**NHS Digital**

**Indicator Supporting Documentation**

**IAP00516 The proportion of patients recovering to their previous levels of mobility / walking ability at 120 days (NHSOF)**

Application Form

Indicator Assurance Service

**Title: Hip fracture: proportion of patients recovering to their previous levels of mobility / walking ability at 120 days**

**Set or domain: NHS OF**

**IAS Reference Code: IAP00516**

**Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Changed By | Change |
| V0.1 | 09/07/15 | S Harrison | Application put forward for assurance by MRG |
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# Application Form

Section 1 Introduction / Overview

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| --- | --- |
| **1.1 Title** | Hip fracture: proportion of patients recovering to their previous levels of mobility / walking ability at 120 days |
| **1.2 Set or domain** | NHS Outcomes Framework |
| **1.3 Topic area** | Hip fracture |
| **1.4 Definition** | The indicators measure the proportion of patients aged 60 or over recovering to a level of mobility at (i) 30 and (ii) 120 days after their hip fracture, which was better, the same or only one mobility category worse than their mobility category prior to the hip fracture.  The indicator is calculated using data from the National Hip Fracture Database (NHFD) and is reported for calendar years. This indicator currently includes the following breakdowns: England Gender Age Mobility category at admission Deprivation quintile Lower tier local authority Region Provider (hospital) |
| **1.5 Indicator owner & contact details** | **Department of Health**  Andrew Parker  Principal Operational Research Analyst  Outcomes Analysis Team  Department of Health  [Andrew.Parker@dh.gsi.gov.uk](mailto:Andrew.Parker@dh.gsi.gov.uk) |
| **1.6 Publication status** | Currently in publication |

Section 2 Rationale

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| **2.1 Purpose** | Identifying levels of mobility at 30 and 120 days are indicators of the effectiveness of rehabilitation after discharge from the hospital admission. The time required for recovery from hip fracture surgery means that, if previous levels of mobility are likely to be regained, this will require appropriate rebilitation services to be provided some time after discharge. The indicator is therefore an important measure of the effectiveness of rehabilitation within the wider local healthcare system outside of the inpatient setting. It is expected that this indicator will be used to track progress over time and highlight areas for improvement. |
| **2.2 Sponsor** | **Department of Health** James Vallance NHS Clinical Services Unit Richmond House |
| **2.3 Endorsement** |  |
| **2.4 Evidence and Policy base**  Including related national incentives, critical business question, NICE quality standard and set or domain rationale, if appropriate | The rapid restoration of physical and self-care functions is critical to recovery from hip fracture, particularly where the goal is to return the patient to preoperative levels of function and residence. Loss of pre-fracture mobility and independence currently results in between a quarter and one third of such patients requiring a permanent change in residence. Early surgery, good perioperative care, supported multidisciplinary rehabilitation and falls risk intervention can reduce hospital stay, improve early return to function affecting both readmission rates and the levels of Social Care or NHS Continuing care-funded care support. Mortality following hip fracture is high (as a result of comorbidities).  The indicators form part of domain 3 of the NHS Outcomes Framework. The Fragility Fractures Programme at the Department of Health was initiated in 2009, clinically led by National Clinical Director for Trauma Care, Prof Keith Willett, and the National Clinical Director for Older People, Prof David Oliver. The issues the programme sought to address were the care of hip fracture patients and the prevention of fractures amongst the high risk population. The programme looked for system architecture improvements that would improve the priority given across the NHS to those at risk of fragility fractures, and reduce the effect of delays, co-morbidities and lengthy stays in hospitals or care facilities.  Domain 3 of the NHS Outcomes Framework aims to measure recovery from episodes of ill health or following injury. Indicator 3.5i and ii attempts to measure recovery from hip fracture at 30 and 120 days. |

Section 3 Data

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| **3.1 Data source** | National Hip Fracture Database (NHFD) |
| **3.2 Justification of source and others considered** | This is the only available data source but as part of the validation of NHFD data it is compared to Hospital Episode Statistic (HES) data in order to validate the completeness of case ascertainment. It is stated that the HES figures correspond well with the estimates from NHFD data. |
| **3.3 Data availability** | The data is provided on request by the Health Quality Improvement Partnership (HQIP).  Data is released approximately 6 months after the end of the reporting period (calendar year) to allow for a follow up period of 120 days.  The underlying data for this indicator is not publicly available. |
| **3.4 Data quality** | The assumption is that more data will be submitted to NHFD. The risk is that walking ability at 120 days is timely and costly to collect.  **Low recording rates of mobility category**  For a record to be included in either the 30 day or the 120 day analysis there must be a record of mobility status at both time of admission and at the 30/120 day point (after admission).  A sample analysis was undertaken on 2014 data to determine the numbers involved.  The results can be seen in table 1 below. |

