**NHS Digital**

**Indicator Supporting Documentation**

**IAP00026 Infant mortality**

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| **Indicator Title** | **IAP Code (IAP00026)** |
| Concise concept of what is being monitored, avoiding use of acronyms or details of calculation or breakdown groups. *Infant Mortality*  |  |

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| Indicator Definition, including calculation, measurement units, geographical range, age and gender |
| Include any relevant detail of the statistic, such as calculation type (eg rate per 100,000 population), gender, age or geography, summary / condition(s) / procedure(s), period of analysis (e.g. 3 year pooled)*Infant mortality is defined as the number of deaths at ages under one year, per 1,000 live births.* *Calculation type**It is expressed as a rate per thousand live births.* *Period of analysis**Presented as rolling three-year average.**Geographical range**England ?Query what else GORs, SHAs, LAs, PCOs?**Gender**Persons**Other disaggregation**We require indicators to be disaggregated by socio-economic group and deprivation (?I think).* *Age**N/A.*  |

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| Is this Indicator to be derived from ….. |  |  |  |
| (a) Data that is already aggregated or pre-calculated to answer the indicator question. This is most common when using an existing published figure as an indicator measure |  | (b) Raw data that requires further calculation to answer the indicator question. This is most common when there is no suitable published figure, so raw data is used to create the figure specifically for the purpose of using it as an indicator.  |  |
| If (a), please list the Indicator Data Source(s) |  |  |  |
| Details of aggregate data sources, if known. Give the name of the collection, publication and/or the organisation collecting the information.*ONS: Live births, stillbirths and infant deaths**http://www.statistics.gov.uk/downloads/theme\_health/infant-perinatal-mortality-summary-tables.xls* |  |  |  |
| If (a) please list the Indicator Data Availability |  |  |  |
| Please note if this data is collected currently, or if it will require some sort of development such as setting up a new collectionIs data publicly available (eg National Statistic), or is it only available as a bespoke dataset upon request. *Currently collected* |  |  |  |

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| **Indicator Overlap** |
| List the indicator sets you have checked for overlap or if you have searched the IC Indicator library  |
| For example, NHS Choices, IQI / MQI, Better Care, Better Value, NCHOD, NHS Comparators. Please note the current IC Indicator Library in the website is not up to date, this will be improved/replaced as part of development of this project*NCHOD* |
| List any indicators which overlap with the proposed indicator  |
| Please include, where known, any indicator code or unique reference, as well as the title of the indicator*Mortality in Infancy* |
| What value does the proposed indicator offers over existing indicators |
| Highlight any gaps left by any current indicators*NONE* |

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| **Indicator Use** |  |  |  |  |
| Does this indicator measure a  | process | [ ]  | Outcome (including process as proxy) | [x]  |

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| This indicator is intended for… |  |  |  |  |  |
| …comparison against absolute evidence based standard | [ ]  | …comparison against national average | [ ]  | … comparison against optimum value | [ ]  |
| … comparison against self over time | [x]  | … observation of variation | [ ]  | Other (please specify)       | [ ]  |

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| Indicator Title/ Definition Review **(IC use only)**  |  |  |  |
| *Indicator meets criteria for :*Indicator definition self explanatory Indicator definition in plain English, suitable for publishing to all audiences Indicator definition with clear measurement unitsIndicator definition with clear scope (geog, age, sex)[Data source available][Data source suitable ]Indicator is unique Face validity of concept and indicator use**Information complete - proceed** | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | *Requires revision for following reasons:*Title not confined to concept onlyUse of acronyms Definition needs more detail on:- calculations- data sources - geographical coverage - patient/population groups [Insufficient information about data source]Insufficient exploration of overlapInsufficient information about indicator use | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  |
| Notes: |  |  |  |

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| **Application contact details** (please note all contact details will be treated confidentially) |  |
| Applicant Name | *Candy Ballantyne* |
| Applicant Role | *NHS Outcomes Framework Domain 1 lead* |
| Applicant Organisation | *DH* |
| Applicant Telephone | *020 7972 2372* |
| Applicant Email | *Candida.Ballantyne@dh.gsi.gov.uk* |
| Indicator Set Name | *NHS Outcomes Framework* |
| Sponsor Name | *DH - Quality Framework & QIPP teams* |
| Sponsor Role | *Delivery of NHS Outcomes Framework indicatorsfor SoS to use to hold NHS Commissioning Board to account* |
| Sponsor Organisation  | *DH* |
| Acknowledgements Please list any contributors to the development of the indicator you wish accredited | *?* |
| Other Stakeholder Name  | *ONS* |
| Other Stakeholder Role | *Collection/pubilcation of indicator data* |
| Other Stakeholder Organisation | *N/A* |
| Please list any additional Stakeholder(s) | *N/A* |

