

Indicator metadata

## NHS Atlas of Variation in Diabetes

Version 1.0

### Indicator themes

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## Care Processes

### 1: Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes receiving all nine key care processes by PCT, 1 January 2009 to 31 March 2010

<b>Indicator:</b>	<b>Persons with Type 1 diabetes receiving all nine NICE recommended diabetes care processes</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of persons with Type 1 diabetes in each PCT who received all nine of the NICE (National Institute for Clinical Excellence) recommended diabetes care processes
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who received all nine of the NICE recommended diabetes care processes at least once during the 15 month audit period
Denominator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started-how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started-how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
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### 2: Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes receiving all nine key care processes by PCT, 1 January 2009 to 31 March 2010

<b>Indicator:</b>	<b>Persons with Type 2 diabetes receiving all nine NICE recommended diabetes care processes</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of persons with Type 2 diabetes in each PCT who received all nine of the NICE (National Institute for Clinical Excellence) recommended diabetes care processes
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who received all nine of the NICE recommended diabetes care processes at least once during the 15 month audit period
Denominator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started-how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started-how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
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## Treatment targets

### 3: Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent HbA1c measurement was 7.5% (58 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010

<b>Indicator:</b>	<b>Persons with Type 1 diabetes with last HbA1c less than 7.5%</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of persons with Type 1 diabetes with an HbA1c measurement taken in the 15 month audit period in whom the last HbA1c is less than 7.5% (or equivalent test/reference range depending on local laboratory)
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period and their last HbA1c is less than 7.5% (or equivalent test/reference range depending on local laboratory)
Denominator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

### 4: Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes whose most recent HbA1c measurement was 7.5% (58 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010

<b>Indicator:</b>	<b>Persons with Type 2 diabetes with last HbA1c less than 7.5%</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of persons with Type 2 diabetes with an HbA1c measurement taken in the 15 month audit period in whom the last HbA1c is less than 7.5% (or equivalent test/reference range depending on local laboratory)
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period and their last HbA1c is less than 7.5% (or equivalent test/reference range depending on local laboratory)
Denominator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
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**5: Percentage of children aged 0-15 years with Type 1 diabetes whose most recent HbA1c measurement was 10% (86 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Type 1 HbA1c &lt; 10</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	0-15 years
Description:	Percentage of children aged 0-15 years with Type 1 diabetes with an HbA1c measurement taken in the 15 month audit period (1st January 2009 - 31st March 2010) in whom the last HbA1c is 10.0% or less (or equivalent test/reference range depending on local laboratory)
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of children aged 0-15 years with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period and their last HbA1c was 10.0% or less (or equivalent test/reference range depending on local laboratory)
Denominator:	Number of children aged 0-15 years with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their HbA1c measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage. Confidence intervals to be calculated using Wilson Score method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
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**6: Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Persons with Type 1 diabetes with blood pressure within target</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period and their measurement was 'in target'.
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period and their measurement was 'in target'.
Denominator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage., In target' blood pressure definition: 140/80 for persons with diabetes and 130/80 for those with diabetes with evidence of eye, kidney or vascular disease.
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**7: Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Persons with Type 2 diabetes with blood pressure within target</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period and their measurement was 'in target'.
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period and their measurement was 'in target'.
Denominator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their blood pressure measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage., In target' blood pressure definition: 140/80 for persons with diabetes and 130/80 for those with diabetes with evidence of eye, kidney or vascular disease.
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
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**8: Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent cholesterol measurement was 5 mmol/l or less by PCT, 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Persons with Type 1 diabetes with last measured total cholesterol of 5mmol/l or less</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period and their last cholesterol measurement was 5 mmol/l or less
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period and their last cholesterol measurement was 5 mmol/l or less
Denominator:	Number of people with Type 1 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**9: Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes whose most recent cholesterol measurement was 5 mmol/l or less by PCT, 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Persons with Type 2 diabetes with last measured total cholesterol of 5mmol/l or less</b>
Statistic:	Percentage
Time period:	1st January 2009 to 31st March 2010 (2009/10 National Diabetes Audit)
Age group:	All ages
Description:	Percentage of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period and their last cholesterol measurement was 5 mmol/l or less
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period and their last cholesterol measurement was 5 mmol/l or less
Denominator:	Number of people with Type 2 diabetes included in the 2009/10 National Diabetes Audit who had their cholesterol measured in the 15 month audit period
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
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**Prescribing**