Table 1: Number of total patients in England, exclusions, filters and eligible episodes from NHFD 2014

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| --- | --- | --- | --- | --- | --- |
| **Follow-up Period** | **Cases of Hip Fracture** | **Pre-fracture mobility score of 4 or 5 (filter)** | **Eligible for Indicator** | **Recovered (of eligible)** | **Excluded** |
| **30 Days** | 57,680 | 23,260 | 9,880 (17.1%) | 2,375 (24%) | 47,800(82.9%) |
| **120 Days** | 57,680 | 23,260 | 7,172(12.4%) | 3,609 (50.3%) | 50,508(87.6%) |

Please note that exclusions and filters are not mutually exclusive, therefore it is possible for some cases to be excluded for multiple reasons.

Table 2: Breakdown of reasons for exclusion from hip fracture indicators 3.5.i and 3.5.ii from NHFD 2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exclusion reasons** | **Missing score pre-fracture** | **Missing score at pre-fracture and 30/120 days** | **Missing score at 30/120 days only** | **Cases not mapped to LA/region (exclusion)** |
| **30 Days** | 697 | 3,747 | 35,968 | 781 |
| **120 Days** | 349 | 4,095 | 27,248 | 172 |

<http://www.nhfd.co.uk/20/hipfractureR.nsf/4e9601565a8ebbaa802579ea0035b25d/e83e76b2128bd42a80257da90083996b/$FILE/NHFDCCGindicators.pdf>

Although the majority of trusts complete the pre-injury mobility scoring at the time of the admission, the 30 and 120 day follow-up is generally done by phone or letter. It is self-reported and some hospitals do not undertake any follow-up. However, it is hoped that with the inclusion of these indicators in the NHS Outcomes Framework and CCG OIS will 'encourage' an increase in the follow-up reporting.

This issue is highlighted in the Indicator Quality Statement.

NHFD data quality issues are highlighted in the National Hip Fracture Database

National Report 2011 (p.33)

<http://www.nhfd.co.uk/003/hipfracturer.nsf/NHFDNationalReport2011_Final.pdf>

The Indicator Specifications report from NHFD (referenced above) also includes information on data suppression and ineligible cases by indicator:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | Breakdown level | Total, n | Suppressed due to small numbers, n | With no eligible cases, n |
| NHS OF 3.5.i Mobility at 30 days | Provider  Local authority | 176  326 | 34  135 | 64  27 |
| NHS OF 3.5.ii Mobility at 120 days | Provider  Local authority | 176  326 | 26  123 | 81  46 |

\* includes patients with an English LSOA who were admitted to hospitals outside of England.

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| **3.5 Quality assurance** | The numerator, denominator and rates are supplied pre-calculated and are sense checked before they are published on the HSCIC Indicator Portal. The NHS Outcomes Framework analytical team calculate confidence intervals which are also published. These are independently calculated by two analysts.  Rates with numerator, denominator and associated confidence intervals are published by HSCIC, with suppression of small numbers in the numerators & denominators. |
| **3.6 Quality improvement plan**  If appropriate | Whilst the aim of these indicators is to improve data quality in the recording of mobility status at 30 and 120 days post fracture, these metrics fall outside of the Best Practice Tariff, therefore there is no incentive for trusts to improve the collection/recording of this information. |
| **3.7 Data linkage** | None |
| **3.8 Quality of data linkage** | N/A |
| **3.9 Data fields** | 1. Age 2. Date and time of admission to A&E 3. Discharge destination from acute orthopaedic ward 4. Discharge destination from hospital trust 5. Walking ability indoors 6. Walking ability outdoors 7. Accompanied to walk indoors  8. Accompanied to walk outdoors  9. Walking ability indoors at 30 days  10. Walking ability outdoors at 30 days  11. Accompanied to walk indoors at 30 days  12. Accompanied to walk outdoors at 30 days  13. Mobility at admission (derived from fields 5 to 8)  14. Mobility at 30 days (derived from fields 9 to 12) |
| **3.10 Data filters** | See table below |

