**NHS Digital**

**Indicator Supporting Documentation**

**IAP00071 Emergency admissions for children with lower respiratory tract infections (LRTs)**

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| FIELD | CONTENTS |
| IAP Code | IAP00071 |
| Title | Emergency admissions for children with lower respiratory tract infections (LRTs) |
| Published by | NHS Digital |
| Reporting period | Annually |
| Geographical Coverage | England |
| Reporting level(s) | CCG |
| Based on data from | HES and GP population data |
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| Rating | Assured |
| Assurance date | 20/09/12 |
| Review date | 20/09/15 |
| Indicator set | CCG OIS |
| Brief Description  [This appears as a blurb in search results] | This indicator will measure progress in preventing LRTIs in children from becoming more serious.  LRTIs in children lead to a high number of emergency bed days and this is included in an attempt to address the problem. The aim is that in the future, these will be more successfully treated in primary care rather than secondary care. |
| Purpose | The intended audience for the indicator is CCGs, the Department of Health, Provider Managers, Commissioning Managers, Clinicians, Patients and the Public.  This indicator forms part of Domain 3 - Helping people to recover from episodes of ill health or following injury. The indicator supports the complementary objectives of preventing conditions from becoming more serious (where possible) and helping people to recover effectively. This indicator will measure progress in preventing LRTIs in children from becoming more serious.  A hospital admission for a child with a LRTI, often resulting in a high number of emergency bed days, may also suggest that the child’s condition was allowed to deteriorate more than should have been permitted by adequate provision of healthcare in a primary care setting, at a clinic or as an outpatient at hospital. Better patient care and case-management will have the additional benefit of reducing preventable emergency hospital admissions, which are costly and expose patients to otherwise avoidable clinical risks such as healthcare acquired infections. |
| Definition | Proportion of children aged under 19 years admitted to hospital as an emergency admission for LRTIs in the respective quarter of the financial year. |
| Data Source | Hospital Episode Statistics (The NHS IC) and GP Population Data  **Denominator**  Registered patient counts by single year of age and sex from the National Health Application and Infrastructure Services (NHAIS), commonly known as ’Exeter’ System, provided by NHS Digital.  **Numerator**  Hospital Episode Statistics (HES) Admitted Patient Care (APC), provided by NHS Digital.  **Standard population**  Office for National Statistics (ONS) mid-year England population estimates for the respective calendar years. If estimates are not available for a specific calendar year, the most recently available estimates are used. |
| Numerator | The number of finished and unfinished continuous inpatient (CIP) spells, excluding transfers, for patients aged under 19 years with an emergency method of admission and with any of the following primary diagnoses (DIAG\_01 in the 1st episode of the spell, ICD 10 codes) in the respective quarter of the financial year. |
| Denominator | GP Population data of children under 19 years of age. |
| Calculation | This indicator is calculated as a rate directly standardised by age and sex. |
| Interpretation Guidelines | 1. This indicator requires careful interpretation and should not be used in isolation. It should be taken in conjunction with other indicators and information from other sources (patient feedback, staff surveys and other such material) that together form a holistic view of CCG outcomes and a more complete overview of how CCG processes are impacting on outcomes. 2. Standardisation is by age and sex and does not account for any other factors that could potentially influence the rate. 3. Differences in casemix (beyond that accounted for by standardisation), comorbidities and other potential risk factors also contribute to the variation. 4. There may be variation in the prevalence of particular conditions due to differing levels of deprivation, for other geo-demographic reasons or between patients of different ethnic heritages. 5. A number of factors outside the control of hospitals and other healthcare providers, such as the socio-economic mix of local populations and events prior to treatment or hospitalisation. may determine whether a patient is admitted or not. This may influence rates. 6. The patterns of providing care may vary between organisations in terms of extent of treatment in primary care settings; referral policies and practices; hospital outpatient facilities/walk-in clinics; and hospital inpatient admission policies and practices. 7. There may be local variation in data quality, particularly in terms of diagnostic and procedure coding. 8. Some factors causing or exacerbating LRTIs are outside the control of the NHS and CCGs. These can vary by region and may include environmental factors such as air quality, occupational hazards and deprivation. |
| Caveats |  |

