NHS Digital

Indicator Supporting Documentation

IAP00347 Cancer stage at diagnosis

Application Form

Indicator and Methodology Assurance Service

**Title: Cancer stage at diagnosis**

**Set or domain: CCG OIS 1.17**

**IAS Reference Code: IAP00347**

**Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Changed By | Change |
| V0.1 | 28/06/2017 | Andy Besch | Commenced uplift to new application form in preparation for review |
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# Application Form

**Section 1. Introduction / Overview**

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| **1.1 Title** | Cancer stage at diagnosis |
| **1.2 Set or domain** | CCG OIS 1.17 |
| **1.3 Topic area** | Cancer |
| **1.4 Definition** | The percentage of all cases of cancer for which a valid stage is recorded, given by Clinical Commissioning Group (CCG).‘Validity’ of stage is assessed according to United Kingdom Association of Cancer Registries (UKACR) rules. As not all cancer types can be validly staged by any staging system, the UKACR adopts a threshold of 70% completeness for this indicator. |
| **1.5 Indicator owner & contact details** |  |
| **1.6 Publication status** | Currently in publication |

**Section 2. Rationale**

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| **2.1 Purpose** | The intended audience for the indicator is CCGs, the Department of Health, provider managers, commissioning managers, clinicians, patients and the public.Diagnosis at an early stage of the cancer's development leads to dramatically improved survival chances. Specific public health interventions, such as screening programmes and information/education campaigns aim to improve rates of early diagnosis. An indicator on the proportion of cancers diagnosed at an early stage is, therefore, a useful proxy for assessing improvements in cancer survival rates. This indicator on the overall proportion of cancers for which a stage is recorded will allow assessment of the completeness of staging data for these purposes. |
| **2.2 Sponsor** |  |
| **2.3 Endorsement** | The methodology for this indicator has been developed in partnership with Public Health England’s National Cancer Registration and Analysis Service (NCRAS). |
| **2.4 Evidence and Policy base**Including related national incentives, critical business question, NICE quality standard and set or domain rationale, if appropriate | This indicator forms part of Domain 1: Preventing people from dying prematurely. The stage of the tumour at diagnosis is a major determinant of patient outcomes from cancer. A high proportion of cancers with a valid stage recorded allow much deeper and more actionable analyses of outcomes by treatment type, patient pathway, and casemix.In January 2011 the Government published Improving Outcomes – a Strategy for Cancer. This document sets out how the Government plans to improve cancer outcomes, including improving survival rates through tackling late diagnosis of cancer.In July 2015 the independent body The National Cancer Transformation Workforce published *Achieving World-Class Cancer Outcomes: A Strategy for England 2015-202.* This sets out how the Government plans to improve cancer outcomes, including survival rates through tackling late diagnosis of cancer. |

**Section 3. Data**

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| **3.1 Data source** |  Data will be provided by the National Cancer Intelligence Network (NCIN) from the Cancer Analysis System (CAS). The CAS contains a fully signed off extract of cancer registrations supplied by the National Cancer Registration Service.Data from this source has not yet been tested due to the current migration of cancer registration data to a single system. It is not yet of a sufficient completeness for use as a baseline and it will continue to evolve during 2013. It is expected that the data will be available to develop the indicator by October 2013.National Cancer Registration dataset based on a snapshot of Public Health England’s Cancer Analysis System, available at: <http://www.ncras.nhs.uk/> (previously the National Cancer Intelligence Network (NCIN) <http://www.ncin.org.uk/home>)Postcode to CCG mappings have been derived from the National Statistics Postcode Lookup (NSPL), dated May 2015, maintained by the Office for National Statistics (ONS), available at: <https://data.gov.uk/dataset/national-statistics-postcode-lookup-uk> |
| **3.2 Justification of source and others considered** |   |
| **3.3 Data availability** | Data are shared between cancer registries and may be released to NHS organisations and healthcare professionals providing care for those patients or monitoring the quality of cancer service provision. Data are also released for research uses. Whenever it is possible to do so, these data are released in an anonymised form so no one individual can be identified.In certain circumstances, using anonymised data would not be fit for purpose. Requests to access potentially or explicitly identifiable data are handled by the PHE Office for Data Release (ODR).Data for this indicator will be extracted from the NCIN’s CAS. The CAS contains an extract of cancer registration data for analytical purposes once data have been signed off as complete by the cancer registries. Currently, the most recent year’s data available are for 2011. Data for 2013 will not be available until October or November 2014. |
| **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:** **iv) What is the rationale for the selection of the data quality checks and thresholds selected above?**  **v) Describe how you would plan to improve data quality should it not meet, or subsequently fall below, the thresholds required for this indicator.** **vi) Who will own the data quality risks and issues for this indicator?** **Name:** **Job Title:** **Role:** **Email:** **Telephone:** **vii) Describe how the data quality risks and issues will be managed for this indicator, including the escalation process.** **viii) Describe any assumptions you have made about data quality for this indicator.** **ix) Describe any data quality constraints you are aware of for this indicator.** **x) Additional data quality information:**  |
| **3.5 Quality assurance** | COSD provides level 1 to 3 reports |
| **3.6 Data linkage** | Linkage is a complex issue, which has become far simpler in recent years with the rollout in use of the NHS number. Registries use different linkage methods according to the type of data which is available. In essence, the more data that is available, the more confident that linkage is correct.In fact, linkage comprises two parts: blocking and weighting. Blocking takes an incoming record and uses a range of search criteria, determined by the incoming records content, to identify a series of possible matches in the database. Where the NHS number is available, that is used, but other blocking is usually also applied. In a manual context, these blocks tend to be sequential, but in an automated setting they tend to run consecutively, with all potential matches passing to the second stage, weighting.Weighting can be simple. Deterministic weighting is used for NHS number matching, but this is always augmented with at least one other identifier. Probabilistic techniques use a wider set of data matches and are usually used when the NHS number is not available on either the source record or the blocked record. It looks for the ‘commonness’ of the data value in the overall database, and then uses that to weight up or down based on a series of random control matches. Probabilistic weighting is a well-defined science, with robust methodologies, however it is used far less than in past years. |
| **3.7 Quality of data linkage** |  |
| **3.8 Data fields** | The data fields supplied from the cancer registry dataset are shown below. Details of the cancer registration data are available at: <http://www.ncras.nhs.uk/patientinfo/>ORGANISATION CODEORGANISATIONPERIODC1.17 DENOMINATORC1.17 NUMERATORCANCER STAGE COMPLETENESS PERCENTAGESTAGED FLAG LCISTAGED FLAG UCI |
| **3.9 Data filters** | Only people resident in England are included in the indicator. Non-residents that are treated in England are excluded.**Denominator**Cancer registry records where the following criteria are met:1. Field Name: [DIAGNOSISYEAR]Conditions: Is the respective diagnosis yearRationale: Selects patient records where the patient is diagnosed within the year of interest.
2. Field Name: [POSTCODE]Conditions: Is in EnglandRationale: Selects patient records where the patient is resident in England, such that the postcode can be found in the postcode lookup and associated with an English CCG
3. Field Name: Site of tumour in body [SITE\_ICD10\_O2\_3CHAR]Conditions: Is equal to ‘C00-C97 excl.C44’Rationale: Selects patient records where the cancer type is a malignant (C00-C97)neoplasms, with the exception of non-Melanoma skin Cancer (C44)
4. Field Name: STATUSOFREGISTRATIONConditions: Is equal to ‘F’Rationale: Only registrations that are finalised are included