|  |  |
| --- | --- |
| 1. Field: | Age |
| Conditions: | Between 60 and 110 |
| Rationale: | Restricts the data to patients aged 60 to 110 years inclusive. |
|  |  |
| 2. Field: | Hospital admission date |
| Conditions: | Between 1 January and 31 December inclusive for the year being reported |
| Rationale: | Selects only those admitted during the relevant calendar year. |
|  |  |
| 3. Field: | Pre-fracture mobility category |
| Conditions: | Equal to 1, 2 or 3 |
| Rationale: | Excludes patients whose pre-fracture mobility was classified as category 4 or 5, or patients who have no pre-fracture mobility category recorded. |
|  |  |
| 4. Field: | Mobility category 30 days post admission |
| Conditions: | Is not NULL |
| Rationale: | Excludes records where the mobility category 30 days post admission was not recorded. |

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| **3.11 Justifications of inclusions and exclusions**  and how these adhere to standard definitions | The indicator only includes patients aged 60 or over with a pre- hip fracture mobility score in either category 1, 2 or 3. This is because any patient in either category 4 or 5 cannot fall more than 1 mobility category and therefore will always be determined to have recovered. |
| **3.12 Data processing** | The NHFD current dataset records walking ability indoors, walking ability outdoors and whether a patient is accompanied to walk outdoors at admission and at 30 and 120 days post-admission.  For walking ability indoors the available options are:   * Regularly walked without aids * Regularly walked with one aid * Regularly walked with two aids or frame * Wheelchair or bedbound   For walking ability outdoors the available options are:   * Regularly walked without aids * Regularly walked with one aid * Regularly walked with two aids or frame * Electric buggy * Wheelchair or bedbound * Never goes outdoors   For whether the patient is accompanied to walk outdoors the available options are:   * No * Yes * Wheelchair or bedbound * Never goes outdoors   For this outcome indicator patients with the above characteristics will be placed into five categories according to a simple algorithm for mobility. A summary of the category derivations from the above is provided below |

|  |  |  |
| --- | --- | --- |
| **Mobility category** | **Mobility category description** | **Definition as per NHFD data fields** |
| 1 | Regularly mobile outdoors without aids (or assistance) | Walking ability outdoors = ‘*Regularly walked without aids*’  AND  Accompanied to walk outdoors = ‘*No*’ |
| 2 | Mobile outdoors with only one aid | Walking ability outdoors = ‘*Regularly walked with one aid*’  AND  Accompanied to walk outdoors = ‘*No*’ |
| 3 | Mobile outdoors with two aids or a frame | Walking ability outdoors = ‘*Regularly walked with two aids or frame*’  AND  Accompanied to walk outdoors = ‘*No*’ |
| 4 | Indoor mobility only, but never goes out unassisted | Walking ability indoors IN (‘*Regularly walked without aids*’, ‘*Regularly walked with one aid*’, ‘*Regularly walked with two aids or frame*’)  AND  (Walking ability outdoors IN (‘*Electric buggy*’, ‘*Wheelchair or bed bound*’, ‘*Never goes outdoors*’)  OR  Accompanied to walk outdoors = ‘*Yes*’) |
| 5 | No functional mobility (wheelchair or assisted transfers or bedbound) | Walking ability indoors = ‘*Wheelchair or bedbound*’  AND  Walking ability outdoors IN (‘*Electric buggy*’, ‘*Wheelchair or bed bound*’, ‘*Never goes outdoors*’) |