Application Form

Indicator and Methodology Assurance Service

**Title: Emergency admissions for children with lower respiratory tract infections (LRTs)**

**Set or domain: CCG OIS 3.4**

**IAS Reference Code: IAP00071**

# Application Form

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| --- | --- |
| **Title** |  |
| **Set or domain** | CCG OIS 3.4 |
| **Topic area** | Hospital Admissions |
| **Definition** | Directly age and sex standardised rate of emergency admissions of children under 19 years (0 to 18 years) with lower respiratory tract infections, per 100,000 registered patients. |
| **Indicator owner & contact details** |  |
| **Publication status** | Currently in publication |
| **Purpose** | The intended audience for the indicator is CCGs, the Department of Health, Provider Managers, Commissioning Managers, Clinicians, Patients and the Public.  This indicator forms part of Domain 3 – Helping people to recover from episodes of ill health or following injury. The indicator supports the complementary objectives of preventing conditions from becoming more serious (where possible) and helping people to recover effectively.  This indicator will measure progress in preventing LRTIs in children from becoming more serious. A hospital admission for a child with a LRTI, often resulting in a high number of emergency bed days, may also suggest that the child’s condition was allowed to deteriorate more than should have been permitted by adequate provision of healthcare in a primary care setting, at a clinic or as an outpatient at hospital.  Better patient care and case-management will have the additional benefit of reducing preventable emergency hospital admissions, which are costly and expose patients to otherwise avoidable clinical risks such as healthcare acquired infections. |
| **Sponsor** |  |
| **Endorsement** |  |
| **Evidence and Policy base**  Including related national incentives, critical business question, NICE quality standard and set or domain rationale, if appropriate |  |
| **Data source** | **Denominator**  Registered patient counts by single year of age and sex from the National Health Application & Infrastructure Services (NHAIS), commonly known as ’Exeter’ System, provided by NHS Digital.  **Numerator**  Hospital Episode Statistics (HES) Admitted Patient Care (APC), provided by NHS Digital.  **Standard population**  Office for National Statistics (ONS) mid-year England population estimates for the respective calendar years. If estimates are not available for a specific calendar year, the most recently available estimates are used. |
| **Justification of source and others considered** |  |
| **Data availability** | **NHAIS:** CCG level count of patients registered with the constituent GP Practices extracted from NHAIS (Exeter) Systems.  Counts of registered patients are extracted on 1st April each year, and GP practices are mapped to CCGs using the mapping on this date. When calculating indicators, the count of registered patients and the GP to CCG mapping are taken from the 1st April within the specific time period. For example, the 12 month period July 2013 to June 2014 would use the 1st April 2014 registered patient counts and the GP to CCG map as it was on this date.  **HES: Monthly Provisional Data**  Since April 2008, at pre-arranged dates during the year, on a monthly basis, HES extracts are taken from the SUS data warehouse. HES represents a series of fixed positions aligned to extracted data, whereas SUS is continuously updated whenever data is submitted. This is why there can be differences between SUS and HES even when looking at the same time period.  Each extract is cumulative and contains data submitted for the financial year so far, i.e. Month 1 will only contain the data submitted with an activity date in April, but Month 6 will contain data submitted with an activity date from April to September. One of the reasons for this is that additional data may be needed to update patient records from earlier in the year, e.g. an episode may potentially run for several months or an amendment may need to be made as clinical coding takes place on discharge.  **HES: Annual Refresh / Final Year Data**  Each Final Year data publication of HES collects and holds data based on a financial year. At the end of each year, after the 12 monthly submissions, there is an additional submission date to support what is called the Annual Refresh. This gives providers the opportunity to revise and update their submissions for the year.  A provisional extract is generated from the Annual Refresh submission and is referred to as the “Month 13” extract. This allows HES users an early provisional view of the Final Year data before final publication.  The final publication is subject to consultation and providers are given the opportunity to amend provider organisation code mapping or the removal of any duplicate records. While data relating to episodes and spells for a particular year can be amended and updated in SUS long after the year has passed, no further SUS updates are applied to HES which is fixed after Final Year data publication.  Submission timetable of HES for providers can be found here:  <http://content.digital.nhs.uk/sus/pbrguidance> |
| **Data quality** | **i) What data quality checks are relevant to this indicator?**  **Coverage**  **Completeness**  **Validity**  **Default**  **Integrity**  **Timeliness**  **Other** |
