

Quality and Outcomes Framework guidance for GMS contract 2013/14

March 2013

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Section 1: Introduction

The Quality and Outcomes Framework (QOF) rewards contractors for the provision of quality care and helps to standardise improvements in the delivery of primary medical services. Contractor participation in QOF is voluntary.

QOF was introduced as part of the new GMS contract in 2004.

From May 2006, evidence was provided by an 'expert panel', coordinated by a consortium of academic bodies, including the Universities of Birmingham and Manchester, which informed negotiations between NHS Employers, on behalf of the four UK health departments and the General Practitioners Committee (GPC) of the British Medical Association (BMA) on what changes should be made to the QOF each year.

The National Institute for Health and Clinical Excellence (NICE) became responsible for managing an independent and transparent approach to developing the QOF clinical and health improvement indicators from April 2009.

This document includes a copy of the summary of indicators for the 2013/14 QOF as set out in Annex D of the General Medical Services (GMS) Statement of Financial Entitlements Directions (SFE) and provides additional guidance on the indicators in England. It replaces all guidance issued in previous years. Annex D to the SFE forms part of the GMS contract for 2013/14.

For 2013/14, the Government consulted on changes to the GMS contract, including implementing in full all of the NICE recommended changes to the QOF and the removal of the organisational domain. The Government also consulted on increasing thresholds for all continuing fraction indicators in line with the 75th centile of achievement phased in over two years. The GPC did not agree to, or support all of these changes – details can be found in its consultation response. Following the consultation, the Government decided to defer the introduction of two of the indicators recommended by NICE for one year, to phase in thresholds for two new indicators and to increase points for three new indicators.

For details of the Government's response to the consultation see:

www.dh.gov.uk/health/2013/03/gp-contracts-response/

For details of the GPC response to the consultation see: http://bma.org.uk/-/media/Files/PDFs/Working%20for%20change/Negotiating%20for%20the%20profession/General%20Practitioners/gpcontractimpositionconsultationresponse_finalBMAresponsefeb2013.pdf

NICE operates an online facility which allows stakeholders to comment on current QOF indicators. Comments inform the review of existing QOF indicators against set criteria which include:

- evidence of unintended consequences
- significant changes to the evidence base
- changes in current practice.

These comments are fed in to a rolling programme of reviews and considered by the QOF Advisory Committee. The recommendations of the Committee will then be considered during negotiations between NHS Employers and the GPC on potential changes to QOF. The online facility is available on the NICE website¹.

The focus for new indicators is provided by NICE Quality Standards. Interested individuals/organisations are encouraged to register with NICE as a stakeholder in the development of individual quality standards. Once registered, stakeholders are able to comment on the content of quality standards during their development. The comments facility and full details of quality standards in development are available on the NICE website.²

The term NHS CB (NHS Commissioning Board) is used throughout the guidance, as the structure responsible for the commissioning of primary care in England.

Principles

The following principles relating to the QOF have been agreed by the negotiating parties:

1. Indicators should, where possible, be based on the best available evidence.
2. The number of indicators in each clinical condition should be kept to the minimum number compatible with an accurate assessment of patient care.
3. Data should never be collected purely for audit purposes.
4. Only data which is useful in patient care should be collected. The basis of the consultation should not be distorted by an over emphasis on data collection. An appropriate balance has to be struck between excess data collection and inadequate sampling.
5. Data should never be collected twice e.g. data required for audit purposes should be data routinely collected for patient care and obtained from existing practice clinical systems.

¹ NICE website. QOF. www.nice.org.uk/aboutnice/qof/qof.jsp

² NICE website. Quality standards.

www.nice.org.uk/ourguidance/niceguidancebytype/clinicalguidelines/shregistration/shregistration.jsp

General information on indicators

Indicators across all domains were renumbered from April 2013. In the guidance they are prefixed by an abbreviation of the category to which they belong, for example coronary heart disease (CHD) indicator number one, becomes CHD001. The addition of zeros indicates the change from previous years numbering.

Indicators that have been developed through the NICE process³ are identified by the reference 'NICE [YEAR] menu ID: NMXX' for information.

For the purposes of calculating achievement payments, contractor achievement against QOF indicators is measured:

- on the last day of the relevant financial year (31 March); or
- in the case where the contract terminates mid-year, on the last day on which the contract subsists. For example, for payments relating to the financial year 1 April 2013 to 31 March 2014, unless the contract terminates mid-year, achievement is measured on 31 March 2014. If the GMS contract ends on 30 June 2013, achievement is measured on 30 June 2013.

Indicators generally set out the target, intervention or measurement to be recorded within a specified time period to establish eligibility for achievement payments. Unless otherwise stated, time periods referred to mean the period which ends on the last day of the financial year to which the achievement relates. For example:

- Indicator CHD002 – *“The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less”*, the phrase *“in the preceding 12 months”* means the period of 12 months which ends on 31 March in the financial year to which the achievement payments relate.
- Indicator CAN002 - *“The percentage of patients with cancer, diagnosed within the preceding 15 months, who have a patient review recorded as occurring within 3 months of the contractor receiving confirmation of the diagnosis”*, the phrase *“within the preceding 15 months”* means the period of 15 months which ends on 31 March in the financial year to which the achievement payments relate.
- Indicator HYP002 – *“The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 150/90 mmHg or less”*, the phrase *“in the preceding 9 months”* means the period of nine months which ends on 31 March in the financial year to which the achievement payments relate.
- Indicator CS002 – *“The percentage of women (aged 25 or over and under the age of 65) whose notes record that a cervical screening test has been performed in the preceding 5 years”* the phrase *“in the preceding 5 years”* means the period of five

³ NICE menu of indicators. www.nice.org.uk/aboutnice/gof/indicators.jsp

years which ends on 31 March in the financial year to which the achievement payments relate.

- Indicator CHD004 – *“The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March”* the phrase *“in the preceding 1 September to 31 March”* means the period of seven months which ends on 31 March in the financial year to which the achievement payments relate.

For clarity, the following points apply to any indicators in which age or date ranges are referenced:

- Where an indicator refers to the financial year, this means the period of 12 months from 1 April to 31 March.
- Where an indicator refers to patients diagnosed after a specified date (and does not specify a period within which the care described in the indicator is to be carried out), the indicator is looking for any record of the care described at any time on or after the diagnosis date (provided that the diagnosis date is on or after the specified date) up to and including the date that the achievement is measured. This type of indicator is called a “cumulative” indicator. AST002 is an example *‘The percentage of patients aged 8 years or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before or anytime after diagnosis’*. This indicator is looking for any record of the specified care at any time on or after the diagnosis date (provided that the diagnosis date is on or after 1 April 2006), up to and including the date that the achievement is measured.
- Patients are considered to be 'currently treated' with a specified medicine if they have had a prescription for that medicine within the preceding six months ending on the last day of the financial year to which the achievement payments relate.

In the case of a contract that has come to an end before 31 March in any relevant financial year, the reference to periods of time are still calculated on the basis that the period ends on 31 March in the financial year to which the achievement payment relates. Annex D of the SFE sets out the rules that apply to measuring achievement for contracts that end before the end of the financial year.

Disease registers

An important feature of the QOF is the establishment of disease registers. These are lists of patients registered with the contractor who have been diagnosed with the disease or risk factor described in the register indicator. While it is recognised that these may not be completely accurate, it is the responsibility of the contractor to demonstrate that it has systems in place to maintain a high quality register. Verification may involve asking how the register is constructed and maintained. The NHS CB may compare the reported prevalence with the expected prevalence and ask contractors to explain any reasons for variations.

For some indicators, there is no disease register, but instead there is a target population group. For example, for cervical screening the target population group is women who are aged 25 years or over and under the age of 65. Indicators in the clinical and public health (PH) domain are arranged in terms of clinical areas. Most of these areas either relate to a register or to a target population group.