**Numerator**Of the denominator, patient records where the following criteria are met:The first character of [STAGE\_BEST] is one of ‘1’, ‘2’, ‘3’, or ‘4’.**CCG mapping**Code of organisation is mapped from the National Statistics Postcode Lookup based on the [POSTCODE] of the patient at the time of diagnosis. |
| **3.10 Justifications of inclusions and exclusions** and how these adhere to standard definitions |  |
| **3.11 Data processing** |  |

**Section 4. Construction**

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| **4.1 Numerator** | Of the cases of cancer in the denominator, the number with a valid stage at diagnosis recorded. |
| **4.2 Denominator** | The number of new invasive cases of cancer (ICD-10 diagnosis codes are C00-C97), excluding non-melanoma skin cancer (C44), diagnosed during the respective year.Note: non-melanoma skin cancer is a non-basal cell carcinoma which is regularly excluded from cancer indicators as its impact on health is much less than other cancers and there are comparatively large numbers of cases which could significantly impact any statistic that includes it. |
| **4.3 Computation** |  |
| **4.4 Risk adjustment or standardisation type and methodology** | Choose an item.*Variables and methodology:* |
| **4.5 Justification of risk adjustment type and variables**or why risk adjustment is not used |  |
| **4.6 Confidence interval / control limit use and methodology** | Confidence Intervals*Methodology:*Confidence intervals are calculated using the Wilson Score method, as specified in ‘Commonly used public health statistics and their confidence intervals’ (PHE, March 2008).The formulae for the 100(1 – α)% confidence interval limits for the proportion p are:Formula to calculate confidence interval limits for the proportion pwhere:*O* is the observed number of individuals in the sample/population having the specified characteristic (i.e., the numerator);*n* is the total number of individuals in the sample/population (i.e., the denominator);*q* = (1 – *p*) is the proportion without the specified characteristic;*z* is the 100(1 – *α*/2)th percentile value from the Standard Normal distribution. For example, for a 95% confidence interval, *α* = 0.05, and *z* = 1.96 (i.e. the 97.5th percentile value from the Standard Normal distribution). |
| **4.7 Justification of confidence intervals / control limits used** | Confidence intervals are calculated using the Wilson Score method, as specified in “Commonly used public health statistics and their confidence intervals” (APHO, March 2008). |

**Section 5. Presentation and Interpretation**

**Presentation**

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| **5.1 Presentation of indicator** | Indicator is presented as an Excel spreadsheet and CSV data file. Current published versions have data for 2012 - 2015 |
| **5.2 Contextual information provided alongside indicator**with justification | This indicator requires careful interpretation and should not be viewed in isolation, but instead be considered alongside information from other indicators and alternative sources such as patient feedback, staff surveys and similar material. Until recently, the NCIN’s service provided profiles of indicators and was available from <https://www.cancertoolkit.co.uk/>. This service was decommissioned on 31 March 2016. Public Health England (PHE) is in the process of replacing the toolkit with a number of cancer information toolkits in the form of data and statistical services. The decommissioned service website will signpost users to the new tools when they become available (<https://www.cancertoolkit.co.uk>).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.This indicator has been assured through the Indicator and Methodology Assurance Service which is managed by the NHS Digital on behalf of the wider Health and Social Care system. Under the regulations within the Health and Social Care Act, a national database of quality assured indicators has been established. Indicators registered in the database must have been firstly appraised under the assurance process.The full indicator methodology document is available through the NHS Digital Indicator Portal: <https://indicators.hscic.gov.uk/>. |
| **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** |  |
| **5.7 Limitations and potential bias** | Data for this indicator will be extracted from the NCIN’s CAS. The CAS contains an extract of cancer registration data for analytical purposes once data have been signed off as complete by the cancer registries. Currently, the most recent year’s data available are for 2011. Data for 2013 will not be available until October or November 2014.The assignment of a CCG to a patient will be based on GP or practice code where possible and if not, then on the patient’s home postcode. Where the patient’s practice and postcode are both unavailable, the responsible CCG is the location of the hospital or trust. As the numerator is a subset of the denominator, the same method will be used for any particular patient. |
| **5.8 Improvement actions** | CCGs could impact on cancer stage recording by encouraging hospital trusts to record this information as soon as possible and to make sure it is passed on to the cancer registries. CCGs could stipulate this as part of the services they commission. |
| **5.9 Evidence of variability** |  |

**Section 6. Risks**

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| **6.1 Similar existing indicators** | CCG OIS 1.18 - Cancers detected at stage 1 or 2 (IAP00350) is being reviewed alongside this indicator, the two together should give a more holistic view of cancer staging.There are many other indicators looking at the incidence, mortality, survival, screening and other facets of cancer. However, these two are the only ones available that looked specifically at staging across many cancers. |
| **6.2 Coherence and comparability** | This indicator was published through the NCIN Cancer Commissioning Toolkit (CCT): <https://www.cancertoolkit.co.uk> (decommissioned as at 31 March 2016, awaiting replacement cancer tools currently listed at the above link).Two indicators within the CCG Outcomes Indicator Set are subsets of this indicator: ‘Lung cancer stage at decision to treat’ and ‘Cancers diagnosed at stage 1 and 2’. Both of these indicators are published at CCG level. Cancers diagnosed at stage 1 and 2 will also be published at local authority level via the Public Health Outcomes Framework.This indicator was constructed following consultation with clinical and cancer data experts. Whilst the data all come via NCRAS, this is fed by numerous types of data from different sources, including hospital inpatient, outpatient and pathology data, GP data and ONS mortality data. Staging data from cancer registration has been used for this indicator to provide a consistent data source for each cancer site. For the majority of cancers, this is the definitive source of staging for newly diagnosed cancers at a national level. (One exception is the National Lung Cancer Audit which captures stage at decision to treat for Lung Cancer patients.) In order to provide consistency with other CCG level cancer staging indicators, registration data is being used across all sites. |
| **6.3 Undesired behaviours and/or gaming** |  |
| **6.4 Approach to indicator review** | This indicator was previously assured in 2014. IGB set a review timescale to be in-line with other cancer staging indicators. IGB will once again set the indicator review timescale |
| **6.5 Disclosure control** |  |
| **6.6 Copyright** | Copyright © 2010 National Cancer Intelligence Network. |

Indicator Governance Board Meeting – 22nd July 2014

*Paper (4)*

Indicators for Appraisal - Pack 2

* **IAP00344** Mortality from breast cancer in females
* **IAP00346** Percentage of cancers diagnosed via emergency routes
* **IAP00347** Record of cancer stage at diagnosis
* **IAP00350** Cancers detected at stage 1 or 2
* **IAP00351** Record of lung cancer stage at decision to treat

