Methodology for Mixed-Sex Accommodation Breach Rate Indicator

Introduction

The collection of mixed-sex accommodation (MSA) data was introduced in December 2010 to support the introduction of the *Eliminating Mixed Sex Accommodation* policy. This enabled the routine reporting of all occurrences of unjustified mixing of sleeping accommodation by providers of NHS funded health care, on a monthly basis. The data is published in order that patients and members of the public can see how individual healthcare providers are doing in terms of the since updated policy *Delivering same-sex accommodation*. This paper describes the MSA breach rate indicator presented in the published statistics.

Why have a breach rate indicator?

A simple count of the number of MSA breaches would not provide a fair comparison across healthcare providers because raw numbers alone do not take account of the size of the organisation. It would be unfair to classify large acute providers as “worst performing”, compared to other, smaller providers, as they handle larger volumes of admitted patients and therefore the possibility of mixing patients is greater.

An indicator gives us the ability to compare healthcare providers with others, or to compare change over time. It can tell us how a provider is “performing” in relation to other similar organisations, or the national average, and whether they are improving or getting worse.

Indicator Description

Definition
The number of breaches of mixed-sex accommodation (MSA) sleeping accommodation, per 1,000 Finished Consultant Episodes.

Formula
MSA Breach Rate = (Numerator / Denominator) × 1,000

Numerator
The number of MSA breaches for the reporting month in question

Data Source: MSA data collection, NHS England and NHS Improvement[1]

Denominator
The number of Finished Consultant Episodes (FCEs) that finished in the month regardless of when they started

Data source: Admitted patient care, HES NHS Digital[2]

[1] For details and guidance on the MSA collection see: https://www.england.nhs.uk/statistics/statistical-work-areas/mixed-sex-accommodation/
[2] For details on HES see: http://www.hesonline.nhs.uk

Coverage

MSA breach rates are published at national, regional, commissioner (Clinical Commissioning Groups) and provider level.

Data timeliness

The latest available HES data at time of MSA publication are used to provide the denominator. Due to timeliness of HES data, there is one year's lag in the denominator data, compared to the MSA breaches.

E.g. for December 2018 breaches, December 2017 FCEs was used as the denominator (as December 2018 HES data was not be available in time for publication). Using data from the same month in the previous year helps to ensure that seasonal fluctuations in activity are taken into account.

Where possible, 'final' HES data is used for the denominator. However, annual HES data is not finalised until later in the year. For example, final 2018/19 HES data was released in September 2019. Therefore, provisional HES data was used for April 2019 breach data onwards until 'final' HES data was available. From August 2019 MSA data (published in October 2019) until the end of 2019/20, the final HES data was used.

Example calculation

The denominator for December 2018 MSA breaches used December 2017 FCEs from the 'final' 2017-18 HES database. To obtain December 2017 FCEs, count all FCEs that have an episode end date >= 01/12/2017 and <= 31/12/2017.

If a healthcare provider reported 20 MSA breaches in December 2018 and had 5,000 FCEs in December 2017.

$$\text{MSA Breach Rate} = \frac{\text{MSA breaches}}{\text{FCEs}} \times 1{,}000 = \frac{20}{5{,}000} \times 1{,}000 = 4.0 \text{ breaches per } 1{,}000 \text{ FCEs}$$

Changes to October 2021 to March 2022 breach rate calculations

As highlighted in the data timeliness section, the established methodology[3] used for the breach rate uses FCEs from the same period of the previous year due to data timeliness and to ensure seasonal fluctuations in activity are accounted for.

On reintroduction[4] of the MSA collection in October 2021, if the established methodology was used, the October 2020 FCE data (i.e. the same month of the previous year) would normally be used to calculate the rate. However, this data was impacted by Covid-19 and is likely to distort the breach rate figures.

The FCE data was most significantly impacted from March 2020, when the first lockdown was implemented to March 2021, when the phased exit of the third lockdown began. It is likely that the impact varied across organisations

[3] Methodology used since December 2010

[4] The MSA collection resumed in October 2021 data following a period of suspension (March 2020 to September 2021) due to Covid-19 and the need to release capacity across the NHS.

making it difficult to ensure that breach rate calculations would allow for fair comparisons across Trusts (one of the main drivers for calculating the rate).