Some areas in the clinical and PH domain do not have a register indicator, or there may be more than one register to calculate the Adjusted Practice Disease Factor (APDF) for different indicators within the area. For all relevant disease areas, the register population used to calculate the APDF are set out in the summary of indicators section.

Indicators in the quality and productivity (QP) and patient experience (PE) domain have neither a disease register nor a target population. These are indicators which require a particular activity to be carried out and where the points available are awarded in full if it is carried out or not at all if it is not carried out.

Verification

For indicators where achievement is not extracted automatically from GP clinical systems the guidance outlines the evidence which the NHS CB may require the contractor to produce for verification purposes. The evidence would not need to be submitted unless requested by NHSCB.

The SFE sets out the reporting requirements for contractors and the rules for the calculation of QOF payments. It states (see section 5.17 (c) - (e) of the directions):

- (c) *"contractors utilising computer systems approved by the Board must make available to the Board aggregated monthly returns relating to the contractors achievement of the standards contained in the indicators in the QOF, and in the standard form provided for by such systems;*
- (d) *contractors not utilising computer systems approved by the Board must make available to the Board similar monthly returns, in such form as the Board may reasonably request that a contractor fill in manually a printout of the standard spreadsheet in the form specified by the Board); and*
- (e) *all information supplied pursuant to or in accordance with this paragraph must be accurate."*

The SFE states (section 6.4) that in order for a contractor claim payment for achievement *"a contractor must make a return in respect of the information required of it by the Board in order for the Board to calculate its achievement payment"*.

Data from GP clinical systems will be extracted automatically by the GP Extraction Service (GPES) and reported to CQRS. Contractors report achievement against indicators where automatic extraction is not available by self-declaration on CQRS through a web-based server. CQRS will calculate achievement and payments for QOF and report to contractors and the NHS CB.

The SFE states (paragraph D16): *“The contractor must ensure that it is able to provide any information that the NHS CB may reasonably request of it to demonstrate that it is entitled to each achievement point to which it says it is entitled, and the contractor must make that information available to the Board on request. In verifying that an indicator has been achieved and information correctly recorded, the Board may chose to inspect the output from a computer search that has been used to provide information on the indicator, or a sample of patient records relevant to the indicator.”*

Where 'reporting and verification' is included it provides additional information to support practices in meeting the criteria for the indicator.

The terms 'notes' and 'patient record' are used throughout this document to indicate either electronic or paper patient records.

Business rules

In April 2010, the NHS Health and Social Care Information Centre (HSCIC) took over the development of the Business Rules from NHS Employers and NHS Connecting for Health (CfH).

The Logical Query Indicator Specification and the Dataset and Business Rules that support the reporting requirements of the QOF are based entirely on Read codes (version 2 and Clinical Terms Version 3) and associated dates. Read codes are an NHS standard. Contractors using proprietary coding systems and/or local/practice specific codes will need to be aware that these codes will not be recognised within QOF reporting. Contractors utilising such systems may need to develop strategies to ensure that they are using appropriate Read codes in advance of producing their achievement report.

The Logical Query Indicator Specification and the Dataset and Business Rules are updated twice a year and can be downloaded from the Primary Care Commissioning (PCC) website⁴.

Further information on the Business Rules process is available on the NHS Employers website⁵.

Exception reporting

Exception reporting applies to those indicators in any domain of the QOF where the achievement is determined by the percentage of patients receiving the specified level of care.

Some indicators refer to a sub-set of patients on the relevant disease register, or in the target population group. Patients who are on the disease register or in the target group

⁴ Primary Care Commissioning website. www.pcc-cic.org.uk

⁵ NHS Employers. Developing the QOF business rules. www.nhsemployers.org/PayAndContracts/GeneralMedicalServicesContract/QOF/DevelopingQOFbusinessrules/Pages/DevelopingtheQOFbusinessrules.aspx

for the clinical area concerned, but not included in an indicator denominator for definitional reasons are called “exclusions”.

“Exceptions” relate to registered patients who are on the relevant disease register or in the target population group and would ordinarily be included in the indicator denominator, but who are excepted by the contractor on the basis of one or more of the exception criteria. Patients are removed from the denominator and numerator for an indicator if they have been both excepted and they have not received the care specified in the indicator wording. If the patient has been excepted but subsequently the care has been carried out within the relevant time period the patient will be included in both the denominator and the numerator (e.g. achievement will always override an exception).

Exception reporting criteria

Patients may be excepted if they meet the following criteria for exception reporting:

- A. Patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the financial year to which the achievement payments relate (except in the case of indicator CS002, where the patient should have been invited on at least three occasions during the period of time specified in the indicator during which achievement is to be measured (e.g. the preceding five years ending on 31 March in the financial year to which achievement payments relate).
- B. Patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances, for example, a patient who has a terminal illness or is extremely frail.
- C. Patients newly diagnosed or who have recently registered with the contractor who should have measurements made within three months and delivery of clinical standards within nine months e.g. blood pressure or cholesterol measurements within target levels.
- D. Patients who are on maximum tolerated doses of medication whose levels remain sub-optimal.
- E. Patients for whom prescribing a medication is not clinically appropriate e.g. those who have an allergy, contra-indication or have experienced an adverse reaction.
- F. Where a patient has not tolerated medication.
- G. Where a patient does not agree to investigation or treatment (informed dissent) and this has been recorded in their patient record following a discussion with the patient.
- H. Where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. cholesterol reduction where the patient has liver disease.
- I. Where an investigative service or secondary care service is unavailable.

In the case of exception reporting on criteria A and B these patients are removed from the denominator for all indicators in that disease area where the care had not been delivered. For example, a contractor with 100 patients on the coronary heart disease

(CHD) disease register, of which four patients have been recalled for follow-up on three occasions but have not attended and one patient has become terminally ill with metastatic breast carcinoma during the year, the denominator for reporting would be 95. However, all 100 patients with CHD would be included in the calculation of APDF (practice prevalence). This would apply to all relevant indicators in the CHD set.

In addition, contractors may exception report patients from single indicators if they meet criteria in C to I, for example a patient who has heart failure (HF) due to left ventricular systolic dysfunction (LVSD) but who is intolerant of angiotensin converting enzyme inhibitors (ACE-inhibitors/ACE-I) and angiotensin receptor blocker (ARB) could be exception reported from HF003. This would result in the patient being removed from the denominator for that indicator only.

Contractors should report the number of exceptions for each indicator set and individual indicator. Contractors will not be expected to report why individual patients were exception reported. However, contractors may be called on to explain why they have 'excepted' patients from an indicator and this can be identifiable in the patient record.

Additional guidance on exception reporting can be found in section eight of this document and in annex D of the SFE.

Section 2: Summary of all indicators

Section 2.1: Clinical domain

Section 2.1. applies to all contractors participating in QOF.

