**NHS Digital**

**Indicator Supporting Documentation**

**IAP00068 Unplanned hospitalisation for chronic ambulatory care sensitive conditions**

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| FIELD | CONTENTS |
| IAP Code | IAP00068 |
| Title | Unplanned Hospitalisation for Chronic Ambulatory Care Sensitive Conditions |
| Published by | NHS Digital |
| Reporting period | Quarterly |
| Geographical Coverage | England |
| Reporting level(s) | CCG, National |
| Based on data from | National Health Application and Infrastructure Services (NHAIS), Hospital Episode Statistics (HES) Admitted Patient Care (APC) and European Standard Population 2013 |
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| Rating | Fit for Use |
| Assurance date | 24/05/2018 |
| Review date | 24/05/2021 |
| Indicator set | Clinical Commissioning Group Outcome Indicator Set |
| Brief Description  | This indicator (CCG OIS 2.6) measures how many people with specific long-term conditions, which should not normally require hospitalisation, are admitted to hospital in an emergency. This indicator forms part of Domain 2 - Enhancing quality of life for people with long-term conditions and is intended to measure progress in preventing chronic ambulatory care sensitive conditions (ACSC) – diabetes, epilepsy and high blood pressure – from becoming more serious. |
| Purpose | ACSC’s (e.g. chronic hepatitis B; asthma; congestive heart failure; diabetes; chronic obstructive pulmonary disease; angina; iron deficiency anaemia; hypertension; epilepsy; dementia) are those where effective community care and case management can help prevent the need for hospital admission. ACSCs account for a significant percentage of all emergency admissions nationally (8.1 per cent in 2015/16). Providing effective ambulatory care for these conditions will lead to better patient care and case management, and a reduction in avoidable emergency admissions, which are costly and expose patients to otherwise avoidable clinical risks such as health care acquired infections. The aim of this indicator is to look at emergency admissions for all long-term conditions where optimum management can be achieved in the community. Conditions are included if treatment or management of the condition in primary care or within the community should have prevented the exacerbation that led to the emergency admission. It is expected that CCGs will use this to identify how improvements in care and the desired reduction in emergency hospital admissions will be delivered. |
| Definition | Directly age and sex standardised admission rate for unplanned hospitalisation for chronic ambulatory care sensitive conditions per 100,000 registered patients, 95% confidence intervals (CI). This indicator forms part of Domain 2 - Enhancing quality of life for people with long-term conditions and is intended to measure progress in preventing chronic ambulatory care sensitive conditions (ACSC) – such as diabetes or hypertension – from becoming more serious. For a full list of the conditions included in this indicator please see Appendix 1.The King’s Fund Data Briefing on ACSCs, April 2012 (https://www.kingsfund.org.uk/publications/data-briefing-emergency-hospital-admissions-ambulatory-care-sensitive-conditions), suggests there is a link between poor primary care management of ACSCs and the escalation of the condition to require emergency treatment. The report also indicates that not only would a person’s care improve with better primary care management but there would also be a potential saving of between £96 million and £238 million per year due to savings on emergency admissions at the time of writing. The chronic ambulatory care-sensitive conditions used in this indicator are included in the definition of ambulatory care-sensitive conditions reported on within the Kings Fund, however the Kings Fund definition also includes acute and vaccine preventable conditions. Therefore, only a proportion of the savings quoted in the report could be saved with effective management of the indicator conditions.  |
| Data Source | 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. http://systems.digital.nhs.uk/ssd/prodserv/vaprodopenexe/ Numerator: Hospital Episode Statistics (HES) Admitted Patient Care (APC), provided by NHS Digital. http://digital.nhs.uk/hes Standard Population: European Standard Population 2013 |
| Numerator | The number of finished and unfinished admission episodes, excluding transfers, for patients with an emergency method of admission and with a primary diagnosis for chronic ambulatory care sensitive conditions as shown in appendix 1. |
| 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. |
| Calculation | This indicator is calculated as a rate directly standardised by age and sex per 100,000 registered patients of the number of emergency admissions for ACSCs that should not usually require hospital admission Rates are presented at one decimal place.GP registered patients (denominator) and admission episode counts (numerator) are presented for each CCG, as well as at a national level to provide further information. 95% confidence intervals are also provided for the DSRs for further information. |
| Interpretation Guidelines | 1. This indicator requires careful interpretation and should not be viewed in isolation, but instead be considered alongside information from other indicators and alternative sources such as patient feedback, staff surveys and similar material. When evaluated together, these will help to provide a holistic view of CCG outcomes and provide a more complete overview of the impact of the CCGs’ processes on outcomes.
2. Standardisation is by age and sex and does not encompass any other factors that could potentially influence the rate.
3. Differences in casemix (beyond that accounted for by standardisation), such as comorbidities and other potential risk factors may also contribute to 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. For example, Type 2 diabetes is up to six times more common in people of South Asian descent and up to three times more common amongst those of African and Afro-Caribbean origin.
5. A number of factors outside the control of healthcare providers, such as the socio-economic mix of local populations, may determine whether a patient is admitted; thus, this could 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 relevant conditions are outside the control and influence of the NHS and CCGs. These can vary by region, and may include environmental factors such as air quality, occupational hazards and deprivation.
9. The indicator is calculated based on the primary diagnosis field which is defined as follows: i) The main condition treated or investigated during the relevant episode of healthcare, and ii) Where there is no definitive diagnosis, the main symptom, abnormal findings or problem. As a result of the above, if a patient is admitted to hospital as a result of an injury or condition which has been caused by a badly managed ACSC they may be omitted from this indicator if the injury or condition was the main condition being treated or investigated in the admission episode, rather than if the ACSC were the main condition being treated.
10. GP patient registration figures can be subject to over and under coverage issues. List inflation may occur for a number of reasons including but not limited to ; high turnover of patients followed by subsequent registrations not being processed in a timely manner, people who do not de-register, people who live abroad who fail to deregister, people with a temporary residence. Equally there may be under coverage for reasons including but not limited to; patients solely registered with private GPs, babies yet to be registered, migrants yet to register. The affects of this may vary between CCGs.
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| Caveats | None. |