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

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| **Indicator Title** | **Mortality from breast cancer in females** | IAS Ref Code: | IAP00344 |
| Indicator Set | CCG Outcomes Indicator Set |  |  |

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| Description  | Deaths from breast cancer registered in the calendar year, directly standardised by age group, females only, given as a rate per 100,000 CCG population. |

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| Initial IGB discussion  | 22/07/14 | Further discussed |  |

**Strategic Considerations & Implications**

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

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| Indicator rationale  | Breast cancer is the most common cancer in women in England (and also affects a very small number of men). New cases diagnosed in women each year have increased from under 30,000 in 1993 to more than 41,000 in 2010. During the same period, the number of deaths from breast cancer in women has fallen from 12,500 to just over 9,600.There is a trend of increasing incidence because of lifestyle factors and improved detection and decreasing mortality because of earlier detection and improvements in the quality and availability of effective treatments.CCGs could impact on breast cancer mortality in a number of ways. They could encourage women to attend breast screening when invited and commissioning appropriate treatment services, etc. However, it could be several years before any effect is noticed, particularly given the existing general downward trend in breast cancer mortality. |
| Basis for rationale [Details of quality statement, policy etc.] | This indicator is based on NICE Quality Standard 12 (Breast Cancer), linked to Clinical Guidelines 80 and 81. |
| Calculation Summary | Calculation type: 3 year rolling indicator, directly age standardisation, standardised using 5 year age bands.***Denominator:***CCG level count of females registered with the constituent GP Practices provided by NHAIS (Exeter) Systems.***Numerator:***The number of deaths of females from breast cancer (ICD-10: C50), classified by the underlying cause of death registered in the respective calendar years. |
| Risks & assumptions | * The registered population is derived from practice populations. All current practices in England are part of a CCG. It is acknowledged that the registered population may be an overestimate of the true population. The registered population is larger than the postcode-based resident population; it is 6.6% larger throughout England, based on 2010 population estimates. .
* To remain in line with the Office of National Statistics, male breast cancer deaths are not included in the indicator.
* The data used is based on the original cause of death recorded on the death certificate rather than any final amended causes.
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| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production] | *Data Source(s):* *Denominator:* * National Health Application & Infrastructure Services (NHAIS, commonly known as the Exeter System) for the CCG populations.
* *Also: ONS mid-year population estimates (for England ‘standard’ population).*

*Numerator:** Primary Care Mortality Database (PCMD) from HSCIC:

*The numerator is derived from data in the ONS mortality database, which does not contain the GP practice code required to report these data at CCG level. The PCMD contains the ONS mortality data with the addition of the GP practice code.** Discussions between the HSCIC, ONS and General Register Office (GRO) are on-going around PCMD access and it needs to be made sure that the appropriate legal gateway is used for the indicator.
 |
| Potential impacts on other business areas [inc outstanding generic issues] | There are a number of indicators relating to Breast Cancer reported on the HSCIC Indicators Portal (Compendium of Population Health Indicators), including:* Incidence of breast cancer:

indirectly standardised ratio, <75 years, 3-year average, Female* Mortality from breast cancer:

directly standardised rate, all ages, 3-year average, Female* Mortality from breast cancer:

number, by age group, annual, Female* Years of life lost due to mortality from breast cancer:

directly standardised rate, 1-74 years, 3-year average, Female* Survival following diagnosis of breast cancer:

one year age-standardised relative survival rate (%), 15-99 years, 3-year average, FemaleThese indicators are reported at National, Trust and SHA level.The proposed indicator is the only indicator measuring at CCG levelA general question was raised during the appraisal as to whether HSCIC (or NHS England) should be looking to commission something producing “an Attribution Dataset (ADS)” which can be used at CCG level and would serve to increase consistency with the ONS populations. |
| Implementation Method[inc production funding] | * NHS England has commissioned HSCIC to produce and disseminate the CCG OIS indicators; this is funded via the Grant in Aid funding to HSCIC.
* Dissemination and presentation of the CCG OIS will be via a number of routes:
	+ The indicators and their underlying data will be made publically 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.
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**Development Advice / Peer Review (undertaken as part of assurance process)**

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| Range of input during development | - |
| Assurance ServicePeer Reviewers: | Paul Jennings – HSCIC Clinical Indicators Team |
| Peer Review summary: | * (Original )Title may need some elaboration in order to differentiate it from a number of existing indicators.
* As there is understood to be an overall downward trend in breast cancer mortality, changes as the result of organisational actions may take several years to become apparent.
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**Record of MRG Discussion**

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| Discussion dates: 07/10/13, 09/01/14,05/06/14 | By:Julie Stroud (chair) / HSCIC, Head of Population Health and Social CareChris Dew (vice-chair), HSCIC, Section Head, Clinical IndicatorsIrena Begaj, UHB, Statistical Intelligence AnalystPaul Fryers, PHE, Deputy Director, East Midlands Knowledge and Intelligence TeamJonathon Hope, HSCIC, Principal Information Analyst, Clinical AuditPaul Iggulden, HSCIC, Interim Head of Clinical Analysis, Research & DevelopmentJohn Sharp, HSCIC, Head of Data QualityAndy Sutherland, HSCIC, Statistics Head of ProfessionAlyson Whitmarsh, HSCIC, Programme Manager, Clinical Audit |
| Summary of MRG discussions:  | MRG Appraisal against Criteria:**Clarity*** Based on further analysis following the MRG meeting (5/6/14), the indicator will contain all ages and the title updated to – “Mortality from breast cancer in females”.
* In the view of the applicant the indicator title and the location of publication are consistent with other CCG OIS mortality indicators and as such they would like to keep it the same. The differentiation suggested by the peer review would be achieved through publication in the CCGOIS section of the indicator portal.

**Rationale / Purpose*** It is noted that there are a number of indicators measuring the subject area, however MRG acknowledged this is the only indicator measuring at CCG level.
* MRG questioned as to whether NICE Quality Standard 12 excludes men, and what the justification was to exclude men from the indicator.
* NCIN provided the following advice on the exclusion of men from the indicator: Due to the anatomical differences in males and females leading to the differences in presentation of disease, male breast cancer is routinely separated from analysis of breast cancer as a whole. In addition, with 211 CCGs, there are insufficient cases to robustly measure breast cancer mortality for men. To remain in line with the Office of National Statistics, male breast cancer deaths are not included in the indicator.

