

Indicator metadata

**NHS Atlas of Variation for Respiratory Disease**

Version 1.1

**Indicator themes**

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**Chronic Obstructive Pulmonary Disease**

**1: Ratio of reported to expected COPD prevalence, by PCT, 2010/11**

<b>Indicator:</b>	<b>Ratio of reported to expected COPD prevalence</b>
Statistic:	Ratio
Time period:	2010/11
Age group:	18+
Description:	Ratio of reported to expected COPD prevalence in adults
Data source:	Quality and Outcomes Framework 2010/11, 2011 modelled prevalence estimates by the Eastern Region Public Health Observatory <a href="http://www.ic.nhs.uk/qof">http://www.ic.nhs.uk/qof</a>
Numerator:	The observed crude prevalence of COPD as recorded by the Quality and Outcomes Framework
Denominator:	Expected COPD prevalence is derived using a model. The following briefing document explains how the Chronic Obstructive Pulmonary Disease (COPD) prevalence model has been developed and applied by erpho on behalf of the Public Health Observatories in England: <a href="http://www.apho.org.uk/default.aspx?RID=48313">http://www.apho.org.uk/default.aspx?RID=48313</a>
Methodology:	The ratio of QOF prevalence of COPD is divided by the modelled prevalence of COPD
Further notes:	Confidence interval calculations are not available for the gap figures.
Produced by:	ERPHO
Date created:	December 2011

**2: Percentage of patients with COPD with a record of FEV<sub>1</sub> in the previous 15 months, by PCT, 2010/11**

<b>Indicator:</b>	<b>Percentage of COPD patients with a record of FEV<sub>1</sub></b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD with a record of FEV <sub>1</sub> in the previous 15 months
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD with a record of FEV <sub>1</sub> in the previous 15 months as recorded by the Quality and Outcomes Framework
Denominator:	The number of patients with COPD, excluding patients recorded as 'excepted' for a record of FEV <sub>1</sub> , as recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage. These percentages are the published achievement by the the Quality and Outcomes Framework.
Further notes:	More information including a rationale for this indicators use in QOF is available from: <a href="https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.02">https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.02</a> The source data is available from: <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework</a>
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

<b>Indicator:</b>	<b>Percentage of COPD patients with a record of FEV<sub>1</sub>, including 'excepted' patients</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD with a record of FEV <sub>1</sub> in the previous 15 months
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD with a record of FEV <sub>1</sub> in the previous 15 months as recorded by the Quality and Outcomes Framework
Denominator:	Total number of patients with COPD as recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage
Further notes:	The Quality and Outcomes Framework (QOF) allows practices to exception-report (exclude) specific patients from data collected to calculate achievement scores. Patients can be exception-reported from individual indicators for various reasons, including 'not attending appointments' or 'treatment is judged to be inappropriate by the GP'. The patients that have been 'excepted' are included in this analysis. For background information on QOF exception reporting, and for notes on the way exception reporting rates are calculated, see the detailed notes in the statistical bulletin in QOF exception reporting.
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

### 3: Percentage of patients with COPD who have had a review in the preceding 15 months, by PCT, 2010/11

<b>Indicator:</b>	<b>The percentage of COPD patients who have had a review</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months as recorded by the Quality and Outcomes Framework
Denominator:	The number of patients with COPD, excluding patients recorded as 'excepted' for a review, recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage. These percentages are the published achievement by the the Quality and Outcomes Framework.
Further notes:	More information including a rationale for this indicators use in QOF is available from: <a href="https://mgi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.05">https://mgi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.05</a> The source data is available from: <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework</a>
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

<b>Indicator:</b>	<b>The percentage of COPD patients who have had a review, including 'excepted' patients</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months as recorded by the Quality and Outcomes Framework
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months as recorded by the Quality and Outcomes Framework
Denominator:	Total number of patients with COPD as recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage
Further notes:	The Quality and Outcomes Framework (QOF) allows practices to exception-report (exclude) specific patients from data collected to calculate achievement scores. Patients can be exception-reported from individual indicators for various reasons, including 'not attending appointments' or 'treatment is judged to be inappropriate by the GP'. The patients that have been 'excepted' are included in this analysis. For background information on QOF exception reporting, and for notes on the way exception reporting rates are calculated, see the detailed notes in the statistical bulletin in QOF exception reporting.
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