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| **Users of the Proposed Indicator** | Primary User | Secondary User | Not intended for |
| Boards (national, local) | [x]  | [ ]  | [ ]  |
| Provider Managers | [ ]  | [ ]  | [ ]  |
| Commissioning Managers | [ ]  | [ ]  | [ ]  |
| Regulators | [ ]  | [ ]  | [ ]  |
| Clinicians | [ ]  | [ ]  | [ ]  |
| Patients | [ ]  | [ ]  | [ ]  |
| Public | [ ]  | [x]  | [ ]  |
| Other (please specify)  | [ ]  | [ ]  | [ ]  |
| Other (please specify)  | [ ]  | [ ]  | [ ]  |

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| **Rationale for indicators** |
| **Please list any relevant policies, strategies or programmes** |
| *NHS Outcomes Framework* |

High level subject area

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| Preventing people from dying prematurely | [x]  | Enhancing quality of life for people with long term conditions | [ ]  | Helping people recover from episodes of ill health or following an injury | [ ]  |
| Ensuring people have positive experiences of care | [ ]  | Treating and caring for people in a safe environment and protecting them from avoidable harm | [ ]  | Helping people to stay healthy | [ ]  |
| Facilitate equitable access to care | [ ]  |  |  | Other (please specify) | [ ]  |

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| Evidence base for the indicator |
| Provide a paragraph summarising the evidence for the rationale, noting quality of evidence where appropriate. Do not list the relevant docs here, please extract salient messages. *This is a joint indicator with Public Health. The infant mortality rate is considered a key international indicator of a country’s population health and quality of health care services.. Infant mortality rate is a measure of the longer term consequences of perinatal events and is particularly important for monitoring outcomes for high risk groups such as very preterm babies and growth restricted babies.**Historically, infant mortality claimed a considerable percentage of children born, but rates have significantly declined in the West mainly due to improvements in basic health care and technological medical advances. It is included here as a measure of deaths in children. Infant mortality includes late neonatal (from 7 to 28 days) and post-neonatal (28 days to 1 year) deaths as well as early neonatal deaths (under 7 days), and all of these have different determinants. Many late neonatal deaths occur as a result of improvements in neonatal care postponing deaths which might otherwise have occurred in the perinatal period. Other factors in neonatal death include the availability of skilled birth attendance and postnatal care utilisation. Postneonatal mortality relates more but not exclusively to public health issues.*  |
| References |
| List up to six key references or documents*Extensive consultation – see Transparency in Outcomes – a Framework for the NHS, The NHS Outcomes Framework 2011-12* |
| Clinical advice  |
| Provide details of any clinical advice or support already given in development or preparation of indicator.  |

