**NHS Digital**

**Indicator Supporting Documentation**

**IAP00140 Patient safety incident reporting (CCGOIS)**

Application Form

Indicator and Methodology Assurance Service

**Title:**

**Set or domain: CCG OIS 5.1**

**IAS Reference Code: IAP00140**

**Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Changed By | Change |
| V0.1 | 11/08/2017 | Andy Besch | Uplift to new form |
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# Application Form

Section1 Introduction /Overview

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| --- | --- |
| * 1. **Title** |  |
| **1.2 Set or domain** | CCG OIS 5.1 |
| **1.3 Topic area** | Patient Safety |
| **1.4 Definition** | For each of a CCG’s five main providers, this indicator shows the rate of Patient Safety incidents per 1,000 total provider bed days. Patient safety incidents are any unintended or unexpected incident which could have, or did, lead to harm for one or more patients receiving NHS-funded healthcare[[1]](#footnote-1) |
| **I1.5 ndicator owner & contact details** |  |
| **1.6 Publication status** | Currently in publication |

Section 2 Rationale

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| **2.1 Purpose** | It is impossible to eliminate entirely adverse events in healthcare but the need to learn from the events is understood. Work is on-going to improve data collection to support the reduction in these incidents. |
| **2.2 Sponsor** |  |
| **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 | Building A Safer NHS For Patients’ sets out the Government's plans for promoting patient safety following the publication of the report ‘An Organisation with a Memory’ and the commitment to implement it in the NHS Plan. It places patient safety in the context of the Government's NHS quality programme and highlights key linkages to other Government initiatives. Central to the plan is the new mandatory, national reporting scheme for adverse health care events and near misses within the NHS. This will enhance existing mechanisms for improving quality of care and promoting patient safety by harnessing learning throughout the NHS when something goes wrong.[[2]](#footnote-2) |

Section 3 Data

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| **3.1Data source** | **Organisation Patient Safety Incident Workbook:**  http://www.nrls.npsa.nhs.uk/patient-safety-data/organisation-patient-safety-incident-reports/directory/  These data have historically been reported to the National Patient Safety Agency (NPSA) by the National Reporting and Learning System (NRLS). This has now been transitioned to NHS England following the abolition of NPSA.  **Hospital Episode Statistics (HES) Admitted Patient Care (APC)** is used to identify a CCG’s five main providers http://www.hscic.gov.uk/hes |
| **3.2 Justification of source and others considered** | NLRS data are an essential component in assessing, monitoring and managing patient safety. NRLS data are shared with a range of national bodies to support the identification of hazards, and the development of patient safety guidance and solutions. These organisations include NHS England, Public Health England (which now includes the remit of the Health Protection Agency), the Medicines and Healthcare products Regulatory Agency (MHRA), the Care Quality Commission (CQC), the Royal College of Anaesthetists, Connecting for Health, and the NHS Wales Informatics Service.  National bodies (such as the Care Quality Commission, Monitor, and the National Audit Office) can use these datasets to build up trend analyses in order to timetable their audit and inspection functions and prioritise resources. These data also provide a context for research undertaken by academic organisations and scoping work undertaken by Royal Colleges. Additionally, they provide trend and context data to support NHS England in the development of patient safety resources, such as Safer Practice Notices (http://www.nrls.nhs.uk/resources/type/alerts/).  NRLS data are currently used to measure four of the outcomes within Domain 5 of the NHS Outcomes Framework (Treating and caring for people in a safe environment and protecting them from avoidable harm). The Outcomes Framework sets the direction of travel in the journey towards improving outcomes and offers an opportunity for the NHS to begin to understand what an NHS focussed on outcomes means for individuals, organisations and health economies. Data from the QDS workbooks is used to calculate three of these indicators: 5a, 5b, and 5.4. The fourth indicator, 5.6 is derived from bespoke analyses of the NRLS data.[[3]](#footnote-3)  HES APC data is used to calculate a CCG’s five main providers, based on total bed days. Data quality for HES APC data is considered to be good. Further information can be found at: <http://www.hscic.gov.uk/hes>  Reliable patient safety incident data cannot be provided at CCG level, so an alternative approach has been used to indicate the outcomes for a CCG’s patients. |
| **3.3 Data availability** | Data is reported by the NRLS bi-annually, 6 months in arrears. The 6 month period from April to September is reported the following March and the 6 month period from October to March is reported the following September. Following on from these dates, it is anticipated that this CCG data will be reported in June and December.  Provisional HES data may be used for the bed days calculations. This ensures that data is more timely, 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.  These indicators are official statistics and the publication date is pre-announced. There is no gap between the planned and actual publication date |
| **3.4 Data quality** | **i) What data quality checks are relevant to this indicator?**  **Coverage**  **Completeness**  **Validity**  **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:**  **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:**  **iii) What are the thresholds for the data quality checks selected?**  **Coverage:**  **Completeness:**  **Validity:**  **Default:**  **Integrity:**  **Timeliness:**  **Other:** |
| **3.5 Quality assurance** | The NRLS quality assurance process has included a monthly report to support organisations in identifying and resolving any quality issues as promptly as possible. Every month, provisional data are shared back with the submitting organisation to help identify possible data quality problems with data uploaded to the NRLS. This gives organisations the opportunity to check the data that the NRLS has received and compare with data in their systems. Detailed guidance on what to look for and known reporting issues is given in an online FAQ document, along with the option to contact the NRLS Patient Safety Reporting Leads for further support if needed. Therefore, the NRLS team would expect any data issues at local organisation level to have been resolved well in advance of production of both workbooks, and therefore would not anticipate any requests for revisions from NHS organisations.[[4]](#footnote-4)  Data quality for HES APC data is considered to be good. Further information can be found at: <http://content.digital.nhs.uk/hes> |
| **3.6 Data linkage** |  |
| **3.7 Quality of data linkage** |  |
| **3.8 Data fields** | Provider level data for this indicator is published by the NRLS in 6 month reporting periods via the Organisation Patient Safety Incident workbook. April to September data is reported the following March and October to March data is reported the following September. The data are continually updated, so the latest version that covers the period is used to provide the most up to date figure. At the time of calculating this indicator, the latest available version is available at: <http://www.nrls.npsa.nhs.uk/patient-safety-data/organisation-patient-safety-incident-reports/>.  ACUTE (NON-SPECIALIST) - [PERIOD START – PERIOD END] RATE PER 1,000 BED DAYS  HES APC data, linked to the derived inpatient spells data, is used to calculate a CCG’s five main providers. The data fields that are used are as follows. Details of HES fields and classifications are available in the HES Data Dictionary: <http://content.digital.nhs.uk/hesdatadictionary>.  EPISTAT  P\_SPELL\_DISDATE (derived field)  P\_SPELL\_EPIORDER (derived field)  PROCODET\_MAPPED  Bed Days (calculated field)  CCG\_RESPONSIBILITY |
| **3.9 Data filters** | The data filters used for the calculation of a CCG’s five main providers are as follows: |

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| 1. Field Name | EPISTAT |
| Conditions | Is equal to 3 |
| Rationale | Selects finished episodes |
|  |  |
| 2. Field Name | P\_SPELL\_DISDATE |
| Conditions | Is between <reporting period> |
| Rationale | Selects provider spells in the relevant reporting period |
|  |  |
| 3. Field Name | P\_SPELL\_EPIORDER (derived field) |
| Conditions | Is equal to 1 |
| Rationale | Selects first episode in the provider spell. |
|  |  |
| 4. Field Name | PROCODET\_MAPPED |
| Conditions | Is not equal to ‘N%’ or ‘8%’ |
| Rationale | Excludes private and independent providers. |
|  |  |
| 5. Field Name | Bed Days (calculated field) |
| Conditions | (P\_SPELL\_DISDATE - P\_SPELL\_ADMIDATE) + 0.5 |
| Rationale | Calculates the number of bed days per provider spell. Bed days are limited to the period in which the patient safety incident data relates to. For example, patients that are admitted before April will have their bed days calculated from 1st April onwards for the April to September patient safety incident period |
| 6. Field Name | CCG\_RESPONSIBILITY |
| Conditions | CCGs in England only |
| Rationale | Excludes those registered with GPs outside of England. Reference file provided at: <http://content.digital.nhs.uk/ccgois> |