**Data :*** Justification provided regarding the choice of data source(s)
* Use of the Primary Care Mortality Database (PCMD) as the data source is consistent with other CCG OIS mortality indicators.
* In order to record CCG, data from the PCMD is used. The numerator is derived from data in the ONS mortality database, which does not contain the GP practice code required to report these data at CCG level. The PCMD contains the ONS mortality data with the addition of the GP practice code.
* The reasoning for the selection of the data source is included in the metadata.
* With regards to the denominator, it was noted that there are issues with using GP registered population as there are more patients on GP practice registers than counted in the Census by the ONS.
* It was suggested that Attribution Dataset (ADS) be looked into to see if it could be adapted for use as a possible denominator.
* However, having consulted with the HSCIC Population Geography team, the applicant was advised that the ADS would be unable to provide the necessary data for the indicator denominator. The latest ADS was produced for 2011 data at SHA and PCO levels but there are no plans to commission the service for CCG populations. The ADS was commissioned by Connecting for Health and carried out by an external contractor.
* The applicant confirmed that the proposed population being used from NHAIS has been used before and are the same as the populations being generally used at CCG level.
* Further clarification was sought detailing the on-going discussions between the HSCIC, ONS and General Register Office (GRO) around PCMD access, and the implications for accessing data.
	+ A review of all of the mortality feeds into the HSCIC from ONS is being initialised.
	+ HSCIC Population and Geography team are not aware of any planned changes to PCMD which would affect the CCG OIS indicators.
	+ It is confirmed that HSCIC has the legal gateway approval to use the PCMD to produce the CCG OIS indicators and there are no changes to this anticipated at present.
* The Chair suggested that the response be accepted for the moment, with it being re-assessed if there is an issue.

**Construction:*** Analysis presented based on 1 year data showed 40 CCGs (19%) had a count in the numerator of less than 25, which is considered significant (in Public Health Outcomes Framework directly standardised rates that are based on numerators of less than 25 are supressed).
* The applicant suggested the indicator could be re-presented using indirect age standardisation in order to deal with the small numbers at CCG level, however MRG put forward that options around suppression or widening the 1 year data to 3 years in order to have more in the numerator be considered before indirectly standardising.

Following further analysis, the final proposal presented is as follows: * It is recommended that data is presented for the period 2011-13 using five-year age bands in the standardisation calculation with the Mid-2011 Registered Population Estimates used as the denominator for this data. This will allow for a balance between the focus of the reference period and factors that could influence the standardisation calculation.
* Initially, those aged under 35 were to be excluded from the indicator. However following advice from MRG on the impact that zero cells will have on the standardisation, this age group was re-included.
* In order to align to other indicators, this indicator will now use 5 year age bands up to 89, those aged 90 and above will be counted in a single group.
* MRG members indicated they were content with the proposed change.

**Interpretation:*** No further comments raised by MRG

**Risks and Usefulness:** * No further comments raised by MRG
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| *Outcome of MRG consideration:* | 1. **No significant issues identified**
 |[x]
|  | 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: | * Based on the response to questions raised and follow up analysis regarding standardisation presented by the applicant, MRG members indicated they were content with the evidence presented.
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Review:

**Review**

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| Review Timescale |  |
| **1 year** |[ ]
| **3 years** |[x]
| **Other:** |[ ]

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| Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]The indicator is recommended for review in three years on the rationale that no changes to methodology are anticipated. |

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 |  |

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

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| **Indicator Title** | **Percentage of cancers diagnosed via emergency routes**  | IAS Ref Code: | IAP00346 |
| Indicator Set | CCG Outcomes Indicator Set |  |  |

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| Description  | This indicator shows the percentage of cases of cancer diagnosed during the respective year where the first presentation to secondary care is traced back to an emergency route, given by CCG. Secondary care is specialist care, usually provided in hospital, after a referral from a GP or health professional. |

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| Initial IGB discussion  | 22/07/14 | Further discussed |  |

**Strategic Considerations & Implications**

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

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| --- | --- |
| Indicator rationale  | Research into the way in which patients are first diagnosed with cancer shows that about a quarter of cancer patients are diagnosed via emergency routes and that the survival rates for those diagnosed via emergency routes are considerably lower than for other cancer patients.The National Cancer Intelligence Network (NCIN) has produced the first study to look at how patients first enter secondary care on their way to being diagnosed with cancer. The methodology has been peer-reviewed in the British Journal of Cancer and the results include detailed comparison by type of cancer and results by equality groups. Also included is an analysis of incidence by broad route for breast, colorectal, lung and prostate cancer at PCT level.The study showed that those patients diagnosed following an initial emergency presentation to secondary care had worse outcomes across all cancer types. By identifying the proportion of patients who first present as an emergency, it’s possible to investigate why these patients present as emergencies and how some patients could present earlier through a different route. An increase in the proportion of patients who present through a more managed process will correspond with improved outcomes. An indicator on the proportion of cancers diagnosed via an emergency route is, therefore, a useful proxy for assessing improvements in early diagnosis.CCGs could impact on cancer diagnosis routes in a number of ways, including encouraging compliance with screening programmes among their patients and encouraging people to see their GP with potential symptoms of cancer when these first become noticeable, even if the symptoms do not represent an immediate major health issue. However, it could be several years before any effect is noticed and it may be difficult to isolate the effect of local interventions over national awareness programmes. |
| Basis for rationale [Details of quality statement, policy etc.] | In January 2011 the Government published Improving Outcomes – a Strategy for Cancer. This document sets out how the Government plans to improve cancer outcomes, including improving survival rates through tackling late diagnosis of cancer. |
| Calculation Summary | ***Denominator:***The number of invasive cases of cancer, excluding non-melanoma skin cancer, diagnosed during the respective year. This is for both males and females, all age groups.*Note: non-melanoma skin cancer is a non-basal cell carcinoma which is regularly excluded from cancer indicators as its impact on health is much less than other cancers and there are comparatively large numbers of cases which could significantly impact any statistic that includes it.**ICD-10 diagnosis codes are C00-C97, excluding C44.****Numerator:***Of cases of cancer in the denominator, the number with a route to diagnosis of “Emergency Presentation”.*A route to diagnosis can be calculated for each tumour using a variety of sources. The methodology for this has been published in the British Journal of Cancer.* *The assignment of a route to diagnosis is based on combining datasets to assign the most likely route. The route is not captured in any one dataset.* |
| Risks & assumptions | * The methodology for assigning the route to diagnosis as part of the registration system will be developed in early 2014 and may not be ready until late 2014, which means it will correspond with the availability of cancer registration data for 2013.
* The assignment of a CCG to a patient will be based on GP or practice code where possible and if not, then on the patient’s home postcode. Where the patient’s practice and postcode are both unavailable, the responsible CCG is the location of the hospital or trust. As the numerator is a subset of the denominator, the same method will be used for any particular patient.
 |
| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production] | *Data Source:* National Cancer Intelligence Network (NCIN) from the Cancer Analysis System (CAS). * Data for this indicator will be extracted from the NCIN’s CAS. The CAS contains an extract of cancer registration data for analytical purposes once data have been signed off as complete by the cancer registries. Currently, the most recent year’s data available are for 2011. Data for 2013 will not be available until October or November 2014.
 |
| Potential impacts on other business areas [inc outstanding generic issues] | * There are no regularly produced indicators which look at the route to diagnosis of people diagnosed with cancer.
* The National Cancer Intelligence Network (NCIN) produced similar indicators at a national level and for breast, colorectal, lung and prostate cancers at PCT level. These are part of the work for “Routes to Diagnosis”
 |
| Implementation Method[inc production funding] | * 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 required for the CCG OIS is via existing data collections, in this case by the NCIN from the Cancer Analysis System (CAS). Testing and specification of this indicator was carried out by the Specification Development Service in conjunction with the NCIN. The construction of the indicators will be carried out by the NCIN.
* Dissemination and presentation of the CCG OIS will be via a number of routes:
	+ The indicators and their underlying data will be made publically 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)**