**4: Percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March, by PCT, 2010/11**

<b>Indicator:</b>	<b>Percentage of COPD patients having influenza immunisation</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March as recorded by the Quality and Outcomes Framework
Denominator:	The number of patients with COPD, excluding patients recorded as 'excepted' for influenza immunisation, recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage. These percentages are the published achievement by the the Quality and Outcomes Framework.
Further notes:	More information including a rationale for this indicators use in QOF is available from: <a href="https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.04">https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.03.04</a> The source data is available from: <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework</a>
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

<b>Indicator:</b>	<b>Percentage of COPD patients having influenza immunisation, including 'excepted' patients</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The number of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March as recorded by the Quality and Outcomes Framework
Denominator:	Total number of patients with COPD as recorded by the Quality and Outcomes Framework
Methodology:	Numerator divided by denominator expressed as a percentage
Further notes:	The Quality and Outcomes Framework (QOF) allows practices to exception-report (exclude) specific patients from data collected to calculate achievement scores. Patients can be exception-reported from individual indicators for various reasons, including 'not attending appointments' or 'treatment is judged to be inappropriate by the GP'. The patients that have been 'excepted' are included in this analysis. For background information on QOF exception reporting, and for notes on the way exception reporting rates are calculated, see the detailed notes in the statistical bulletin in QOF exception reporting.
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

**5: Rate of COPD emergency admissions to hospital per population, by PCT, 2010/11**

<b>Indicator:</b>	<b>Emergency COPD admissions</b>
Statistic:	Directly standardised rate per 100,000
Time period:	2010/11
Age group:	All ages
Description:	Directly standardised rate of COPD admissions by PCT, per 100,000
Data source:	Hospital Episode Statistics, The NHS Information Centre for health and social care
Coding scheme used:	ICD-10 in range J40-J44, Episode number = 1, Status of episode = 3, admission method 21-28. Patient class = 1 or 2.
Numerator:	Numbers of finished, ordinary or day case admissions in all patients with a primary ICD 10 diagnosis code indicating COPD.
Denominator:	Mid year estimates of PCT population for 2010
Methodology:	Records with the relevant diagnosis codes for 2010/11 were extracted from HES using business objects. Directly standardised rates were calculated with 95% confidence intervals.
Further notes:	Confidence intervals were calculated with 95% confidence intervals using the Byars method.  <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	South East Public Health Observatory
Date created:	July 2012

**6: Percentage of emergency COPD re-admissions to hospital within 30 days of discharge, by PCT, 2010/11**

<b>Indicator:</b>	<b>Emergency COPD readmissions</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	Emergency readmissions to hospital within 30 days of discharge
Data source:	Hospital Episode Statistics, The NHS Information Centre for health and social care
Coding scheme used:	ICD-10 in range J40-J44, Episode number = 1, Status of episode = 3, admission method 21-28, Patient classification in 1, 2 or 5
Numerator:	The number of admissions for COPD which were within 30 days of a discharge
Denominator:	The number of admissions for COPD
Methodology:	Numerator divided by denominator expressed as a percentage
Further notes:	To help monitor National Health Service (NHS) success in avoiding (or reducing to a minimum) readmission following discharge from hospital, when readmission was not part of the originally planned treatment. Previous analyses have shown wide variation between similar NHS organisations in emergency readmission rates. Not all emergency readmissions are likely to be part of the originally planned treatment and some may be potentially avoidable. The NHS may be helped to prevent potentially avoidable readmissions by seeing comparative figures and learning lessons from organisations with low readmission rates.  Confidence intervals were created using the Wilson Score method, the 100(1-a)% confidence limits for the proportion: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	North East Public Health Observatory
Date created:	October 2011