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| **3.10 Justifications of inclusions and exclusions**  and how these adhere to standard definitions | See rationales above |
| **3.1 Data processing** | Provider level data for this indicator is published by the NRLS in 6 month reporting periods via the Organisation Patient Safety Incident workbook.  HES APC data, linked to the derived inpatient spells data, is used to calculate a CCG’s five main providers. |

Section 4 Construction

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| **4.1 Numerator** |  |
| **4.2 Denominator** |  |
| **4.3 Computation** | For each CCG this indicator will report the number of patient safety incidents as reported by their five main providers alongside a rate of patient safety incidents per 1,000 total provider bed days. All of the figures are reported at provider level.  A CCG’s five main providers are the ones it commissions the most activity from. This is calculated by totalling the provider’s number of bed days for any provider inpatient spell commissioned by that CCG during the reporting period.  Bed days are defined as: (Provider spell discharge date – Provider spell admission date) + 0.5.  Bed days are limited to the period in which the patient safety incident data relates to. For example, patients that are admitted before April will have their bed days calculated from 1st April onwards for the April to September patient safety incident period.  The number of patient safety incidents at each provider during the reporting period is taken from the NRLS data and a rate per 1,000 total provider bed days is calculated.  The CCG’s five main providers, based on total bed days commissioned (as recorded in HES inpatient data), are reported with their provider level crude patient safety incident figure (as reported by the provider). In addition, the number of incidents per 1,000 total provider bed days (based on the bed days definition below) is given. This is to provide context without the need for figures to be attributed to CCGs. There is no evidence that patient safety incidents are linked to inpatient activity, this is a proxy measure. The activity levels, expressed as inpatient bed days, do not take outpatients, critical care and A&E bed days into consideration. It is important to note that not all Mental Health inpatient activity is recorded in HES, which may affect rates for some Mental Health trusts.  Bed days are defined as: (Provider spell discharge date – Provider spell admission date) + 0.5. An arbitrary 0.5 days are added to the length of stay calculation to take into account day case admissions. This definition was assured by the HSCIC Indicator Assurance Service for calculating bed days. Bed days are limited to the period in which the patient safety incident data relates to. For example, patients that are admitted before April will have their bed days calculated from 1st April onwards for the April to September patient safety incident period. Only closed finished provider spells have been used within the HES data.  The HSCIC-derived inpatient spells data uses a mapped provider code field (PROCODET\_MAPPED) from HES APC which is regenerated each time the spells data is updated. This means that the indicator uses the latest, up to date provider codes for each release of data. Due to this, where providers have merged or been acquired by other providers, patient safety incident data is shown under their current provider code. For example, London North West Healthcare NHS Trust (provider code R1K) was established on 1st October 2014 following the closure of Ealing Hospital NHS Trust (RC3) and North West London Hospitals NHS Trust (RV8). The patient safety incident figures for RC3 and RV8 are shown under R1K in April 2013 to September 2013 and October 2013 to March 2014 data. Barnet and Chase Farm Hospitals NHS Trust (RVL) became part of the Royal Free London NHS Foundation Trust (RAL) on 1st July 2014. The patient safety incident figures for RVL are shown under RAL in April 2013 to September 2013 and October 2013 to March 2014 data.  Following the closure of Mid Staffordshire NHS Foundation Trust (RJD) on 31st October 2014, the provider bed days activity at this trust transferred to University Hospitals of North Midlands NHS Trust (RJE) and The Royal Wolverhampton NHS Trust (RL4).  However, the patient safety incident figures for RJD (2,365 reported in the period April 2014 to September 2014) cannot be appropriately attributed between the two providers. Therefore, the patient safety incidents per 1,000 bed days figure is based on incomplete data and should be interpreted with care.  Further information on the spell methodology can be found at:  http://www.hscic.gov.uk/media/11859/Provider-Spells-Methodology/pdf/Spells\_Methodology.pdf  The patient safety incident rate per 1,000 total bed days is calculated using the number of reported incidents by the provider and that provider’s total number of bed days according to HES inpatient data, irrespective of which CCG commissions them. |
| **4.4 Risk adjustment or standardisation type and methodology** | Choose an item.  *Variables and methodology:* |
| **4.5Justification of risk adjustment type and variables**  or why risk adjustment is not used | Incidents are reported by provider and are difficult to attribute to a CCG, as such any form of risk adjustment is not reliable. |
| **4.6 Confidence interval / control limit use and methodology** | **Choose an item.**  *Methodology:* |
| **4.7 Justification of confidence intervals / control limits used** |  |

Section 5 Presentation and Interpretation

Presentation

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| **5.1 Presentation of indicator** | 6 month reporting periods available from April 2013 onwards i.e. April to September and October to March. |

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| **Column name** | **Output** |
| Reporting period | Reporting period |
| ONS code | ONS geography code |
| Level | CCG code |
| Level description | CCG name |
| Provider code | Provider code |
| Provider name | Provider name |
| Number of bed days commissioned by the CCG at this provider | Number of bed days commissioned by the CCG at this provider |
| Percentage of bed days commissioned by the CCG at this provider | Percentage of bed days commissioned by the CCG at this provider |
| Total number of provider bed days | Total number of provider bed days |
| Number of reported patient safety incidents | Number of reported patient safety incidents |
| Patient safety incidents per 1,000 provider bed days | Rate of reported patient safety incidents per 1,000 total bed days at the Provider |

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| **5.2 Contextual information provided alongside indicator**  with justification | The “Number of bed days commissioned by the CCG at this provider”, “Percentage of bed days commissioned by the CCG at this provider”, “Total number of provider bed days” and “Number of reported patient safety incidents” are contextual information items in addition to the main indicator value. |
| **5.3 Calculation and data source of contextual information** |  |
| **5.4 Use of bandings, benchmarks or targets**  with justification |  |
| **5.5 Banding, benchmark or target methodology**  if appropriate |  |

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 the Public Health England mandatory surveillance information and the NRLS Quarterly Data Summaries. 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** | 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 that together form a holistic view of CCG outcomes and a fuller overview of how CCG processes are impacting on outcomes.  It is only mandatory for providers to report incidents with a severe degree of harm or death; the reporting of patient safety incidents in general is voluntary and under-reporting is known to be common. There are concerns regarding the level of completeness in the NRLS dataset currently available, particularly because NRLS has traditionally focused upon learning from patient safety incidents and was never intended to be a data collection mechanism. The data in NRLS is not a complete count of all cases where a patient is harmed during contact with the NHS. Some providers may not report a full 6 months of data during a reporting period. Further information can be found at:  Organisation Patient Safety Incident Workbook: <http://www.nrls.npsa.nhs.uk/report-a-patient-safety-incident/about-reporting-patient-safety-incidents/>  This indicator is not subject to standardisation, as there are no age breakdowns in the NRLS data. Furthermore, there are an array of patient safety incidents including ‘Patient Accident’, ‘Medication’, ‘Treatment/Procedure’ and ‘Documentation’ that can occur across all equality dimension groups.  This indicator is not provided as a single output, as is the case with other CCG level indicators, as reliable CCG level data cannot be obtained for patient safety incidents.  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.  A number of factors outside the control of healthcare providers, such as the socio-economic mix of local populations, may determine whether a patient acquires an infection; thus, this could influence incidence. |
| **5.8 Improvement actions** |  |
| **5.9 Evidence of variability** | There is variation in the order of the top 5 providers by CCG for most CCGs for each of the three periods reported to date. As there is no single figure per CCG, evidence of variability is difficult to summarise. |