Atrial fibrillation (AF)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| AF001. The contractor establishes and maintains a register of patients with atrial fibrillation | 5 | |
| Ongoing management | | |
| AF002. The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHADS ₂ risk stratification scoring system in the preceding 12 months (excluding those whose previous CHADS ₂ score is greater than 1) <i>NICE 2011 menu ID: NM24</i> | 10 | 40–90% |
| AF003. In those patients with atrial fibrillation in whom there is a record of a CHADS ₂ score of 1 (latest in the preceding 12 months), the percentage of patients who are currently treated with anti-coagulation drug therapy or anti-platelet therapy <i>NICE 2011 menu ID: NM45</i> | 6 | 57–97% |
| AF004. In those patients with atrial fibrillation whose latest record of a CHADS ₂ score is greater than 1, the percentage of patients who are currently treated with anti-coagulation therapy <i>NICE 2011 menu ID: NM46</i> | 6 | 40–70% |

Secondary prevention of coronary heart disease (CHD)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| CHD001. The contractor establishes and maintains a register of patients with coronary heart disease | 4 | |
| Ongoing management | | |
| CHD002. The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less | 17 | 53–93% |

| | | |
|--|----|---------|
| CHD003. The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less | 17 | 45–85% |
| CHD004. The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March | 7 | 56–96% |
| CHD005. The percentage of patients with coronary heart disease with a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken | 7 | 56–96% |
| CHD006. The percentage of patients with a history of myocardial infarction (on or after 1 April 2011) currently treated with an ACE-I (or ARB if ACE-I intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin <i>NICE 2010 menu ID: NM07</i> | 10 | 60–100% |

Heart failure (HF)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| HF001. The contractor establishes and maintains a register of patients with heart failure | 4 | |
| Initial diagnosis | | |
| HF002. The percentage of patients with a diagnosis of heart failure (diagnosed on or after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment 3 months before or 12 months after entering on to the register | 6 | 50–90% |
| Ongoing management | | |
| HF003. In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction, the percentage of patients who are currently treated with an ACE-I or ARB | 10 | 60–100% |
| HF004. In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction who are currently treated with an ACE-I or ARB, the percentage of patients who are additionally currently treated with a beta-blocker licensed for heart failure | 9 | 40–65% |

Disease registers for heart failure

There are two disease registers used for the HF indicators for the purpose of calculating APDF:

1. a register of patients with HF is used to calculate APDF for HF001 and HF002

2. a register of patients with HF due to left ventricular systolic dysfunction (LVSD) is used to calculate APDF for HF003 and HF004.

Register 1. is defined in indicator HF001. Register 2. is a sub-set of register 1. and is composed of patients with a diagnostic code for LVSD as well as for HF.

Hypertension (HYP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| HYP001. The contractor establishes and maintains a register of patients with established hypertension | 6 | |
| Ongoing management | | |
| HYP002. The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 150/90 mmHg or less | 10 | 44–84% |
| HYP003. The percentage of patients aged 79 or under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less <i>NICE 2012 menu ID: NM53</i> | 50 | 40–80% |
| HYP004. The percentage of patients with hypertension aged 16 or over and who have not attained the age of 75 in whom there is an assessment of physical activity, using GPPAQ, in the preceding 12 months <i>NICE 2011 menu ID: NM36</i> | 5 | 40–80% |
| HYP005. The percentage of patients with hypertension aged 16 or over and who have not attained the age of 75 who score 'less than active' on GPPAQ in the preceding 12 months, who also have a record of a brief intervention in the preceding 12 months <i>NICE 2011 menu ID: NM37</i> | 6 | 40–80% |

Peripheral arterial disease (PAD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| PAD001. The contractor establishes and maintains a register of patients with peripheral arterial disease <i>NICE 2011 menu ID: NM32</i> | 2 | |
| Ongoing management | | |
| PAD002. The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less | 2 | 40–90% |

| | | |
|---|---|--------|
| <i>NICE 2011 menu ID: NM34</i> | | |
| PAD003. The percentage of patients with peripheral arterial disease in whom the last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less <i>NICE 2011 menu ID: NM35</i> | 3 | 40–90% |
| PAD004. The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken <i>NICE 2011 menu ID: NM33</i> | 2 | 40–90% |

Stroke and transient ischaemic attack (STIA)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| STIA001. The contractor establishes and maintains a register of patients with stroke or TIA | 2 | |
| Initial diagnosis | | |
| STIA002. The percentage of patients with a stroke or TIA (diagnosed on or after 1 April 2008) who have a record of a referral for further investigation between 3 months before or 1 month after the date of the latest recorded stroke or TIA | 2 | 45–80% |
| Ongoing management | | |
| STIA003. The percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less | 5 | 40–75% |
| STIA004. The percentage of patients with stroke or TIA who have a record of total cholesterol in the preceding 12 months | 2 | 50–90% |
| STIA005. The percentage of patients with stroke shown to be non-haemorrhagic, or a history of TIA, whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less <i>NICE 2012 menu ID: NM60</i> | 5 | 40–65% |
| STIA006. The percentage of patients with stroke or TIA who have had influenza immunisation in the preceding 1 September to 31 March | 2 | 55–95% |
| STIA007. The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken | 4 | 57–97% |

Diabetes mellitus (DM)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| DM001. The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed <i>NICE 2011 menu ID: NM41</i> | 6 | |
| Ongoing management | | |
| DM002. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less <i>NICE 2010 menu ID: NM01</i> | 8 | 53–93% |
| DM003. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mmHg or less <i>NICE 2010 menu ID: NM02</i> | 10 | 38–78% |
| DM004. The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5 mmol/l or less | 6 | 40–75% |
| DM005. The percentage of patients with diabetes, on the register, who have a record of an albumin:creatinine ratio test in the preceding 12 months <i>NICE 2012 menu ID: NM59</i> | 3 | 50–90% |
| DM006. The percentage of patients with diabetes, on the register, with a diagnosis of nephropathy (clinical proteinuria) or micro-albuminuria who are currently treated with an ACE-I (or ARBs) | 3 | 57–97% |
| DM007. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59 mmol/mol or less in the preceding 12 months <i>NICE 2010 menu ID: NM14</i> | 17 | 35–75% |
| DM008. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64 mmol/mol or less in the preceding 12 months | 8 | 43–83% |
| DM009. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 75 mmol/mol or less in the preceding 12 months | 10 | 52–92% |
| DM010. The percentage of patients with diabetes, on the register, who have had influenza immunisation in the preceding 1 September to 31 March | 3 | 55–95% |

| | | |
|--|----|--------|
| DM011. The percentage of patients with diabetes, on the register, who have a record of retinal screening in the preceding 12 months | 5 | 50–90% |
| DM012. The percentage of patients with diabetes, on the register, with a record of a foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 12 months <i>NICE 2010 menu ID: NM13</i> | 4 | 50–90% |
| DM013. The percentage of patients with diabetes, on the register, who have a record of a dietary review by a suitably competent professional in the preceding 12 months <i>NICE 2011 menu ID: NM28</i> | 3 | 40–90% |
| DM014. The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register <i>NICE 2011 menu ID: NM27</i> | 11 | 40–90% |
| DM015. The percentage of male patients with diabetes, on the register, with a record of being asked about erectile dysfunction in the preceding 12 months <i>NICE 2012 menu ID: NM51</i> | 4 | 40–90% |
| DM016. The percentage of male patients with diabetes, on the register, who have a record of erectile dysfunction with a record of advice and assessment of contributory factors and treatment options in the preceding 12 months <i>NICE 2012 menu ID: NM52</i> | 6 | 40–90% |

Hypothyroidism (THY)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| THY001. The contractor establishes and maintains a register of patients with hypothyroidism who are currently treated with levothyroxine | 1 | |
| Ongoing management | | |
| THY002. The percentage of patients with hypothyroidism, on the register, with thyroid function tests recorded in the preceding 12 months | 6 | 50–90% |

Asthma (AST)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| AST001. The contractor establishes and maintains a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months | 4 | |
| Initial diagnosis | | |
| AST002. The percentage of patients aged 8 or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before or anytime after diagnosis | 15 | 45–80% |
| Ongoing management | | |
| AST003. The percentage of patients with asthma, on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions <i>NICE 2011 menu ID: NM23</i> | 20 | 45–70% |
| AST004. The percentage of patients with asthma aged 14 or over and who have not attained the age of 20, on the register, in whom there is a record of smoking status in the preceding 12 months | 6 | 45–80% |

Chronic obstructive pulmonary disease (COPD)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| COPD001. The contractor establishes and maintains a register of patients with COPD | 3 | |
| Initial diagnosis | | |
| COPD002. The percentage of patients with COPD (diagnosed on or after 1 April 2011) in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register | 5 | 45–80% |
| Ongoing management | | |
| COPD003. The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the Medical Research Council dyspnoea scale in the preceding 12 months | 9 | 50–90% |

| | | |
|--|---|--------|
| COPD004. The percentage of patients with COPD with a record of FEV ₁ in the preceding 12 months | 7 | 40–75% |
| COPD005. The percentage of patients with COPD and Medical Research Council dyspnoea grade ≥ 3 at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months <i>NICE 2012 menu ID: NM63</i> | 5 | 40-90% |
| COPD006. The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March | 6 | 57-97% |