Application Form

Indicator and Methodology Assurance Service

**Title:**

**Set or domain: CCG OIS 2.6**

**IAS Reference Code: IAP00068**

**Version History**

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| --- | --- | --- | --- |
| Version | Date | Changed By | Change |
| V0.1 | 28/07/2017 | Andy Besch | Uplift to new application form commenced |
| V0.2 | 31/07/2017 | Andy Besch | Uplift completed |
| V0.3 | 21/12/2017 | Pauline Musa | Review of comments & completion of remainder of form |
| V0.4 | 28/12/2017 | Pam Murray | Review & minor updates for submission |
| V0.5 | 29/01/2018 | Ruth Thompson / Pam Murray | Updated application form to reflect actions from MRG appraisal log |
| V0.6 | 08/02/2018 | Ruth Thompson / Pam Murray | Updated application form to reflect actions from MRG appraisal log |
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# Application Form

Section 1 Introduction / Overview

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| **1.1 Title** |  |
| **1.2 Set or domain** | Clinical Commissioning Group Outcome Indicator Set (CCG OIS)Domain 2 – Enhancing quality of life for people with long-term conditions (indicator 2.6) |
| **1.3 Topic area** | Hospital Admissions |
| **1.4 Definition** | **Plain English description** CCG OIS 2.6 measures how many people with specific long-term conditions, which should not normally require hospitalisation, are admitted to hospital in an emergency. These conditions include, for example, diabetes, epilepsy and high blood pressure. **Technical description** Directly age and sex standardised admission rate for unplanned hospitalisation for chronic ambulatory care sensitive conditions per 100,000 registered patients, 95% confidence intervals (CI) This indicator forms part of Domain 2 - Enhancing quality of life for people with long-term conditions and is intended to measure progress in preventing chronic ambulatory care sensitive conditions (ACSC) – such as diabetes or hypertension – from becoming more serious. For a full list of the conditions included in this indicator please see Appendix 1This indicator will be presented at CCG level and national level broken down by gender, with a 12 month rolling reporting period published on a quarterly basis. |
| **1.5 Indicator owner & contact details** | Clinical Indicators team, NHS DigitalClinical.indicators@nhs.net |
| **1.6 Publication status** | Currently in publication |

Section 2 Rationale

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| **2.1 Purpose** | ACSC’s (e.g. chronic hepatitis B; asthma; congestive heart failure; diabetes; chronic obstructive pulmonary disease; angina; iron deficiency anaemia; hypertension; epilepsy; dementia) are those where effective community care and case management can help prevent the need for hospital admission. ACSCs account for a significant percentage of all emergency admissions nationally (8.1 per cent in 2015/16). Providing effective ambulatory care for these conditions will lead to better patient care and case management, and a reduction in avoidable emergency admissions, which are costly and expose patients to otherwise avoidable clinical risks such as health care acquired infections. The aim of this indicator is to look at emergency admissions for all long-term conditions where optimum management can be achieved in the community.Conditions are included if treatment or management of the condition in primary care or within the community should have prevented the exacerbation that led to the emergency admission.The indicator uses primary diagnosis for ACSC conditions only. Co-morbidity ACSC conditions such as epilepsy are documented on a patients record regardless of whether the admission was due to the ACSC or not. Including secondary diagnosis would therefore inflate figures.The intended audience for the indicator is CCGs, the Department of Health, Provider Managers, Commissioning Managers, Clinicians, Patients and the Public.It is expected that CCGs will use this to identify how improvements in care and the desired reduction in emergency hospital admissions will be delivered. |
| **2.2 Sponsor** | The CCGOIS indicators were originally commissioned by NHS England however NHS England has not recommissioned these indicators as they are awaiting the outcome of the Kings Fund Report. Therefore, we do not have a current sponsor. However, we will write to MRG when the sponsorship arrangements have been formalised. |
| **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 | This indicator fits within CCGOIS Domain 2: Enhancing quality of life for people with long-term conditions.Managing Ambulatory care-sensitive conditions is listed within the ten priorities for commissioners as outlined by the Kings Fund (<https://www.kingsfund.org.uk/publications/articles/transforming-our-health-care-system-ten-priorities-commissioners/summary#_-acs-conditions>) The King’s Fund Data Briefing on ACSCs, April 2012[[1]](#footnote-1), suggests there is a link between poor primary care management of ACSCs and the escalation of the condition to require emergency treatment. The report also indicates that not only would a person’s care improve with better primary care management but there would also be a potential saving of between £96 million and £238 million per year due to savings on emergency admissions at the time of writing.The chronic ambulatory care-sensitive conditions used in this indicator are included in the definition of ambulatory care-sensitive conditions reported on within the Kings fund, however the Kings fund definition also includes acute and vaccine preventable conditions. Therefore, only a proportion of the savings quoted in the report could be saved with effective management of the indicator conditions.The following quotes are from the King’s Fund Data Briefing: ‘ACSCs are conditions for which effective management and treatment should prevent admission to hospital. They can be classified as: chronic conditions, where effective care can prevent flare-up; acute conditions, where early intervention can prevent more serious progression; and preventable conditions, where immunisation and other interventions can prevent illness (Ham et al 2010’‘High levels of admissions for ACSCs often indicate poor co-ordination between the different elements of the health care system, in particular between primary and secondary care. An emergency admission for an ACSC is a sign of the poor overall quality of care, even if the ACSC episode itself is managed well. The wide variation of emergency hospital admissions for ACSCs implies that they, and the associated costs for commissioners, can be reduced.’‘In order to realise the potential savings, in the short to medium term better management of ACSCs in primary care is needed to reduce emergency hospital admissions (i.e. secondary prevention).’‘According to our estimates, emergency admissions for ACSCs could be reduced by between 8 and 18 per cent. We estimate this would result in savings of between £96 million and £238 million per year.’ |