**7: Proportion (%) of patients admitted with COPD receiving non-invasive ventilation (NIV), by PCT, 2010/11**

<b>Indicator:</b>	<b>COPD patients receiving non-invasive ventilation (NIV)</b>
Statistic:	Percent
Time period:	2010/11
Age group:	All ages
Description:	Patients receiving non-invasive ventilation
Data source:	Sourced from NHS Comparators
Numerator:	Patients with HRG4 code of DZ21E or DZ21F or DZ21G
Denominator:	Patients with HRG4 code of DZ21A to DZ21K
Methodology:	The count of spells by PCT was extracted from the 'PbR Income/Expenditure - APC' section of NHS Comparators for DZ21A, DZ21B, DZ21C, DZ21E, DZ21F, DZ21G, DZ21H, DZ21J & DZ21K. These were summed for the denominator and the sum of DZ21E or DZ21F or DZ21G for the numerator.
Produced by:	NHS Comparators <a href="https://www.nhscomparators.nhs.uk">https://www.nhscomparators.nhs.uk</a>
Date created:	June 2012

**8: Rate of COPD emergency admissions to hospital per population, by PCT, 2010/11**

**8a: Rate of expenditure on home oxygen therapy per patient diagnosed with COPD, by PCT, 2010/11**

<b>Indicator:</b>	<b>Expenditure on home oxygen therapy</b>
Statistic:	1. Spend (£s) per 1000 ADS population 2. Spend (£s) per patient on COPD disease register
Time period:	2010/11
Age group:	All ages
Description:	Expenditure on home oxygen therapy, per head of population by PCT, 2010/11 and per patient on COPD disease register
Data source:	Department of Health
Numerator:	PCT Recharge value for Home Oxygen Therapy
Denominator:	1. Attribution Data Set (ADS) for PCT registered population 2. The observed crude prevalence of COPD as recorded by the Quality and Outcomes Framework
Methodology:	The expenditure on home oxygen therapy was taken from the Home Oxygen Supply team in the DH and divided by the ADS registered population of the PCT to establish the cost of a HOS per 1000 patients in each PCT. The same expenditure was then divided by the number of patients on the COPD register to establish the cost of a HOS per 1000 COPD patients in each PCT.
Produced by:	Home Oxygen Supply Service, Department of Health
Date created:	October 2011

**9: Rate of deaths within 30 days of admission for COPD per COPD inpatient admissions, by PCT, 2009/10**

<b>Indicator:</b>	<b>30 day mortality rate following COPD admission</b>
Statistic:	Indirectly age, sex, method of admission and HRG standardised rate per 100,000
Time period:	2009/10
Age group:	All ages
Description:	Deaths within 30 days of admission for COPD
Data source:	NHS Information Centre Programme Budget Atlas
Coding scheme used:	ICD-10 in range J41-J44
Numerator:	Number of deaths in patients admitted with COPD
Denominator:	Number of completed inpatient spells for COPD
Methodology:	PCT of residence. Rates are indirectly standardised => England crude mortality rate multiplied by the PCT standardised mortality ratio. Expected PCT values are calculated applying national age-sex, admission method and HRG death rates to local admission populations at PCT level. Confidence intervals are calculated at 95% level
Further notes:	Age bands for standardisation are 0-14, 15-44, 45-54, 55-64, 65-74, 75-84, 85+ NB similar data is available for asthma and all respiratory disease. It is possible to produce 90 day and 1 year mortality from the HES linked mortality file.
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	01/04/2012

**10: Rate of COPD mortality per population, by PCT, 2008-10**

<b>Indicator:</b>	<b>COPD mortality rate</b>
Statistic:	Directly age standardised mortality rate per 100,000
Time period:	2008-10
Age group:	All ages
Description:	Mortality from bronchiolitis and emphysema and other chronic obstructive pulmonary disease (COPD).
Data source:	Compendium of Population Health Indicators, The NHS Information Centre for Health and Social Care
Coding scheme used:	ICD-10 in range J40-J44
Numerator:	The number of deaths from COPD, classified by underlying cause of death.
Denominator:	2001 census based mid-year population estimates for 2008, 2009 and 2010.
Methodology:	The indicator is constructed as a directly age standardised rate for all ages years using the European population as the reference standard.
Further notes:	<a href="https://indicators.ic.nhs.uk/webview/">https://indicators.ic.nhs.uk/webview/</a>
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	January 2012