Dementia (DEM)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| DEM001. The contractor establishes and maintains a register of patients diagnosed with dementia | 5 | |
| Ongoing management | | |
| DEM002. The percentage of patients diagnosed with dementia whose care has been reviewed in a face-to-face review in the preceding 12 months | 15 | 35–70% |
| DEM003. The percentage of patients with a new diagnosis of dementia recorded in the preceding 1 April to 31 March with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded between 6 months before or after entering on to the register <i>NICE 2010 menu ID: NM09</i> | 6 | 45–80% |

Depression (DEP)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Initial diagnosis | | |
| DEP001. The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have had a bio-psychosocial assessment by the point of diagnosis. The completion of the assessment is to be recorded on the same day as the diagnosis is recorded <i>NICE 2012 menu ID: NM49</i> | 21 | 50–90% |
| Initial management | | |
| DEP002. The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have been reviewed not earlier than 10 days after | 10 | 45–80% |

| | | |
|--|--|--|
| and not later than 35 days after the date of diagnosis <i>NICE 2012 menu ID: NM50</i> | | |
|--|--|--|

Disease register for depression

There is no register indicator for the depression indicators. The disease register for the depression indicators for the purpose of calculating the APDF is defined as all patients aged 18 or over, diagnosed on or after 1 April 2006, who have an unresolved record of depression in their patient record.

Mental health (MH)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| MH001. The contractor establishes and maintains a register of patients with schizophrenia, bipolar affective disorder and other psychoses and other patients on lithium therapy | 4 | |
| Ongoing management | | |
| MH002. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan documented in the record, in the preceding 12 months, agreed between individuals, their family and/or carers as appropriate | 6 | 40–90% |
| MH003. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months <i>NICE 2010 menu ID: NM17</i> | 4 | 50–90% |
| MH004. The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 12 months <i>NICE 2010 menu ID: NM18</i> | 5 | 45–80% |
| MH005. The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose or HbA1c in the preceding 12 months <i>NICE 2011 menu ID: NM42</i> | 5 | 45–80% |
| MH006. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 12 months <i>NICE 2010 menu ID: NM16</i> | 4 | 50–90% |
| MH007. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 12 months <i>NICE 2010 menu ID: NM15</i> | 4 | 50–90% |

| | | |
|---|---|--------|
| MH008. The percentage of women aged 25 or over and who have not attained the age of 65 with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years <i>NICE 2010 menu ID: NM20</i> | 5 | 45–80% |
| MH009. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months <i>NICE 2010 menu ID: NM21</i> | 1 | 50–90% |
| MH010. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months <i>NICE 2010 menu ID: NM22</i> | 2 | 50–90% |

Disease register for mental health

Due to the way repeat prescribing works in general practice, patients on lithium therapy are defined as patients with a prescription of lithium within the preceding six months.

Remission from serious mental illness

Making an accurate diagnosis of remission can be challenging. In the absence of strong evidence of what constitutes ‘remission’ from serious mental illness, clinicians should only consider using the remission codes if the patient has been in remission for at least five years, that is where there is:

- no record of anti-psychotic medication
- no mental health in-patient episodes; and
- no secondary or community care mental health follow-up for at least five years.

Where a patient is recorded as being ‘in remission’ they remain on the MH001 register (in case their condition relapses at a later date) but they are excluded from the denominator for mental health indicators MH002-MH008.

The accuracy of this coding should be reviewed on an annual basis by a clinician. Should a patient who has been coded as ‘in remission’ experience a relapse then this should be recorded as such in their patient record.

In the event that a patient experiences a relapse and is coded as such, they will once again be included in all the associated indicators for schizophrenia, bipolar affective disorder and other psychoses.

Where a patient has relapsed after being recorded as being in remission, their care plan should be updated subsequent to the relapse. Care plans dated prior to the date of the relapse will not be acceptable for QOF purposes.

Cancer (CAN)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| CAN001. The contractor establishes and maintains a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers diagnosed on or after 1 April 2003' | 5 | |
| Ongoing management | | |
| CAN002. The percentage of patients with cancer, diagnosed within the preceding 15 months, who have a patient review recorded as occurring within 3 months of the contractor receiving confirmation of the diagnosis <i>NICE 2012 menu ID: NM62</i> | 6 | 50–90% |

Chronic kidney disease (CKD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| CKD001. The contractor establishes and maintains a register of patients aged 18 or over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD) | 6 | |
| Ongoing management | | |
| CKD002. The percentage of patients on the CKD register in whom the last blood pressure reading (measured in the preceding 12 months) is 140/85 mmHg or less | 11 | 41–81% |
| CKD003. The percentage of patients on the CKD register with hypertension and proteinuria who are currently treated with an ACE-I or ARB | 9 | 45–80% |
| CKD004. The percentage of patients on the CKD register whose notes have a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months | 6 | 45–80% |

Epilepsy (EP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| EP001. The contractor establishes and maintains a register of patients aged 18 or over receiving drug treatment for epilepsy | 1 | |

| | | |
|---|---|--------|
| Ongoing management | | |
| EP002. The percentage of patients aged 18 or over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 12 months | 6 | 45–70% |
| EP003. The percentage of women aged 18 or over and who have not attained the age of 55 who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 12 months <i>NICE 2010 menu ID: NM03</i> | 3 | 50–90% |

Learning disability (LD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| LD001. The contractor establishes and maintains a register of patients aged 18 or over with learning disabilities | 4 | |
| Ongoing management | | |
| LD002. The percentage of patients on the learning disability register with Down's Syndrome aged 18 or over who have a record of blood TSH in the preceding 12 months (excluding those who are on the thyroid disease register) <i>NICE 2010 menu ID: NM04</i> | 3 | 45–70% |

Osteoporosis: secondary prevention of fragility fractures

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| OST001. The contractor establishes and maintains a register of patients: 1. Aged 50 or over and who have not attained the age of 75 with a record of a fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan, and 2. Aged 75 or over with a record of a fragility fracture on or after 1 April 2012 <i>NICE 2011 menu ID: NM29</i> | 3 | |
| Ongoing management | | |
| OST002. The percentage of patients aged 50 or over and who have not attained the age of 75, with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent <i>NICE 2011 menu ID: NM30</i> | 3 | 30–60% |

| | | |
|---|---|--------|
| OST003. The percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2012, who are currently treated with an appropriate bone-sparing agent <i>NICE 2011 menu ID: NM31</i> | 3 | 30–60% |
|---|---|--------|

Disease register for osteoporosis

Although the register indicator OST001 defines two separate registers, the disease register for the purpose of calculating the APDF is defined as the sum of the number of patients on both registers.

Rheumatoid arthritis (RA)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| RA001. The contractor establishes and maintains a register of patients aged 16 or over with rheumatoid arthritis <i>NICE 2012 menu ID: NM55</i> | 1 | |
| Ongoing management | | |
| RA002. The percentage of patients with rheumatoid arthritis, on the register, who have had a face-to-face review in the preceding 12 months <i>NICE 2012 menu ID: NM58</i> | 5 | 40–90% |
| RA003. The percentage of patients with rheumatoid arthritis aged 30 or over and who have not attained the age of 85 who have had a cardiovascular risk assessment using a CVD risk assessment tool adjusted for RA in the preceding 12 months <i>NICE 2012 menu ID: NM56</i> | 7 | 40–90% |
| RA004. The percentage of patients aged 50 or over and who have not attained the age of 91 with rheumatoid arthritis who have had an assessment of fracture risk using a risk assessment tool adjusted for RA in the preceding 24 months <i>NICE 2012 menu ID: NM57</i> | 5 | 40–90% |

Palliative care (PC)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| PC001. The contractor establishes and maintains a register of all patients in need of palliative care/support irrespective of age | 3 | |

| | | |
|---|---|--|
| Ongoing management | | |
| PC002. The contractor has regular (at least 3 monthly) multi-disciplinary case review meetings where all patients on the palliative care register are discussed | 3 | |

Disease register for palliative care

There is no APDF calculation in respect of the palliative care indicators. In the rare case of a nil register at year end, if a contractor can demonstrate that it established and maintained a register during the financial year then they will be eligible for payment for PC001.