Section 3 Data

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| **3.1 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. <http://systems.digital.nhs.uk/ssd/prodserv/vaprodopenexe/> **Numerator**: Hospital Episode Statistics (HES) Admitted Patient Care (APC), provided by NHS Digital. <http://digital.nhs.uk/hes> **Standard Population**: [European](http://teams2/sites/ClinInd/CI_CCGOIS_NOF/Indicator_Assurance/Emergency%20admissions/01%202017%20Applications/IAP00068%20-%20IND%202.6%20Unplanned%20hospitalisation%20for%20CASC/European) Standard Population 2013  |
| **3.2 Justification of source and others considered** | **National Health Application & Infrastructure Services – GP registered populations** NHAIS is a system implemented for managing patient registration details for England, Wales and Northern Ireland. The NHAIS system contains a wealth of secure information used by a range of bodies and professionals within the NHS. Access to patient data held on NHAIS systems is via Open Exeter. Data are extracted as a quarterly snapshot in time from the GP Payments system (NHAIS) maintained by NHS Digital. **Hospital Episode Statistics – Admitted Patient Care**HES is a well established administrative database for activity in NHS hospitals. It contains details of all admissions to NHS hospitals in England, including private patients treated in NHS hospitals, patients who are resident outside of England, and care delivered by treatment centres (including those in the independent sector) funded by the NHS. HES is the data source for a wide variety of healthcare analysis for the NHS, Government, and many other organisations and individuals. The APC dataset includes details of episodes where the patient is admitted into hospital. The data consist of individual records of patient care that are held within the HES database. Each record in the HES APC database is known as an episode – this is a continuous period of admitted patient care under the care of a consultant within one hospital provider. Provisional HES statistics are produced and published on a monthly basis and so are readily available for rolling quarterly publications of this indicator.**European Standard Population 2013**The current European Standard Population was introduced in 2013 and is widely used to produce age standardised rates. This will also allow for timeseries comparison. |
| **3.3 Data availability** | **See table below for European Standard Population 2013** **NHAIS** (GP practice population reference data):https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/general-practice-data-hubCCG 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.An extract is taken quarterly and published in the same month, with all data tables available and free of charge. **HES** https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statisticsThis indicator uses both finalised and provisional HES data, the provisional data is produced and published two months in arrears due to HES processing and quality controls. The final annual HES data is reported approximately seven months in arrears (October, 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.Extracts and tabulations of data from HES are available to order for a charge. This is managed by the NHS Digital Data Access Request Service (DARS). https://digital.nhs.uk/services/data-access-request-service-dars |

European Standard Population 2013

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| Age group | ESP2013 |
| 0-4 | 5,000 |
| 5-9 | 5,500 |
| 10-14 | 5,500 |
| 15-19 | 5,500 |
| 20-24 | 6,000 |
| 25-29 | 6,000 |
| 30-34 | 6,500 |
| 35-39 | 7,000 |
| 40-44 | 7,000 |
| 45-49 | 7,000 |
| 50-54 | 7,000 |
| 55-59 | 6,500 |
| 60-64 | 6,000 |
| 65-69 | 5,500 |
| 70-74 | 5,000 |
| 75-79 | 4,000 |
| 80-84 | 2,500 |
| 85-89 | 1,500 |
| 90+ | 1,000 |

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| **3.4 Data quality** |  **i) What data quality checks are relevant to this indicator?****Coverage** [x]  **Completeness** [x]  **Validity** [x]  **Default** [ ]  **Integrity** [ ]  **Timeliness** [ ]  **Other** [ ] **If you included ‘Other’ as a data quality check, please describe the check, how it will be measured, and its reason for use below:** n/a **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. Each release of HES APC data is accompanied by a data quality report. The 2016/17 data quality report is available via the following link: https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/general-practice-data-hubMore detailed HES data quality reports covering all data sets and all years are available here: https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics/the-processing-cycle-and-hes-data-quality**Period of data:** 2016/17HES APC data is available at CCG level from 2010/11 onwards. CCGs replaced Primary Care Trusts (PCTS) on 1 April 2013, HES processing allowed for the mapping of CCGs in years prior to this, back to 2010/11**Coverage:** HES APC 2016/17 data contained 19.7million Finished Consultant Episodes (FCEs). **Calculation:** Data quality information available in respective data set reports.**Completeness:** The completeness of individual fields within HES APC is generally very high, details of specific issues in the 2016/17 data set are outlined in the data quality report. **Calculation:** Data quality information available in respective data set reports.**Validity:** Healthcare providers collect administrative and clinical information locally to support the care of the patient. The data is submitted to the Secondary Uses Service (SUS), which as well as making it available to the commissioners, also copies the information to a database. At pre-arranged dates during the year, SUS takes an extract from their database and sends it to HES. HES then validate and clean the extract, before deriving new items and making the information available in the data warehouse. Data quality reports and checks are competed at various stages in the cleaning and processing cycle.   **Calculation:** The HES data quality team review provisional data on a monthly basis reporting back to providers to drive up quality throughout the year. **Default:** n/a **Calculation:** n/a **Integrity:** n/a **Calculation:** n/a**Timeliness:** Aggregated reports of HES data are released on provisional monthly data approximately two months after the end of the reference month.  **Calculation:** n/a**Other:** n/a**Calculation:** n/a**iii) What are the thresholds for the data quality checks selected?** HES is a mandated collection and as such there is no threshold set. Data quality issues are reviewed and fed back to providers to ensure continual improvement in all areas. **Coverage:** n/a**Completeness:** n/a **Validity:** n/a**Default:** n/a**Integrity:** n/a**Timeliness:** n/a**Other:** n/a**iv) What is the rationale for the selection of the data quality checks and thresholds selected above?** See above **v) Describe how you would plan to improve data quality should it not meet, or subsequently fall below, the thresholds required for this indicator.** The HES data quality team continually feedback to providers to maintain high standards of data quality. If any issues were found in the HES data, these would be investigated by the team and reported back to Clinical Indicators.**vi) Who will own the data quality risks and issues for this indicator?** **Name:** Chris Dew **Job Title:** Information Analysis Lead Manager **Role:** Clinical Indicators **Email:** clinical.indicators@nhs.net **Telephone:** 0300 303 5678 **vii) Describe how the data quality risks and issues will be managed for this indicator, including the escalation process.** Any issues will be managed and mitigated through agreed engagement channels with the data suppliers.**viii) Describe any assumptions you have made about data quality for this indicator.** Please see section 3.5 ‘Quality Assurance’ and Section 5 ‘Presentation and Interpretation’ **ix) Describe any data quality constraints you are aware of for this indicator.** **x) Additional data quality information:** **The monthly provisional HES data is subject to change this is because 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. 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 prior to the 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. HES data is fixed after the final publication.** **As provisional HES data is subject to change it should be treated as an estimate until the final annual data is released. When the indicator is produced with finalised data previously reported provisional quarterly datasets are replaced with the single annual dataset.** **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).****These indicators are official statistics and the publication date is pre-announced. There is no gap between the planned and actual publication date.**  |
| **3.5 Quality assurance** | There is no other national data set to compare HES against to obtain an overall quantitative assessment of accuracy. The data are completed from administrative records recorded by each Trust on their Patient Administration Systems (PAS) with the clinical information added by clinical coders based on doctors’ notes. The trusts are required to complete this information to inform how much they are paid under PbR. Historically, the Audit Commission ran a rolling programme of audits of organisations’ coding to check for accuracy. As of April 2015, this role was replaced by Public Sector Audit Appointments Ltd. (PSAA). Further to this, from 2017/18 PSAA is no longer responsible for appointing auditors to NHS trusts and CCGs. Under the Local Audit and Accountability Act 2014, NHS trusts and CCGs must select and appoint their own auditors, and directly manage their contracts, for the audits for financial years starting from 1 April 2017.The HES Processing Cycle and Data Quality report includes and explains the data cleaning process, the provider organisation code mapping and the derivation rules which include examples of correction and validation rules and derivation is available at the following link: <http://content.digital.nhs.uk/article/1825/The-processing-cycle-and-HES-data-quality>. |
| **3.6 Data linkage** | N/A |
| **3.7 Quality of data linkage** | N/A |
| **3.8 Data fields** | The data fields and filters that are used are as follows. Details of HES fields and classifications are available in the HES Data Dictionary:https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics/hospital-episode-statistics-data-dictionaryHES APC: DIAG\_3\_01 – Diagnosis, 3 charactersDIAG\_4\_01 – Diagnosis, 4 charactersDIAG\_3\_CONCAT – 3 character concatenated diagnosisOPERTN\_3\_CONCAT – 3 character concatenated procedure STARTAGE – Age at the start of the episodeADMIMETH – Method of admissionEPISTAT – Status of episodeADMIDATE – Date of admissionSEX – Sex of patientEPIORDER – Episode number within a spellADMISORC – Source of admissionEPITYPE – Type of admissionCLASSPAT – Patient classificationCCG\_RESPONSIBILITY – CCG of responsibility. CCG derived from the patient’s GP practice, or if this is not recorded, from their residence, or if this is not recorded, from the location of the hospital provider supplying careEPIKEY – Unique record identifier |
| **3.9 Data filters** | * Field Name: DIAG\_3\_01, DIAG\_4\_01, DIAG\_3\_CONCAT , OPERTN\_3\_CONCAT Conditions Any of the below are true. Defined as follows:
	+ DIAG\_4\_01 is equal to either: B18.0, B18.1ANDDIAG\_3\_CONCAT does not contain: D57 [where DIAG\_3\_CONCAT is a concatenated field containing the values of all 20 diagnosis fields separated by commas. This condition excludes episodes with a subsequent diagnosis of D57 (Sickle-cell disorders)]
	+ DIAG\_3\_01 is equal to J45ORDIAG\_4\_01 is equal to J46X
	+ (DIAG\_3\_01 is equal to I50ORDIAG\_4\_01 is equal to any of: I11.0, J81X, I13.0)AND(OPERTN\_3\_CONCAT does not contain any of: K0, K1, K2, K3, K4, K50, K52, K55, K56, K57, K60, K61, K66, K67, K68, K69, K71, K73, K74)[where OPERTN\_3\_CONCAT is a concatenated field containing the values of all 24 operation/procedure fields, separated by commas. K73 and K74 are valid for data from 1st April 2017.]
	+ DIAG\_3\_01 is equal to any of: E10, E11, E12, E13, E14
	+ DIAG\_3\_01 is equal to any of: J41, J43, J44ORDIAG\_4\_01 is equal to either of: J42X, J47XOR(DIAG\_3\_01 is equal to J20 AND DIAG\_3\_CONCAT contains any of: J41, J42, J43, J44, J47)
	+ DIAG\_3\_01 is equal to either of: I20, I25ANDOPERTN\_3\_CONCAT does not contain any of: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, V, W, X0, X1, X2, X4, X5
	+ DIAG\_3\_01 is equal to either of: D51, D52ORDIAG\_4\_01 is equal to any of: D50.1, D50.8, D50.9
	+ DIAG\_4\_01 is equal to either of: I10X, I11.9AND(OPERTN\_3\_CONCAT does not contain: K0, K1, K2, K3, K4, K50, K52, K55, K56, K57, K60, K61, K66, K67, K68, K69, K71, K73, K74) [where OPERTN\_3\_CONCAT is a concatenated field containing the values of all 24 operation/procedure fields, separated by commas. K73 and K74 are valid for data from 1st April 2017.]
	+ DIAG\_3\_01 is equal to any of: I48, G40, G41, F00, F01, F02, F03