Section 6 Risks

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| **6.1 Similar existing indicators** | NHS OF 5.6 Patient safety incidents reported (formerly indicators 5a, 5b and 5.4)  NHS OF 5.1 Deaths from venous thromboembolism (VTE) related events within 90 days post discharge from hospital  NHS OF 5.2.ii Incidence of healthcare-associated infection - C. difficile  NHS OF 5.6 Incidence of harm to children due to ‘failure to monitor’ (retired as of May-15)  NHS OF 5.2.i Incidence of healthcare-associated infection - MRSA  CCG OIS 5.3 Incidence of Healthcare Associated Infection (HCAI) – Methicillin-resistant Staphylococcus aureus (MRSA)  CCG OIS 5.4 Incidence of Healthcare Associated Infection (HCAI) – C. difficile  Compendium NRLS 1 - Consistent reporting of patient safety events reported to the Reporting and Learning System (RLS)  Compendium NRLS 3 - Rate of patient safety events occurring in trusts that were submitted to the Reporting and Learning System (RLS)  Compendium NRLS 2 - Timely reporting of patient safety events reported to the Reporting and Learning System (RLS) |
| **6.2 Coherence and comparability** | A similar indicator exists in the NHS Outcomes Framework, upon which this indicator is based. It provides quarterly counts of patient safety incidents at a national level and bi-annual counts at provider level - Indicator 5.6 Patient safety incidents reported (formerly indicators 5a, 5b and 5.4) is available on the HSCIC Indicator Portal: <https://indicators.hscic.gov.uk/>. |
| **6.3 Undesired behaviours and/or gaming** | It is only mandatory for providers to report incidents with a severe degree of harm or death; coding or recording incidents with a lower severity may occur to improve scores. |
| **6.4 Approach to indicator review** | NHS England performs an annual review of the CCG OIS and release a summary of all indicators with any retirements, additions and changes.  <https://www.england.nhs.uk/resources/resources-for-ccgs/ccg-out-tool/ccg-ois/> |
| **6.5 Disclosure control** | Rates are rounded to one decimal place before publication. |

**Appendix**

**Old DQ section**

With regards to the NRLS, there is no ‘correct’ or ‘safe’ number of patient safety incidents

There are known reasons for ‘high’ and ‘low’ reporting. Some organisations report daily, others quarterly. In many cases, incidents are grouped and sent to the NRLS in large batches. It should never be assumed that the total numbers of patient safety incidents are representative of totals across the NHS. The reporting culture varies between organisation types: reporting in secondary care is far more common than in primary care; ambulance and mental health organisations have the most varied reporting patterns. Even in acute care, it has been estimated that anything between 22% and 83% of incidents go un-reported locally. It has also been suggested that specific incident types are under-reported (in particular medication incidents in primary care).

‘Low’ reporting

Under-reporting of patient safety incidents at a local level is a well-recognised issue. Over 99% of patient safety incidents are reported to the NRLS by local organisations uploading incidents from their local risk management systems. (The upload process is via a secure website).Therefore, this potential source of bias will be embedded into the subsequent reporting to the NRLS.

A ‘low’ reporting rate should not be interpreted as a ‘safe’ organisation and may represent under-reporting.

‘High’ reporting

Experience in other industries has shown that as an organisation’s reporting culture matures, staff become more likely to report incidents. (Even in ‘high’ reporting organisations, there may still be some degree of under-reporting.)

Organisations’ local risk management systems are often used for a number of reasons and not just for recording patient safety incidents. Sometimes incidents are inappropriately reported to the NRLS. There is a formal process in place for organisations to request that incidents be ‘deleted’, i.e. removed from the analytical layer of the NRLS database, in very specific circumstances.

A ‘high’ reporting rate should not be interpreted as an ‘unsafe’ organisation and may actually represent a culture of greater openness.

Patient safety incidents reported to the NRLS are simply just that – incidents reported to the NRLS. They should not be presented as the number of incidents actually occurring in an organisation, especially as sometimes organisations fail to meet the NRLS submission deadlines[[5]](#footnote-5) which can result in gaps in coverage.

The NRLS is a dynamic reporting system, and the number of incidents reported as occurring at any point in time may increase as more incidents are reported. Experience in other industries has shown that as an organisation’s reporting culture matures, staff become more likely to report incidents. Therefore, an increase in incident reporting should not be taken as an indication of worsening of patient safety but may represent an increasing level of awareness of safety issues amongst healthcare professionals and a more open and transparent culture across the organisation.

The quality of the data submitted to the NRLS relies on three things:

• the incident being recognised as a patient safety incident.

• sufficient detail being documented in the patient’s notes; and

• adequate and consistent coding in the local risk management system prior to uploading to the NRLS.

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The degree of harm in the NRLS is intended to record the actual degree of harm suffered by the patient as a direct result of the patient safety incident. However, this is not always the case.

Sometimes reporters provide the potential degree of harm of an incident instead of the actual degree of harm that occurred. For example, in the case of ‘near misses’ (where no harm resulted as the impact was prevented) the resulting degree of harm is occasionally coded as ‘severe’.

Reporters may code the degree of harm as ‘severe’ when the patient is expected to suffer severe but temporary harm (for example, severe bruising), instead of the NRLS definition of significant and permanent harm.

A report on Patient Safety by the House of Commons Health Committee refers to earlier work showing that “incidents leading to serious harm were among the least likely to be reported”.

As organisations use their local risk management systems for a number of purposes, some incidents that are reported to the NRLS are not patient safety incidents, and this can also confound this data.

There are known delays in reporting to the NRLS – the time lag between the incident occurring to the incident being reported to the NRLS

Organisations are encouraged to report patient safety incidents to the NRLS at least once a month, and the CQC guidance for the reporting of serious incidents recommends reporting “without delay”.

However, in practice there is a delay between an incident occurring and it being reported to the NRLS. The NRLS team monitor the average (median) number of days delay for both serious incidents and all incidents and feed these data back to NHS organisations. Every month, provisional data are shared back with the submitting organisation to help identify possible data quality problems with data uploaded to the NRLS. This gives organisations the opportunity to check the data that the NRLS has received and compare them with data in their local risk management system. Detailed guidance on what to look for and known reporting issues is given in an online FAQ document, along with the option to contact the Patient Safety Reporting Leads for further support if needed.

As this delay is well known, the NRLS always allow a minimum of two months lag in defining the ‘Occurring Dataset’ (the data set used to analyse patient safety incident characteristics, based on the date the incident is reported to have actually occurred, rather than the date that the incident was reported to the NRLS).

Since October 2014, the documentation has been increased and improved in order to be much clearer about the context, interpretation, scope, methods, reasoning, and known quality issues of the data.

All NRLS releases are now accompanied by a range of documentation in order to support user(s) by providing a commentary on trends and changes. Background information is also provided to help clarify the context of the data, and the limitations in the use of the data are explicitly documented.

When comparing NRLS data across time periods, it is important to compare data to the same time period in the previous year(s). This is to take into account known ‘seasonality’ in the data. (Seasonality is due to the fact that patterns, variations and fluctuations in patient safety incidents are caused by the season, month, day of the week, or some other time period they occur in.) There are at least two causes of seasonality in the reporting of patient safety incidents to the NRLS: ‘administrative seasonality’ and incident seasonality.

‘Administrative seasonality’

There are large spikes in the reporting of patient safety incidents to the NRLS every six months (at the end of May and the end of November), as organisations upload substantial batches of data in order to meet the cut-off dates for submission to the NRLS for inclusion in the Organisation Patient Safety Incident Report (NRLS UK Official Statistics) workbook.

Incident seasonality

Research suggests that higher rates of postsurgical morbidity and mortality relate to the time of the year, with systems of care within academic medical centres sufficiently disrupted with the beginning of a new academic year to affect patient outcomes.[[6]](#footnote-6)

Seasonality also has an impact on some of the national mandatory reporting requirements. For example, suicides have been found to have at least two seasonal peaks. In October 2011, the Care Quality Commission revised its guidance on the reporting of apparent and actual suicides. This is now a wider definition to include all actual or apparent suicides of people with an open episode of care in specialist mental health services (either inpatient or community patients) at the time of death, i.e. no longer restricted to deaths related to patient safety incidents.