Section 2.2: Public health domain

Section 2.2.1: Public health domain

Section 2.2.1. applies to all contractors participating in QOF.

Cardiovascular disease – primary prevention (CVD-PP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Ongoing management | | |
| CVD-PP001. In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an assessment tool agreed with the NHS CB) of $\geq 20\%$ in the preceding 12 months: the percentage who are currently treated with statins <i>NICE 2011 menu ID: NM26</i> | 10 | 40–90% |
| CVD-PP002. The percentage of patients diagnosed with hypertension (diagnosed on or after 1 April 2009) who are given lifestyle advice in the preceding 12 months for: smoking cessation, safe alcohol consumption and healthy diet | 5 | 40–75% |

Disease register for CVD-PP

The disease register for the purpose of calculating the APDF for the CVD-PP indicators is defined as follows: patients diagnosed with a first episode of hypertension on or after 1 April 2009, excluding patients with the following conditions:

- CHD or angina
- stroke or TIA
- peripheral vascular disease
- familial hypercholesterolemia
- diabetes
- CKD (US National Kidney Foundation: Stage 3 to 5 CKD)

Blood pressure (BP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| BP001. The percentage of patients aged 40 or over who have a record of blood pressure in the preceding 5 years <i>NICE 2012 menu ID: NM61</i> | 15 | 50–90% |

Obesity (OB)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| OB001. The contractor establishes and maintains a register of patients aged 16 or over with a BMI ≥ 30 in the preceding 12 months | 8 | |

Smoking (SMOK)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| SMOK001. The percentage of patients aged 15 or over whose notes record smoking status in the preceding 24 months | 11 | 50–90% |
| SMOK002. The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months <i>NICE 2011 menu ID: NM38</i> | 25 | 50–90% |
| Ongoing management | | |
| SMOK003. The contractor supports patients who smoke in stopping smoking by a strategy which includes providing literature and offering appropriate therapy | 2 | |
| SMOK004. The percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 24 months <i>NICE 2011 menu ID: NM40</i> | 12 | 40–90% |
| SMOK005. The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 12 months <i>NICE 2011 menu ID: NM39</i> | 25 | 56–96% |

Disease register for smoking

The disease register for the purpose of calculating the APDF for SMOK002 and SMOK005 is defined as the sum of the number of patients on the disease registers for each of the conditions listed in the indicators. Any patient who has one or more co-morbidities e.g. diabetes and CHD, is only counted once on the register for SMOK002 and SMOK005.

There is no APDF calculation for SMOK001, SMOK003 and SMOK004.

Requirements for recording smoking status

Smokers

For patients who smoke this recording should be made in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002.

Non-smokers

It is recognised that life-long non-smokers are very unlikely to start smoking and indeed find it quite irritating to be asked repeatedly regarding their smoking status. Smoking status for this group of patients should be recorded in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002 until the end of the financial year in which the patient reaches the age of 25.

Once a patient is over the age of 25 years (e.g. in the financial year in which they reach their age of 26 or in any year following that financial year) to be classified as a non-smoker they should be recorded as:

- never smoked after their 25th birthday for SMOK001
- never smoked which is both after their 25th birthday and after the earliest diagnosis date for the disease which led to the patients inclusion on the SMOK002 register (e.g. one of the conditions listed on the SMOK002 register).

Ex-smokers

There are two ways in which a patient can be recorded as an ex-smoker. Ex-smokers can be recorded as such in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002. Practices may choose to record ex-smoking status on an annual basis for three consecutive financial years and after that smoking status need only be recorded if there is a change. This is to recognise that once a patient has been an ex-smoker for more than three years they are unlikely to restart.

Section 2.2.2: Public health (PH) domain – additional services sub domain

Section 2.2.2. applies to contractors who provide additional services under the terms of the GMS contract and participate in QOF.

Cervical screening (CS)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| CS001. The contractor has a protocol that is in line with national guidance agreed with the NHS CB for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate sample rates | 7 | |
| CS002. The percentage of women aged 25 or over and who have not attained the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years | 11 | 45–80% |
| CS003. The contractor ensures there is a system for informing all women of the results of cervical screening tests | 2 | |
| CS004. The contractor has a policy for auditing its cervical screening service and performs an audit of inadequate cervical screening tests in relation to individual sample-takers at least every 2 years | 2 | |

Child health surveillance (CHS)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| CHS001. Child development checks are offered at intervals that are consistent with national guidelines and policy agreed with the NHS CB | 6 | |

Maternity services (MAT)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| MAT001. Antenatal care and screening are offered according to current local guidelines agreed with the NHS CB | 6 | |

Contraception (CON)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| CON001. The contractor establishes and maintains a register of women aged 54 or under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS | 4 | |
| CON002. The percentage of women, on the register, prescribed an oral or patch contraceptive method in the preceding 12 months who have also received information from the contractor about long acting reversible methods of contraception in the preceding 12 months | 3 | 50–90% |
| CON003. The percentage of women, on the register, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor who have received information from the contractor about long acting reversible methods of contraception at the time of or within 1 month of the prescription | 3 | 50–90% |

Section 2.3. Quality and productivity (QP) domain

Section 2.3. applies to all contractors participating in QOF.

| Indicator | Points |
|--|--------|
| QP001. The contractor reviews data on secondary care outpatient referrals, for patients on the contractor's registered list, provided by the NHS CB | 5 |
| QP002. The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its secondary care outpatient referral data with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements | 5 |
| QP003. The contractor engages with the development of and follows 3 care pathways, agreed with the NHS CB, for improving the management of patients in the primary care setting (unless in individual cases they justify clinical reasons for not doing this) to avoid inappropriate outpatient referrals | 11 |
| QP004. The contractor reviews data on emergency admissions, for patients on the contractor's registered list, provided by the NHS CB | 5 |
| QP005. The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its data on emergency admissions with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements | 15 |
| QP006. The contractor engages with the development of and follows 3 care pathways, agreed with the NHS CB (unless in individual cases they justify clinical reasons for not doing this), in the management and treatment of patients in aiming to avoid emergency admissions | 28 |
| QP007. The contractor reviews data on accident and emergency attendances, for patients on the contractor's registered list, provided by the NHS CB. The review will include consideration of whether access to clinicians in the contractor's premises is appropriate, in light of the patterns on accident and emergency attendance | 7 |
| QP008. The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its data on accident and emergency attendances with that of the other contractors. The contractor agrees an improvement plan with the group. The review should include, if appropriate, proposals for improvement to access arrangements in the contractor's premises in order to reduce avoidable accident and emergency attendances and may also include proposals for commissioning or service design improvements | 9 |
| QP009. The contractor implements the improvement plan that aims to reduce avoidable accident and emergency attendances | 15 |

Composition of external review groups

For indicators QP002, QP005 and QP008, the contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out the

external review. The group should contain a minimum of six practices unless the NHS CB agrees otherwise.

Accident and emergency (A&E) attendances

For the purposes of QP007, QP008 and QP009 attendances at A&E are defined as those patients seen in a Type 1 A&E department for both first and follow-up attendances for the same condition (excluding planned follow-ups). The definition in the document A&E Clinical Quality Indicators Data Definitions⁶ defines a Type 1 A&E department as "a consultant led 24-hour service with full resuscitation facilities and designated accommodation for the reception of A&E patients".