Therefore, due to the impact of Covid-19 on the denominator data, the following amendments outside the usual methodology will apply to the data period of FCE data used to calculate the breach rates (also see Table 1):

October 2021 to March 2022 data (2021/22)	Use the last 12 months of pre-pandemic FCE data (March 2019 to February 2020) as the denominator for the breach rate. This means: - October 2021 to February 2022 rates will use October 2019 to February 2020 FCE data respectively (i.e. 2019/20) - March 2022 rates will use March 2019 FCE data (i.e. 2018/19) Whilst the FCE data is more out of date than using the previous year, it reduces the risk of breach rates being distorted by the impact of Covid-19 allowing for fairer comparisons across Trusts. It still accounts for seasonality and is very similar to the established method.
April 22 data onwards (2022/23)	Revert back to the established method using FCE data from the same period of the previous year (2021/22) i.e. April 2022 rate will use April 2021 FCE data. Although it is likely that FCE data from April 2021 will still be impacted by Covid-19, this is likely to be a lesser extent with Covid-19 restrictions much less prominent and as we move further away from the initial impact of Covid-19.

Table 1: Summary of denominator period to be used

Data period	Denominator period	Notes
Oct-21	Oct-19	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Nov-21	Nov-19	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Dec-21	Dec-19	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Jan-22	Jan-20	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Feb-22	Feb-20	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Mar-22	Mar-19	Compare to latest 12 months pre-pandemic data (Mar 2019 - Feb 2020)
Apr-22	Apr-21	Revert to standard method, compare to same month, previous year
May-22	May-21	Revert to standard method, compare to same month, previous year
Jun-22	Jun-21	Revert to standard method, compare to same month, previous year
Jul-22	Jul-21	Revert to standard method, compare to same month, previous year

Why use Finished Consultant Episodes for the denominator?

FCEs are used as an estimate for the denominator because:

- FCEs are the "default currency" for HES analyses, particularly for Parliamentary Questions. Data can be easily understood and replicated by the NHS.
- FCEs are representative of MSA policy i.e. all occurrences of unjustified mixing. If a patient has a new consultant-led episode of care within the same hospital spell then they might have to be moved to a different ward. This potentially increases the likelihood of a patient experiencing unjustified mixing at some point during their hospital stay. Using FCEs as a denominator would go some way to taking this into account.
- FCEs include both day case and ordinary admissions and are therefore representative of MSA policy.

Will data for the indicator be revised after publication?

Data revisions are normally published every six months in line with the SDCS revisions policy: https://www.england.nhs.uk/statistics/code-compliance/. The number of breaches and corresponding breach rate indicator values are updated for organisations that submit revisions. The national and regional level data are also updated to reflect these revisions.

From 2017/18, when MSA data was revised, the supporting FCE HES data was also updated to use the latest available at the time so they correspond to the finalised HES data (which was subsequently been finalised since original publication of the data period).

Previously although the numerator data (number of breaches) were revised, the methodology specified that that data used for the denominator would not be updated. Therefore, for some periods prior to 2017/18, the provisional data used at the time of publication of MSA data (and thus in the published time-series) will not correspond to the official HES data.

How will the FCE data be presented and used to calculate the breach rate indicator?

At a national level, the raw FCE HES data are used to calculate the breach rate and will therefore correspond to the published HES timeseries following revisions to MSA data (from 2017/18 onwards when FCE data was also updated).

From November 2019 publication (September data) onwards, the FCE data used in the calculations are now included alongside the MSA data itself, in both the national timeseries and sub-national published webfiles. This is to enable users to clearly see how the breach rates have been derived. The breach rate calculations and FCE data included in webfiles from this point, use FCE data suppressed and presented in line with HES disclosure control rules as outlined in the HES analysis guide.

Glossary of terms

finished consultant episode (FCE) - a continuous period of admitted patient care under one consultant within one healthcare provider.

ordinary admission - Ordinary admissions are patients who have been admitted for treatment. The intention is for treatment to be concluded in longer than one day. If, unexpectedly, the patient is not kept overnight, the episode remains as an ordinary admission.

day cases admission - patients who have been admitted for treatment just for the day. The intention is for treatment to be concluded in one day. If, unexpectedly, the patient is kept overnight, it must be re-classed as an ordinary admission.

spell – a single stay in hospital which consists of one or more episodes.

Further information

Published MSA data, guidance and information can be found at:
https://www.england.nhs.uk/statistics/statistical-work-areas/mixed-sex-accommodation/

For queries on the MSA publication email:
england.electivepublications@nhs.net

NHS England and NHS Improvement
Published December 2021

Version	Date issued	Changes made
1.0	December 2010	• N/A

1.1	November 2019	• Changed to reflect the updated policy guidance “Delivering Same-Sex Accommodation” published September 2019.
		• Minor amendments to text elsewhere in document including
		  ○ reflect change from collecting data via Unify2 to SDCS
		  ○ removing references to PCTs
		  ○ wording of data timeliness and revisions sections
		  ○ reflect rebranding to NHS England and NHS Improvement
		• Question added highlighting that FCE data used to calculate breach rates, are now included in published webfiles alongside breach numbers for transparency

1.2	December 2021	• Section added to explain impact of Covid on calculation of breach rate and data periods

		affected by this.