Reporting to the NRLS has increased year on year since its inception in 2003, and it is anticipated that this will continue to increase as the culture of reporting all incidents spreads more widely and deeply across the NHS. Comparisons over time are confounded by a number of factors.

Careful consideration should be given to the dates of changes in mandatory reporting requirements, as these may have a ‘one-off’ impact, affecting a specific time frame. Organisational change should also be borne in mind, as newly created and newly merged organisations take time to mature and set up their systems and processes.

Therefore, when reviewing changes over time, it is recommended that:

• proportions or percentages are used rather than actual numbers

(to allow for the differences in the underlying numbers of incidents);

and

• either the same time period in the previous year, or a full year’s worth of data are used

(in order to take seasonality into account);

and

• checks are made that any ‘change/difference’ is not an artefact due to either new/amended national mandatory reporting requirements, or organisational restructuring.

These statistics relate to NHS organisations in England and Wales, and there are no directly comparable figures to allow international comparison.

The statistics in the NRLS releases are all drawn from the same data source (the NRLS), using a coherent and consistent method to define the datasets used, and a rigorous quality assurance process.

Although it is possible for NHS organisations to use different methods to report to the NRLS (uploading from their local system or by completing an eform on the NRLS website), almost all – more than 99% – upload their incidents directly from their local risk management systems. The data fields from these commercial local risk management systems (or bespoke locally developed systems) have been mapped to the NRLS national dataset by the Patient Safety Reporting Leads in a consistent and systematic way. This provides a high degree of assurance regarding the uniformity of reporting of categorical data.

Data quality for HES APC data is considered to be good. Further information can be found at: <http://www.hscic.gov.uk/hes>

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| **IAS Ref Code** |  |
| **Indicator Title** | **5.1 Patient Safety Incidents** |
| **Indicator Set** | **CCG Outcome Indicator Set** |

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| --- | --- | --- | --- |
| Version | Date | Changed By | Summary of changes |
| v.01 | 19/02/13 | Gavin Harrison | Document Created |
| v.02 | 05/03/13 | Gavin Harrison | Included MRG comments from 21/02/13 |
| v.03 | 20/05/13 | Gavin Harrison | Included MRG comments from 03/05/13 |
| v.04 | 23/11/13 | Chris Wilson | Updated in preparation for IGB |
| v.05 | 02/06/17 | Andrew Besch | Updated with details from IGB meeting of 06/12/2013 |

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**Assurance Summary**

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| --- | --- |
| **IAS Ref Code** |  |
| **Indicator Title** | 5.1 Patient Safety Incidents |
| **Indicator Set** | CCG Outcome Indicator Set |

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| Assurance Stage |  | Date(s) | Comments |
| Application Received |  | 04/12/12 |  |
| Initial Appraisal Completed |  | 20/01/13 |  |
| Peer Review Appraisal |  |  | No peer review undertaken |
| Methodology Review Group Discussion |  | 21/02/13, 03/05/13 | Discussed 26/10/12 as part of discussion of NHSOF level indicator |
| Indicator Governance Board Discussion |  | 06/12/13 |  |
| Signed-off |  |  |  |

Peer Review

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| Peer Reviewer(s) / Organisations : | No peer review undertaken at present |

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| *Outcome of Peer Review consideration:* | 1. **Proposal signed off, with or without caveats** |  |  |
|  | 1. **Minor changes recommended** |  |  |
|  | 1. **Declined to sign-off** |  |  |

Methodology Review Group (MRG)

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| --- | --- | --- | --- |
| *Outcome of MRG consideration:* | 1. **No significant issues identified** |  |  |
|  | 1. **No significant issues on basis of completion of outstanding actions** |  |  |
|  | 1. **Some concerns expressed as caveats or limitations** |  |  |
|  | 1. **Significant reservations** |  |  |
|  | 1. **Unresolved issues** |  |  |

Indicator Governance Board (IGB)

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| *Final Appraisal Status* | 1. **Assured** |  |  |
|  | 1. **Assured with Comments** |  |  |
|  | 1. **Failed Assurance** |  |  |

**Peer Review** Summary

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| --- | --- | --- | --- |
| **Indicator Title** | **5.1 Patient Safety Incidents** | IAS Ref Code: |  |
| Indicator Set | CCG Outcome Indicator Set |  |  |

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| Date of Peer Review |  |
| Peer Reviewer(s) / Organisations : |  |
| Peer Review Comments: | No peer review at present |

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| --- | --- | --- | --- |
| *Outcome of MRG consideration:* | 1. **Proposal signed off, with or without caveats** |  |  |
|  | 1. **Minor changes recommended** |  |  |
|  | 1. **Declined to sign-off** |  |  |

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| Link to Peer Review Appraisal |  |

Indicator Methodology for Consideration - **Methodology Review Group**

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| --- | --- | --- | --- |
| **Initial Indicator Title** | [Indicator title submitted pre - MRG discussion]  **5a Patient Safety Incidents** | IAS Ref Code: |  |
| Indicator Set | CCG Outcome Indicator Set |  |  |

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| Introduction |
| [Brief background on indicators being considered, especially if they form part of a programme of indicators. Provide any general information such as urgency of approval / broad timescales; history and direction of any indicator programmes involved e.g. General news about NHS Outcomes Framework; Level of IC’s involvement, e.g. is it commissioned to produce or surface the data ]  **The indicator was assured for use in the NHS Outcome Framework – see application ref IAP00037**  The following three indicators use provider-level data that are not directly attributable to a GP practice and so are not directly reportable at CCG level:  • 5a - Patient Safety Incidents Reported  • 5.2ii – Incidents of healthcare associated infection - C. Difficile  • 5.9 – Adult patients who have had a VTE risk assessment on admission to hospital  The approach outlined below is the best available tool to indicate where activity takes place at CCG level. It is intended to provide estimates for CCGs on levels of Patient Safety incidents.  **Attribution Method**  The attribution method apportions a number of incidents to a CCG based upon the overall inpatient activity at a provider (2010-11 HES data) that has been commissioned by the CCG.  The method has been tested using a dummy indicator on known HES data, where a comparison can be made, as the provider can be accurately matched to a CCG via the GP Practice code in HES. When tested using this known data, there was a correlation of 0.75, i.e. in 75 out of 100 cases the activity will be correctly matched to the commissioning CCG. Based on initial analysis by the Clinical Indicators team, there is evidence that use of this attribution method is inappropriate where there are fewer than 300 results, as the correlation dwindles.  The graph below shows the correlation between the direct provider-to-CCG volumes (available in HES) and the attributed volumes. The dummy indicator used is a crude mortality rate indicator, summarised below;  Denominator: The number of provider spells in financial year 2010/11.  Numerator: The number of provider spells that end in a discharge coded as death in financial year 2010/11.  **Graph graph showing correlation between direct to provider  CCG volumes and the attributed**  The examples used in the MRG reports use a CCG based in the North of England with full year 2010-11 figures for the incidents relevant to the indicator at provider-level.  **Attribution Method Potential Issues**  Using the attribution method assumes a correlation between provider-to-CCG activity and the number of Patient Safety/HCAI/VTE issues, which may or may not be valid.  Use of this attribution method could mask statistically significant variation at CCG-level by inappropriately allocating each CCG a proportion of cases based purely upon the number of patients sent to the provider in question. It would therefore be inappropriate to use this method to hold CCGs to account. The results should be viewed in the context of the provider and not as an individual figure in isolation.  It is recommended the word ‘Estimated’ be included in the indicator title.  Indicators constructed using this proxy attribution method should not be used in the allocation of payments or quality premium.  This method was presented to the NICE COF Advisory Committee in September and they did not support the use of these indicators.  **Update (21/02/13):** In their December information packs for CCGs and Local Authorities, DH outlined their method to represent CCG level patient experience without attributing provider level data. For each CCG, this shows their five main providers with the number of admissions and the patient experience scores (examples shown at the end of this indicator update).  A similar method could be used to represent patient safety figures at CCG level. The following information provides MRG with an update on the attribution method and the recommendation made previously. Given the suggestion from DH, we are seeking MRG’s advice on which of the two options should be progressed. |