In circumstances where there is no Type 1 A&E department or where the majority of patients do not use a Type 1 A&E department, contractors should identify the most frequently used local urgent care service and agree with the NHS CB those that will be included (for example Type 2 and/or Type 3 A&E departments). The type of A&E attendance will be limited to both first and follow-up attendances for the same condition (excluding planned follow-ups).

⁶ DH. A&E Clinical Quality Indicators Data Definitions.
www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_122892.pdf

Section 2.4: Patient experience (PE) domain

Section 2.4. applies to all contractors participating in QOF.

| Indicator | Points |
|--|-----------|
| <p>PE001 (Length of consultations)</p> <p>The contractor ensures that the length of routine booked appointments with doctors in the surgery is not less than 10 minutes. If the contractor routinely admits extra patients during booked surgeries, then the average booked consultation length should allow for the average number of extra patients seen in a surgery session such that the length of booked appointments is not less than 10 minutes. If the extra patients are seen at the end of surgery, then it is not necessary to make this adjustment. For contractors with only an open surgery system, the average face-to-face time spent by the GP with the patient is not less than 8 minutes. Contractors that routinely operate a mixed economy of booked and open surgeries should ensure that the length of booked appointments is not less than 10 minutes and the length of open surgery appointments is not less than 8 minutes.</p> | <p>33</p> |

Section 3: Clinical domain

Clinical domain introduction

The clinical indicators are organised by disease category. The disease categories have been selected for the following reasons:

- where the responsibility for ongoing management rests principally with the general practitioner and the primary care team
- where there is good evidence of the health benefits likely to result from improved primary care – in particular if there is an accepted national clinical guideline
- where the disease area is a priority.

Where evidence-based national guidance has not been included, this has usually been to limit the size and complexity of the framework, where this is the case links and/or references have been included.

A summary of the indicators for each disease category is provided at the beginning of each section.

Establishing and maintaining disease registers is good professional practice and ensures a defined population is identified for undertaking further evidence-based interventions. Disease registers also make it possible to call and recall patients effectively to provide systematic care and to undertake care audits.

For each indicator detailed guidance supporting the indicator is provided under 'rationale' and where appropriate additional detail around 'reporting and verification' requirements are also included.

The drugs which count towards achievement for the clinical and health improvement indicators are included in the Business Rules for the relevant year. The code clusters within the Business Rules are updated each April and October. For this reason, references to acceptable drugs are not included in the guidance. The Business Rules can be found on the PCC website⁷.

'xxx.1 Rationale'

This sub section explains why the indicator has been selected. Wherever possible, the evidence source is described and if available, a web address (hyperlink in an electronic version of this guidance) is provided. When available, national guidelines have been used as the main evidence source, but individual papers are also quoted.

In some areas, more extensive information is provided. The aim is to achieve a balance of providing helpful information without attempting to provide a textbook of medicine or replicating guidelines.

⁷ Primary Care Commissioning. www.pcc-cic.org.uk

The indicators included in the QOF are not intended to cover all the process issues or outcomes for each disease category. In some areas, the indicators cover only a very small part of the care for those conditions.

'xxx.2 Reporting and verification'

Annex D to the SFE sets out the requirements in relation to verification. The contractor is required to ensure that it is able to provide any information that the NHS CB may reasonably request of it to demonstrate that it is entitled to each achievement point to which it says it is entitled and the contractor is required to make that information available to the NHS CB on request. In verifying that an indicator has been achieved and information correctly recorded, the NHS CB may chose to inspect the output from a computer search that has been used to provide information on the indicator, or a sample of patient records relevant to the indicator.

See section one for full details on reporting and verification.

Atrial fibrillation (AF)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| AF001. The contractor establishes and maintains a register of patients with atrial fibrillation | 5 | |
| Ongoing management | | |
| AF002. The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHADS ₂ risk stratification scoring system in the preceding 12 months (excluding those whose previous CHADS ₂ score is greater than 1) <i>NICE 2011 menu ID: NM24</i> | 10 | 40–90% |
| AF003. In those patients with atrial fibrillation in whom there is a record of a CHADS ₂ score of 1 (latest in the preceding 12 months), the percentage of patients who are currently treated with anti-coagulation drug therapy or anti-platelet therapy <i>NICE 2011 menu ID: NM45</i> | 6 | 57–97% |
| AF004. In those patients with atrial fibrillation whose latest record of a CHADS ₂ score is greater than 1, the percentage of patients who are currently treated with anti-coagulation therapy <i>NICE 2011 menu ID: NM46</i> | 6 | 40–70% |

AF – rationale for inclusion of indicator set

AF is common and significant cause of morbidity and mortality. The age-specific prevalence of AF is rising, presumably due to improved survival of patients with CHD (the commonest underlying cause of AF⁸). One per cent of a typical practice population will be in AF; five per cent of patients aged 65 or over and nine per cent of patients aged 75 or over. AF is associated with a five-fold increase in risk of stroke⁹.

SIGN clinical guideline 94. Cardiac arrhythmias in CHD 2007.
www.sign.ac.uk/guidelines/fulltext/94/index.html

AF indicator 001

The contractor establishes and maintains a register of patients with atrial fibrillation

⁸ Psaty et al. Circulation 1997; 96: 2455-61

⁹ Wolf et al. Stroke 1991; 22: 983-88

AF001.1 Rationale

The register includes all patients with an initial event; paroxysmal; persistent and permanent AF.

AF 001.2 Reporting and verification

See indicator wording for requirement criteria.

AF indicator 002 (NICE 2011 menu ID: NM24)

The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHADS₂ risk stratification scoring system in the preceding 12 months (excluding those whose previous CHADS₂ score is greater than 1)

AF 002.1 Rationale

A cornerstone of managing AF is deciding whether or not to use an anti-coagulant. Despite strong evidence supporting the efficacy of anti-coagulants in preventing thromboembolism related to AF¹⁰, many patients with AF who would benefit from their use are not prescribed them¹¹.

In order to decide whether or not a patient with AF needs anti-coagulation therapy, it is necessary for the clinician to assess their future risk of stroke. This indicator therefore incentivises the use of a stroke risk stratification tool in general practice for patients with AF.

To help clinicians decide which management path to choose, several tools have been developed to estimate the risk of stroke on the basis of clinical factors^{12,13,14,15}. The scoring system recommended for QOF is CHADS₂, which is validated and particularly suitable for identifying high-risk AF patients, while also being relatively simple to use¹⁶. The CHADS₂ system is based on the AF Investigators I Study (AFI1) and Stroke Prevention in AF I Study (SPAF1) risk criteria^{17, 18}.

¹⁰ Aguilar M, Hart R, Pearce L. Oral anti-coagulants versus anti-platelet therapy for preventing stroke in patients with non-valvular AF and no history of stroke or TIA 2007. Cochrane Database of Systematic Reviews Issue 3: CD006186

¹¹ Ogilvie IM, Newton N, Welner S et al. Underuse of oral anti-coagulants in AF: a systematic review 2010. Am Journal of Medicine 123: 638-45

¹² RCP. National Collaborating Centre for Chronic Conditions. AF: national clinical guideline for management in primary and secondary care 2006.