| **Data quality** | **If you included ‘Other’ as a data quality check, please describe the check, how it will be measured, and its reason for use below:** |
| **Data quality** | **ii) What are the current values for the data quality checks selected?** The period of data the current values are calculated from should be stated. Current values should be recorded as a percentage and calculated as described below.  **Period of data:**  **Coverage:**  **Calculation:**  **Completeness:**  **Calculation:**  **Validity:**  **Calculation:**  **Default:**  **Calculation:**  **Integrity:**  **Calculation:**  **Timeliness:**  **Calculation:**  **Other:**  **Calculation:** |
| **Data quality** | **iii) What are the thresholds for the data quality checks selected?**  **Coverage:**  **Completeness:**  **Validity:**  **Default:**  **Integrity:**  **Timeliness:**  **Other:** |
| **Data quality** | **iv) What is the rationale for the selection of the data quality checks and thresholds selected above?** |
| **Data quality** | **v) Describe how you would plan to improve data quality should it not meet, or subsequently fall below, the thresholds required for this indicator.** |
| **Data quality** | **vi) Who will own the data quality risks and issues for this indicator?**  **Name:**  **Job Title:**  **Role:**  **Email:**  **Telephone:** |
| **Data quality** | **vii) Describe how the data quality risks and issues will be managed for this indicator, including the escalation process.** |
| **Data quality** | **viii) Describe any assumptions you have made about data quality for this indicator.** |
| **Data quality** | **ix) Describe any data quality constraints you are aware of for this indicator.** |
| **Data quality** | **x) Additional data quality information:** |
| **Quality assurance** |  |
| **Data linkage** |  |
| **Quality of data linkage** |  |
| **Data fields** | For this indicator the numerator is derived from HES APC final data with the use of HES APC provisional data where the data has not yet been finalised. Finalised annual data are usually available in the November following the year end. For the denominator, GP patient  counts are supplied annually on 1 April.  The data fields and filters that are used are as follows. Details of HES fields and classifications are available in the HES Data Dictionary available at:  <http://digital.nhs.uk/hesdatadictionary>  DIAG\_3\_01  DIAG\_4\_01  STARTAGE  ADMIMETH  EPISTAT  ADMIDATE  SEX  EPIORDER  ADMISORC  EPITYPE  CLASSPAT  CCG\_RESPONSIBILITY |
| **Data filters** | 1. Field Name: DIAG\_3\_01, DIAG\_4\_01  Conditions: DIAG\_3\_01 is equal to any of: J12, J15, J16, J21 OR DIAG\_4\_01 is equal to any of: J10.0, J11.0, J11.1, J13.X, J14.X J18.0, J18.1, J18.9 Rationale: This gives the primary diagnosis of the patient in the episode when the patient was admitted to hospital with an LRTI.  2. Field Name: STARTAGE Conditions: Is between (inclusive): 0 and 18 OR is between (inclusive): 7001 and 7007 Rationale: This field describes the age of the patient at the start of their episode of care. For this indicator only patients under the age of 19 are considered. For children under the age of one year, codes 7001 through 7007 may be used instead of 0 to describe their age in days. This is why the further classification relating to 7000 is needed.  3. Field Name: ADMIMETH Conditions: Is equal to the following: 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2D Rationale: This restricts the data to emergency admissions only. 25, 2A, 2B, 2C and 2D are valid for data from 1st April 2013 and replace 28.  4. Field Name: EPISTAT Conditions: Is equal to the following: 1 or 3 Rationale: This includes both finished and unfinished hospital episodes.  5. Field Name: ADMIDATE Conditions: Limited to admissions within the current rolling quarter year. Rationale: Data are presented annually with an admission date within the year of interest.  6. Field Name: SEX Conditions: Is equal to the following: 1 or 2 Rationale: Data are shown for males and females separately. Data for persons are the sum of males and females and exclude the small number of records where sex was unknown or unspecified.  7. Field Name: EPIORDER Conditions: Is equal to: 1 Rationale: This restricts the data to the first episode of care in a hospital spell.  8. Field Name: ADMISORC Conditions: Is not equal to: 51, 52, 53 Rationale: This excludes transfers.  9. Field Name: EPITYPE Conditions: Is equal to: 1 Rationale: This restricts the data to general episodes (excludes birth, delivery and mental health episodes).  10. Field Name: CLASSPAT Conditions: Is equal to: 1 Rationale: This restricts the data to ordinary admissions (excludes day cases, regular day/night attends and mothers and babies using only delivery facilities).  11. Field Name: CCG\_RESPONSIBILITY Conditions: CCGs in England only. Rationale: Excludes those patients who are registered with GPs outside England. Reference file provided at: <http://content.digital.nhs.uk/ccgois> |
| **Justifications of inclusions and exclusions**  and how these adhere to standard definitions | See rationale statements in field above |
| **Data processing** |  |
| **Numerator** | The number of finished and unfinished admission episodes, excluding transfers, for patients with an emergency method of admission and with primary diagnoses for lower respiratory tract infections as shown above. |