Section 4 Construction

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| **4.1 Numerator** | Count of all patients aged 60 or over recorded in the NHFD who have survived to 30 / 120 days and who have either:   * improved (lower mobility category after 30/120 days than pre- hip fracture) * remained the same (same mobility category after 30/120 days as pre- hip fracture) * or deteriorated (only 1 mobility category higher after 30/120 days than pre- hip fracture). |
| **4.2 Denominator** | Count of all patients aged 60 or over recorded in the NHFD as having had a hip fracture in the designated 12 month period plus 30/120 days for their follow-up where:   * The patient has survived to 30 / 120 days * There is a completed data field for pre-hip fracture mobility and for mobility 30/120 days after the hip fracture. |
| **4.3 Computation** | For 2013 the indicator values were provided pre-calculated by the Clinical Effectiveness Unit at the Royal College of Surgeons. The National Hip Fracture Database (NHFD) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and managed by the Royal College of Physicians (RCP) as part of the Falls and Fragility Fracture Audit Programme (FFFAP).  The indicator value is calculated as follows:  formula to calculate indicator value  where:  **O** is the observed number of individuals in the sample (numerator);  **n** is the total number of individuals in the sample (denominator). |
| **4.4 Risk adjustment or standardisation type and methodology** | **None**  *Variables and methodology:* |
| **4.5 Justification of risk adjustment type and variables**  or why risk adjustment is not used | The use of risk adjustment is not applicable as eligibility criteria are contained within the audit question (i.e. non-applicable patients are excluded as part of the calculation |
| **4.6 Confidence interval / control limit use and methodology** | Confidence Intervals  The confidence intervals were calculated by the HSCIC.  95% confidence intervals are calculated based on the Wilson Score method[[1]](#footnote-1),[[2]](#footnote-2) using the following formulae:  formula to calculate 95% confidence intervals based on the Wilson score method    formula to calculate upper 95% confidence interval based on wilson score method  where:  **q** is 1– (/100);  **O** is the observed number of individuals in the sample (numerator);  **n** is the total number of individuals in the sample (denominator);  **z** is the 97.5th percentile value from the Standard Normal distribution (for a 95% confidence interval z = 1.96 (rounded)). |
| **4.7 Justification of confidence intervals / control limits used** | The confidence intervals follow the method for proportions as stated in the APHO technical briefing 3 - Commonly used public health statistics and their confidence intervals |

Section 5 Presentation and Interpretation

Presentation

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| **5.1 Presentation of indicator** | The calculated NHS Outcomes Framework indicators, including numerator and denominator are publicly available on the HSCIC indicator portal. Excel and csv files are published for each of the indicators in the following format: |

|  |  |
| --- | --- |
| **Column name** | **Output** |
| Year | Calendar year |
| Period of coverage | 01/01 to 31/12 of the respective calendar year |
| Breakdown | England, gender, age, mobility category at admission, deprivation quintile, lower tier local authority, region and provider (hospital) |
| Level | More detailed description of breakdown |
| Indicator value | Percentage of admitted patients whose mobility category at 30 days was lower (i.e. better), the same or only one mobility category higher (i.e. worse) than the mobility category at admission |
| Lower CI | 95% lower confidence limit |
| Upper CI | 95% upper confidence limit |
| Count of patients who recovered (numerator) | Number of patients in the extract whose mobility category at 30 days was lower (i.e. better), the same or only one mobility category higher (i.e. worse) than the mobility category at admission |
| Count of patients (denominator) | Number of admitted patients with a mobility score of 1,2, or 3 recorded at admission, and a mobility score recorded at 30 days |

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| **5.2 Contextual information provided alongside indicator**  with justification | None. NHFD do not currently produce any follow-up contextual information. |
| **5.3 Calculation and data source of contextual information** | N/A |
| **5.4 Use of bandings, benchmarks or targets**  with justification | None. Due to issues with data completeness it would not be appropriate to apply bandings to this indicator. Additionally, as there is no mandate to record this information it would be difficult to justify any benchmarking or banding of indicator values. |
| **5.5 Banding, benchmark or target methodology**  if appropriate | N/A |

Interpretation

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| **5.6 Interpretation guidelines** | A high percentage is desirable to indicate that patients with a fragility fracture are receiving the best care possible for their condition. It is not advisable to compare values at provider or local authority level.  As the data completeness for this indicator is poor indicator values, particularly at lower tier local authority and provider level, are unlikely to be robust.  The reliability of this indicator is therefore questionable as there is no guarantee that the small percentage of records which are captured in the data are representative of the overall population. It is important to bear this in mind when interpreting the indicator values as they could potentially be misleading. |
| **5.7 Limitations and potential bias** | Despite the inclusion of “previous” levels of mobility in the title there is no expectation within the indicator that patients will get back to the exact same level of mobility. HSCIC had recommended the description “effective” recovery.   1. **Low recording rates of mobility category** (see section 3.4)   Although the majority of trusts complete the pre-injury mobility scoring at the time of the admission, the 30 and 120 day follow-up is generally done by phone or letter. It is self-reported and some hospitals do not undertake any follow-up. However, it is hoped that with the inclusion of these indicators in the NHS Outcomes Framework and CCG Outcomes Indicator Set will 'encourage' an increase in their follow-up reporting.  This issue is highlighted in the Indicator Quality Statement.   1. **Possible selection bias**   An analysis has been carried out on 2011 NHFD data to look at the distribution of total patients by age and gender and compare them to the distribution of patients with a valid mobility score at point of admission as well as the 30/120 day point. This is in order to investigate whether the 11% of records eligible for inclusion are representative of the total number of patients in the NHFD.  The table below shows the results:  table showing NHFD data for patient distribution |
| **5.8 Improvement actions** | The indicator measures the proportion of patients who recover effective mobility following a hospital admission for a hip fracture. In order to be considered as recovering to your previous levels of mobility in this indicator, a patient must have a mobility score at 30 days, no more than 1 category lower than their mobility score prior to the fracture. Clinically this is considered to be a good outcome.  Responsibility will lie with NHS England. The NHS Outcomes Framework sets out the national outcome goals that the Secretary of State will use to monitor the progress of NHS England. It does not set out how these outcomes should be delivered, it will be for NHS England to determine how best to deliver improvements by working with CCGs to make use of the tools at their disposal. |
| **5.9 Evidence of variability** | The lower tier local authority breakdown for 2013 is as follows: |