¹³ Fang MC, Go AS, Chang Y et al. Comparison of risk stratification schemes to predict thromboembolism in people with non-valvular AF 2008. Journal of the Am College of Cardiology 51: 810-5

¹⁴ Van Staa TP, Setakis E, Di Tanna GL et al. A comparison of risk stratification schemes for stroke in 79,884 AF patients in general practice 2011. Journal of Thrombosis Haemostasis 9: 39-48

¹⁵ Olesen JB, Lip GYH, Hansen ML et al. Validation of risk stratification schemes for predicting stroke and thromboembolism in patients with AF: nationwide cohort study 2011. BMJ 342: d124

¹⁶ Gage BF, Waterman AD, Shannon W et al. Validation of clinical classification schemes for predicting stroke: results from the National Registry of AF 2001. Journal of the American Medical Association (AMA) 285: 2864-70

¹⁷ Laupacis A, Boysen G, Conolly S et al. Risk factors for stroke and efficacy of antithrombotic therapy in AF: analysis of pooled data from five RCTs 1994. Archives of Internal Medicine 154: 1449-57

¹⁸ SPAF Investigators. Predictors of thromboembolism in AF: I. Clinical features of patients at risk 1992. Annals of Internal Medicine 116: 1-5

The revised CHADS₂ system scores one point, up to a maximum of six, for each of the following risk factors (except previous stroke or TIA, which scores double, hence the '2'):

1. C - congestive HF (one point)
2. H - hypertension (one point)
3. A - age 75 or over (one point)
4. D - diabetes mellitus (one point)
5. S₂ - previous stroke or TIA (two points)

A score of zero is classified as low risk, one is moderate risk and two or more is high risk.

The intention of this indicator is that all patients on the contractor's AF disease register will be assessed. The risk score can be calculated through a review of the patient's patient record.

AF 002.2 Reporting and verification

See indicator wording for requirement criteria. This indicator excludes patients whose previous CHADS₂ score is greater than one.

The NHS CB may wish to discuss with contractors the processes they have in place for performing this calculation and how any results indicating that anti-coagulation may be required are acted upon.

AF indicator 003 (NICE 2011 menu ID: NM45)

In those patients with atrial fibrillation in whom there is a record of a CHADS₂ score of 1 (latest in the preceding 12 months), the percentage of patients who are currently treated with anti-coagulation drug therapy or anti-platelet therapy

AF 003.1 Rationale

AF is the most common sustained cardiac arrhythmia and if left untreated is a significant risk factor for stroke and other morbidities.

There is evidence that stroke risk can be substantially reduced by warfarin (approximately 66 per cent risk reduction) and less so by aspirin (approximately 22 per cent risk reduction)¹⁹.

Evidence from the Birmingham AF Treatment of the Aged Study (BAFTA)²⁰ and AF Clopidogrel Trial with Irbesartan for prevention of Vascular Events (ACTIVE-W)²¹ studies

¹⁹ No authors listed. Risk factors for stroke and efficacy of anti-thrombotic therapy in AF: analysis of pooled data from five RCTs 1994. Archives of Internal Medicine 154: 1449-57

²⁰ Mant J, Hobbs FD, Fletcher K et al. Warfarin versus aspirin for stroke prevention in an elderly community population with AF, BAFTA: an RCT 2007. Lancet 370: 493-503

suggests that not only is warfarin more effective than aspirin, but that it is not as unsafe (in terms of risk of serious haemorrhage) as previously thought. For example, in the BAFTA trial, the relative risk (RR) for stroke for patients treated with anti-coagulation versus aspirin was 0.46 (95 per cent confidence interval [CI] 0.26 to 0.79). The same study showed no significant difference in the rate of haemorrhage between the warfarin and aspirin arms of the study (RR 0.88, 95 per cent CI 0.46 to 1.63), which suggested a shift in the balance between the risks and benefits of warfarin compared with aspirin. However, to date no meta-analysis has been identified combining the results of studies comparing the two treatments for the outcome of haemorrhage.

Anti-coagulation would not necessarily be indicated if the episode of AF was an isolated event that was not expected to re-occur (for example, one-off AF with a self-limiting cause).

This indicator uses the CHADS₂ risk stratification scoring system to inform treatment options. The use of a risk stratification scoring system is in line with European Society of Cardiology (ESC) guidance that states that 'recommendations for therapy should be based on the presence (or absence) of risk factors for stroke and thromboembolism'.

Where the CHADS₂ score is 0 (low risk), then the patient can be offered treatment with aspirin²². Where the CHADS₂ score is 1 (moderate risk) then either aspirin or anti-coagulants can be offered.

AF 003.2 Reporting and verification

See indicator wording for requirement criteria.

AF indicator 004 (NICE 2011 menu ID: NM46)

In those patients with atrial fibrillation whose latest record of a CHADS₂ score is greater than 1, the percentage of patients who are currently treated with anti-coagulation therapy

AF 004.1 Rationale

See AF 003.1

Where the CHADS₂ score is greater than 1 the patient is at high risk of having a future stroke and the patient should be offered treatment with anti-coagulation drug therapy.

AF 004.2 Reporting and verification

See indicator wording for requirement criteria.

²¹ Healey JS, Hart RG, Pogue J et al. Risks and benefits of oral anti-coagulation compared with clopidogrel plus aspirin in patients with AF according to stroke risk: the ACTIVE-W 2008. *Stroke* 39: 1482-6

²² Guidelines for the management of AF. The Task Force for the Management of AF of the ESC 2010. *Euro Heart Journal* 31: 2369-429. www.escardio.org/guidelines-surveys/esc-guidelines/GuidelinesDocuments/guidelines-afib-FT.pdf

Secondary prevention of coronary heart disease (CHD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| CHD001. The contractor establishes and maintains a register of patients with coronary heart disease | 4 | |
| Ongoing management | | |
| CHD002. The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less | 17 | 53–93% |
| CHD003. The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less | 17 | 45–85% |
| CHD004. The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March | 7 | 56–96% |
| CHD005. The percentage of patients with coronary heart disease with a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken | 7 | 56–96% |
| CHD006. The percentage of patients with a history of myocardial infarction (on or after 1 April 2011) currently treated with an ACE-I (or ARB if ACE-I intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin <i>NICE 2010 menu ID: NM07</i> | 10 | 60–100% |

CHD – rationale for inclusion of indicator set

CHD is the single most common cause of premature death in the UK. The research evidence relating to the management of CHD is well established and if implemented can reduce the risk of death from CHD and improve the quality of life for patients. This indicator set focuses on the management of patients with established CHD consistent with clinical priorities.

CHD indicator 001

The contractor establishes and maintains a register of patients with coronary heart disease

CHD 001.1 Rationale

The register includes all patients who have had coronary artery revascularisation procedures, such as coronary artery bypass grafting (CABG). Patients with Cardiac Syndrome X are not included on the CHD register.

Contactors should record those with a past history of myocardial infarction (MI) as well as those with a history of CHD.

CHD 001.2 Reporting and verification

See indicator wording for requirement criteria.

CHD indicator 002

The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less

CHD 002.1 Rationale

This indicator measures the intermediate health outcome of a blood pressure of 150/90 mmHg or less in patients with hypertension and CHD. Its intent is to promote the secondary prevention of cardiovascular disease (CVD) through satisfactory blood pressure control. This intermediate outcome can be achieved through lifestyle advice and the use of drug therapy.

The NICE clinical guideline on hypertension²³ sets blood pressure thresholds for the initiation of drug treatment of hypertension and these are outlined in the hypertension indicator set. To summarise, patients with CHD and stage one hypertension are recommended drug therapy for hypertension.

The NICE clinical guideline on hypertension recommends a target blood pressure below 140/90 mmHg in patients aged 79 or under with treated hypertension and a clinic blood pressure below 150/90 mmHg in patients aged 80 or over, with treated hypertension. For the purpose of QOF, an audit standard of 150/90 mmHg has been adopted for this indicator.

A major overview of randomised trials showed that a reduction of 5–6 mmHg in blood pressure sustained over five years reduces coronary events by 20–25 per cent in patients with CHD²⁴.

CHD 002.2 Reporting and verification

See indicator wording for requirement criteria.

CHD indicator 003

The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less

²³ NICE clinical guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://publications.nice.org.uk/hypertension-cg127>

²⁴ Collins et al. Lancet 1990; 335: 827-38

CHD 003.1 Rationale

This indicator measures the intermediate health outcome of total cholesterol of 5 mmol/l or less in patients with established CHD. Its intent is to promote the secondary prevention of CVD. This intermediate outcome can be achieved through lifestyle advice and the use of drug therapy.