Rationale: This gives the primary diagnosis of the patient in the episode when the patient was admitted to hospital.* Field Name: STARTAGEConditions: Is between (inclusive): 0 and 120ORis between (inclusive): 7001 and 7007Rationale: This field describes the age of the patient at the start of their spell in hospital. For children under the age of one year, codes 7001 to 7007 may be used instead of 0 to describe their age in days. This is why the further classification relating to 7000 is needed.
* Field Name: ADMIMETHConditions: Is equal to the following: 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2DRationale: 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.
* Field Name: EPISTATConditions: Is equal to the following: 1 or 3Rationale: This includes both finished and unfinished hospital episodes.
* Field Name: ADMIDATEConditions: Limited to admissions within the current rolling quarter year.Rationale: Data is presented annually with an admission date within the year of interest.
* Field Name: SEXConditions: Is equal to the following: 1 or 2Rationale: Data is shown for males and females separately. Data for persons is the sum of males and females and excludes the small number of records where sex was unknown or unspecified.
* Field Name: EPIORDERConditions: Is equal to: 1Rationale: This restricts the data to the first episode in a hospital spell.
* Field Name ADMISORCConditions: Is not equal to 51, 52 or 53Rationale: This excludes transfers.
* Field Name: EPITYPEConditions: Is equal to: 1Rationale: This restricts the data to general episodes (excludes birth, delivery and mental health episodes).
* Field Name: CLASSPATConditions: Is equal to: 1Rationale: This restricts the data to ordinary admissions (excludes day case, regular day/night attenders and mothers and babies using only delivery facilities).
* Field Name: CCG\_RESPONSIBILITYConditions: CCGs in England only.Rationale: Excludes those patients who are registered with GPs outside England. Reference file provided at: <http://digital.nhs.uk/ccgois>
 |
| **3.10 Justifications of inclusions and exclusions** and how these adhere to standard definitions | 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.ADMISORC – Excludes transfers from NHS hospital providers. This is a standard HES definition in the indicator set.CCG\_RESPONSIBILITY – Selects valid CCGs, this is a standard HES definition in the indicator set.CLASSPAT – Selects ordinary admissions only. This is a standard definition in the indicator set when identifying emergencies. EPIORDER – Standard HES definition, selects the first admission in a spell, known as the admission episode.EPISTAT – Standard HES definition, to select both finished and unfinished episodes. EPITYPE – Standard HES definition, selects general episodes only.SEX – Selects valid genders onlySTARTAGE – Selects valid ages onlyThis indicator counts all emergency admissions for ACSCs, therefore if a person is admitted twice within the reporting period for a ACS condition they will be counted twice. |
| **3.11 Data processing** | The Clinical Indicators team will extract the data and perform all calculations to produce the indicator. |