|  |  |
| --- | --- |
| Range of input during development | Advice and input was received on indicator definitions from Dr Mick Peake, National Clinical Lead for NHS Cancer Improvement and Clinical Lead for the NCIN. |
| Assurance ServicePeer Reviewers: | Andrea Johnson – Clinical Indicator HSCIC |
| Peer Review summary: | * Perhaps change title to ‘Percentage of cancers diagnosed via emergency routes’.
* Include definition of secondary care.
* ICD 10 codes included, along with the exclusion of C44 and that it covers all ages and genders need to be explicitly stated in the indicator definition.
* Further explanation of how a patient comes to be registered on the NCIN CAS database would be useful.
* The indicator as it stands offers an overall figure to CCGs on performance. However, due to the typical later presentation of males into services, a breakdown by gender, age or deprivation may be beneficial to highlight inequalities and allow CCGs the ability to more efficiently targets resources if required.
* Contextual indicators into the main types of cancer, particularly those covered by screening programmes would help CCGs assess where work may need to be targeted.
* The completeness of the NCIN CAS system is not detailed, only that ‘England is widely recognised as having one of the most comprehensive cancer registration systems in the world.’
 |

**Record of MRG Discussion**

|  |  |
| --- | --- |
| Discussion dates: 07/10/13, 09/01/14 | By:Julie Stroud (chair), HSCIC, Head of Population Health and Social CareChris Dew (vice-chair), HSCIC, Section Head, Clinical IndicatorsIrena Begai, UHB, Statistical Intelligence AnalystPaul Fryers, PHE, Deputy Director, East Midlands Knowledge and Intelligence TeamJulie Henderson, HSCIC, Programme Head, Clinical AnalysisJonathon Hope, HSCIC, Principle Information Analyst, Clinical AuditPaul Iggulden, HSCIC, Interim head of Clinical Analysis, Research and DevelopmentAndy Sutherland, HSCIC, Statistics Head of ProfessionAlyson Whitmarsh, HSCIC, Programme Manager, Clinical Audit |
| Summary of MRG discussions:  | Appraisal against Criteria:**Clarity*** The recommendation to amend the title to include the “percentage of…” was acted upon.
* It was suggested that further evidence of the methodology used to determine whether cases are diagnosed by emergency routes would be useful, e.g. as described in the British Journal of Cancer.
* The methodology used for this indicator has been peer-reviewed and published in the British Journal of Cancer.
* A link to the BJC study has been provided in the indicator quality statement alongside the table presented in MRG detailing the eight routes, and showing diagnosis groups, descriptions, priority and relevant codes. This is also included in the specification.
* It was noted that in within the list of emergency codes for inpatients, the third category code 24 (emergency referral from outpatient to inpatient) is missing. For other emergency admissions it is usually included, therefore it will be inconsistent with the definition of emergency used elsewhere. Conformation was sought as to whether it was certain it shouldn’t be excluded.
* The developer put forward that
	+ the intent with the routes was work back from the end point and in going through this, to find out what the emergency presentation was that got the patient to first present to secondary care.
	+ finding out how people first came into secondary care is of interest. If someone is an emergency transfer for outpatient to inpatient, they have already had an outpatient appointment. The outpatient data would have to be looked at to see if the first presentation was an emergency or not. This would be slightly different to a patient who had entered into secondary care and then been considered an emergency and transferred to inpatient (as opposed to presenting as an emergency into secondary care in the first place). This had been discussed at length as part of the development process.
* MRG questioned how this aligned with the inclusion of emergency admissions following A&E attendance. A&E is the first presentation but the indicator includes the inpatient bit following a presentation at A&E.
* The developer put forward that there was a considerable difference as presenting at A&E is actually their first attendance into secondary care and is an emergency rather than already being in the system and becoming an emergency.
* The exclusion of the category code 24 is explained in the Indicator Quality Statement as it represents a different approach for emergency admissions for other indicators.
* The developer accepted as a good idea the suggestion to look as to whether the outcomes (survival) for those people who present as an outpatient and then get an emergency referral through to an inpatient significantly different to other people who first present as an outpatient,
* However, this wouldn’t be done until late 2014.

**Rationale / Purpose*** No further comments were raised by MRG

**Data :*** The applicant put forward that cancer registration data has been used for this indicator, as it is the definitive source for cancers diagnosed via emergency routes at a national level.
* A description identifying that for some cancers better data sources are available (e.g. the NLCA for lung cancer) is included in the metadata.

**Construction:*** Further clarification as to whether patients diagnosed at death should be included in the numerator and the denominator or excluded from the indicator.
* NCIN provided the following advice on this recommendation:
	+ This indicator measures the proportion of all tumours that were diagnosed as an emergency. The source of this indicator also displays the other seven Routes that tumours can be assigned to. A Death Certificate Only (DCO) is a Route; indeed, it is important to identify cancer sites with a high proportion of DCOs in order to understand why the person had not presented with symptoms. This indicator and results should also align with the source of the data and therefore needs to adhere to the same methodology.
	+ Professor Sir Mike Richards, Clinical Advisor to the Routes to Diagnosis project, supports these results being consistent with the Routes to Diagnosis methodology.

**Interpretation:*** It was confirmed DCOs are included in the denominator but not the numerator, however it was queried as to whether there might be an issue in that DCOs are a bad outcome, but a higher level of DCOs can be interpreted as good on this indicator. In this case should they be excluded from the denominator.
* In response the developer put forward excluding DCOs from the denominator would produce a slightly different set of results to anything else that is published using the risk and diagnosis methodology, and on the basis of a small amount of numbers, is there a benefit of producing this inconsistency.
* A suggestion put forward was the preferable outcome was to include DCOs in the numerator (as if people were diagnosed at death then this represents a failure of the system), however the developer responded that as it was not classified as an emergency it couldn’t be included in the numerator, as there was no information if they presented as an emergency or not.
* MRG concluded that the issue of including / excluding DCO’s would impact on the interpretation of the indicator, as mixing of “good and bad things” isn’t generally a good way of defining an indicator. However, if it is a negligible issue and is the historic way it is done then the group might not want to see it being slightly different from other versions of the indicator elsewhere.
* To ensure that there is not any perverse behaviour happening around DCOs results showing emergency plus DCOs will be provided as contextual information. This will enable users to see if there were any large changes in the DCOs that would affect the emergency rates.