Indicator Details - Initial MRG Submission

|  |  |
| --- | --- |
| Date of Initial Discussion: | 26/10/12 |
| Rationale / usefulness  Evidence and action ability of indicator [take this directly from the application if possible] | “Patient safety incidents are an unintended or unexpected incident which could have, or did, lead to harm for one or more patients receiving NHS-funded healthcare.”  (<http://www.nrls.npsa.nhs.uk/report-a-patient-safety-incident/healthcare-staff-reporting/>)  It is impossible to eliminate entirely adverse events in healthcare but the need to learn from the events is understood. Work is on-going to improve data collection to support the reduction in these incidents.  This is based upon the NHS Outcomes Framework indicator of the same number and name. It seeks an improved readiness of the NHS to report harm and to learn from it.  The IC was asked by DH to provide an attribution method to allocate provider-level data to CCGs. |
| Data source | Organisation Patient Safety Incident workbook, attributed to CCGs via a proxy attribution method.  These data have historically been reported to the National Patient Safety Agency (NPSA) by the National Reporting and Learning System (NRLS). However, this this is in transition to Imperial College, London to which NRLS will transfer following the abolition of the NPSA.  <http://www.nrls.npsa.nhs.uk/patient-safety-data/organisation-patient-safety-incident-reports/directory/> |
| Construction  Summary of construction, including the numerator, denominator, statistical method(s), presence of risk adjustment variables (age, sex, casemix etc.), specific codes and filters.  For more complex indicators, summarise here and supply detail in an appendix | ***Summary description of the calculation:***  The indicator is a raw count of the number of reported Patient Safety incidents attributed to CCGs via the proxy attribution method, explained previously.  The example below uses a CCG based in the North of England with full year 2010-11 figures for Patient Safety incidents at provider-level. The top 6 providers make up 99% of the overall CCG activity, with a further 90 providers making up the remaining 1%.  In the example, Provider 1 has had 6716 incidents during the time period and 18.46% of its total activity is commissioned by the CCG, so 1240 incidents are attributed to the CCG (6716 x 18.46%).  **CCG 1 – North of England**  **Table showing provider activity**  The case below is a Mental Health provider which has 4073 admissions recorded in HES but which reported 11391 Patient Safety incidents for 2010-11. This highlights an issue with the attribution method as incidents can happen in any setting but the attribution method only uses inpatient activity. Other types of activity would need to be sourced from other collections e.g. MHMDS. It also highlights the issue that the attribution method assumes a correlation between provider-to-CCG inpatient activity and the number of Patient Safety incidents, which may or may not be valid.  **table showing CCG activity**  ***Calculation type:*** Raw count  ***Denominator:***  ***Numerator:***  ***Statistical Methods / Risk adjustment variables:***  Risk adjustment is not necessary for this indicator.  ***Other (Quality assurance/interpretation/known limitations):***  DH would prefer a single figure to be reported, however our recommendation to the NICE Committee was that this would be inappropriate, as these are attributed figures. |

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| Potential Issues  Highlight any of the following that apply  -data source(s) do not collect 100% of events  -data source(s) organisation or geographic coverage shortfalls  -codes or filters not matching the policy question  -data source(s) definitions not meeting policy question  -data source(s) quality problems or inconsistency of reporting  -statistical methods not appropriate for test or audience  -risk adjustment not considered  -long term security of the data source(s)  -timing of data availability for use in indicator  presentation of data likely to mislead or give false confidence in findings | * It is only mandatory for providers to report incidents with a *severe degree of harm or death;* the reporting of patient safety incidents in general is voluntary and under-reporting is known to be common. There are major concerns regarding the level of completeness in the National Reporting and Learning System (NRLS) dataset currently available, particularly because NRLS has traditionally focussed upon learning from patient safety incidents and was never intended to be a reporting or data collection mechanism. The data in NRLS is not a complete count of all cases where a patient is harmed during contact with the NHS. * Secondary care submissions from providers is currently the only data used in the indicator, as the attribution method is based on inpatient provider spells only. PCT-level data is available but we are unsure as to whether the attribution method should be applied. * Patient Safety incidents occurring in acute trusts could happen in a number of different settings, including admitted patients (who *are* reported on HES), outpatients, pharmacy, diagnostic tests and administration. The published data does not specify the location or service, only the degree of harm and category of incident. * Frequency of reporting will need further consideration, as the provider-level data is currently reported every six months. The attribution method currently uses annual inpatient admission data, which is provider spell-based and not person-based. * Potential issues relating to the attribution method issues explained previously. |
| Supporting Documents  Provide links to any additional documentation used to support discussion at MRG |  |

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| Additional Information / Sample Data :  **Example of Patient Experience data presented in DH CCG and Local Authority Information Packs (21/2/13)**  <http://www.commissioningboard.nhs.uk/la-ccg-data/#data> |

**4b, 4.1, 4.2, 4.3 Patient experience of hospital care**

**Composite experience scores (out of 100) at the CCG's main 5 providers**

**The table below shows the composite score based on people who reported that their experience was**

**"very good" or "fairly good" in various patient surveys.**

**NHS Bradford City CCG**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Providers (ordered by number of admissions) for this CCG** | **Number of admissions / spells (Acute 2010/11)** | **4b Inpatient overall experience** | **4.1 Outpatient Overall experience** | **4.2 Inpatient responsiveness to needs** | **4.3 A&E Over all experience** |
| Bradford Teaching Hospitals NHS FT | 18,292 | 74 | 78 | 67 | 77 |
| Leeds Teaching Hospitals NHS Trust | 811 | 74 | 81 | 65 | 79 |
| Ramsay Healthcare UK Operations Ltd | 457 | NA | NA | NA | NA |
| Airedale NHS FT | 127 | 77 | 82 | 68 | 84 |
| Care UK | 118 | NA | NA | NA | NA |
| **CCG weighted average** |  | **74** | **78** | **67** | **77** |
| **England average** |  | **76** | **80** | **67** | **80** |

**Leeds North CCG**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Providers (ordered by number of admissions) for this CCG** | **Number of admissions / spells (Acute 2010/11)** | **4b Inpatient overall experience** | **4.1 Outpatient Overall experience** | **4.2 Inpatient responsiveness to needs** | **4.3 A&E Over all experience** |
| Leeds Teaching Hospitals NHS Trust | 30,965 | 74 | 81 | 65 | 79 |
| Harrogate & District NHS FT | 6,569 | 80 | 80 | 72 | 82 |
| York Teaching Hospital NHS FT | 571 | 78 | 82 | 71 | 85 |
| Spire Healthcare | 478 | NA | NA | NA | NA |
| Bradford Teaching Hospitals NHS FT | 294 | 74 | 78 | 67 | 77 |
| **CCG weighted average** |  | **74** | **78** | **67** | **77** |
| **England average** |  | **76** | **80** | **67** | **80** |

MRG Recommendations, Comments & Updates:

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| --- | --- | --- | --- |
| **Indicator Title** | **5.1 Patient Safety Incidents** | IAS Ref Code: |  |
| Indicator Set | CCG Outcome Indicator Set |  |  |