Section 4 Construction

|  |  |
| --- | --- |
| **4.1 Numerator** | The number of finished and unfinished admission episodes, excluding transfers, for patients with an emergency method of admission and with a primary diagnosis for chronic ambulatory care sensitive conditions as shown in appendix 1. |
| **4.2 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. |
| **4.3 Computation** | This indicator is calculated as a rate directly standardised by age and sex per 100,000 registered patients of the number of emergency admissions for ACSCs that should not usually require hospital admissionRates are presented at one decimal place. |
| **4.4 Risk adjustment or standardisation type and methodology** | **Direct Standardisation***Variables and methodology:* Eayres D. Technical Briefing 3: Commonly used public health statistics and their confidence intervals. York: APHO; 2008. Available at [http://webarchive.nationalarchives.gov.uk/20080728093252/http://www.apho.org.uk/resource/item.aspx?RID=48457](http://webarchive.nationalarchives.gov.uk/20080728093252/http%3A/www.apho.org.uk/resource/item.aspx?RID=48457)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.$$DSR=\frac{1}{\sum\_{i}^{}w\_{i}}×\sum\_{i}^{}\frac{w\_{i}O\_{i}}{n\_{i}}$$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 European Standard Population 2013. The age groups used are: 0-4, 5-9, 10-14, 15-19, 20-24, 25-29… 85-89, 90+. |
| **4.5 Justification of risk adjustment type and variables**or why risk adjustment is not used | Directly age-standardised rates express an indicator in terms of the overall rate that would occur in a standard population age-structure if it experienced the age-specific rates of the observed population [http://webarchive.nationalarchives.gov.uk/20080728093252/http://www.apho.org.uk/resource/item.aspx?RID=48457](http://webarchive.nationalarchives.gov.uk/20080728093252/http%3A/www.apho.org.uk/resource/item.aspx?RID=48457)Directly standardised rates are utilised as they allow for comparisons of emergency admissions to hospital for ACSCs between different areas using the same standard population – in this instance, European Standard Population 2013. The rates can also be used as a means to assess the trend of these admissions over time. |
| **4.6 Confidence interval / control limit use and methodology** | Confidence Intervals*Methodology:*95% confidence intervals are calculated using Dobson's[[2]](#footnote-2) and Byar's[[3]](#footnote-3) methods for large counts and Dobson and exact chi-squared for small counts (under 389). **Dobson’s method:**$$DSR\_{lower}=DSR+\sqrt{\frac{Var(DSR)}{Var(O)}}\left(O\_{lower}-O\right)$$$$DSR\_{upper}=DSR+\sqrt{\frac{Var(DSR)}{Var(O)}}\left(O\_{upper}-O\right)$$where: ***O*** is the total number of observed admissions in the subject population.$$Var(DSR)=\frac{\sum\_{i}^{}\frac{w\_{i}^{2}O\_{i}}{n\_{i}^{2}}}{\left(\sum\_{i}^{}w\_{i}\right)^{2}}$$$$Var\left(O\right)=\sum\_{i}^{}O\_{i}$$***O****lower* and ***O****upper* are the lower and upper confidence limits for the observed number of events;**Exact chi-squared:**When ***O*** < 389 then,$$O\_{lower}= \frac{χ\_{lower}^{2}}{2}$$$$O\_{upper}= \frac{χ\_{upper}^{2}}{2}$$where:𝜒**2**lower is the 97.5th percentile value from the 𝜒2 distribution with 2***O*** degrees of freedom;𝜒**2**upper is the 2.5th percentile value from the 𝜒2 distribution with 2***O***+2 degrees of freedom.**Byar’s method:**When ***O*** >= 389 then,$$O\_{lower}=O\left(1-\frac{1}{9O}-\frac{z}{3\sqrt{O}}\right)^{3}$$$$O\_{upper}=(O+1)\left(1-\frac{1}{9\left(O+1\right)}+\frac{z}{3\sqrt{O+1}}\right)^{3}$$Where:***z*** is the 97.5th percentile value from the Standard Normal distribution. |
| **4.7 Justification of confidence intervals / control limits used** | The indicator is published with 95% confidence intervals recognising the existence of natural variation between the CCG populations, as specified in the ‘Commonly used public health statistics and their confidence intervals’ (Association of Public Health Observatories (APHO) (now Public Health England), March 2008).The APHO guide recommends using Dobson and Byar’s methods for large counts and Dobson and exact chi-squared for small counts. Further information can be found by following the link below. [http://webarchive.nationalarchives.gov.uk/20080728093252/http://www.apho.org.uk/resource/item.aspx?RID=48457](http://webarchive.nationalarchives.gov.uk/20080728093252/http%3A/www.apho.org.uk/resource/item.aspx?RID=48457) |

Section 5 Presentation and Interpretation

Presentation

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| **5.1 Presentation of indicator** | The indicator is presented on the NHS Digital indicator portal in .csv and .xlsx formats. These files are accompanied by a Specification and an Indicator Quality Statement. The data is presented with a detailed header including information on the statistic presented, the reporting period, level of coverage, publication date, data sources, and any further notes to be aware of. Drop down filtering is also available. The indicator is presented at England and CCG level (for all England CCGs) broken down by gender. Previously published historic datasets starting from 2010/11 are also presented to enable time series analysis. Data is reported quarterly, on a rolling annual basis. Provisional HES data is used when final HES data is not available. When the indicator is produced with finalised data previously reported provisional quarterly datasets are replaced with the single annual dataset.  |

The specific fields presented in the data are as follows:

|  |  |
| --- | --- |
| **Column Name** | **Output** |
| Period | Year(s) of coverage |
| Reporting period | Period of coverage (years/rolling quarters) |
| Breakdown | National (All registered patients in England), CCG |
| ONS Code | ONS geography code |
| Level | CCG codes |
| Level description | CCG names |
| Gender | Person, Female, Male |
| Indicator value | Directly standardised rate (DSR) per 100000 registered patients |
| CI lower | DSR lower 95% confidence interval |
| CI upper | DSR upper 95% confidence interval |
| Denominator | The number of registered patients (denominator) |
| Numerator | The number of unplanned hospitalisations for chronic ambulatory care sensitive conditions |

|  |  |
| --- | --- |
| **5.2 Contextual information provided alongside indicator**with justification | GP registered patients (denominator) and admission episode counts (numerator) are presented for each CCG, as well as at a national level to provide further information. 95% confidence intervals are also provided for the DSRs for further information. |
| **5.3 Calculation and data source of contextual information** |  |
| **5.4 Use of bandings, benchmarks or targets**with justification | The indicator is presented without target or ranking. If a CCG believes their figure to be disproportionately high, for example when compared to the national figure, the factors contributing to this can be investigated and appropriate action can be taken. |
| **5.5 Banding, benchmark or target methodology**if appropriate | N/A |