**Risks and Usefulness:** * No further comments were raised by MRG

**Other:**Further clarification was provided as to those patients presenting at secondary services via routes other than A&E and emergency GP referrals. |
| *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**

[x]  |
|  | 1. **Significant reservations**

[ ]  |
|  | 1. **Unresolved issues**

[ ]  |

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| MRG statement of recommendation: | The indicator is recommended for appraisal by IGB subject to the issues discussed during the meeting. The pragmatic approach the MRG have adopted to cover the concerns raised around this indicator’s methodology regarding the inclusion of DCOs should be noted. |

Review:

**Review**

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| --- | --- |
| Review Timescale |  |
| **1 year** |[ ]
| **3 years** |[x]
| **Other:** |[ ]

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| Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]The indicator is recommended for review in three years on the rationale that no changes to methodology are anticipated. |

IGB Sign-off:

**Indicator Assurance Process Output**

|  |  |
| --- | --- |
| *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 |  |

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

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| --- | --- | --- | --- |
| **Indicator Title** | **Record of cancer stage at diagnosis** | IAS Ref Code: | IAP00347 |
| Indicator Set | CCG Outcomes Indicator Set |  |  |

|  |  |
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| Description  | The percentage of all cases of cancer for which a valid stage is recorded, given by Clinical Commissioning Group (CCG).‘Validity’ of stage is assessed according to United Kingdom Association of Cancer Registries (UKACR) rules. As not all cancer types can be validly staged by any staging system, the UKACR adopts a threshold of 70% completeness for this indicator. |

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| Initial IGB discussion  | 22/07/14 | Further discussed |  |

**Strategic Considerations & Implications**

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

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| Indicator rationale  | Cancer is a major cause of death, accounting for around a quarter of deaths in England. Currently, it is estimated that more than 40% children born today will develop cancer at some stage in their life. The stage of the tumour at diagnosis is a major determinant of patient outcomes from cancer. A high proportion of cancers with a valid stage recorded allow much deeper and more actionable analyses of outcomes by treatment type, patient pathway, and case-mix.Diagnosis at an early stage of the cancer's development leads to dramatically improved survival chances. Specific public health interventions, such as screening programmes and information/education campaigns aim to improve rates of early diagnosis. An indicator on the proportion of cancers diagnosed at an early stage is therefore a useful proxy for assessing improvements in cancer survival rates. This indicator on the overall proportion of cancers for which a stage is recorded will allow assessment of the completeness of staging data for these purposes. |
| Basis for rationale [Details of quality statement, policy etc.] | In January 2011 the Government published Improving Outcomes – a Strategy for Cancer. This document sets out how the Government plans to improve cancer outcomes, including improving survival rates through tackling late diagnosis of cancer. |
| Calculation Summary | ***Denominator:***The number of new invasive cases of cancer, excluding non-melanoma skin cancer, diagnosed during the respective year.*Note: non-melanoma skin cancer is a non-basal cell carcinoma which is regularly excluded from cancer indicators as its impact on health is much less than other cancers and there are comparatively large numbers of cases which could significantly impact any statistic that includes it.****Numerator:***Of cases of cancer in the denominator, the number with a valid stage at diagnosis recorded, as defined by the former United Kingdom Association of Cancer Registries (UKACR) registration rules. |
| Risks & assumptions | * Data for this indicator will be extracted from the National Cancer Intelligence Network (NCIN) Cancer Analysis System (CAS). The CAS contains an extract of cancer registration data for analytical purposes once data have been signed off as complete by the cancer registries. Currently, the most recent year’s data available are for 2011. Data for 2013 will not be available until October or November 2014.
* The assignment of a CCG to a patient will be based on GP or practice code where possible and if not, then on the patient’s home postcode. Where the patient’s practice and postcode are both unavailable, the responsible CCG is the location of the hospital or trust. As the numerator is a subset of the denominator, the same method will be used for any particular patient.
 |
| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production]Potential impacts on other business areas [inc outstanding generic issues] | *Data Source:* Data will be provided by the NCIN from the CASThe CAS contains a fully signed off extract of cancer registrations supplied by the National Cancer Registration Service.Data for calendar year 2012 is due to be published in September 2014 as a baseline.  |
| Implementation Method[inc production funding] | * 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 required for the CCG OIS is via existing data collections, in this case by the NCIN from the Cancer Analysis System (CAS). Testing and specification of this indicator was carried out by the Specification Development Service in conjunction with the NCIN. The construction of the indicators will be carried out by the NCIN.
* Dissemination and presentation of the CCG OIS will be via a number of routes:
	+ The indicators and their underlying data will be made publically 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)**

|  |  |
| --- | --- |
| Range of input during development | Advice and input was received on indicator definitions from Dr Mick Peake, National Clinical Lead for NHS Cancer Improvement and Clinical Lead for the NCIN. |
| Assurance ServicePeer Reviewers: | Andrea Johnson – Clinical Indicators HSCIC |
| Peer Review summary: | * Indicator title ‘Cancer stage at diagnosis’ could be changed. It actually measures the percentage of new cases per year with a valid stage recorded. ‘Percentage of new cancer cases with a valid stage recorded’ or similar perhaps?
* It isn’t explained how a patient comes to be registered on the NCIN CAS database. Is it at the point of initial cancer diagnosis from whichever location? How long does it take to appear on the NCIN system following diagnosis?
* It is noted on the application form that a 70% completeness rate is considered to be a valid completeness level for this indicator by the UKACR as not all cancers can be validly staged by any staging method. A note could be placed on the data to recognise that 100% may not be achievable through no fault of the CCG.
 |

**Record of MRG Discussion**

|  |  |
| --- | --- |
| Discussion dates: 07/10/13,  | By:Heather Dawe (chair), HSCIC, Programme Manager, Clinical IndicatorsChris Dew (vice-chair), HSCIC, Section Head, Clinical IndicatorsPaul fryers, PHE, Deputy Director, East Midlands Knowledge and Information TeamJulie Henderson, HSCIC, Programme Head, Clinical AnalysisAndy Sutherland, HSCIC, Statistics Head of professionAlyson Whitmarsh, HSCIC, Programme Manager, Clinical Audit |
| Summary of MRG discussions:  | Appraisal against Criteria:**Clarity*** The indicator title has been updated to “Record of cancer stage at diagnosis’ in order to clarify that it is measuring record completeness, as opposed to the average cancer stage at diagnosis.

**Rationale / Purpose*** It was suggested by MRG that if old age is a common cause for staging not to be conducted, that an age cut off could be used (for instance it may be undesirable for clinicians to conduct invasive procedures in order to stage the cancer in an elderly patient with prostate cancer)
* In response the applicant felt this would reflect poorly on the indicator and raise concerns about elderly patients not getting the same standard of care due to their age. Furthermore, that the aim of 70% of cancer patients being staged at diagnosis takes into account this population.

**Data :*** No further comments were raised by MRG

**Construction:*** The extent to which staging is appropriate differs with different cancers, therefore when CCGs are being compared, it was queried as to whether any standardisation would account for this.
* The applicant felt that one purpose of the indicator was to drive better staging at diagnosis, therefore it is hoped that records would be more complete as a result. However, in terms of standardisation, the applicant felt there was no way of doing this.

