

Announcement of methodological changes to Seven-day Services, England: Mortality and emergency readmissions indicators

Background

The Seven-day Services indicators provide information on how we can effectively measure both improvement and variation in care provision across the week.

Unlike some other indicators, such as the Summary Hospital-level Mortality Indicator (SHMI) which is restricted to non-specialist acute trusts, the Seven-day Services mortality and emergency readmissions indicators only include data-driven trust exclusions. i.e. trusts are included if the number of events (deaths or emergency readmissions) is at least 100 for each part of the week over the reporting period.

Following the first publication of these indicators in October 2016, concerns were expressed around whether the statistical models adequately addressed the differences in case-mix for patients treated in specialist trusts, community trusts and mental health trusts compared to non-specialist acute trusts.

As a result of this feedback, a decision was taken to only present results for non-specialist acute trusts for subsequent releases of the indicators. However, data for specialist trusts, community trusts and mental health trusts are still included in the statistical models upon which the indicator is based if the number of events is greater than or equal to 100 for each part of the week.

This means that the scope of the indicators is unclear, and it is confusing to users that the national results may include organisations which are not included in the trust level results. Also, users cannot identify which specialist, mental health and community trusts are included in the statistical models and the national results, as data for these trusts is not presented.

Therefore, the methodology for both the mortality and emergency readmissions indicators will be updated so that activity for specialist, community and mental health trusts is excluded. This change has been agreed by the Department of Health and Social Care (who own and sponsor the Seven-day Services indicators).

No change will be made to the length of stay indicator because case-mix adjustment is not applied.

Impact

The impact of the change is very small. The following analysis is based on data for October 2016 – September 2017.

- There are very few specialist, community and mental health trusts with sufficient numbers of events to be included in either the mortality or emergency readmissions indicators.
- The impact of excluding these trusts on the marginal national results is very small (less than 0.3 per cent).
- The impact on the trust level results is negligible. The odds ratios change by less than 0.2 per cent for all trusts and parts of the week, and whether or not the odds ratio is significantly different from one is not affected.

Timing

The first publication to be affected by this change will be the October 2018 release, which covers data in the period April 2017 – March 2018.

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.