Interpretation

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| --- | --- |
| **5.6 Interpretation guidelines** | This indicator requires careful interpretation and should not be viewed in isolation, but instead be considered alongside information from other indicators and alternative sources such as patient feedback, staff surveys and similar material. When evaluated together, these will help to provide a holistic view of CCG outcomes and provide a more complete overview of the impact of the CCGs’ processes on outcomes. |
| **5.7 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 fuller overview of how CCG processes are impacting on outcomes.
2. Standardisation is by age and sex and does not encompass any other factors that could potentially influence the rate.
3. Differences in casemix (beyond that accounted for by standardisation), such as comorbidities and other potential risk factors may also contribute to 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. For example, Type 2 diabetes is up to six times more common in people of South Asian descent and up to three times more common amongst those of African and Afro-Caribbean origin.
5. A number of factors outside the control of healthcare providers, such as the socio-economic mix of local populations, may determine whether a patient is admitted; thus, this could 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 relevant conditions are outside the control and influence of the NHS and CCGs. These can vary by region, and may include environmental factors such as air quality, occupational hazards and deprivation.
9. The indicator is calculated based on the primary diagnosis field which is defined as follows:
10. The main condition treated or investigated during the relevant episode of healthcare, and
11. Where there is no definitive diagnosis, the main symptom, abnormal findings or problem.

As a result of the above, if a patient is admitted to hospital as a result of an injury or condition which has been caused by a badly managed ACSC they may be omitted from this indicator if the injury or condition was the main condition being treated or investigated in the admission episode, rather than if the ACSC were the main condition being treated.1. GP patient registration figures can be subject to over and under coverage issues. List inflation may occur for a number of reasons including but not limited to ; high turnover of patients followed by subsequent registrations not being processed in a timely manner, people who do not de-register, people who live abroad who fail to deregister, people with a temporary residence. Equally there may be under coverage for reasons including but not limited to; patients solely registered with private GPs, babies yet to be registered, migrants yet to register. The affects of this may vary between CCGs.
 |
| **5.8 Improvement actions** | It is expected that CCGs will use this to identify how improvements in care and the desired reduction in emergency hospital admissions will be delivered. |
| **5.9 Evidence of variability** | 2016/17 data shows that the numerator value for CCGs ranged from 87 to 7,954 emergency admissions, with only 1 being under 100.In 2016/17 CCG Indicator values ranged from a rate of 71.7 to 1,686.1 per 100,000 patientsSee CCG\_2.6\_I00757\_D.xlsx https://files.digital.nhs.uk/4B/7F204D/CCG\_2.6\_I00757\_D.xlsx |

Section 6 Risks

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| --- | --- |
| **6.1 Similar existing indicators** | 2.3.i Unplanned hospitalisation for chronic ambulatory care sensitive conditions - NHS Outcomes Framework (NHS OF) https://digital.nhs.uk/data-and-information/publications/clinical-indicators/nhs-outcomes-framework/current/domain-2-enhancing-quality-of-life-for-people-with-long-term-conditions-nof/2-3-i-unplanned-hospitalisation-for-chronic-ambulatory-care-sensitive-conditions |
| **6.2 Coherence and comparability** | A similar indicator, 2.3.i, exists in the NHS OF upon which this indicator is based. However, the NHS OF indicator uses a different standard population and standardisation method in its calculation and different breakdowns to reflect the different purposes of the NHS OF and the CCGOIS. The aim of NHS OF indicators are to provide national level accountability for the outcomes the NHS delivers, whereas the CCG OIS aims to provide clear, comparative information for CCGs and Health and Wellbeing Boards (HWBs) in England about the quality of health services they commission in order to understand where they may need to focus their efforts to improve services and outcomes. 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 OF. Similar indicators also exist in Compendium of Population Health Indicators and the Organisation for Economic Cooperation and Development (OECD) |
| **6.3 Undesired behaviours and/or gaming** | n/a |
| **6.4 Approach to indicator review** | NHS England review the list of indicators included in the CCG OIS on an annual basis. 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.Comments can be made through various media, including NHS Digital general enquiries by email enquiries@nhsdigital.nhs.uk or by telephone 0300 303 5678. |
| **6.5 Disclosure control** | The indicator is calculated following the HES Analysis guide on suppression of small numbers. The numerator and indicator value is suppressed and replaced with a ‘\*’when the numerator is between one and five (inclusive). 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.These suppression rules are set out in the HES Analysis Guide https://digital.nhs.uk/binaries/content/assets/website-assets/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics/hes\_analysis\_guide\_march\_2015.pdfIndicator values calculated from numerators under 10 are also suppressed following the recommendations in the PHE Technical Guide Calculating Directly Standardised Rates.[[4]](#footnote-4) |
| **6.6 Copyright** | Copyright © 2018, NHS Digital. All rights reserved. |

**Appendix 1 - List of conditions (ICD-10)**

**Infections**

B18.1 Chronic viral hepatitis B without delta-agent

B18.0 Chronic viral hepatitis B with delta-agent

Nutritional, endocrine and metabolic

E10 Type 1 diabetes mellitus

E11 Type 2 diabetes mellitus

E12 Malnutrition-related diabetes mellitus

E13 Other specified diabetes mellitus

E14 Unspecified diabetes mellitus

**Diseases of the blood**

D50.1 Sideropenic dysphagia

D50.8 Other iron deficiency anaemias

D50.9 Iron deficiency anaemia, unspecified

D51 Vitamin B12 deficiency anaemia

D52 Folate deficiency anaemia

**Mental and behavioural disorders**

F00 Dementia in Alzheimer disease

F01 Vascular dementia

F02 Dementia in other diseases classified elsewhere

F03 Unspecified dementia

**Neurological disorders**

G40 Epilepsy

G41 Status epilepticus

**Cardiovascular diseases**

I10X Essential (primary) hypertension

I11.0 Hypertensive heart disease with (congestive) heart failure

I11.9 Hypertensive heart disease without (congestive) heart failure

I13.0 Hypertensive heart and renal disease with (congestive) heart failure

I20 Angina pectoris

I25 Chronic ischaemic heart disease

I50 Heart failure

I48 Atrial fibrillation and flutter

J81X Pulmonary oedema

**Respiratory diseases**

J20 Acute bronchitis

J41 Simple and mucopurulent chronic bronchitis

J42X Unspecified chronic bronchitis

J43 Emphysema

J44 Other chronic obstructive pulmonary disease

J45 Asthma

J46X Status asthmaticus

J47X Bronchiectasis

|  |
| --- |
| Logo for indicator governance board |
| Indicator Assurance Report |
|  |
| **IAP00068** |

