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Announcement of methodological changes to—

- **Finalised Patient Reported Outcome Measures (PROMs) in England**
- **Provisional Monthly Patient Reported Outcome Measures (PROMs) in England**

Background

To allow for fair comparisons of average reported health gains for an organisation against the national average, the PROMs publications include 'casemix adjusted health gain' scores. These casemix-adjusted scores are intended to reflect the achievement of each provider taking into account the particular complexity of patients that the provider has treated. There are two components to the calculation of adjusted scores:

- a) calculating predicted post-operative scores for each patient
- b) together with the patients' observed scores, aggregating these predicted scores to organisational level.

Hip and knee replacement operations may be considered as either 'primary' operations or 'revision' operations to existing replacement joints. Following feedback from PROMs users, it has been decided to report separately on primary operations distinct from revision operations. Accordingly, new casemix-adjustment statistical methods have been developed which consider primary and revision surgeries separately.

Changes

Summary: For hip and knee replacement PROMs, separate casemix-adjustment methodologies have been developed for primary and revision operations. When aggregated to organisation level, statistically-adjusted average health gains will be presented for primary hip and primary knee operations and (where volumes are sufficiently large as to render it statistically valid) for revision hip and revision knee operations.

Quality assurance: The casemix adjustment methodologies have been developed by the PROMs Programme Team at NHS England in conjunction with the HSCIC. The new methodologies has successfully passed a process of appraisal by the *Methodology Review Group* of the *Indicator Assurance Service* which is run by the HSCIC on behalf of the national Quality Information Committee (QIC):

<http://www.hscic.gov.uk/article/1674/Indicator-Assurance-Service>



Benefit: The new methodologies allow for statistically-adjusted average health gains to be reported separately for primary operations and, where possible, for revision operations. This better meets the needs of users, as identified by their feedback, than the existing method of reporting figures for all hip and all knee operations.

Impact: In a small number of cases, provider organisations identified as statistical outliers under the former all-hip or all-knee reporting are not identified as outliers under the new primary or revision only aggregations. Conversely, some organisations are identified as outliers for primary or revision operations which would not have been identified as outliers under the former combined aggregations. The number of such shifts in identification will vary between reporting quarter but are generally expected to be few; some analysis on this is available at the NHS England website at: <http://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2013/10/proms-meth-prim-revis.pdf> [PDF, 301kB].

In addition, the act of separating all replacements into primaries and revisions will reduce the number of records aggregated into each category and organisation. As a consequence, the number of cases where the number of records falls below 30 (the lower limit at which statistically adjusted scores are meaningful) or 6 (the limit below which suppression is required) will increase and the number of meaningful measurements will decrease.

Further information

Regarding the new casemix adjustment methodologies, please contact the PROMs Team at NHS England on 0207 972 6144.

Regarding the consequent changes to the reporting in the PROMs official statistics, please contact the HSCIC on 845 00 6016 or email enquiries@hscic.gov.uk.