| **Denominator** | CCG level count of patients registered with the constituent GP Practices extracted from NHAIS (Exeter) Systems.  Counts of registered patients are extracted on 1st April each year, and GP practices are mapped to CCGs using the mapping on this date. When calculating indicators, the count of registered patients and the GP to CCG mapping are taken from the 1st April within the specific time period. For example, the 12 month period July 2013 to June 2014 would use the 1st April 2014 registered patient counts and the GP to CCG map as it was on this date. |
| **Computation** | This indicator is calculated as a rate directly standardised by age and sex. |
| **Risk adjustment or standardisation type and methodology** | **Direct Standardisation**  *Variables and methodology:*  The directly age and sex standardised rate (DSR) is the rate of events that would occur in a standard population if that population were to experience the age and sex specific rates of the subject population. The age and sex specific rates of the subject population are applied to the age and sex structure of the standard population.  ormula: The directly age and sex standardised rate (DSR) is the rate of events that would occur in a standard population if that population were to experience the age and sex specific rates of the subject population. The age and specific rates of the subject population are applied to the age and sex structure of the standard population.  where:  *Oi* is the observed number of events in the local or subject population in age and sex group *i*  *ni* is the number of individuals in the local or subject denominator population in age and sex group *i*  *wi* is the number of individuals in the standard population in age and sex group *i*.  The standard population used for the direct method is the England population in the appropriate ONS mid-year population estimates. The single years of age can be found in appendix 1 |
| **Justification of risk adjustment type and variables**  or why risk adjustment is not used |  |
| **Confidence interval / control limit use and methodology** | Confidence Intervals  *Methodology:*  95% confidence intervals are calculated using Dobson's[[1]](#footnote-1) and Byar's[[2]](#footnote-2) methods. Byar’s method is recommended for larger counts whereas for smaller numerators (less than 389) a more exact method based on the Poisson distribution (Dobson’s method) is used:  Formula: 95% confidence intervals are calculated using Dobson's and Byar's methods.  where: *O* is the total number of observed admissions in the subject population.  Formula: 𝑂 is the total number of observed admissions in the subject population  *Olower* and *Oupper* are the lower and upper confidence limits for the observed number of events;  When *O* < 389 then,  Formula: 𝑂lower and Oupper are the lower and upper confidence limits for the observed number of events  where:  𝜒2lower is the 97.5th percentile value from the 𝜒2 distribution with 2*O* degrees of freedom;  𝜒2upper is the 2.5th percentile value from the 𝜒2 distribution with 2*O*+2 degrees of freedom.  When *O* >= 389 then,  Formula: Where: 𝜒2𝑙𝑜𝑤𝑒𝑟 is the 97.5th percentile value from the 𝜒2 distribution with 2𝑂 degrees of freedom; 𝜒2upper is the 97.5th percentile value from the 𝜒2 distribution with 2𝑂+2 degrees of freedom; When O >= 389 then  Where:  *z* is the 97.5th percentile value from the Standard Normal distribution. |
| **Justification of confidence intervals / control limits used** |  |
| **Presentation of indicator** | Indicator values are released as .CSV and .XLSX files. The current release (as of 08/08/17) contains national- and CCG- level data for years 2010/11, 2011/12, 2012/13, 2013/14, 2014/15 and 2015/16.  Data will be reported quarterly, on a rolling annual basis. In order to release data in a more timely way for users, provisional HES data will be used. However, care should be taken as it is subject to changes and revisions each month and should be treated as an estimate until the final annual data is released. Provisional HES data is reported four months in arrears due to HES processing and quality controls. The final annual HES data will be reported eight months in arrears (November, following the financial year end) after the HES annual refresh. The annual refresh gives providers the opportunity to revise and update their submissions for the year. All previously reported provisional quarterly datasets will be replaced by a single annual dataset. Admitted Patient Care Data Quality notes are available via the following link for the relevant data period:  [https://content.digital.nhs.uk](https://content.digital.nhs.uk/article/2021/WebsiteSearch?q=Hospital+Episode+statistics+Admitted+patient+care&area=both)  Reporting periods are broken down as follows:   Q1: July to June. Comprised of July to March (final) and April to June (provisional). The finalised annual figures for the previous year – April to March (final) are also released at this time.   Q2: October to September. Comprised of October to March (final) and April to September (provisional)   Q3: January to December. Comprised of January to March (final) and April to December (provisional)   Q4: April to March. Comprised of April to March (provisional).  Registered patient counts are extracted from the NHAIS (Exeter) System on 1 April for the forthcoming financial year:  <http://systems.digital.nhs.uk/ssd/prodserv/vaprodopenexe/>  ONS Mid-Year Population Estimates, at national level, are released in the following summer. Census based estimates for mid-year are published in September:  <http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates> .  These indicators are official statistics and the publication date is pre-announced. There is no gap between the planned and actual publication date. |