 **Interpretation:*** Although it is understood by MRG that one of the main purposes of this indicator is support the push to increase staging of cancer when possible at diagnosis, the group queried how a CCG with a low rate of staging should be compared to others which perhaps have many cases of cancer which either cannot be staged or it is deemed undesirable to do so, and thus how this fits into the purpose of CCG OIS.
* Another concern raised is that CCGs may be able to claim a variable not taken into consideration by the indicator is the reason behind the results, for example deprivation or population age. It was felt by MRG that in the future, contextual indicators should be published with the outcomes of this indicator.
* In the interim the indicator quality statement associated with the indicator directs users to contextual information:
	+ *“This indicator requires careful interpretation and should not be viewed in isolation, but instead be considered alongside information from other indicators and alternative sources. The NCIN’s service profiles provide information on other indicators and are available from https://www.cancertoolkit.co.uk/. 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.”*

**Risks and Usefulness:** * No further comments were raised by MRG
 |
| *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**

[x]  |
|  | 1. **Significant reservations**

[ ]  |
|  | 1. **Unresolved issues**

[ ]  |

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| MRG statement of recommendation: | This indicator was recommended for discussion by IGB on the basis that the indicator quality statement reflects that the indicator should not be used in isolation, and that as part of the future development of this indicator, contextual indicators should be produced e.g. around deprivation, age etc. |

Review:

**Review**

|  |  |
| --- | --- |
| Review Timescale |  |
| **1 year** |[ ]
| **3 years** |[x]
| **Other:** |[ ]

|  |
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| Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]The indicator is recommended for review in three years on the rationale that no changes to methodology are anticipated. |

IGB Sign-off:

**Indicator Assurance Process Output**

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

|  |  |
| --- | --- |
| Basis of Sign-off[Detail caveats and limitations ] |  |
| Sign-off Date |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator Title** | **Cancers detected at stage 1 or 2** | IAS Ref Code: | IAP00350 |
| Indicator Set | CCG Outcomes Indicator Set |  |  |

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| --- | --- |
| Description  | This indicator calculates the percentage of new cases of cancer which were diagnosed at stage 1 or 2 for the specific cancer sites, morphologies and behaviour: invasive malignancies of breast, prostate, colorectal, lung, bladder, kidney, ovary, uterus, non-Hodgkin lymphoma and invasive melanomas of skin, given by CCG.This indicator relates to a subset of the cancers covered by CCG indicator 1.16 Percentage of cancers diagnosed via emergency routes, and 1.17 Record of stage of cancer at diagnosis. |

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| Initial IGB discussion  | 22/07/14 | Further discussed |  |

**Strategic Considerations & Implications**

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

|  |  |
| --- | --- |
| Indicator rationale  | Cancer is a major cause of death, accounting for around a quarter of deaths in England. Currently, it is estimated that more than 40% children born today will develop cancer at some stage in their life. The stage of the tumour at diagnosis is a major determinant of patient outcomes from cancer.Diagnosis at an early stage of the cancer's development leads to dramatically improved survival chances. Specific public health interventions, such as screening programmes and information/education campaigns aim to improve rates of early diagnosis. An indicator on the proportion of cancers diagnosed at an early stage is, therefore, a useful proxy for assessing improvements in cancer survival rates.CCGs could impact on cancer staging recording by encouraging hospital trusts to record this information as soon as possible and to make sure it is passed on to the cancer registries. CCGs could stipulate this as part of the services they commission. |
| Basis for rationale [Details of quality statement, policy etc.] | In January 2011 the Government published Improving Outcomes – a Strategy for Cancer. This document sets out how the Government plans to improve cancer outcomes, including improving survival rates through tackling late diagnosis of cancer. |
| Calculation Summary | ***Denominator:***The number of new cases of cancer diagnosed during the respective year, at any stage or unknown stage, for the specific cancer sites, morphologies and behaviour: invasive malignancies of breast, prostate, colorectal, lung, bladder, kidney, ovary, uterus, non-Hodgkin lymphoma and invasive melanomas of skin.*The full list of UKACR registration rules is available in a separate document.****Numerator:***Of cases of cancer in the denominator, the number diagnosed at stage 1 or 2. |
| Risks & assumptions | * Data for this indicator will be extracted from the National Cancer Intelligence Network (NCIN) Cancer Analysis System (CAS). The CAS contains an extract of cancer registration data for analytical purposes once data have been signed off as complete by the cancer registries. Currently, the most recent year’s data available are for 2011. Data for 2013 will not be available until October or November 2014.
* The assignment of a CCG to a patient will be based on GP or practice code where possible and if not, then on the patient’s home postcode. Where the patient’s practice and postcode are both unavailable, the responsible CCG is the location of the hospital or trust. As the numerator is a subset of the denominator, the same method will be used for any particular patient.
* This indicator shows the percentage of new cases of cancer which were diagnosed at stage 1 or 2 for the specific cancer sites, morphologies and behaviour: invasive malignancies of breast, prostate, colorectal, lung, bladder, kidney, ovary, uterus, non-Hodgkin lymphoma and invasive melanomas of skin. These cancers are those that can be staged at diagnosis. It might be expected that around 90% of these cancers are staged. There may be cases where determining a stage is not recommended, for example, where it would be detrimental to the patient’s health to carry out the necessary investigations.
 |
| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production] | *Data Source:* Data will be provided by the NCIN from the CAS. * The CAS contains a fully signed off extract of cancer registrations supplied by the National Cancer Registration Service.
* Data for calendar year 2012 is due to be published in September 2014 as a baseline.
 |
| Potential impacts on other business areas [inc outstanding generic issues] | * A similar indicator exists in the Public Health Outcomes Framework:

*PHOF 2.19 - The proportion of invasive malignancies of breast, prostate, colorectal, lung, bladder, kidney, ovary and uterus, non-Hodgkin lymphomas, and melanomas of skin, diagnosed at stage 1 or 2* |
| Implementation Method[inc production funding] | * 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 required for the CCG OIS is via existing data collections, in this case by the NCIN from the Cancer Analysis System (CAS). Testing and specification of this indicator was carried out by the Specification Development Service in conjunction with the NCIN. The construction of the indicators will be carried out by the NCIN.
* Dissemination and presentation of the CCG OIS will be via a number of routes:
	+ The indicators and their underlying data will be made publically 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)**

|  |  |
| --- | --- |
| Range of input during development | Advice and input was received on indicator definitions from Dr Mick Peake, National Clinical Lead for NHS Cancer Improvement and Clinical Lead for the NCIN. |
| Assurance ServicePeer Reviewers: | The indicator was sent for peer review in a pack of five cancer indicators. No comments were received for this indicator. |
| Peer Review summary: | n/a |

**Record of MRG Discussion**

|  |  |
| --- | --- |
| Discussion dates: 07/10/13 | By: Heather Dawe (chair), HSCIC, Programme Manager, Clinical IndicatorsChris Dew (vice-chair), HSCIC, Section Head, Clinical IndicatorsPaul Fryers, PHE, Deputy Director, East Midlands Knowledge and Information TeamJulie Henderson, HSCIC, Programme Head, Clinical AnalysisAndy Sutherland, HSCIC, Statistics Head of ProfessionAlyson Whitmarsh, HSCIC, Programme Manager, Clinical Audit |
| Summary of MRG discussions:  | Appraisal against Criteria:**Clarity*** MRG felt it was not clear from the title that only certain cancers were measured and it was assumed that the list of cancers was the same as the other cancer indicators.
* Clarity of which cancers are included in the indicator is included in the Specification. In the detailed descriptor and the introduction, it also makes reference to the fact that this indicator differs to the other two specific CCG OIS cancer indicators.
* The applicant updated the group that the list of cancers used is the same as those used for the Public Health Outcome Framework indicator, with the same name. A wider issue of whether the PH indicator should be changed too was raised.