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| --- | --- | --- |
|  | Count of LAs | Percentage of LAs |
| Suppressed indicator value: | 154 | 47.2% |
| No indicator value to report\* | 28 | 8.6% |
| Zero indicator value (numerator=0) | 4 | 1.2% |
| Valid indicator value | 140 | 42.9% |

\* numerator and denominator equal to zero

The following chart shows the variability for LAs (excluding suppressed values):

Section 6 Risks

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| **6.1 Similar existing indicators** | There are equivalent CCG level indicators published as part of the CCG Outcomes Indicator Set (3.10i and ii) |
| **6.2 Coherence and comparability** | Although the calculation methodology is the same for the NHS OF and CCG OIS indicators, the CCG. Going forwards, it is proposed that the CCG indicators will only be published at CCG level.  OIS indicators are currently published at CCG and area team level. |
| **6.3 Undesired behaviours and/or gaming** | Hospitals could score patients with a mobility score of 4 or 5 which would make them ineligible to be included within the indicator.  If a patient has not recovered as would be expected the hospital could ensure they are not included in the indicator calculation by failing to follow-up the patient as follow-up is not mandatory. This would mean that these patients would not have a negative effect on scores. |
| **6.4 Approach to indicator review** | The time period for when the indicator is to be reviewed will be set by the Indicator Governance Board (IGB). The indicator will also be considered as part of any review of the NHS Outcomes Framework.  User feedback and comments on the indicator are welcomed via HSCIC Enquiries: [enquires@hscic.gov.uk](mailto:enquires@hscic.gov.uk) |
| **6.5 Disclosure control** | All indicator values, numerators and denominators are suppressed where the numerator and/or denominator is between 1 and 5 (inclusive) |
| **6.6 Copyright** | Copyright © 2015, Health and Social Care Information Centre. All Rights Reserved |

MRG Assessment Summary (23/07/2015)

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| --- | --- |
| IAS Reference Code | IAP00516 |
| Title | **Hip fracture: proportion of patients recovering to their previous levels of mobility / walking ability at 120 days** |
| Set / Framework | NHS Outcomes Framework |
| Reason for assessment | Scheduled review (review date reached) |
| Iteration | 1st MRG meeting |

**Assurance Rating by MRG**

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| --- | --- |
| **Fit for use** | **Clarity** |
| **Fit for use with caveats** | **Rationale** |
| **Not fit for purpose** | **Data** |
| **Fit for use with caveats** | **Construction** |
| **Fit for use with caveats** | **Interpretation** |
| **Fit for use** | **Risks and Usefulness** |
| Not fit for purpose | **Overall rating** |

**Summary Recommendation to IGB**

Although the indicator adequately met most assurance criteria, the indicator was rated “Not fit for purpose” on the grounds that the data quality is very poor, with no incentive or mechanism to improve it. MRG do not endorse the indicator for inclusion in the National Library of Quality Assured Indicators.

IGB Assessment Summary (13/08/2015)

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| --- | --- |
| IAS Reference Code | IAP00122 |
| Title | **Hip fracture: proportion of patients recovering to their previous levels of mobility / walking ability at 120 days** |
| Set / Framework | NHS Outcomes Framework |
| Reason for assessment | Scheduled review (review date reached) |

**Summary of discussion**

This indicator is to be included in the Library with an assurance level of “use with caution” However any associated indicator quality statement published when the indicator produced requires a clear warning of the limitations data quality has on interpretation and use. Correspondence will be sent by IGB to SCCI and NICE observing the lack of mandate to collect data in some of the fields used in the indicator methodology.