**10: Insulin total net ingredient cost per patient on GP diabetes registers by PCT 2010/11**

<b>Indicator:</b>	<b>Total annual cost (net ingredient cost) of prescribed insulin items per adult with diabetes</b>
Statistic:	Pounds sterling (£)
Time period:	2010/11
Age group:	<b>Numerator:</b> all ages <b>Denominator:</b> 17+ years
Description:	Total annual cost (net ingredient cost) of all insulins (BNF 6.1.1) prescribed during 2010/11 divided by the number of patients registered with diagnosed diabetes on 31st March 2010
Data source:	<b>Numerator:</b> ePACT from the NHS Prescription Services <b>Denominator:</b> Quality and Outcomes Framework (QOF) data held on the Quality Management Analysis System (QMAS), The NHS Information Centre for Health and Social Care
Numerator:	Total net ingredient cost (NIC) of insulins (BNF 6.1.1) prescribed during 2010/11
Denominator:	Number of patients on the clinical register with diabetes on 31st March 2010, recorded on QMAS
Methodology:	Total net ingredient cost (NIC) of insulins (BNF 6.1) prescribed in pounds sterling (£) divided by the number of patients on the clinical register with diabetes.
Source locations:	<a href="http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx">http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx</a> <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10</a>
Further notes:	The number of patients on the diabetes clinical register fluctuates daily due to a number of factors and the recent trend has been a steady increase due to rising obesity prevalence, an ageing population and an increasing diagnosis rate. The choice of date for the denominator diabetes registrations is fixed to single annual prevalence day which in the most recent 2009/10 QOF was 31st March 2010. For the purpose of timeliness, the calculation uses most recent available single financial year of prescribing data (2010/11).
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory

**11: Non-insulin anti-diabetic drugs total net ingredient cost per patient on GP diabetes registers by PCT**

<b>Indicator:</b>	<b>Total annual cost (net ingredient cost) of non-insulin anti-diabetic items per adult with diabetes</b>
Statistic:	Pounds sterling (£)
Time period:	2010/11
Age group:	<b>Numerator:</b> all ages <b>Denominator:</b> 17+ years
Description:	Total annual cost (net ingredient cost) of non-insulin anti-diabetic items (BNF 6.1.2) prescribed during 2010/11 divided by the number of patients registered with doctor diagnosed diabetes on 31st March 2010
Data source:	<b>Numerator:</b> ePACT from the NHS Prescription Services <b>Denominator:</b> Quality and Outcomes Framework (QOF) data held on the Quality Management Analysis System (QMAS), The NHS Information Centre for Health and Social Care
Numerator:	Total net ingredient cost (NIC) of non-insulin anti-diabetic items (BNF 6.1.2) prescribed during 2010/11
Denominator:	Number of patients on the clinical register with diabetes on 31st March 2010, recorded on the QMAS
Methodology:	Total net ingredient cost (NIC) of non-insulin anti-diabetic items (BNF 6.1.2) prescribed in pounds sterling (£) divided by the number of patients on the clinical register with diabetes.
Source locations:	<a href="http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx">http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx</a> <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10</a>
Further notes:	The number of patients on the diabetes clinical register fluctuates daily due to a number of factors and the recent trend has been a steady increase due to rising obesity prevalence, an ageing population and an increasing diagnosis rate. The choice of date for the denominator diabetes registrations is fixed to single annual prevalence day which in the most recent 2009/10 QOF was 31st March 2010. For the purpose of timeliness, the calculation uses most recent available single financial year of prescribing data (2010/11).
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory



**12: Blood-testing items total net ingredient cost per patient on GP diabetes registers by PCT 2010/11**

<b>Indicator:</b>	<b>Total annual cost (net ingredient cost) of prescribed blood monitoring items per adult with diabetes</b>
Statistic:	Pounds sterling (£)
Time period:	2010/11
Age group:	<b>Numerator:</b> all ages <b>Denominator:</b> 17+ years
Description:	Total annual cost (net ingredient cost) of all blood testing items (sub-section of BNF 6.1.6) prescribed during 2010/11 divided by the number of patients registered with doctor diagnosed diabetes on 31st March 2010
Data source:	<b>Numerator:</b> ePACT from the NHS Prescription Services <b>Denominator:</b> Quality and Outcomes Framework (QOF) data held on the Quality Management Analysis System (QMAS), The NHS Information Centre for Health and Social Care
Numerator:	Total net ingredient cost (NIC) of blood testing items (sub-section of BNF 6.1.6) prescribed during 2010/11
Denominator:	Number of patients on the clinical register with diabetes on 31st March 2010, recorded on the QMAS
Methodology:	Total net ingredient cost (NIC) of blood testing items (sub-section of BNF 6.1.6) prescribed in pounds sterling (£) divided by the number of patients on the clinical register with diabetes.
Source locations:	<a href="http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx">http://www.nhsbsa.nhs.uk/PrescriptionServices/3230.aspx</a> <a href="http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10">http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2009-10</a>
Further notes:	The number of patients on the diabetes clinical register fluctuates daily due to a number of factors and the recent trend has been a steady increase due to rising obesity prevalence, an ageing population and an increasing diagnosis rate. The choice of date for the denominator diabetes registrations is fixed to single annual prevalence day which in the most recent 2009/10 QOF was 31st March 2010. For the purpose of timeliness, the calculation uses most recent available single financial year of prescribing data (2010/11).
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory

## Use of Inpatient Services

### 13: Excess length of stay (%) in hospital among people with diabetes when compared with people without diabetes by PCT 2009/10

<b>Indicator:</b>	<b>Excess length of stay in people with diabetes compared to those without for all HRGs</b>
Statistic:	Percentage difference
Time period:	2009/10
Age group:	All ages
Description:	Difference between the actual and expected number of inpatient bed days in people with diabetes expressed as a percentage of the expected number. The expected number of bed days for people with diabetes is what they would have experienced if they had the same average length of stay as people without diabetes within each age group.
Data source:	Hospital Episode Statistics (HES), The NHS Information Centre for Health and Social Care
Numerator:	Observed total number of inpatient bed days summed for all people with diabetes admitted to hospitals in England during 2009/10
Denominator:	Expected total number of inpatient bed days summed for people with diabetes admitted to hospitals in England during 2009/10, as if they had had the same average length of stay as those admitted without diabetes by age group
Methodology:	The observed number is the sum of all lengths of stay, expressed in bed days, for patients admitted to hospitals in England during 2009/10 with an ICD-10 coding of E10-E14 in any diagnosis position in the first episode of care in any provider spell. The expected number of bed days in people with diabetes was calculated by multiplying the total number of people with diabetes by the average length of stay in those without diabetes in each age-band group and summing across all these groups. Stratifying the calculation by ageband adjusted the expected number such that any excess could not be attributed to differences in the age distribution of those with and without diabetes.
Source locations:	<a href="http://www.diabetes-ndis.org/">http://www.diabetes-ndis.org/</a>
Further notes:	These statistics are presented in the tool, 'Variation in Inpatient Activity: diabetes (VIA: Diabetes)' which allows users to compare information on inpatient activity for those with and without diabetes to provide evidence on differing care patterns. The tool presents information for both primary care trusts (PCTs) and provider trusts across England on the actual and expected numbers of day cases, bed days and emergency readmissions for patients with diabetes. 'Expected' figures are calculated by assuming those with diabetes have the same rates of day cases, emergency readmissions or lengths of stay as patients without diabetes of a similar age. Data is broken down by Health Resource Groups (HRGs) allowing comparison between groups of conditions and is presented for both 2008-09 and 2009-10. The indicator proposed for the diabetes themed atlas is the 'All HRG' version which includes all 19 HRGs.
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory
Date published:	April 2011

**14: Excess emergency re-admissions (%) within 28 days among people with diabetes when compared with people without diabetes by PCT 2009/10**