**Final Assurance Rating from the Indicator Governance Board - 24/05/2018**

|  |  |
| --- | --- |
| **Reason for assessment** | Scheduled review (review date reached) |
| **Iteration** | 1st IGB meeting |

|  |  |
| --- | --- |
| **Ratings Against Assessment Criteria** |  |
| Clarity | **Fit for use** |
| Rationale |  **Fit for use** |
| Data |  **Fit for use** |
| Construction |  **Fit for use** |
| Presentation and Interpretation |  **Fit for use** |
| Risks and Usefulness |  **Fit for use** |
| **Overall Rating** | **Fit for use** |

|  |  |
| --- | --- |
| **Outcome** | **This indicator has been approved for inclusion in the National Library of Quality Assured Indicators** |

|  |
| --- |
| **Key findings from Assurance** |
| * None
 |

|  |  |
| --- | --- |
| **Approval date** | 24/05/2018 |
| **Review date** | 24/05/2021 |

**Details of Methodology Appraisal – 17/05/2018**

|  |  |
| --- | --- |
| **Methodology appraisal body** | NHS Digital Indicator Methodology and Assurance Service |
| **Reason for assessment** | Scheduled review (review date reached) |
| **Iteration** | 2nd MRG meeting |

***Suggested Assurance Rating by Methodology Appraisal Body***

|  |  |
| --- | --- |
| **Ratings Against Assessment Criteria** |  |
| Clarity  | **Fit for use** |
| Rationale  |  **Fit for use** |
| Data  |  **Fit for use** |
| Construction  |  **Fit for use** |
| Presentation and Interpretation  |  **Fit for use** |
| Risks and Usefulness  |  **Fit for use** |
| **Overall Rating** | **Fit for use** |

**Summary Recommendation to Applicant:**

MRG thank the applicant for the work that has been carried out on the indicator since the first MRG. Members agreed that the applicant(s) has responded to all queries and recommendations raised. The group’s overall assessment of the indicator as “Fit for use ”. The application can continue to the Indicator Governance Board (IGB) for assurance and inclusion into the National Library of Quality Assured Indicators.

**Summary Recommendation to IGB:**

Fit for use

**Details of Methodology Appraisal – 11/01/2018**

|  |  |
| --- | --- |
| **Methodology appraisal body** | NHS Digital Indicator Methodology and Assurance Service |
| **Reason for assessment** | Scheduled review (review date reached) |
| **Iteration** | 1st MRG meeting |

***Suggested Assurance Rating by Methodology Appraisal Body***

|  |  |
| --- | --- |
| **Ratings Against Assessment Criteria** |  |
| Clarity  | **Fit for use** |
| Rationale  |  **Fit for use** |
| Data  |  **Fit for use** |
| Construction  | **Not enough information provided** |
| Presentation and Interpretation  |  **Fit for use** |
| Risks and Usefulness  |  **Fit for use** |
| **Overall Rating** | **Not enough information provided** |

**Summary Recommendation to Applicant:**

MRG thank the applicant for the work that has been carried out on the indicator since it was last assured. However, there was a lot of concern from the group around the decision to directly standardise against a different standard population every year. While they agree that this indicator is indeed useful, they feel that clearer justification for the current method, or using a fixed standard population is needed.

**Summary Recommendation to IGB:**

N/A

**Please find a detailed description of recommendations and actions in the appraisal log at the end of the document.**

**What do the Assurance Ratings mean?**

|  |  |
| --- | --- |
| **Rating** | **Description** |
| **Fit for use** | This indicator can be used with confidence that it is constructed in a sound manner that is fit for purpose. |
| **Fit for use with caveats** | The indicator is fit for use, however users should be aware of caveats and/or recommendations for improvement that have been identified during the assurance process. |
| **Use with caution – data quality issue** | The indicator is based on a sound methodology for which the assurance process endorse the use, however issues have been identified with the national data source which have implications for its use as an indicator. |
| **Not fit for use** | Issues have been identified with the indicator which have resulted in the assurance process currently not endorsing its use as a quality indicator. |
| **Not enough information provided** | There has not been enough information supplied to the assurance process to be able to accurately give the indicator a level of assurance. |

**Appraisal Log**

**Clarity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
| 1a | Do primary diagnosis codes necessarily capture admissions caused by the underlying long term condition? e.g. would someone who injures themselves in a fall as a result of epilepsy be counted in the numerator?  | 11/01/2018 | The primary diagnosis is defined as follows:1. *The main condition treated or investigated during the relevant episode of healthcare, and*
2. *Where there is no definitive diagnosis, the main symptom, abnormal findings or problem*

As such, if the main condition treated during the admission episode were the injury from the fall then yes potentially some patients could be excluded, however, if the main condition treated on admission were the epilepsy this would be included. It would not however, be appropriate to include patients with a secondary diagnosis of epilepsy, as epilepsy is a co-morbidity this would be coded at all times it’s documented on a patients record, regardless of whether the admission was due to epilepsy or not, which would inflate the figures.Updated the limitation section (5.7) with the following:*‘The indicator is based on the primary diagnosis field which is defined as follows:*1. *The main condition treated or investigated during the relevant episode of healthcare, and*
2. *Where there is no definitive diagnosis, the main symptom, abnormal findings or problem*

*As a result of the above, if a patient is admitted to hospital as a result of an injury or condition which has been caused by a badly managed ACSC they may be omitted from this indicator if the injury or condition was the main condition being treated or investigated in the admission episode, rather than if the ACSC were the main condition being treated.’*  | 22/03/2018 |[x]  MRG22/03/2018 |
| 1b | Would someone with a new primary diagnosis of a cardiovascular disease and a secondary diagnosis of diabetes be counted in the numerator? (assuming poorly-managed diabetes could lead to cardiovascular disease). | 11/01/2018 | If the cardiovascular disease were coded as one of the inclusive conditions the indicator is based on, then yes this would be captured in the numerator. In this instance, the secondary diagnosis of diabetes is not relevant as this is not looked at in the construction of the indicator. | 22/03/2018 |[x]  MRG22/03/2018 |
| 1c | Following on from the above, are people who have not previously been diagnosed with one of the long-term conditions (e.g. first admission for angina) included in the numerator? | 11/01/2018 | A person whose primary diagnosis is an ACSC condition will be included in the numerator, even if they haven’t previously been diagnosed. There is no feasible way to exclude these patients. The fact they were not previously diagnosed with the condition may also be down to poor care management in primary care.  | 22/03/2018 |[x]  MRG22/03/2018 |