| **Contextual information provided alongside indicator**  with justification |  |
| **Calculation and data source of contextual information** |  |
| **Use of bandings, benchmarks or targets**  with justification |  |
| **Banding, benchmark or target methodology**  if appropriate |  |
| **Interpretation guidelines** |  |
| **Limitations and potential bias** | 1. This indicator requires careful interpretation and should not be used in isolation. It should be taken in conjunction with other indicators and information from other sources (patient feedback, staff surveys and other such material) that together form a holistic view of CCG outcomes and a more complete overview of how CCG processes are impacting on outcomes.  2. Standardisation is by age and sex and does not account for any other factors that could potentially influence the rate.  3. Differences in casemix (beyond that accounted for by standardisation), comorbidities and other potential risk factors also contribute to the variation.  4. There may be variation in the prevalence of particular conditions due to differing levels of deprivation, for other geo-demographic reasons or between patients of different ethnic heritages.  5. A number of factors outside the control of hospitals and other healthcare providers, such as the socio-economic mix of local populations and events prior to treatment or hospitalisation may determine whether a patient is admitted or not. This may influence rates.  6. The patterns of providing care may vary between organisations in terms of: extent of treatment in primary care settings; referral policies and practices; hospital outpatient facilities/walk-in clinics; and hospital inpatient admission policies and practices.  7. There may be local variation in data quality, particularly in terms of diagnostic and procedure coding.  8. Some factors causing or exacerbating LRTIs are outside the control of the NHS and CCGs. These can vary by region, and may include environmental factors such as air quality, occupational hazards and deprivation. |
| **Improvement actions** | It is expected that Clinical Commissioning Groups will use this to identify how improvements in care and the desired reduction in emergency hospital admissions will be delivered. |
| **Evidence of variability** | See CCG\_3.4\_I00762\_D.xlsx |
| **Similar existing indicators** | A similar indicator, 3.2, exists in the NHS Outcomes Framework (NHS OF) upon which this indicator is based. However, the NHS OF indicator uses a different standard population and standardisation method in its calculation to reflect the different purposes of the NHS Outcomes Framework and the CCG Outcomes Indicator Set.  The list of conditions used in the indicator definition was compiled using expert clinical advice, approved for both indicators by the research directorate and reviewed for the NHS Outcomes Framework. The list of conditions included is considered to be the most up-to-date and comprehensive available.  A comparable indicator, upon which the NHS Outcomes Framework indicator was based, also exists in the Compendium of Population Health Indicators, (Emergency hospital admissions).  However, these indicators differ in that the CCG indicator includes all children aged 0-18 years whereas the Compendium reports only those aged 0-15 years. Expert advice recommended the inclusion of children aged 16-18 to provide a more complete view of the extent of the problem of LRTIs amongst children.  Similar indicators also exist in NHS Comparators and the Organisation for Economic Co-operation and Development (OECD). |
| **Coherence and comparability** | See above |
| **Undesired behaviours and/or gaming** |  |
| **Approach to indicator review** | Comments can be made through various media, including NHS Digital general enquiries by email enquiries@nhsdigital.nhs.uk or by telephone 0300 303 5678.  As well as initially assuring the quality and methodology of this indicator, the NHS Digital’s Indicator Assurance Process will be used on an on-going basis to review any new indicators. User needs and feedback will be taken into consideration during this assurance process |
| **Disclosure control** | The indicator is calculated following the HES Analysis guide on suppression of small numbers. Where the indicator is calculated from a numerator of between one and five (inclusive), the value is suppressed and replaced with a ‘\*’. This is in order to protect against the potential for disclosing the identity of an individual.  Secondary suppression is carried out where only one rate is suppressed for a certain breakdown and time period and this value could be calculated by differencing. This is to reduce the risk of one suppressed number being identifiable in isolation.  <http://digital.nhs.uk/media/1592/HES-analysisguide/pdf/HES_Analysis_Guide_March_2015.pdf> |
| **Copyright** |  |