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| Ref code  **2012/265**  Made: 26/10/12 | MRG suggested that further research be carried out on whether it is better to use bed days rather than admissions for attributing patient safety incidence. |
| Update:  Made: 21/02/13 | The use of length of stay or bed days provides a similar correlation between the direct provider-to-CCG rate (for the dummy indicator, available in HES) and the attributed rates as the use of admissions.  LOS (discharge date minus admission date, chart below) provides a correlation of 0.72. The bed days definition used is very similar to LOS but assigns an arbitrary figure of 0.5 bed days for any admission where the patient was discharged on the same day. Using this method provides a correlation of 0.73. Both of which, are lower than the previous discussed method of using number of admissions.  Graph showing correlation of data from  LOS and the indicator |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2012/266**  Made: 26/10/12 | The attribution method suggested apportions the number of patient safety incidents to CCGs based on overall inpatient activity at provider level. MRG recommended the need for contextual information to show levels of activity including other health care settings e.g. outpatients |
| Update:  Made: 21/02/13 | **HES – Indicative Outpatient figures**  The figures below are indicative as they utilise the Provider Spells mapping tables that are currently still being developed by the HES team.  For the majority of providers, outpatient attended appointments far exceeded that of inpatient admissions, as you’d expect. This ranged from double to more than 10 times the amount, suggesting that outpatient activity would have a different effect on patient safety incidents for each provider.   * 261 providers where outpatient attendances double (or more than double) inpatient admissions. * 34 providers with no outpatient attendances recorded. * 3 providers with lower outpatient attendances than inpatient admissions.   The chart below shows the range of the proportion of inpatient admissions to outpatient attendances across providers.    **NRLS**  The NRLS reported patient safety incidents for a further 71 PCT’s in 2010/11 where there is no inpatient or outpatient activity in HES and so these incidents could not be attributed. |
| Further Rec:  Made: xx/xx/xx |  |
| Update:  Made: xx/xx/xx |  |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2012/267**  Made: 26/10/12 | It was commented that although there was a linear correlation in the graph provided (showing comparison between direct provider to CCG volumes available in HES and the proposed attribution method), the size of the range also indicated considerable uncertainty  MRG suggested further thought was required on providing a measure of uncertainty / confidence interval to accompany any figures quoted if the attribution methodology suggested is to be used. |
| Update:  Made: 21/02/13 | We have investigated the use of a confidence interval around the regression slope (chart below) and also individual confidence intervals on the actual and attributed rates.  Graph showing attribution comparison for LOS showing correlation and slope  The example below uses the CCG level actual and attributed rates rate for the dummy indicator using LOS. The confidence intervals are slightly wider around the attributed rates.  Table showing rates for dummy indicator for attributed and actual with confidence intervals |
| Comment:  Made: 21/02/13 | As general point MRG commented that there was a need to review the way regression was used to generate confidence intervals because what was presented was too narrow. |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2012/268**  Made: 26/10/12 | MRG asked if there was any base research available on whether particular groups are affected with regards to patient safety.  It was also commented that the quality statement should indicate whether risk adjustment has been considered, although it was suggested risk adjustment was not necessary in this instance. |
| Update:  Made: 21/02/13 | There are no age breakdowns in NRLS data so it cannot be risk adjusted.  The NRLS data includes an array of patient safety incidents that can occur in any group. There are approximately 300k patient safety incidents each quarter and, of those, around 25% (~80k) are classified as ‘Patient Accident’. The remaining incidents are made up of the following types:   * Medication * Treatment/procedure * Implementation of care and ongoing monitoring/review * Access, admission, transfer, discharge (including missing patient) * Documentation (including records, identification) * Infrastructure (including staffing, facilities, environment) * Clinical assessment (including diagnosis, scans, tests, assessments) * Other * Disruptive, aggressive behaviour * Self-harming behaviour * Consent, communication, confidentiality * Medical device/equipment * Infection Control Incident * Patient Abuse (by staff/third party |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2012/269**  Made: 26/10/12 | The data source for the indicator should be reviewed when upcoming changes to the HPA data collections come online which are believed to provide direct CCG level data. |
| Update:  Made: 21/02/13 | HPA hold no plans to provide the overall ‘Patient Safety Incidents’ figure at CCG level, although other individual patient safety items such as MRSA and *C. difficile* will be reported.  The NRLS do not hold any GP Practice data and so cannot provide at CCG level in the foreseeable future. |
| Further Rec:  Made: xx/xx/xx |  |
| Update:  Made: xx/xx/xx |  |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2013/07**  Made: 21/02/13 | An alternative approach to the previously presented attribution method had been considered; used by the DH in the CCG packs. MRG favoured this approach for this indicator on the basis that the more contextual information provided the better, without presenting the actual value (not robust enough without GP code collection). |
| Update:  Made: 21/02/13 |  |
| Further Rec:  Made: xx/xx/xx |  |
| Update:  Made: xx/xx/xx |  |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2013/08**  Made: 21/02/13 | MRG discussed further the options for ensuring that a meaningful denominator is used that allows the indicator to capture the level of risk.   * Length of stay would not provide enough information on its own as this would also depend on the number/ types of admissions. * Admissions on their own would not provide enough information as patients who have a longer stay (which could vary by provider) would be at greater risk of incident. * Bed days would appear to offer the best opportunity in terms of a meaningful denominator. In respect of whether to use 1 or ½ for partial day stays, this wouldn’t matter either way as long as this is consistent between CCGs.   To check where bed days used in other indicators to ensure consistency.  MRG queried how the commissioner of a CCG would judge the results of this indicator. Specifically, would the commissioner be able to ascertain whether patients in their CCG are receiving a ‘bad deal’ in terms of number of incidents reported. Furthermore, would the indicator aid the commissioner in identifying the cause if their patients were receiving a ‘bad deal’.  MRG suggested that both a number and a rate of admissions (bed days) could be presented alongside each CCG. A rate (per 100,000) would be sensible as the proportion may not be easily comparable . |

Update Made: 03/05/13

***Interpretation****:* Patient Safety incidents cannot be directly assigned to CCG’s, as there is no GP Practice code in the NRLS data. The actual number of incidents reported by each of the trusts could relate to a number of CCGs, however Trust 1 and Trust 2 in the example below are the main providers commissioned by this CCG, based on bed days.

*Presentation Example - CCG1 (full year 2010/11 data):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Providers (ordered by bed days) for this CCG** | **Number of bed days for this CCG** | **Bed days proportion for this CCG** | **Bed days rate per 100,000 CCG pop for this CCG** | **Reported Patient Safety Incidents for the Trust** |
| Trust 1 | 250,215 | 48.5% | 66,831 | 14,568 |
| Trust 2 | 227,522 | 44.1% | 60,770 | 2,792 |
| PCT 1 | 9,436 | 1.8% | 2,520 | 2,210 |
| PCT 2 | 8,194 | 1.6% | 2,188 | 563 |
| Trust 3 | 7,567 | 1.5% | 2,021 | 5,303 |

Bed Days calculation: The bed days definition used is very similar to the standard LOS definition but assigns an arbitrary figure of 0.5 bed days for any admission where the patient was discharged on the same day.

Indicator P01433 (Emergency Bed Days for Long Term Conditions per 1000 population) uses bed days at an episode level that are calculated using episode end date – episode start date; therefore, zero bed days would be assigned where a patient is discharged on the same day as they are admitted. The HES team use the same standard definition

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| Further Rec:  **2013/21**  Made: 03/05/13 | MRG commented that in the example table the column ‘Reported Patient Safety Incidents for the Trust’ it may be appropriate to standardise to take account of differences in trust size. |
| Further Rec:  **2013/22**  Made: 03/05/13 | MRG commented that the bed days calculation could be adjusted. For example, a 4 hour stay in hospital would be assigned 0.5 bed days, whereas a 47 hour stay could potentially be assigned 1 bed day. Perhaps look at adding the arbitrary 0.5 bed days to all admissions so that same day discharges aren’t over represented. |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2013/09**  Made: 21/02/13 | Strategic recommendation  Recommendation to ask NRLS to include GP practice code as part of data collection.  MRG suggested that each incident should be linked to either HES ID or NHS no. in order to clearly link back to CCG level. |
| Update:  Made: 03/05/13 | The NRLS provided the following response;  *‘*The NRLS is currently being reviewed and the assessment of short and long-term changes and requirements are in course. So far, there is no concrete decision on the inclusion of GP Practice code into the collection but this will be considered. In summary - at the moment, the NRLS have no agreed plans to collect GP Practice codes.’ |
| Further Rec:  Made: xx/xx/xx |  |
| Update:  Made: xx/xx/xx |  |