**IGB Actions**

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| Sign off of MRG assessment | Yes - with minor ammendments |
| Library status | Published in the Library |
| Review date | **13/08/2018** |

**Final IGB Assurance Rating**

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| --- | --- |
| **Fit for use** | **Clarity** |
| **Fit for use with caveats** | **Rationale** |
| **Not fit for purpose** | **Data** |
| **Fit for use with caveats** | **Construction** |
| **Fit for use with caveats** | **Interpretation** |
| **Fit for use** | **Risks and Usefulness** |
| Use with caution | **Overall rating** |

Appraisal Log

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**Criterion: CLARITY**

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| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 1a | The description of indicator needs to be re-worded to better match what is being calculated – i.e. not just patients who recover to their previous levels of mobility but also those who have dropped by no more than one mobility category. DH to be approached for an alternative title.  IGB commented that the titling of the indicator does not reflect the description of the construction (i.e. numerator). It is recommended the definitions and descriptions used in the indicator are reviewed ahead of the Autumn 2013 publication. | MRG  8/11/12  IGB  30/11/12 | As this indicator is defined within the NHS Outcomes Framework we are unable to change the actual title. However, we have updated the definition of the indicator to make it clear that it also covers those patients who were one mobility category worse than previously. The definition is now:  “The indicator measures the proportion of patients, expressed as a percentage, aged 60 or over recovering to a level of mobility at 30 days after their hip fracture, which was better, the same or only one mobility category worse than the mobility category prior to the hip fracture.” | 17/7/15 |  | MRG  23/07/15 |

**Criterion: RATIONALE**

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| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 2a | The evidence/policy base for measuring patients at 30 and 120 days should be added to the paperwork. | MRG  23/07/15 |  |  |  |  |

**Criterion: DATA**

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| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 3a | Clarification should be provided on the rationale for the exclusion of patients aged under 60 | MRG  8/11/12 | Data for the under 60s isn’t collected as part of the NHFD. | 17/7/15 |  | MRG  23/07/15 |
| 3b | The percentage of cases included in the indicator is very low, which makes sample bias very likely. In addition, due to small numbers, a large percentage of results are suppressed. | MRG  23/07/15 |  |  |  |  |
| 3c | Related to the point above, there are no incentives to improve the data quality, and as the mobility levels are self-reported, there is no clear mechanism for improvement. | MRG  23/07/15 |  |  |  |  |

**Criterion: CONSTRUCTION**

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| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 4a | The mobility scale used is not sensitive, as it is only a 5 point scale. Due to the nature of the measure, patients with a pre-accident score of 4 or 5 have to be excluded from the indicator, as these will be seen as an automatic success if included (as it is not possible to drop two mobility points). The group were concerned that due to the crude nature of the scale, they were unsure as to whether patients who dropped a mobility point should be included as a positive result. | MRG  23/07/15 |  |  |  |  |

**Criterion: INTERPRETATION**

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| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 5a | Interpretation of the indicator is difficult due to the likely sample bias and that it is not possible for the confidence intervals to take this into consideration. Due to patients who drop one mobility point being included as a positive result, providers may think they are performing well when they are not. | MRG  23/07/15 |  |  |  |  |

**Criterion: RISKS AND USEFULNESS**

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| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Issue or recommendation** | **Raised By/Date** | **Response / Action taken (if appropriate)** | **Response date** | **Resolved** | **Checked by / Date** |
| 6a | MRG asked for clarity on whether the self-reporting of mobility levels by patients was staff-lead, as this may introduce a risk of gaming. | MRG  23/07/15 | At the end of the audit tool in the link below there are a standard set of questions with fixed answers. Our understanding is that these are the questions asked to the patients but this can be done via phone or questionnaire/letter:  <http://www.nhfd.co.uk/20/hipfractureR.nsf/xsp/.ibmmodres/domino/OpenAttachment/20/hipfracturer.nsf/5ED1EA7CD1DA6DD580257C94004FB4A6/Attachment/National%20Hip%20Fracture%20Database%20%E2%80%93%20Audit%20Tool%20V8.doc> | 27/07/15 |  | MRG  via email  03/08/15 |

See our [accessibility statement](https://www.nice.org.uk/accessibility#what-to-do) if you’re having problems with this document.

1. Wilson EB. Probable inference, the law of succession, and statistical inference. J Am Stat Assoc 1927; 22: 209–12. [↑](#footnote-ref-1)
2. Newcombe RG, Altman DG. Proportions and their differences. In Altman DG et al. (eds). Statistics with confidence (2nd edn). London: BMJ Books; 2000: 46–8. [↑](#footnote-ref-2)