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| Indicator Rationale Review **(IC use only)** |  |  |  |
| Priority level linked to policy, strategy or programmeQuality of evidence  - clinical trial / cohort studies/ meta-analysis  - non-analytical studies - best practice (clinical)  - good practice for patient experience**Information complete - proceed**  | [ ] [ ] [ ] [ ] [ ]  | *Requires revision for following reasons:*Policy, strategy, programme information not completeEvidence information not complete | [ ] [ ]  |
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| **Indicator Methodology – information sources** |
| Numerator definition  |
| Word description of the cases or events to be counted. The numerator should be a subset of the denominator*Number of deaths of infants under 1 year registered in the respective calendar year(s)* |
| Numerator source  |
| Organisation and data collection*ONS* |
| Numerator construction  |
| Which data fields (specify) and values (specify codes) are combined to arrive at the count. Include any special rules.  |
| Numerator completeness  |
| Are all relevant cases/ events counted. List any known exclusions, shortfalls or collection issues which will affect the required count. How do counts compare with other sources? *YES* |
| Numerator quality of data  |
| Issues with accuracy or known variability of recording. For example coding by untrained staff. Please list any indicators of data quality available (by field or whole numerator) |
| Numerator data availablity |
| Are data publicly available / published. Are they available only upon request, or only to groups of people meeting specific criteria / conditions? *Data are publicly available* |
| Numerator timeliness  |
| Frequency and timeliness of data. State how the publication/release of data relates to indicator production timescales. *Annual, published in the autumn following the year in which the death was registered.* |
| Numerator comments  |
| Please detail any caveats not already covered, e.g. varying serousness / severity of harmful event, whether potentially avoidable etc |
| Denominator definition  |
| Word description of the populations or events to be counted*Live births* |
| Denominator source  |
| Organisation and data collection*ONS* |
| Denominator construction  |
| Which data fields (specify) and values (specify codes) are combined to arrive at the count. Include any special rules.  |
| Denominator completeness  |
| Are all relevant populations / events counted? Any known exclusions, shortfalls or collection issues which will affect the required count? How do counts compare with other sources?*YES* |
| Denominator quality of data  |
| Issues with accuracy or known variability of recording. For example coding by untrained staff. Please list any indicators of data quality available (by field or whole denominator).  |
| Denominator data availability  |
| Are data publicly available / published. Are they available only upon request, or only to groups of people meeting specific criteria / conditions? *Data are publicly available* |
| Denominator timeliness  |
| Frequency and timeliness of data. State how the publication/release of data relates to indicator production timescales. *as numerator* |
| Denominator comments  |
| Please detail any caveats not already covered , e.g. impact of admission policies / thresholds, selection biases such as patients choosing place of death |

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| Indicator Applicant Review **(IC use only)** |  |  |  |
| Are raw data universally available for others to recreate indicator?Are data available in a suitable timeframe and frequency?Are data quality issues well documented and acknowledged?Are data robust enough to support indicator and derivations?Are data consistent over the required time?Are construction of numerator and denominator robust and comparable with other sourcesIs the numerator a valid subset of the denominator?If numerator / denominator is incomplete, is this acceptable?Is indicator likely to be meaningful / useful after accounting for any weaknesses in the data **Information complete - proceed**  | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | *Requires revision for following reasons:*Numerator info not completeDenominator info not complete | [ ] [ ]  |
| Notes:  |  |  |  |

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| **Indicator methodology - statistical methods** |
| Statistical support  |
| Summarise involvement of statistician involvement in developing indicator so far, and ongoing support for indicator when rolled out. *ONS National Statistics product* |
| Risk adjustment variables |
| The purpose of risk adjustment is to remove the effect of aspects beyond the direct control of the organisation or group monitored. Where risk adjustment is used, summarise the application of risk adjustment and selection of relevant variables. If not used, state why.  |
| Statistical methods |
| Type of analysis (any methods used), risk adjustment (predictive power of model), special techniques (dealing with dispersion, constant risk), statistical process control*Crude rate* |
| Quality assurance processes |
| Detail the quality assurance processes in place to check data, identify anomalies, and explore these further with providers.*ONS QA processes* |
| Test or sample data  |
| During course of the indicator assurance process, test or sample data will be required to give proof of concept. Insert table, chart or other representation of data. *http://www.statistics.gov.uk/downloads/theme\_health/infant-perinatal-mortality-summary-tables.xls* |
| Interpretation |
| Describe how this indicator is planned to be used, what questions the indicator is planned to answer, and any known limitation(s)*As part of a balanced set of outcomes indicators, it reflects quality of postnatal care and public health issues.,*  |
| Format of presentation |
| Describe published format, such as interactive website, csv file, etc. Provide table or screenshot (or mock version) of how the final presentation of data will appear. Include any interpretative text as well as figures*csv file to DH* |

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| Indicator Methodology Review **(IC use only)** |  |  |  |
| Construct validityTransparency / reproducibility Anomaly investigation and actionValid and appropriate methods usedCan play of chance be assessedIdentification and action on outliers for the purpose of data qualityPresentation suitable for audienceInterpretation**Information complete - proceed**  | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | *Requires revision for following reasons:*Statistical methods information not completeTest data not completeInterpretation not completePresentation not complete | [ ] [ ] [ ] [ ]  |
| Notes:Potential bias and confoundingSuitability of risk adjustment (if used)Predictive capability of model (if used) |  |  |  |