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| --- | --- | --- | --- | --- |
| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

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| Ref Code:  **2013/10**  Made: 21/02/13 | **Indicator recommended for consideration by IGB on the understanding that the use of bed days in other indicators is investigated to ensure consistency. Additionally, that consideration is given to publishing a number and a rate alongside each CCG.** |
| Ref code  **2013/23**  Made: 03/05/13 | **Indicator approved for consideration by IGB providing recommendations regarding standardisation and bed days calculation are further investigated.** |

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| Rec Status: | **Further Information Required** |  | **Resolved / No Action Required** |  |

Revisions:

To be completed where changes to the methodology are made by the applicant during the appraisal [i.e. subsequent to the initial application form]

A new section is to be added for each new set of revisions to go to MRG.

|  |  |
| --- | --- |
| Revision Date: |  |
| General Comments / Reasoning: |  |
| Revisions: |  |
| Indicator Title |  |
| Data source |  |
| Construction |  |
| Updated Potential Issues |  |

Record of Assurance provided by **Indicator Governance Board**

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| --- | --- | --- | --- |
| **Indicator Title** | **Patient Safety Incidents** | IAS Ref Code: | IAP00140 |
| Indicator Set | CCG Outcome Indicator Set (5.1) |  |  |

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| --- | --- |
| Description | For each of a CCG’s five main providers, this indicator shows the rate of Patient Safety incidents per 1,000 total provider bed days.  “Patient safety incidents are an unintended or unexpected incident which could have, or did, lead to harm for one or more patients receiving NHS-funded healthcare.”  (<http://www.nrls.npsa.nhs.uk/report-a-patient-safety-incident/healthcare-staff-reporting/>) |

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| --- | --- | --- | --- |
| Initial IGB discussion | 23/09/13 | Further discussed |  |

**Strategic Considerations & Implications**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Applicant / Sponsor Organisation | NHS England  \*Costing for assurance appraisal included in development cost | Assurance process funded? | **Yes\***    **No** |  |

|  |  |
| --- | --- |
| Indicator rationale | It is impossible to eliminate entirely adverse events in healthcare but the need to learn from the events is understood. Historically, a very incomplete picture of safety has been available from the information collected. Over many years, and with the introduction of the National Reporting and Learning System, by the National Patient Safety Agency, that picture is improving. However, more needs to be done, and maximising the potential to reduce incidents will be supported by continued improvements in reporting.  The Clinical Commissioning Group Outcomes Indicator Set (CCG OIS) is an integral part of NHS England’s systematic approach to quality improvement. It is intended to provide clear, comparative information for CCGs, patients and the public about the quality of health services commissioned by CCGs and the associated health outcomes. |
| Basis for rationale  [Details of quality statement, policy etc.] | This is based upon the NHS Outcomes Framework indicator of the same name. It seeks an improved readiness of the NHS to report harm and to learn from it.  HSCIC was originally asked by DH to provide an attribution method to allocate provider-level data to CCGs. This did not provide a sound basis for an indicator so following discussions with DH and NHS England, it was agreed to use the ‘five main providers’ methodology, as used in the CCG OIS Patient Experience indicators. |
| Calculation Summary | Reliable patient safety incident data is not currently provided at CCG level, so an alternative approach has been used to highlight a CCG’s performance. The CCG’s five main providers, based on total bed days commissioned by the CCG, are reported with their provider level crude patient safety incident figure, as well as the number of incidents per 1,000 total provider bed days (based on the bed days definition below). This is to maintain accuracy without the need for figures to be attributed to CCGs.  A CCG’s five main providers are the ones it commissions the most activity to. This is calculated by totalling the provider’s number of bed days for any provider inpatient spell commissioned by that CCG during the reporting period.  To identify a CCG’s five main providers, the following data sources are used:   * Hospital Episode Statistics Admitted Patient Care (HES APC) * GP Practice to CCG mapping file (to be released in April of the relevant financial year) * Where no GP Practice code is recorded in the HES APC data, the CCG of responsibility is identified using the lower super output area (LSOA) to CCG mapping file.   Bed days are defined as: (Provider Spell discharge date – Provider Spell admission date) + 0.5. An arbitrary 0.5 days are added to the length of stay calculation to take into account day case admissions.  The Patient Safety incidents rate per 1,000 total bed days is calculated using the number of reported incidents by the provider and that provider’s total number of bed days, irrespective of which CCG commissions them. |

Example data is provided for illustration;

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Reporting Period** | **Provider name** | **Proportion of total CCG activity (bed days) commissioned at this Provider** | **Number of bed days commissioned by CCG at this Provider** | **Provider activity: total number of bed days** | **Patient Safety incidents reported by the Provider** | **Patient Safety incidents per 1,000 Provider bed days** |
| Apr-Sep12 | Provider 1 | 52.8% | 135,000 | 345,000 | 7,250 | 21.0 |
| Apr-Sep12 | Provider 2 | 39.5% | 100,000 | 190,000 | 1,500 | 7.9 |
| Apr-Sep12 | Provider 3 | 1.8% | 4,500 | 55,000 | 1,250 | 22.7 |
| Apr-Sep12 | Provider 4 | 1.6% | 4,000 | 4,500 | 250 | 55.6 |
| Apr-Sep12 | Provider 5 | 1.6% | 4,000 | 195,000 | 2,750 | 14.1 |

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| Risks & assumptions | Stated limitations:   * 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 that together form a holistic view of CCG outcomes and a fuller overview of how CCG processes are impacting on outcomes. * It is only mandatory for providers to report incidents with a *severe degree of harm or death;* the reporting of patient safety incidents in general is voluntary and under-reporting is known to be common. There are major concerns regarding the level of completeness in the National Reporting and Learning System (NRLS) dataset currently available, particularly because NRLS has traditionally focussed upon learning from patient safety incidents and was never intended to be a reporting or data collection mechanism. The data in NRLS is not a complete count of all cases where a patient is harmed during contact with the NHS. * Patient Safety incidents occurring in acute trusts could happen in a number of different settings, including admitted patients (who *are* reported on HES), outpatients, pharmacy, diagnostic tests and administration. The published data does not specify the location or service, only the degree of harm and category of incident. * 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. * A number of factors outside the control of healthcare providers, such as the socio-economic mix of local populations, may determine whether a patient acquires an infection; thus, this could influence incidence. * This indicator is not subject to standardisation, as there are no age breakdowns in the NRLS data. Furthermore, there are a vast array of patient safety incidents including ‘Patient Accident’, ‘Medication’, ‘Treatment/Procedure’ and ‘Documentation’ that can occur across all equality dimension groups. * This indicator is not provided as a single output, as is the case with other CCG level indicators, as reliable CCG level data cannot be obtained for patient safety incidents. |
| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production] | *Data Source:*  Organisation Patient Safety Incident workbook, reported to NHS via the National Reporting and Learning System (NRLS), which is administered by Imperial College, London. Until June 2012 the NRLS was administered by the National Patient Safety Agency (NPSA)  Hospital Episodes Statistics (HES) Admitted Patient Care (APC) data.   * Data from the Organisation Patient Safety Incident Workbook is publicly available. * These data have historically been reported to the National Patient Safety Agency (NPSA) by the National Reporting and Learning System (NRLS). This has transitioned to Imperial College as stated above.   <http://www.nrls.npsa.nhs.uk/patient-safety-data/organisation-patient-safety-incident-reports/directory/>   * Underlying HES data are held by the HSCIC and are made available to customers via several mechanisms depending on their requirements. These include the publication of aggregated output; a chargeable extract service that covers both bespoke and routine extracts; and direct access via an interrogation tool to the underlying data for certain customers. |
| Potential impacts on other business areas [inc outstanding generic issues] | A similar indicator exists in the NHS Outcomes Framework, upon which this indicator is based. It provides quarterly counts of patient safety incidents at a national level and bi-annual counts at PCT/trust level.  Indicator NHSOF 5a Patient Safety Incident Reporting) is available on the HSCIC Indicator Portal:  [**http://indicators.ic.nhs.uk/webview/**](http://indicators.ic.nhs.uk/webview/). |
| Implementation Method  [inc production funding] | This indicator makes use of an existing data collection, so there are no additional data collection cost implications or burden.  NHS England has commissioned HSCIC to produce and disseminate the CCG OIS indicators; this is funded via the Grant in Aid funding to HSCIC.  Collection of the data for the CCG OIS is via existing data collections, in this case HES. Testing and specification of the indicators is carried out by the Specification Development Service and construction of the indicators is provided by Clinical Indicators via the CI Platform.  Dissemination and presentation of the CCG OIS will be via a number of routes:   * The indicators and their underlying data will be made publicly available via the HSCIC website and the Indicator Portal. * The data will also be provided to NHS England for use in their internal Intelligence Tool. * Subject to confirmation by NHS England, the calculated indicator, numerator and denominator for CCGs will be supplied by messaging to the Calculating Quality Reporting Service (CQRS) for use by CCGs as part of their management information |