**Rationale / Purpose:** No further comments were raised by MRG**Data :** No further comments were raised by MRG**Construction:*** It was questioned whether it was planned to aggregate all cancers on the list at CCG level, and the applicant confirmed this was the case.
* It was clarified by the applicant that the numerator is measuring the cases that are both diagnosed and recorded; therefore, there will be patients who did not have a stage recorded which will be in the denominator but not in the numerator. However, all cancers in the denominator have the potential to be recorded.

**Interpretation:** No further comments were raised by MRG**Risks and Usefulness:** No further comments were raised by MRG |
| *Outcome of MRG consideration:* | 1. **No significant issues identified**

[x]  |
|  | 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**

[ ]  |

|  |  |
| --- | --- |
| MRG statement of recommendation: | This indicator was recommended for discussion by IGB on completion of the above recommendations. |

Review:

**Review**

|  |  |
| --- | --- |
| Review Timescale |  |
| **1 year** |[ ]
| **3 years** |[x]
| **Other:** |[ ]

|  |
| --- |
| Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]The indicator is recommended for review in three years on the rationale that no changes to methodology are anticipated. |

IGB Sign-off:

**Indicator Assurance Process Output**

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

|  |  |
| --- | --- |
| Basis of Sign-off[Detail caveats and limitations ] |  |
| Sign-off Date |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator Title** | **Record of lung cancer stage at decision to treat** | IAS Ref Code: | IAP00351 |
| Indicator Set | CCG Outcomes Indicator Set |  |  |

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| Description  | The percentage of cases of lung cancer for which a valid stage field is recorded, given by Clinical Commissioning Group. |

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| Initial IGB discussion  | 22/07/14 | Further discussed |  |

**Strategic Considerations & Implications**

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

|  |  |
| --- | --- |
| Indicator rationale  | Lung cancer has one of the lowest survival outcomes of any cancer because over two-thirds of patients are diagnosed at a late stage when curative treatment is not possible. Earlier diagnosis and referral to specialist teams would make a significant difference to survival rates. |
| Basis for rationale [Details of quality statement, policy etc.] | This indicator is based on the NICE Quality Standard 17: Lung cancer for adults, issued March 2012 http://guidance.nice.org.uk/QS17.This indicator aims to be consistent with the NICE Clinical Guideline 121: The diagnosis and treatment of lung cancer, issued April 2011 <http://publications.nice.org.uk/lung-cancer-cg121>. The following statements are taken from CG121: *1.3.2 Patients with known or suspected lung cancer should be offered a contrast-enhanced chest CT scan to further the diagnosis and stage the disease. The scan should also include the liver and adrenals.**1.3.12 Choose investigations that give the most information about diagnosis and staging with least risk to the patient. Think carefully before performing a test that gives only diagnostic pathology when information on staging is also needed to guide treatment* |
| Calculation Summary | ***Denominator:***The number of patients first seen in the respective Lung Cancer Audit year.***Numerator:*** Of the denominator, the number of patient records where the stage field at the time of decision to treat is completed (according to staging rules). |
| Risks & assumptions | * When testing the indicator for the NICE Advisory Committee in May 2013, the data had been mapped to CCG using the ‘latest’ GP Practice code registered for each patient.
* GP Practice code at ‘date first seen’ would be preferable as it is more reflective of the patient’s home location of secondary care. NHAIS (Exeter) have confirmed that they are able to trace GP Practice code at date first seen, however this will involve a cost.
 |
| IG Considerations [e.g. release of under-lying data, intermediaries access to data, data ownership impact on production] | *Data Source:* The National Lung Cancer Audit.The National Lung Cancer Audit Report is published at trust and network level on an annual basis. Use for CCG level indicators will be subject to a Data Sharing Agreement.The National Lung Cancer Audit (the Lung Cancer Data project LUCADA) is approved by ISB ref ISB0064. |
| Potential impacts on other business areas [inc outstanding generic issues] | - |
| Implementation Method[inc production funding] | * 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 the National Lung Cancer Audit. Testing and specification of this indicator is carried out by the Specification Development Service in conjunction with the National Lung Cancer Audit. The construction of the indicators will be carried out by Clinical Indicators via the CI Platform at HSCIC.
* Dissemination and presentation of the CCG OIS will be via a number of routes:
	+ The indicators and their underlying data will be made publically available via the HSCIC website and the Indicator Portal.
	+ The indicators 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.
* The National Lung Cancer Audit is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and currently funded to December 2013. It is expected to be granted an extension to December 2014; however, this is yet to be approved.
 |

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

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| Range of input during development | - |
| Assurance ServicePeer Reviewers: | The indicator was sent for peer review in a pack of five indicators. No comments were received for this indicator. |
| Peer Review summary: | n/a |

**Record of MRG Discussion**

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| --- | --- |
| Discussion dates: 07/10/13,  | By:Heather Dawe (chair), HSCIC, Programme Manager, Clinical IndicatorsChris Dew (vice-chair), HSCIC, Section Head, Clinical IndicatorsPaul Fryers, PHE, Deputy Director, East Midlands Knowledge and Intelligence TeamJulie Henderson, HSCIC, Programme Head, Clinical AnalysisAndy Sutherland, HSCIC, Statistics Head of ProfessionAlyson Whitmarsh, HSCIC, Programme Manager, Clinical Audit |
| Summary of MRG discussions:  | Appraisal against Criteria:**Clarity*** The applicant highlighted an issue with the current title, that the lung cancer stage is recorded at decision to treat rather than at diagnosis, therefore the title has been updated to ‘Record of lung cancer stage at decision to treat’

**Rationale / Purpose:** No further comments were raised by MRG**Data :*** It was questioned as to why the NLCA was used as a data source for this indicator, when NCIN includes lung cancer. The applicant explained that this data was of a higher quality, and if data of this standard was available for all cancer types, it would be used as opposed to the NCIN.

**Construction:** No further comments were raised by MRG**Interpretation:** No further comments were raised by MRG**Risks and Usefulness:** No further comments were raised by MRG |
| *Outcome of MRG consideration:* | 1. **No significant issues identified**

[ ]  |
|  | 1. **No significant issues on basis of completion of outstanding actions**

[x]  |
|  | 1. **Some concerns expressed as caveats or limitations**

[ ]  |
|  | 1. **Significant reservations**

[ ]  |
|  | 1. **Unresolved issues**

[ ]  |

MRG statement of recommendation: This indicator was recommended for discussion by IGB on completion of the above recommendations.

Review:

**Review**

|  |  |
| --- | --- |
| Review Timescale |  |
| **1 year** |[ ]
| **3 years** |[x]
| **Other:** |[ ]

|  |
| --- |
| Rationale [Issues to consider – Changes to process, policy data source, coding definitions HES definitions ]The indicator is recommended for review in three years on the rationale that no changes to methodology are anticipated. |

IGB Sign-off:

**Indicator Assurance Process Output**

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

|  |  |
| --- | --- |
| Basis of Sign-off[Detail caveats and limitations ] |  |
| Sign-off Date |  |