

# The PROMs CSV Data File Companion

This document provides essential information for anyone making use of the CSV data files published on 13 February 2020 as part of the *Finalised Patient Reported Outcome Measures (PROMs) in England – April 2018 to March 2019*. Data within the CSV data pack refers only to hip and knee replacement procedures.

The data files should be interpreted in conjunction with the full publication, available from <http://content.digital.nhs.uk/proms>.

## Acknowledgements

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## Data Sources

Hospital Episode Statistics (HES) / PROMs, NHS Digital.

## Methodology

Statistical models were developed by the PROMs Programme Team at NHS England in conjunction with NHS Digital. Further information regarding the methodology can be found at <http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/10/proms-meth-prim-revis.pdf>.

For more details on the background to the PROMs programme, an overview of data collection, processing, scoring and linking, it is suggested to read *A Guide to Proms Methodology*, which is available from the PROMs homepage at <http://content.digital.nhs.uk/proms>.

## Patient-level (record-level) CSV files

### Scope

These files include one row for each patient questionnaire record successfully linked to a record of inpatient hospital activity in the Hospital Episode Statistics data warehouse.

### Low numbers

To protect patient confidentiality, records have been excluded where there would otherwise have been fewer than 6 records present for any provider. Where there are between 1 and 5 records for a particular combination of ageband, sex, provider and procedure, the ageband and sex have been

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<sup>1</sup> <http://www.euroqol.org>

<sup>2</sup> See <http://innovation.ox.ac.uk/outcome-measures/oxford-hip-score-ohs/> and <http://innovation.ox.ac.uk/outcome-measures/oxford-knee-score-oks/>

suppressed and replaced with an asterisk (\*). Where it would have remained possible to identify suppressed cells by derivation from the total, additional cells have been suppressed.

## Fieldnames

For definitions and help in interpretation, please refer to the PROMs data dictionary, which is available to download from <http://content.digital.nhs.uk/proms>.

## Participation and linkage rates CSV file

### Definitions

- **Participation rate:** number of pre-operative questionnaires received as a percentage of the number of PROMs-eligible hospital procedures.
- **Linkage rate:** number of pre-operative questionnaires linked to an eligible hospital procedure as a percentage of the number of pre-operative questionnaires received.
- **Issue rate:** number of post-operative questionnaires sent to patients as a percentage of the number of pre-operative questionnaires received.
- **Response rate:** number of post-operative questionnaires received as a percentage of the number of post-operative questionnaires sent to patients.

Participation rates may be shown as higher than 100 per cent. This is caused by patients undergoing surgery at a different provider to the one which administered the pre-operative questionnaire, owing to patient choice or to providers subcontracting activity. This could be within the NHS or to the private sector and the effects can be amplified by small numbers. Hospital procedure numbers are reported on the basis of the provider which performed the surgery; other figures are reported on the basis of the provider code recorded as having administered the questionnaire.

Presented participation rates provide an estimate of the true rate. There may be some imprecision due to differences in the months to which the pre-operative questionnaires and hospital episodes relate, as in many cases patients will complete the pre-operative questionnaire in advance of the operation.

### Low numbers

To protect patient confidentiality, parent figures (number of HES procedures and pre-operative questionnaires returned) between 1 and 5 have been suppressed and replaced with an asterisk (\*). Where child figures (post-operative questionnaires) are between 1 and 5, these are only suppressed if the parent total is between 1 and 5. Totals for providers and commissioners are based on unsuppressed figures, so the sum of the totals may not equal the England totals.

## Provider- and commissioner-level CSV file

### Low numbers

To protect patient confidentiality, parent figures (HES episodes) between 1 and 5 have been suppressed and replaced with an asterisk (\*). Where child figures (modelled records) are between 1 and 5, these are only suppressed if the parent total is between 1 and 5. Totals for providers and commissioners are based on unsuppressed figures, so the sum of the totals may not equal the England totals.

No adjusted results have been calculated for those organisations with fewer than 30 modelled questionnaires as the underlying statistical methods break down when counts are low and aggregate calculations based on small denominators may return unrepresentative results.

## Exclusions

The data include standardised measures. To calculate the standardised health gain for a particular measure, only valid records can be included. Valid records are those where the pre- and post-operative questionnaires both have a valid value recorded. Records with invalid or missing values for either the pre- or post-operative score, or where key variables used during the standardisation procedure are missing, are excluded. Therefore counts of valid questionnaires included here may be lower than the total number of pre- and post-operative pairs completed.

## Time Series CSV file

This file contains time series data about England and provider-level case-mix adjusted average health gains from 2011/12 to the specified provisional reporting period. Finalised datasets are used where available. For each provider/procedure/measure combination, the count of modelled records, the adjusted average health gain and the outlier status of the provider is given.

Users should note that starting in 2012/13 there was a change in the case-mix adjustment methodology which involved splitting hip and knee procedures into primary and revision operations. As primary operations account for a very large majority of all hip and knee operations, 2011/12 modelled records for this procedure are grouped with primary procedures for reporting purposes; figures for revised procedures were not available in 2011/12.

## Low numbers

For data from 2011/12 to 2014/15, to protect patient confidentiality, figures between 1 and 5 have been suppressed and replaced with an asterisk (\*) and derived figures have also been suppressed in order to reduce the risk of calculation of small numbers. Where it would have been possible to identify numbers from the total due to a single suppressed number in a row or column, another figure has also been suppressed.

For data from 2015/16 onwards, parent figures (HES episodes) between 1 and 5 have been suppressed and replaced with an asterisk (\*). Where child figures (modelled records) are between 1 and 5, these are only suppressed if the parent total is between 1 and 5. Totals for providers and commissioners are based on unsuppressed figures, so the sum of the totals may not equal the England totals.

No adjusted results have been calculated for those organisations with fewer than 30 modelled questionnaires as the underlying statistical methods break down when counts are low and aggregate calculations based on small denominators may return unrepresentative results.

## Exclusions

The data include standardised measures. To calculate the standardised health gain for a particular measure, only valid records can be included. Valid records are those where the pre- and post-operative questionnaires both have a valid value recorded. Records with invalid or missing values for either the pre- or post-operative score, or where key variables used during the standardisation procedure are missing, are excluded. Therefore counts of valid questionnaires included here may be lower than the total number of pre- and post-operative pairs completed.

Time series data are published for organisations having at least one modelled record within the procedure/measure combination in the most recent reporting period (i.e. an organisation that undertook procedures in 2011/12, but then closed will not appear in 2015/16 time series file).