

Announcement of methodological changes to the Summary Hospital-level Mortality Indicator (SHMI)

Background

The World Health Organization (WHO) has advised that emergency ICD-10 codes U07.1 and U07.2 should be used to code COVID-19 activity¹. We are expecting to see a significant amount of activity for these codes from the March 2020 Hospital Episode Statistics – Admitted Patient Care (HES-APC) data onwards, which will be used from the July 2020 SHMI publication onwards.

Initially we will exclude all COVID-19 diagnoses from the SHMI and this document describes how the SHMI methodology will be changed to exclude this activity.

The SHMI is not designed for this type of pandemic activity and the statistical modelling used to calculate the SHMI may not be as robust if COVID-19 diagnoses were included.

Also, the creation of temporary specialist hospitals (such as NHS Nightingale London) will mean that certain hospital trusts will have much more activity compared to others. In this instance it would be inappropriate to band trusts as having a higher or lower than expected number of deaths when this would likely be as a result of COVID-19 activity.

Methodological changes

All spells within the Hospital Episode Statistics (HES) provider spells dataset used in the SHMI will be excluded if any of the episodes contained within the spell contain either ICD-10 code U07.1 or U07.2 as a primary or secondary diagnosis. This will remove all hospital activity that is related to COVID-19 from the SHMI.

Additionally, if codes U07.1 or U07.2 are recorded anywhere on the death certificate, then the death will be excluded from the HES linked to Office for National Statistics (HES-ONS) mortality dataset after this is linked to the HES provider spells dataset. This second exclusion is necessary as the SHMI also includes deaths which occur outside of hospital within 30 days of discharge. This exclusion ensures that those who were not diagnosed with COVID-19 in hospital, but later died outside of hospital and had COVID-19 recorded on their death certificate are not included in the SHMI calculations.

¹ <https://www.who.int/classifications/icd/covid19/en/>

New contextual indicator

A count of the number of spells excluded and the percentage of spells excluded (out of all provider spells included in the SHMI prior to applying the exclusion) will be presented as a new contextual indicator for each trust. This will allow users to see the impact of the exclusion. The new indicator will be known as *Percentage of provider spells with COVID-19 coding*.

Timing

The first publication to be affected by this change will be the July 2020 release, which will cover discharges in the period March 2019 – February 2020.

Impact and future steps

These exclusions have been designed to exclude any confirmed or suspected COVID-19 cases from the SHMI and the contextual indicator will allow us to monitor the impact of the exclusions. However, there may be significant changes in the volumes of activity in some of the SHMI diagnosis groups as a result of the effects of the COVID-19 pandemic (e.g. reductions in elective admissions). NHS Digital will carefully monitor the situation as more data becomes available for the time periods affected by the pandemic and will regularly review the exclusions and their appropriateness.

Further information

Questions and feedback on the publication are welcomed and should be sent to enquiries@nhsdigital.nhs.uk or alternatively call 0300 303 5678.