<b>Indicator:</b>	<b>Excess emergency readmission rates within 28 days of a previous inpatient spell of care in people with diabetes compared to those without diabetes for all HRGs</b>
Statistic:	Percentage difference
Time period:	2009/10
Age group:	All ages
Description:	Difference between the actual number of emergency re-admissions within 28 days of a previous spell of care in people with diabetes expressed as a percentage of the expected number. The expected number of emergency re-admissions for people with diabetes is what they would have experienced if they had the same emergency admission rate as people without diabetes within each age group.
Data source:	Hospital Episode Statistics (HES), The NHS Information Centre for Health and Social Care
Numerator:	Observed number of emergency re-admissions within 28 days of a previous spell of care summed for all people with diabetes admitted to hospitals in England during 2009/10
Denominator:	Expected number of emergency re-admissions within 28 days of a previous spell of care summed for people with diabetes admitted to hospitals in England during 2009/10, as if they had had the same average length of stay as those admitted without diabetes, within each Healthcare Resource Group (HRG) and age group
Methodology:	The observed number is the summation of all emergency re-admissions within 28 days of a previous spell of care, for patients admitted to hospitals in England during 2009/10 with an ICD-10 coding of E10-E14 in any diagnosis position in the first episode of care in the original provider spell. The expected number of emergency readmissions in people with diabetes was calculated by multiplying the total number of people with diabetes by the emergency re-admission rate in those without diabetes in each age-band group and summing across all these groups. Stratifying the calculation by ageband adjusted the expected number such that any excess could not be attributed to differences in the age distribution of those with and without diabetes.
Source locations:	<a href="http://www.diabetes-ndis.org/">http://www.diabetes-ndis.org/</a>
Further notes:	These statistics are presented in the tool, 'Variation in Inpatient Activity: diabetes (VIA: Diabetes)' which allows users to compare information on inpatient activity for those with and without diabetes to provide evidence on differing care patterns. The tool presents information for both primary care trusts (PCTs) and provider trusts across England on the actual and expected numbers of day cases, bed days and emergency readmissions for patients with diabetes. 'Expected' figures are calculated by assuming those with diabetes have the same rates of day cases, emergency readmissions or lengths of stay as patients without diabetes of a similar age. Data is broken down by Health Resource Groups (HRGs) allowing comparison between groups of conditions and is presented for both 2008-09 and 2009-10. The indicator proposed for the diabetes themed atlas is the 'All HRG' version which includes 16 out of 19 HRGs (cancer, mental health, and maternity spells of care are excluded)
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory
Date published:	April 2011

**15: Percentage of elective procedures undertaken as day-cases in people with diabetes when compared with people without diabetes by PCT 2009/10**

<b>Indicator:</b>	<b>Excess day case listing rates in people with diabetes compared to those without diabetes for all HRGs</b>
Statistic:	Percentage difference
Time period:	2009/10
Age group:	All ages
Description:	Difference between the actual and expected number of day case admissions in people with diabetes expressed as a percentage of the expected number. The expected number of day case admissions for people with diabetes is what they would have experienced if they had the same day case admission rate as people without diabetes within each age group.
Data source:	Hospital Episode Statistics (HES), The NHS Information Centre for Health and Social Care
Numerator:	Observed number of day case admissions care summed for all people with diabetes admitted to hospitals in England during 2009/10, by PCT
Denominator:	Expected number of day case admissions summed for people with diabetes admitted to hospitals in England during 2009/10, as if they had had the same day case admission rate as those admitted without diabetes, within each age group.
Methodology:	The observed number is the sum of all day case admissions, for patients admitted to hospitals in England during 2009/10 with an ICD-10 coding of E10-E14 in any diagnosis position in the first episode of care in any provider spell. The expected number of day case admissions in people with diabetes was calculated by multiplying the total number of people with diabetes by the day case admission rate in those without diabetes in each age-band group and summing across all these groups. Stratifying the calculation by ageband adjusts the expected number such that any excess could not be attributed to differences in the age distribution of those with and without diabetes. The day case rate for those without diabetes is the number of spells of care which are recorded as a day case calculated as a proportion of all spells of elective care.
Source locations:	<a href="http://www.diabetes-ndis.org/">http://www.diabetes-ndis.org/</a>
Further notes:	These statistics are presented in the tool, 'Variation in Inpatient Activity: diabetes (VIA: Diabetes)' which allows users to compare information on inpatient activity for those with and without diabetes to provide evidence on differing care patterns. The tool presents information for both primary care trusts (PCTs) and provider trusts across England on the actual and expected numbers of day cases, bed days and emergency readmissions for patients with diabetes. 'Expected' figures are calculated by assuming those with diabetes have the same rates of day cases, emergency readmissions or lengths of stay as patients without diabetes of a similar age. Data is broken down by Health Resource Groups (HRGs) allowing comparison between groups of conditions and is presented for both 2008-09 and 2009-10. The indicator proposed for the diabetes themed atlas is the 'All HRG' version which includes all 19 HRGs.
Produced by:	Diabetes Health Intelligence: a strategic programme within Yorkshire and Humber Public Health Observatory
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## Diabetic complications