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| **Indicator production and management**  |
| Commissioner of indicator (this may be the same as the stakeholder) |
| *DH* |
| Producer of indicator (this may be the same as the proposer) |
| [please state Not Applicable if appropriate]*NHS IC* |
| Expected ‘improvement actions’ as a result of this indicator |
| State where responsibility will lie, and what actions will be expected as the result of a 'poor' rating of this indicator. *Responsibility will lie with the NHS Commissioning Board. The NHS Outcomes Framework sets out the national outcome goals that the SoS will use to monitor the progress of the NHS Commissioning Board. It does not set out how these outcomes should be delivered, it will be for the NHS Commissioning Board to determine how best to deliver improvements by working with GP commissioning consortia to make use of the tools at their disposal* |

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| Have costs of collection, construction, dissemination and presentation been fully identified? Please provide, even if the indicator is not to be produced by the NHS IC. This is a useful measure of how committed the sponsor is to this indicator and helps us prioritise applications through the process.  | [ ]  |

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| Funding status  |
| Secured / being sought / not identified / Not Applicable Please add comments*being sought* |

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| What timescales do you envisage for developing / producing this indicator |
| Give specific dates for key stages or publication or development of indicator*To be published by April 2011* |

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| Risks, assumptions and impact of producing indicator |
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| Risk of perverse incentive and gaming by healthcare providers |
| To what extent can organisations influence the value of the indicator in ways which may not benefit patients?  |

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| Risks, assumptions and impact of not producing indicator |
| *This is not an option as there has been a public commitment made to doing so. This indicator is part of the NHS Outcome Framework 2011-12 indicator set.* |

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| Indicator Production Review **(IC use only)** |  |  |  |
| Action-abilityFunding capacity identified [if applicable]Risks sufficiently explored**Information complete - proceed**  | [ ] [ ] [ ] [ ]  | *Requires revision for following reasons:*Commissioner information not completeProducer information not complete[if applicable]Improvement actions not complete[if applicable]Funding status not completeTimescale info not completeRisk assessment not complete | [ ] [ ] [ ] [ ] [ ] [ ]  |
| Notes:Timescales – comment on the appropriate priority level for assuring this indicator Risks – comment on any significant risks |  |  |  |

**Clinical Indicator Methodology Review Working Group**

**Applications for consideration 17 March 2011**

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| --- | --- |
| **Document Author:** | *Alison Crawford* |
| **Document Owner:** | *Alison Crawford* |
| **Created Date:** | *14 March 2011* |
| **Current Issue Date:** |  |
| **Responses expected by:** | *n/a* |
| **Version Number:** | *V 1.2* |

Document Control

## Version History

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| --- | --- | --- | --- |
| **Version** | **Date** | **Changed By** | **Summary of Changes** |
| V 0.1 | 14/03/2011 | Alison Crawford | Initial Draft |
| V 0.2 | 15/03/2011 | Alison Crawford | Domain 5 added |
| V 0.3 | 16/03/2011 | Alison Crawford | Domain 2 added |
| V 1.1 | 18/03/2011 | Alyson Whitmarsh | Recommendations from MRG added |
| V 1.2 | 21/03/2011 | Alyson Whitmarsh | Comments from MRG members |

##

## Approvals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Title** | **Date** | **Version** | **Signature** |
|  |  |  |  |  |

## Distribution

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| **Version** | **Date** | **Distribution List** |
| V 0.3 | 16/3/2011 | John Varlow, Azim Lakhani, Heather Dawe, Andy Sutherland, Alyson Whitmarsh, Adrian Purcell, Arun Bhoopal, Peter Knighton, Ben Glampson, Marcos ManhaesMeeting apologies: Adrian Purcell, Arun Bhoopal, Peter Knighton |
| V 1.2 | 21/03/2011 | NHS IC: John Varlow, Azim Lakhani, Heather Dawe, Andy Sutherland, Alyson Whitmarsh, Peter Knighton NPSA: Ben Glampson, Marcos Manhaes, DH: Arun Bhoopal, Candy Ballantyne, Sunita Shier, Dawn Fagence, Alison Kirby |
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# Introduction

All Indicators presented at this meeting have been proposed as part of the NHS Outcomes Framework, and represent a significant part of the first tranche of work.

The Department of Health has commissioned the NHS IC the produce this first tranche of 22 indicators, with the deadline for production and delivery in April 2011. However, it is recognised that external organisations that produce the source data must be involved in the development to ensure the best quality indicators are created.