Appendix 1 - England standard population age groups

Age groups used for the England standard population. Separate populations were used for males and females.

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| Age group |
| 0 |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 17 |
| 18 |

**Indicator Assurance Pipeline Process IGB Summary**

The Indicator Assurance Pipeline Process IGB Summary gives an overview of the investigations that have been carried out and recommendations made.

Presented alongside this document, the Indicator Quality Statement outlines what the indicator is intended for and any recommended restrictions on its use and interpretation. This group is asked to consider the following:

* review the Quality Statement and determine if this is an accurate reflection of the issues raised during the appraisal process
* comment on the strategic direction of the indicator and if there are wider issues that need to be addressed by the proposer or commissioner, such as recommended developments

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| **Indicator Title** |
| **3.2** Emergency admissions for children with lower respiratory tract infections |
| **Application Code** |
| IAPP00071 |
| **Purpose of indicator – intended use and audience** |
| Part of the Commissioning Outcomes Framework, these data will be used by the Secretary of State for Health to monitor progress of the Clinical Commissioning Groups against their outcome goals. Primary audiences are the NHS Commissioning board and the Department of Health, with plans to share the data with national and local government, regulators, clinicians, patients and the public. |
| **Indicator sponsor** |
| Department of Health |
| **Intended publication vehicle for indicator** |
| It is not yet known whether HSCIC will also be responsible for dissemination and presentation of the indicator on behalf of NICE and DH, but in the event that the HSCIS has this remit, it is anticipated that publication will be done using the HSCIC Indicator Portal. |
| **Indicator definition** |
| This indicator is based upon the NHS Outcomes Framework indicator of the same name and number. The clinical codes for inclusion and exclusion are those specified for the NHS Outcomes Framework version.  Methodology Summary  Proportion of children aged under 19 years admitted to hospital as an emergency admission for LRTIs in the financial year.  Data sources  HES and GP population data.  Reporting period  Annual.  Measurement unit / scale  The indicator will be a rate per 100,000 population directly standardised by age and sex.  Geographical range  England  Reporting level  CCG |
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|  | **Summary of issues and recommendations. MRG / Peer Review** |  |
| **Ref No** | **Recommendation** | **Further comments / Update** |
| Rec 2012/27 | In terms of the use of GP population data, the issue and potential impact of “inflated” GP lists needs acknowledging. Confirm that the attributed GP patient list source is being used. | GP population data will be the registered patient lists provided by CfH, not be based upon attributed GP patient lists.  It is expected that attributed GP patient lists will be abolished autumn 2012 in favour of counts of registered patients and investigation of the extent to which list inflation is a problem shows that this is decreasing.  Use of GP population data has the additional advantage that counts can be provided by sex and single year of age rather than by the quinary age bands that are provided for the ADS. This will support the construction of denominators for COF indicators where definitions of “adult” and “child” can vary according to the indicator and data source in question, (a “child” may be defined as <16, <17, <18, <19, <20) and enable these indicators to be directly standardised by age and sex if appropriate. |
| Rec 2012/28 | Further investigation is to be conducted to establish the prevalence and spread of people who are not GP registered, such as those that are homeless, to ensure that CCG’s responsibility for the geographical area is reflected and that people who are the responsibility of the CCG aren’t being excluded | Patients without a valid GP practice code will not be a great concern when constructing CCG level indicators. Using the cross referencing files provided, a patient not registered with a GP can be mapped using home postcode to LSOA and then to the CCG with geographical responsibility.  When tested for these indicators, 99.31% of emergency admissions for quarter 4 2010-11 could be allocated to CCGs in this way; once patients from other parts of the UK were removed, only 0.37% of emergency admissions could not be allocated to a CCG.  Further to the original recommendation, it was suggested that use of “NHS number absent” flags in HES data could be used to clean the data by identifying patients (such as foreign nationals) who should not be allocated to a CCG or included in this indicator. |