**Development Advice / Peer Review (undertaken as part of assurance process)**

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| Range of input during development | Similar indicator previously considered for use in NHS Outcomes Framework and subject to assurance through the HSCIC Indicator Assurance process. |
| Assurance Service  Peer Reviewers: | No peer review currently undertaken |
| Peer Review summary: | - |

**Record of MRG Discussion**

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| Discussion dates: | 26/10/12  03/05/13 |
| By: | John Varlow HSCIC Director of Information & Analysis  Andy Sutherland HSCIC Statistics Head of Profession  Azim Lakhani HSCIC Head of Clinical Analysis, Research & Development  Alyson Whitmarsh HSCIC Programme Manager, Clinical Audit  Irene Begaj UHB Statistical Intelligence Analyst  Daniel Sutcliffe NICE Programme Manager  Jonathon Hope HSCIC Principal Information Analyst, Clinical Audit |
| Summary of MRG discussions: | *Summary of MRG – 26/10/12*  An original application describing an attribution method to apportion patient safety incidents to a CCG based on overall inpatient activity at provider level was considered at MRG, however this was subsequently revised based on advice from DH. The revised method using the “five main providers” is described in the calculation summary above and is based on methodology used for the calculation of patient experience indicators in the CCG Outcomes Indicator Set.  A number of wider issues were considered as part of the initial MRG discussion:   * MRG suggested that further research be carried out on whether it would be better to use bed days rather than admissions for attributing patient safety incidence. It was subsequently evidenced that the use of length of stay or bed days provides a similar correlation between the direct provider-to-CCG rate and the attributed rates as the use of admissions. * The option to use bed days was adopted. * MRG asked if there was any base research available on whether particular groups are affected with regards to patient safety. It was also commented that the quality assessment should indicate whether risk adjustment has been considered, although it was suggested risk adjustment was not necessary in this instance. * An update was provided highlighting that the NRLS data includes an array of patient safety incidents that can occur in any group. There are approximately 300k patient safety incidents each quarter and, of those, around 25% (~80k) are classified as ‘Patient Accident’. Additionally, there are no age breakdowns in NRLS data so it cannot be risk adjusted. * MRG recommended that the data source for the indicator should be reviewed when upcoming changes to the HPA data collections come online which are believed to provide direct CCG level data. * However, the developer updated the group that HPA hold no plans to provide the overall ‘Patient Safety Incidents’ figure at CCG level, although other individual patient safety items such as MRSA and *C. difficile* will be reported. * The NRLS do not hold any GP Practice data and so cannot provide at CCG level in the foreseeable future.   *Summary of MRG – 03/05/13*  An alternative approach to the previously presented attribution method was considered; used by the DH in the CCG packs (*See calculation section above*).   * MRG favoured this approach for this indicator on the basis that in view of an actual value not being presented, the more contextual information provided the better. * MRG queried how the commissioner of a CCG would judge the results of this indicator. Specifically, would the commissioner be able to ascertain whether patients in their CCG are receiving a ‘bad deal’ in terms of number of incidents reported. * MRG commented that it may be appropriate to standardise to take account of differences in trust size, and that both a number and a rate of admissions (bed days) could be presented alongside each CCG. A rate (per 100,000) would be sensible as the proportion may not be easily comparable. * The rate of incidents per 100,000 provider bed days is now included in the reported data. * Additionally, the developer reported that Patient Safety incidents cannot be directly assigned to CCG’s, as there is no GP Practice code in the NRLS data. The actual number of incidents reported by each of the trusts could relate to a number of CCGs. * MRG commented that the bed days calculation could be adjusted. For example, a 4 hour stay in hospital would be assigned 0.5 bed days, whereas a 47 hour stay could potentially be assigned 1 bed day. Perhaps look at adding the arbitrary 0.5 bed days to all admissions so that same day discharges aren’t over represented. * MRG discussed further the options for ensuring that a meaningful denominator is used that allows the indicator to capture the level of risk. Length of stay or admissions alone would not provide enough information, therefore bed days would appear to offer the best opportunity in terms of a meaningful denominator. In respect of whether to use 1 or ½ for partial day stays, this wouldn’t matter either way as long as this is consistent between CCGs. * The developer revised the methodology to define bed days as: (Provider Spell discharge date – Provider Spell admission date) + 0.5. An arbitrary 0.5 days are added to the length of stay calculation to take into account day case admissions. * This definition was assured by the Methodology Review Group for calculating bed days. * More widely MRG recommended asking NRLS to include GP practice code as part of data collection. MRG suggested that each incident should be linked to either HES ID or NHS no. in order to clearly link back to CCG level. * The NRLS provided the following response:  *‘The NRLS is currently being reviewed and the assessment of short and long-term changes and requirements are in course. So far, there is no concrete decision on the inclusion of GP Practice code into the collection but this will be considered. In summary - at the moment, the NRLS have no agreed plans to collect GP Practice codes*.’ |

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| *Outcome of MRG consideration:* | 1. **No significant issues identified** |  |  |
|  | 1. **No significant issues on basis of completion of outstanding actions** |  |  |
|  | 1. **Some concerns expressed as caveats or limitations** |  |  |
|  | 1. **Significant reservations** |  |  |
|  | 1. **Unresolved issues** |  |  |

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| MRG statement of recommendation: | **The indicator has been put forward for consideration by IGB on the basis of the completion of further consideration of the method to calculate bed days (***which has subsequently been completed see above***).** |

IGB – Additional Recommendations:

[Add new section as necessary]

**Recommendations & Updates**

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| --- | --- |
| Made: | xx/xx/xx |
| Comments & Recommendations  [List additional comments and recommendations raised by IGB] |  |

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| Action required: | **IGB Update Not Required** |  | **Further Update IGB** |  | **Refer to MRG** |  |  |

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| Update:  Made: xx/xx/xx |  |

Review: **Review**

|  |  |
| --- | --- |
| Review Timescale |  |
| **1 year** |  |
| **3 years** |  |
| **Other:** |  |

Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]

In light of the potential change of ownership of the data source the indicator is recommended for annual review in the short term

IGB Sign-off:

**Indicator Assurance Process Output**

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| *Final Appraisal Status* | 1. **Assured** |  |  |
|  | 1. **Assured with Comments** |  |  |
|  | 1. **Failed Assurance** |  |  |

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| Basis of Sign-off  [Detail caveats and limitations ] |  |
| Sign-off Date | 06/12/2013 |

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

1. [↑](#footnote-ref-1)
2. <http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4916275> [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. \* the NRLS sets two ‘submission’ deadlines a year, for data to be included in the Organisation Patient Safety Incident Reports (NRLS Official Statistics) workbooks: the last Friday in May and the last Friday in November. [↑](#footnote-ref-5)
6. The NRLS sets two ‘submission’ deadlines a year, for data to be included in the Organisation Patient Safety Incident Reports (NRLS Official Statistics) workbooks: the last Friday in May and the last Friday in November. [↑](#footnote-ref-6)