## Asthma

### 11: Prevalence (%) of asthma recorded on GP registers, by PCT, 2010/11

<b>Indicator:</b>	<b>Prevalence of asthma</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with asthma, excluding those who have been prescribed no asthma-related drugs the previous twelve months, as recorded on practice disease registers.
Data source:	Information Centre
Numerator:	The aggregated number of patients registered with GP practices, by practice and by PCT, with a coded diagnosis of asthma
Denominator:	The aggregated number of all registered patients with GP practices, by practice and by PCT
Methodology:	Numerator divided by denominator expressed as a percentage
Further notes:	The source data is available from: <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework</a>
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011

### 12: Percentage of patients with asthma who have had an asthma review in the previous 15 months, by PCT, 2010/11

<b>Indicator:</b>	<b>Percentage of asthma patients who have had an asthma review</b>
Statistic:	Percentage
Time period:	2010/11
Age group:	All ages
Description:	The percentage of patients with asthma who have had an asthma review in the previous 15 months
Data source:	Quality and Outcomes Framework 2010/11
Numerator:	The aggregated number of patients registered with GP practices, by PCT, with a asthma review coded in the 15 months leading up to 1st of April 2011
Denominator:	The aggregated number of patients registered with GP practices, with a coded diagnosis of asthma, excluding 'excepted' patients for an asthma review - as reported by the Quality and Outcomes Framework.
Methodology:	Numerator divided by denominator expressed as a percentage. These percentages are the published achievement by the the Quality and Outcomes Framework.
Further notes:	More information including a rationale for this indicators use in QOF is available from: <a href="https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.05.05">https://mqi.ic.nhs.uk/IndicatorDefaultView.aspx?ref=1.09.05.05</a> The source data is available from: <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework</a> The Quality and Outcomes Framework (QOF) allows practices to exception-report (exclude) specific patients from data collected to calculate achievement scores. Patients can be exception-reported from individual indicators for various reasons, including 'not attending appointments' or 'treatment is judged to be inappropriate by the GP'. For background information on QOF exception reporting, and for notes on the way exception reporting rates are calculated, see the detailed notes in the statistical bulletin in QOF exception reporting.
Produced by:	The NHS Information Centre for Health and Social Care
Date created:	October 2011



**13: Rate of emergency admissions to hospital in people with asthma aged 18 years and over per population, by PCT, 2010/11**

<b>Indicator:</b>	<b>Emergency asthma admissions for persons aged 18 and over</b>
Statistic:	Directly standardised rate per 100,000
Time period:	2010/11
Age group:	18 and over
Description:	Emergency admission rate for asthma per 100,000 population aged 18+ years
Data source:	Hospital Episode Statistics (HES) - The NHS Information Centre for Health and Social Care, Office for National Statistics (ONS)
Coding scheme used:	ICD10 J45 - J46
Numerator:	Numbers of finished, ordinary or day case admissions in patients aged 18 and over with a primary ICD 10 diagnosis code indicating Asthma with an admission code indicating emergency.
Denominator:	Mid year resident population estimates by PCT for all persons aged 18 years and older.
Methodology:	Records with the relevant primary diagnosis codes for 2010/11 were extracted from HES using business objects. Directly age standardised rates were calculated for persons aged 18 years and older, using the European population as the reference standard. Confidence intervals were calculated using Byar's method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	SEPHO
Date created:	May 2012

**14: Emergency admission rate for children with asthma per population aged 0-17 years, by PCT, 2010/11**

<b>Indicator:</b>	<b>Emergency asthma admissions for persons aged 17 and under</b>
Statistic:	Directly standardised rate per 100,000
Time period:	2010/11
Age group:	17 and under
Description:	Emergency admission rate for asthma per 100,000 population aged 0-17 years
Data source:	Hospital Episode Statistics (HES), Compendium of Population Health Indicators. The NHS Information Centre for Health and Social Care
Coding scheme used:	ICD 10 J45-J46
Numerator:	Admission episodes for 2010/11 for all persons aged 0-17 years with a relevant primary diagnosis (ICD 10 J45-J46) code and an emergency admission code
Denominator:	Mid year GP relevant population estimates by PCT, aged 0-17 years, 2010. PCT populations for quinary age groups 0-19 were apportioned to obtain population for ages 0-17 years
Methodology:	The indicator is constructed as a directly age standardised rate for persons aged 0-17 years using the European population as the reference standard. Confidence intervals were calculated using Byar's method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	ChiMat
Date created:	June 2012