| Rec 2012/29 | Further consideration to be given to the reporting frequency of these indicators, i.e. whether it is practical to report these indicators on an annual or quarterly basis or whether the rolling 12 months as per SHlMI would be a better option. This needs inclusion in the feasibility report for NICE. | Reporting on a rolling 12 months was suggested rather than quarterly due to anticipated small number problems. The restructured provisional CCG lists (June 2012) means that small numbers are now less of a concern and use of rolling 12 months seems unnecessary.  Sample data suggests that 2.3i, 2.3ii and 3a could be reported quarterly if required. |
| Rec 2012/101 | Further discussion took place around use of quarterly data as small numbers may cause problems with standardisation and confidence intervals.  MRG agreed that decisions should be based upon whether the rates produced using quarterly data are helpful. This links to wider issues of clarity of use. MRG suggested that, if required, quarterly data could be used for management information purposes with accepted limitations, but only the annual data would be published. | It was further noted that the Head of Profession (HoP) can make a recommendation to publish more frequently, for example if there is sufficient expression of interest from users. |
| Rec 2012/30  2012/102 | If and how these indicators should be standardised should be considered and brought back to MRG  MRG had already discussed the most appropriate way to standardise the NHS Outcomes Framework and COF indicators (either direct or indirect). In particular, focus was upon whether the COF indicators should always be standardised in the same way as in the NHS Outcomes Framework on which they are based. | MRG recommended that direct standardisation is the most appropriate for use as it gives a quantifiable figure and can be used to make comparisons between CCGs.  It is proposed that where standardisation is appropriate, other indicators for the COF which will use direct standardisation and it is recognised that equivalent NHS Outcomes Framework indicators may be using indirect standardisation; consistency across these two outcome frameworks is not an imperative but internal consistency is desirable.  This indicator will be directly standardised by age and sex to allow comparison between CCGs. |
| Rec 2012/31 | Discussion was held in relation to the practicalities of reporting on the indicators where there were potentially low numbers at CCG level. The intention is to report as rates but this might switch to numbers where reported numbers are low as this still would be useful for organisations. More analysis is to be brought back to MRG/small numbers panel in regards to low numbers at CCG level including identification of the prevalence of CCG’s where there are 0 episodes, particularly with those indicators relating to children | Small numbers will not be the problem initially feared.  Indicators 2.3.i and 3a for adults and 2.3.ii and 3.2 for children should be reportable on an annual basis and provisional data suggests that all but 3.2 could be produced quarterly. |
| Rec 2012/99 | MRG suggested an exercise could take place to cross reference the GP registered population against 2011 census data for the purpose of understanding although the difficulty of this was recognised. |  |
| Rec 2012/100 | MRG’s views were sought regarding how non-registered additions should be treated when constructing the indicator denominator - for example, if 50 non-registered individuals were to be included in the numerator, should the denominator be increased and if so, by what amount? | It was agreed that the possibility of additional patients being included in the numerator be acknowledged but that the denominator should not be adjusted as there is no way of knowing how many others were not registered with a GP that should be included in the denominator.  This issue should be recognised as a limitation and noted in the indicator quality statement. |

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| **Strategic position and issues** |
| **Funding status** |
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| **Timescales** |
| **Risks, assumptions and impact** |
| All indicators are based on continuous inpatient spells (CIPS) from HES data where the CIPS will be constructed using the in-house methodology approved by MRG 13 July 2012.  HES appears to be a secure data source and the data quality has improved year on year.  The denominators will be constructed at CCG level from GP population data using registered patient lists. |
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| **Additional IGB recommendations regarding strategic position** |

1. Dobson A et al. Confidence intervals for weighted sums of Poisson parameters. Stat Med 1991;10:457-62 [↑](#footnote-ref-1)
2. Breslow NE, Day NE. Statistical methods in cancer research, volume II: The design and analysis of cohort studies. Lyon: International Agency for Research on Cancer, World Health Organization; 1987: 69. [↑](#footnote-ref-2)