### 16: Percentage of people with previously diagnosed diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) at least once by PCT 2009/10

<b>Indicator:</b>	<b>Persons with diabetes admitted to hospital for diabetic ketoacidosis</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for diabetic ketoacidosis in 2009/10
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for diabetic ketoacidosis in 2009/10, excluding those with their initial diabetes diagnosis within this audit period.
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**17: Percentage of children aged 0–15 years with previously diagnosed diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) five years prior to the end of the audit period by PCT; Audit period: 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Diabetic ketoacidosis admissions</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	0-15 years
Description:	Percentage of children aged 0-15 years with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for diabetic ketoacidosis (ICD-10 E101, E111, E131, E141) in the 5 years prior to the audit period (1st January 2009 - 31st March 2010)
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Codes used:	ICD-10 E101, E111, E131, E141
Numerator:	Number of children aged 0-15 years with diabetes included in the 2009/10 National Diabetes Audit who were admitted at least once to hospital for diabetic ketoacidosis in the five years prior to the audit period (1st January 2009-31st March 2010), excluding admissions for initial diabetes diagnosis.
Denominator:	Number of children aged 0-15 years with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage. Confidence intervals to be calculated using Wilson Score method: <a href="http://www.apho.org.uk/resource/item.aspx?RID=48457">http://www.apho.org.uk/resource/item.aspx?RID=48457</a>
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**18: Percentage of people in the National Diabetes Audit (NDA) with diabetes who received renal replacement therapy (RRT) by PCT 2009/10**

<b>Indicator:</b>	<b>Persons with diabetes receiving for renal replacement therapy</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for renal replacement therapy in 2009/10
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for renal replacement therapy in 2009/10
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**19: Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for myocardial infarction (MI) by PCT 2009/10**

<b>Indicator:</b>	<b>Persons with diabetes admitted to hospital for myocardial infarction</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for myocardial infarction therapy in 2009/10
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for myocardial infarction therapy in 2009/10
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**20: Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for stroke by PCT 2009/10**

<b>Indicator:</b>	<b>Persons with diabetes admitted to hospital for stroke</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for stroke therapy in 2009/10
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for stroke therapy in 2009/10
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
Date published:	December 2011

**21: Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for cardiac failure by PCT 2009/10**

<b>Indicator:</b>	<b>Persons with diabetes admitted to hospital for cardiac failure</b>
Statistic:	Percentage
Time period:	2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for cardiac failure therapy in 2009/10
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for cardiac failure therapy in 2009/10
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
Produced by:	The NHS Information Centre for Health and Social Care
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**22: Percentage of people in the National Diabetes Audit (NDA) having major lower limb amputations five years prior to the end of the audit period by PCT; Audit period: 1 January 2009 to 31 March 2010**

<b>Indicator:</b>	<b>Persons with diabetes admitted to hospital for a major lower limb amputation</b>
Statistic:	Percentage
Time period:	2004/05-2009/10
Age group:	All ages
Description:	Percentage of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for a major lower limb amputation in the five years prior to the end of the audit period
Data source:	National Diabetes Audit 2009/10, The NHS Information Centre for Health and Social Care
Numerator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit who were admitted to hospital for a major lower limb amputation in the five years prior to the end of the audit period
Denominator:	Number of people with diabetes included in the 2009/10 National Diabetes Audit
Methodology:	Numerator divided by denominator expressed as a percentage. A major lower limb amputation is defined as an amputation above the ankle.
Source locations:	<a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes</a> <a href="http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano">http://www.ic.nhs.uk/services/national-clinical-audit-support-programme-ncasp/diabetes/getting-started--how-to-participate/analyse-your-data-using-the-nda-toolkit--piano</a>
Further notes:	The 2009/10 National Diabetes Audit is complete and the results are analysable using the NDA toolkit PIANO. The NDA Executive Summary report and the National Diabetes Audit Dashboard are also published on the NHS Information Centre for Health and Social Care website
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Date published:	December 2011