In the first instance the Outcomes Framework requires only a national indicator, which is the main focus for this meeting. Future meetings will cover the following aspects

* age, gender, ethnicity, disability, religion and sexual orientation
* organisation level indicators
* consistency, standardisation, risk adjustment, disclosure

Presentation is via a CVS to DH, no further details are available at this time.

One common issue which has arisen is whether the titles for the indicators are concise, accurate and a suitable description of the indicator. This is not always the case and advice from MRG would be welcomed.

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| **Recommendation 1** | Where necessary alternative title recommendations should be made to DH.  |

# Indicators Appraised by Clinical Indicators Team as not requiring input

There are no indicators at this point that the Clinical Indicators Team would pass through the process that do not require any input from the Methodology Review Group. It is expected that as the process matures, it will become clear when indicators do not need explicit consideration.

# Indicators Appraised by Clinical Indicators Team as requiring minimal input

Several of the NHS Outcomes Framework Domain 1 indicators are currently produced by ONS and NCHOD, or are closely related to indicators currently produced by ONS and NCHOD. The methods used are outlined in the table below. There are issues around changes required to fit these indicators into the framework. Where the issues are specific to the indicator they are listed in the table, where they are generic to the domain they are listed directly below.

General Issues across Domain 1:

* Time periods – if a 3 year average is used in the indicator calculation should a rolling 3 year average be used for time series or should the series run with no overlap? (e.g. 2004-06, 2005-08, 2006-09, 2007-10 or 2004-06, 2007-10.) Where the indicators are currently produced with 3 year averages the possibility of using just 1 year will be investigated.

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| **Recommendation 2** | * Where possible use one year data
* Research alternative methods to rolling averages where numbers not large enough to single year analyses to avoid difficulties with interpretation of trends and confidence internals. Report to back to MRG and QIC.
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* For the Evidence and References section of the Pipeline applications we have been given: results of consultation. Is this enough?

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| **Recommendation 3** | Where evidence not currently forthcoming set review dates to allow time for production or suitable research which demonstrates the clinical effectiveness underpinning the rationale. Report back to MRG if appropriate.  |

* For a number of the indicators DH has said there should be an optimal value, without specifying what is proposed. What should we be asking them to provide in terms of evidence for the value? Are there instances where this is simply isn’t appropriate?

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| **Recommendation 4** |  More detail on requirement needed - query with DH. For example, whether the optimum levels should be adjusted for population type; based on clinical effectiveness evidence; optimum levels achieved at sub-national levels etc.  |

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| **Indicator** | **Calculation Method** | **Currently Available From** | **Issues with use** |
| 1b – Life Expectancy at Age 75 | Life Tables, presented as 3 year rolling average | At birth and 65 from ONS and NCHOD. Can be extracted from ONS published life tables covering all ages. | * Currently published as 3 year rolling average, proposer has requested we look at a single year. We will seek advice on this aspect from ONS
* Optimal value – see above
 |
| 1.1/1.2/1.3 – Under 75 Mortality Rate from Cardiovascular / Respiratory / Liver Disease | Directly standardised to European standard population | NCHOD produce indicators with the required construction, but some differing clinical codes. | * Are there any concerns over the use of the European standard population?
* ICD10 codes for Cardiovascular Disease are the same as for the NCHOD ‘mortality from all circulatory diseases’ indicator.
* ICD10 codes for Liver Disease and Respiratory Disease do not match any current NCHOD indicators. We will need to review evidence and reasoning which DH are in the process of supplying.
* Optimal value – see above
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| **Recommendation 5** | Unadjusted national figures should be suitable for first delivery. When geographical disaggregations are required direct standardisation should be used where possible to allow for such comparisons to be made. A UK/England population to be used for this standardisation as a European Standard Population may not be reflective of the age/gender structure of the England population. |
| **Recommendation 6** | Where figures are needed to be compared internationally, a European population can be used to standardise. This may lead to three national figures being available for use depending on the use they are to be put to. In addition, a time series requiring standardisation may introduce a further national value.  |
| **Recommendation 7** | MRG to review ICD10 selection when available |