## Pneumonia

### 15: Rate of pneumonia mortality in people aged under 75 years per population by PCT, 2007-10

<b>Indicator:</b>	<b>Mortality from pneumonia in those aged less than 75 years</b>
Statistic:	Directly age standardised mortality rate per 100,000
Time period:	2007-10
Age group:	0-74 years
Description:	Mortality rate per 100,000 from pneumonia for all persons aged 0-75 years, 2008-10
Data source:	Annual Districts Deaths Database, Office for National Statistics (ONS)
Coding scheme used:	ICD-10 in range J12-J18
Numerator:	The number of deaths from pneumonia, classified by underlying cause of death
Denominator:	2001 census based mid-year population estimates for PCTs in 2007, 2008, 2009 and 2010
Methodology:	The indicator is constructed as a directly age standardised rate for persons aged 0-74 years using the European population as the reference standard. Confidence intervals were calculated using Byar's method:
Further notes:	<a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	South East Public Health Observatory
Date created:	July 2012

## Sleep Disordered Breathing

### 16: Rate of sleep studies undertaken per population, by PCT, 2011

<b>Indicator:</b>	<b>Sleep studies</b>
Statistic:	Crude rate per 1000
Time period:	2011
Age group:	All ages
Description:	Rate of sleep studies per 1000 population, by PCT, 2010
Data source:	Department of Health, Office for National Statistics (ONS)
Numerator:	Number of sleep studies by PCT
Denominator:	2001 census based estimates of mid-year population estimates in PCTs for 2009
Methodology:	The count of the sleep studies undertaken (DM01) are collected on a monthly basis from NHS providers (NHS Trusts and other providers) and signed off by commissioners (Primary Care Trusts). Twelve months of data has been collated and divided by the 2009 mid year estimates of PCO populations from the office for national statistics and multiplied by 1000 to obtain a crude rate per 1000.
Further notes:	The data are fair – guidance on completion hasn't been edited for some time and the numbers submitted are not subject to rigorous inspection.
Produced by:	Department of Health
Date created:	June 2012

## Bronchiolitis

### 17: Rate of admissions for bronchiolitis in children per population under 2 years of age, by PCT, 2008/09-2010/11

<b>Indicator:</b>	<b>Bronchiolitis admissions</b>
Statistic:	Crude rate per 100,000 (with 95% confidence intervals)
Time period:	3 year aggregate financial years 2008/09-2010/11
Age group:	0-1 years (inclusive)
Description:	Admission rate for bronchiolitis per 100,000 population aged under 2 years
Data source:	Hospital Episode Statistics (HES). Compendium of Population Health Indicators, The NHS Information Centre for Health and Social Care
Coding scheme used:	ICD-10 J21
Numerator:	Admission episodes for 2008/09-2010/11 for all persons aged under 2 years with primary diagnosis code as listed above
Denominator:	Mid year GP relevant population estimates by PCT, aged 0-1 years, 2008 to 2010
Methodology:	The indicator is constructed as a crude rate for children age 0-1 years. Confidence intervals to be calculated using Byar's method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	ChiMat
Date created:	June 2012

### 18: Mean length of stay (days) for bronchiolitis in children aged under 2 years, by PCT, 2008/09-2010/11

<b>Indicator:</b>	<b>Bronchiolitis hospital stay</b>
Statistic:	Mean length of stay (days) for bronchiolitis in children aged under 2 years
Time period:	3 year aggregate financial years 2008/09-2010/11
Age group:	0-1 years (inclusive)
Description:	Mean duration of inpatient hospital spell with primary diagnosis of bronchiolitis aged under 2 years
Data source:	Hospital Episode Statistics (HES), The NHS Information Centre for Health and Social Care
Coding scheme used:	ICD-10 J21
Numerator:	Sum of duration of hospital spells for first finished episodes for 2008/09-2010/11 for all persons aged under 2 years with primary diagnosis ICD code J21
Denominator:	Admission episodes for 2008/09-2010/11 for all persons aged under 2 years with primary diagnosis code as listed above
Methodology:	The average (mean) was calculated from the sum of all hospital spell durations in each PCT, divided by the count of PCT hospital spells recorded. Confidence intervals calculated using the normal approximation method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Produced by:	ChiMat
Date created:	June 2012