**Rationale**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
| 2a | MRG Recommend that more information is put into the Sponsor and Endorsement sections (2.2 and 2.3). | 11/01/2018 | Updated Section 2.2 with the following:*‘The CCGOIS indicators were originally commissioned by NHS England however NHS England has not recommissioned these indicators as they are awaiting the outcome of the Kings Fund Report. Therefore, we do not have a current sponsor. However, we will write to MRG when the sponsorship arrangements have been formalised.’* | 22/03/2018 |[x]  MRG22/03/2018 |

**Data**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
| 3a | MRG questioned why the denominator is the whole CCG population, rather than the population with a defined chronic amulatory care sensitive condition. | 11/01/2018 | The CCG population with a defined chronic ambulatory care sensitive condition is not readily available. | 22/03/2018 |[x]  MRG22/03/2018 |
| 3b | MRG would like more information around the affect of NHAIS list inflation (if any) and if consideration has been given to whether it is greater in large cities, and how this could bias results geographically. | 11/01/2018 | In 2016 ONS produced a document around quality assurance of administrative data used in population statistics, part of which covers potential issues when using the patient register (<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/methodologies/patientregisterqualityassuranceofadministrativedatausedinpopulationstatisticsdec2016> )The source data can have both under and over coverage issues . List inflation may occur for a number of reasons including but not limited to ; high turnover of patients followed by subsequent registrations not being processed in a timely manner, people who do not de-register, people who live abroad who fail to deregister, people with a temporary residence. Equally there may be under coverage for reasons including but not limited to; patients solely registered with private GPs, babies yet to be registered, migrants yet to register.Registered population is considered to be the most appropriate for this indicator which also uses CCG of responsibility rather than CCG of residence. Section 5.7 has been amended as follows: *‘GP patient registration figures can be subject to over and under coverage issues. List inflation may occur for a number of reasons including but not limited to ; high turnover of patients followed by subsequent registrations not being processed in a timely manner, people who do not de-register, people who live abroad who fail to deregister, people with a temporary residence. Equally there may be under coverage for reasons including but not limited to; patients solely registered with private GPs, babies yet to be registered, migrants yet to register. The affects of this may vary between CCGs’.* |  |  |  |
| 3c | Section 3.3 says the (England) mid-year population estimates come out in the 'autumn', but these days they come out in the summer. | 11/01/2018 | We have updated the application to use the European Standard population and removed references to ONS mid year population, therefore this is no longer relevant. | 22/03/2018 |[x]  MRG22/03/2018 |
| 3d | Section 3.5 mentions the 'Audit Commission', but it is defunct. | 11/01/2018 | Section 3.5 has been amended to say the following:‘*Historically the Audit Commission ran a rolling programme of audits of organisations’ coding to check for accuracy. As of April 2015, this role was replaced by Public Sector Audit Appointments Ltd. (PSAA). Further to this, from 2017/18 PSAA is no longer responsible for appointing auditors to NHS trusts and CCGs. Under the Local Audit and Accountability Act 2014, NHS trusts and CCGs must select and appoint their own auditors, and directly manage their contracts, for the audits for financial years starting from 1 April 2017.’* | 22/03/2018 |[x]  MRG22/03/2018 |

**Construction**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
| 4a | Section 4.4 age-groups go up to '85+'. However, since the document was first published, it has become common practice to include a '90+' category. | 11/01/2018 | We have updated the age groups in section 4.4 to align with the European Standard Population including a 90+ category. | 22/03/2018 |[x]  MRG22/03/2018 |
| 4b | Section 4.7 says the Dobson and Byar's methods are the 'APHO recommended approach'. APHO does not exist anymore, and PHE has recently issued a slightly different recommendation (see <https://fingertips.phe.org.uk/documents/PHDS%20Guidance%20-%20DSRs.pdf> ). | 11/01/2018 | NHS Digital are seeking further guidance from PHE on whether it remains acceptable to continue to use a combination of Dobson and Byar’s, or whether the guidance means only Dobson should be used. No changes have been made at this time until this is confirmed. MRG / IGB will be updated in due course once this is confirmed. | 22/03/2018 |[x]  MRG22/03/2018 |
| 4c | This is relevant to both section 3.2 and 4.5:MRG were concerned that the standard population used changes every year, which means that rates for one year are not comparable with rates for another year. In order to monitor trends with DSRs you must keep the standard population the same. It was suggested that either the European Standard Population, or a fixed England population could be used.It was also pointed out that it would be hard for internal targets to be reached if the baseline measurement changes every year.MRG recommend that the applicants either make it very clear why they have chosen to standardise in this way, or to look into using a fixed standard population. | 11/01/2018 | The application has been updated to changed the methodology. The team are going to change the standard population to the European Standard Population so rates are comparable year on year. Sections 3.2 and 4.5 have been updated. | 22/03/2018 |[x]  MRG22/03/2018 |

**Presentation and Interpretation**

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| --- | --- | --- | --- | --- | --- | --- |
| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
|  | N/A |  |  |  |[ ]   |

**Risks and Usefulness**

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| ***Rec. no*** | ***Issue or recommendation*** | ***Raised by / Date*** | ***Response or Action taken by applicant*** | ***Response date*** | ***Resolved*** | ***Sign off by / Date*** |
|  | N/A |  |  |  |[ ]   |

**Any feedback should be made to the Indicator and Methodology Assurance Service (IMAS) Team at NHS Digital. Likewise, if you are unclear regarding any of the recommendations in this report or have any queries about the assurance process in general, please contact the IMAS team.**

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1. <https://www.kingsfund.org.uk/publications/data-briefing-emergency-hospital-admissions-ambulatory-care-sensitive-conditions> [↑](#footnote-ref-1)
2. Dobson A et al. Confidence intervals for weighted sums of Poisson parameters. Stat Med 1991;10:457-62 [↑](#footnote-ref-2)
3. 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-3)
4. <https://fingertips.phe.org.uk/documents/PHDS%20Guidance%20-%20DSRs.pdf> [↑](#footnote-ref-4)