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| 1.4i/1.4ii/1.4iii/1.4iv/1.4v/1.4vi – One and Five Year Cancer Survival (Lung, Breast and Colorectal) | From ONS published relative survival data. Relative survival standardised for age, sex, socio-economic status and geographic region. Actual survival rates compared to expected rates from life tables. | London School of Hygiene and Tropical Medicine (LSHTM) produce for publication by ONS. | * Breast and Lung reported already. Colon and Rectum reported separately to date, but agreement reached between DH and LSHTM for the latter to produce combined Colorectal data from the end of March 2011.
* Optimal value – see above
 |
| **Recommendation 8** | Purpose is for commissioning so agree that colorectal indicator is useful for this purpose |  |  |

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| 1.6i **(IAP00026)** /1.6ii – Infant and Perinatal Mortality | Crude Rate from counts of deaths and births. | ONS and NCHOD. | Nothing specific to this indicator |
| **Recommendation 9** | Investigate whether this could benefit from standardisation (maybe gender and/or deprivation). Report to back to MRG and QIC. |  |  |

NHS Outcomes Framework Domain 2 has one indicator in this tranche, presented below.

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| **Indicator:** | **Construction:** | **Rationale:** | **Issues** |
| **DOMAIN 2 – Long term conditions**Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s | Numerator: Number of emergency admissions (CIP spells) for people aged under 19 where asthma, diabetes or epilepsy was the primary diagnosisDenominator: Mid-year population of under 19 year oldsPresented as a rate per 100,000 population subject to numbersSimilar indicators are available through CHIMAT but for the conditions separately. | The three conditions identified make up 94% of emergency admissions for under 19s with long-term conditions. These conditions are among those where with effective community care and case management can help prevent the need for hospital admission.  | European population to be used for standardisation as for Domain 1. |
| **Recommendation 10** | See earlier recommendations on use of direct standardisation and UK population. |  |  |
| **Recommendation 11** | Investigate construction of CIP spells and ensure same construction used throughout this indicator set. Report back to MRG if necessary. |  |  |
| **Recommendation 12** | Investigate definition of emergency, report back to MRG on any lack of inconsistency with exiting indicators if no apparent reasoning |  |  |

# Indicators Appraised by Clinical Indicators Team as requiring substantial input

Several of the NHS Outcomes Framework Domain 5 indicators which relate to patient safety, are to be presented in the form of a ‘rate per 100,000 bed days’ which is considered to represent the exposure to risk of exposure to avoidable harm. Four are presented here as they have relatively straightforward numerators which are currently published and well understood. Remaining indicators of the same family will be presented in later meetings as the need for the indicators are less urgent or require further specialist advice before presenting to this group. In the first instance the Outcomes Framework requires only a national indicator, but there is likely to be a requirement for organisation level indicators, and breakdowns in the future.

Background for NPSA data

The National Reporting and Learning System collects data on patient safety incidents from all organisations in the NHS in England and Wales. The majority of incidents are submitted via Local Risk Management Systems, with the remainder submitted via specialist eForms (eg Anaesthetics). The main purpose of the data is not for surveillance of the numbers, but is used qualitatively to identify emerging risks, which are then explored and solutions presented to the NHS, which take many formats (Alerts, articles, conference presentations, publications, toolkits etc). Quarterly Data Summary and Organisation Feedback Reports present the number of incidents submitted, but these have largely been used to encourage submission of greater numbers of incidents, with the emphasis on high numbers showing engagement with the patient safety agenda. These data have not been used as an indicator previously, although they are currently supplied to DH for the QIPP dashboard. The major flaw in using the number of NRLS incidents as an indicator is that they represent a sample of what is happening in the NHS and organisations have little incentive to report everything that occurs due to the burden that it entails and the potential for negative perception that they have ‘too many’. Any movement in an indicator derived from this data will almost certainly be interpreted as changes to the reporting practice in the NHS rather than any underlying trends in services delivered to patients. While the NPSA has been earmarked in the ALB review for closure, this function will be retained and will become part of the NHS Commissioning Board. Data handling notes detailing data quality issues are available at - <http://www.nrls.npsa.nhs.uk/resources/?entryid45=129376>