## Respiratory Prescribing

### 19: Average daily quantity of combination (ICS and LABA) inhalers per patients on GP COPD and Asthma registers, by PCT, 2011

<b>Indicator:</b>	Combination (ICS and LABA) inhalers prescribed
<b>Statistic:</b>	Average daily quantity (ADQ) per 1000 patients
<b>Time period:</b>	2011
<b>Age group:</b>	All ages
<b>Description:</b>	Combination (ICS and LABA) inhalers per asthma and COPD GP registers
<b>Data source:</b>	NHS Business Services Authority Prescribing Analysis and CosT tool (PACT) system
<b>Numerator:</b>	Average daily quantity of inhaler items prescribed in 2011 calendar year
<b>Denominator:</b>	The numbers of registered people with COPD and asthma in GP practices, as collected by the Quality Management Analysis System under the Quality and Outcomes Framework 2010/11
<b>Methodology:</b>	Numerator divided by the denominator. Data for the numerator of this indicator are expressed as average daily quantities (ADQ), a measure of prescribing volume based upon prescribing behaviour in England: it represents the assumed average maintenance dose per day for a drug used for its main indication in adults (it is an analytical unit and not a recommended dose). The patient denominator is the combined number of patients on the asthma and COPD GP practice registers.
<b>Produced by:</b>	Prescribing and Primary Care Services, NHS Business Services Authority
<b>Date created:</b>	September 2011

## Smoking

### 20: Rate of successful smoking quitters at 4 weeks per population of smokers aged 16 years and over, by PCT, by PCT, 2010/11

<b>Indicator:</b>	<b>Smoking quit rates</b>
Statistic:	Crude rate per 100,000
Time period:	2010/11
Age group:	16 and over
Description:	Rate of successful smoking quitters at 4 weeks per population of smokers aged 16 years and over
Data sources:	The NHS Information Centre for Health and Social Care, Integrated Household Survey for smoking prevalence. Population estimates from the Office for National Statistics. <a href="http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services">http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services</a>
Numerator:	Number of self-reported successful quitters at 4 weeks in 2010/11. Successful quitters are those smokers who successfully quit at the four-week follow-up. A client is counted as a 'self-reported 4-week quitter' when assessed 4 weeks after the designated quit date, if they declare that they have not smoked, even a single puff on a cigarette, in the past two weeks. This information is collected on NHS Stop Smoking returns in line with requirements from the Department of Health (DH).
Denominator:	Population who currently smoke in 2009 and 2010 taken from the integrated household survey. Smoking prevalence estimates for those aged 18+ for 2009/10 and 2010/11 were applied to 2009 and 2010 mid-year primary care trust populations for persons aged 16+.
Methodology:	The quit rate was calculated by dividing the number of smoking quits by smoking population, multiplied by 100,000. Smoking prevalence based on the IHS survey is routinely available at local authority level only. In order to obtain estimates at PCT level, prevalence estimates for local authorities were weighted proportionately to PCT populations. The 95% confidence intervals for crude rates were calculated using Byar's method. Confidence intervals indicate the level of uncertainty around the numerator, whereas it is assumed that there is no uncertainty around the denominator. However, the denominator for this indicator has been derived from population estimates and estimates of smoking prevalence adjusted to PCO populations, meaning there is some level of uncertainty. This in turn means that the confidence intervals will only be indicative of the true variance around the estimates.  <a href="http://www.lho.org.uk/LHO_Topics/Analytic_Tools/TobaccoControlProfiles/default.aspx">http://www.lho.org.uk/LHO_Topics/Analytic_Tools/TobaccoControlProfiles/default.aspx</a> <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Further notes:	Data are collected on the basis of the PCT providing the stop smoking service. Clients are not restricted to attending stop smoking services in the PCT with which they are registered or resident. This means that the number of smoking quits as a result of stop smoking services is not necessarily the number of smoking quits in the PCT's own population. However, for this indicator quits are expressed per 100,000 resident smoking population. For those PCTs whose residents go elsewhere for stop smoking services this will be an underestimate of the true quit rate, for those PCTs who see many people for stop smoking services from outside the PCT, this rate will be an overestimate of the true quit rate.
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