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| **Title** | **Status** | **Numerator construction** | **Numerator notes** | **Denominator** |
| **Domain 5** 5a Patient Safety Incidents Reported | Currently published on NPSA website as number and rate by admissions/bed days/populationPublished March and Sept each year at trust level and quarterly at a national level | All patient safety incidents submitted to the National Reporting and Learning System as having occurred at an NHS Organisation within period.  | Reporting to the NRLS is voluntary (see exception for severe and deaths), underreporting is likely (and well discussed in literature) but difficult to quantify. However, reporting has been steadily increasing and reporting high volumes is considered a sign of good practice and engaging with the PS agenda. Primary care is particularly under-represented. High potential for gaming.  | No national rate is currently published, only rate by each organisation which is available in the feedback reports. Denominator data for the organisation feedback is complicated and varies according to the organisation type (or ‘cluster’), but is predominantly HES based bed days for the acute setting. Given the changing structure of the NHS, these ‘clusters’ will no longer be relevant. In the current format, it is not possible to aggregate the org level rates to generate a national rate.   |
| 5b Severity of harm of patient safety incidents reported | Currently published on NPSA website as number and % of all incidentsPublished March and Sept each year at trust level and quarterly at a national level | All patient safety incidents submitted to the National Reporting and Learning System as having occurred at an NHS Organisation within period, with degree of harm as ‘severe’ or ‘death’.  | Severe and deaths are mandatory as of April 2010. They account of approx 1% off all incidents reported, and are reviewed by clinical reviewers who escalate ‘emerging’ issues. Known issues with definitions, submitters sometimes allocate the potential harm rather than actual harm. Psychological harm is also poorly recognised.  | No national rate is currently published, only rate by each organisation which is available in the feedback reports. Denominator data for the organisation feedback is complicated and varies according to the organisation type (or ‘cluster’), but is predominantly HES based bed days for the acute setting. Given the changing structure of the NHS, these ‘clusters’ will no longer be relevant. In the current format, it is not possible to aggregate the org level rates to generate a national rate.  |
| **Recommendation 13** | Ensure caviats around this data source are made clear:* Under reporting and any likely effect on summary data
* Whether present at admission – dealt with differently by different organisations
* Whether avoidable or not
* Some incidents will occur after discharge
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| **Recommendation 14** | Review alternative denominators to bed days as a measure of exposure to risk ie admission and population. Report back to MRG and QIC.Clarify occurrence of multiple incidents for the same patient reflecting if and how these should be treated |  |  |  |
| 5.2i Incidence of healthcare associated infections - MRSA | Currently published on HPA website as counts on a monthly, quarterly and annual basis for all acute and primary care organisations.  | Count of all MRSA infections identified two days after admission, where the patient specimen location is ‘acute’ (or null), and patient location is ‘In-patient’, ‘Day patient’, ‘Emergency assessment’ (or is *null*) | These data should not be used as the basis for decisions on the clinical effectiveness of interventions in individual NHS organisations without further investigations | Patient bed day denominators are calculated using the average daily ‘Total (occupied)’ bed data from the KH03 dataset. Figures are now submitted quarterly on form KH03 by each NHS provider and provide a summary across all hospital sites within the Trust or PCT. Patients requiring critical care are excluded as they are captured in a bi-annual census. Occupation of beds by well babies are also excluded. |
| 5.2ii Incidence of healthcare associated infections – *C difficile* | Currently published on HPA website as counts on a monthly, quarterly and annual basis for all acute and primary care organisations.  | Count of all C difficile infections identified three days after admission, where the patient specimen location is ‘acute’ (or null), and patient location is ‘In-patient’, ‘Day patient’, ‘Emergency assessment’ (or is *null*)  | These data should not be used as the basis for decisions on the clinical effectiveness of interventions in individual NHS organisations without further investigations | Patient bed day denominators are calculated using the average daily ‘Total (occupied)’ bed data from the KH03 dataset. Figures are now submitted quarterly on form KH03 by each NHS provider and provide a summary across all hospital sites within the Trust or PCT. Patients requiring critical care are excluded as they are captured in a bi-annual census. Occupation of beds by well babies are also excluded. |
| **Recommendation 15** | Review use of bed days as denominator and ability of KH03 to provide this (aggregate return?). Investigate suitability of SPC based on numbers or rates to see variation from expected. Report back to MRG and QIC. |  |  |  |

The group are asked to consider the key issues:

* Are the caveats around NRLS data acceptable for use as an indicator?
* Is bed days the most appropriate denominator for the four listed indicators at a national level?
* For 5a and 5b, should the data be restricted to inpatient care only to allow for HES bed days to be used as a national denominator? (5.1i and 5.2ii are already explicitly inpatient only)
* Should there be some coverage of primary care/community based patient safety? Could the Welsh approach of using population as the denominator be used to include all care settings?