The NICE clinical guideline on lipid modification²⁵ recommends that treatment for the secondary prevention of CVD is to be initiated with simvastatin 40 mg. If there are potential drug interactions, or simvastatin 40 mg is contraindicated, a lower dose or alternative statin preparation may be chosen.

For patients taking statins for secondary prevention, NICE recommends that clinicians consider increasing to simvastatin 80 mg or a drug of similar efficacy and acquisition cost if either a total cholesterol of less than 4 mmol/l or a low density lipoprotein (LDL) cholesterol of less than 2 mmol/l is not attained. Any decision to offer a higher intensity statin needs to take into account informed preference, co-morbidities, multiple drug therapy and the benefit and risks of treatment. The guideline developers noted that the use of a target figure can be helpful in guiding increases of lipid lowering drugs as long as this figure is intended to guide treatment rather than be a figure patients are expected to achieve.

The NICE clinical guideline on lipid modification recommends that an 'audit' level of total cholesterol of 5 mmol/l is used to assess progress in populations or groups of people with CVD. The guidance here is given in terms of total cholesterol.

CHD 003.2 Reporting and verification

See indicator wording for requirement criteria.

CHD indicator 004

The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March

CHD 004.1 Rationale

This is a current recommendation from the Chief Medical Officer (CMO) and the Joint Committee on Vaccination and Immunisation (JCVI).

Further information

DH. Influenza. <http://www.dh.gov.uk/health/category/policy-areas/public-health/influenza/>

CHD 004.2 Reporting and verification

See indicator wording for requirement criteria.

²⁵ NICE clinical guideline CG67. Lipid modification 2008. <http://www.nice.org.uk/guidance/CG067>

From April 2012, the FLU_COD cluster in the Business Rules was replaced. Contractors should note the change and use the new codes for recording purposes.

CHD indicator 005

The percentage of patients with coronary heart disease with a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken

CHD 005.1 Rationale

Both NICE^{26, 27} and SIGN^{28, 29} clinical guidelines recommend that aspirin (75 – 150 mg per day) is given routinely and continued for life in all patients with CHD unless there is a contraindication. Clopidogrel (75 mg/day) is an effective alternative in patients with contraindications to aspirin, or who are intolerant of aspirin. Aspirin should be avoided in patients who are anti-coagulated.

CHD 005.2 Reporting and verification

See indicator wording for requirement criteria.

CHD indicator 006 (NICE 2010 menu ID: NM07)

The percentage of patients with a history of myocardial infarction (on or after 1 April 2011) currently treated with an ACE-I (or ARB if ACE-I intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin

CHD 006.1 Rationale

There is evidence from meta-analyses and RCTs (level one evidence) for a range of relevant health outcomes, including mortality, to support all patients who have had an acute MI being offered treatment with a combination of the following drugs:

- an ACE-I OR ARB if ACE-I intolerant
- aspirin
- a beta-blocker
- statin.

There is also health economic evidence to suggest that these drug interventions are cost-effective. The evidence presented here is summarised from NICE clinical guideline CG48.

²⁶ NICE clinical guideline CG48. Secondary prevention in primary and secondary care for patients following MI 2007. <http://www.nice.org.uk/CG048>

²⁷ NICE clinical guideline CG126. Management of stable angina 2011. <http://www.nice.org.uk/CG126>

²⁸ SIGN clinical guideline 96. Management of stable angina 2007. Grade A recommendation. www.sign.ac.uk/guidelines/fulltext/96/index.html

²⁹ SIGN clinical guideline 97. Risk estimation and the prevention of CVD 2007. Grade A recommendation. www.sign.ac.uk/guidelines/fulltext/97/index.html

ACE-I

In the studies reviewed, short-term treatment with an ACE-I in unselected patients immediately after an MI was associated with a small reduction in mortality.

Long-term treatment with an ACE-I in patients with signs of heart failure (HF) and/or LVSD who have recently experienced an MI was associated with a substantial reduction in all-cause mortality, recurrent MI and re-admission for HF. Where patients are intolerant of an ACE-I (for example because of a cough or allergy) it is recommended that an ARB is substituted.

Aspirin and anti-platelet therapy

In the studies reviewed, treatment with aspirin after an MI reduced the risk of death and cardiovascular events. In a subgroup of patients with recent MI, aspirin and clopidogrel (an alternative anti-platelet therapy) have similar cardiovascular benefits.

Warfarin

Patients may be treated with anti-coagulants when they are intolerant of aspirin and an alternative anti-platelet therapy or for the management of co-morbid conditions such as AF and HF. Where a patient is treated with anti-coagulant therapy, anti-platelet therapy may not be clinically appropriate. For the purpose of this indicator, anti-coagulant therapy will be included in the 'aspirin or an alternative anti-platelet therapy' component of this indicator to cover this cohort of patients.

Beta-blocker

In the studies reviewed, in unselected patients after acute MI, long-term treatment with beta-blockers was associated with reduced mortality compared with placebo.

Statins

In a meta-analysis of primary and secondary prevention studies, treatment with a statin was associated with a reduction in all-cause mortality and cardiovascular mortality.

Further information

NICE technology appraisal TA94. Statins for the prevention of cardiovascular events in patients at increased risk of developing CVD or those with established CVD 2006.

<http://www.nice.org/uk/guidance/TA94>

NICE clinical guideline CG67. Lipid modification 2007.

<http://www.nice.org.uk/nicemedia/live/11982/40742/40742.pdf>

CHD 006.2 Reporting and verification

This indicator requires a patient to be on four drugs, one from each of the following categories:

- an ACE-I OR an ARB if ACE intolerant; and
- either aspirin OR an alternative anti-platelet OR anti-coagulant therapy; and
- a beta-blocker; and

- a statin.

A patient will therefore be counted towards the target if they are:

- a. receiving an ACE-I AND receiving either aspirin or an alternative anti-platelet or anti-coagulant therapy AND receiving a beta-blocker AND receiving a statin
- b. contraindicated for an ACE-I BUT receiving an ARB AND receiving either aspirin or an alternative anti-platelet or anti-coagulant therapy AND receiving a beta-blocker AND receiving a statin.

A patient will not be included in the denominator if they are:

- a. exception reported using one the nine QOF exception reporting criteria (unless they have a contraindication as per 'b' above but are receiving one of the alternative drugs)
- b. receiving a drug from the last three groups but contraindicated for both an ACE-I and an ARB.

A patient will be included in the denominator and not in the numerator if they are:

- a. not appropriately exception coded
- b. not receiving the medicines described above.

Heart failure (HF)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| HF001. The contractor establishes and maintains a register of patients with heart failure | 4 | |
| Initial diagnosis | | |
| HF002. The percentage of patients with a diagnosis of heart failure (diagnosed on or after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment 3 months before or 12 months after entering on to the register | 6 | 50–90% |
| Ongoing management | | |
| HF003. In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction, the percentage of patients who are currently treated with an ACE-I or ARB | 10 | 60–100% |
| HF004. In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction who are currently treated with an ACE-I or ARB, the percentage of patients who are additionally currently treated with a beta-blocker licensed for heart failure | 9 | 40–65% |

HF – rationale for inclusion of indicator set

HF represents the only major cardiovascular disease with increasing prevalence and is responsible for dramatic impairment of quality of life, carries a poor prognosis for patients and is very costly for the NHS to treat (second only to stroke). This indicator set refers to all patients with HF unless specified otherwise.

HF indicator 001

The contractor establishes and maintains a register of patients with heart failure

HF 001.1 Rationale

All patients with a diagnosis of HF, are included on the register.

HF 001.2 Reporting and verification

See indicator wording for requirement criteria.

There are two disease registers used for the purpose of calculating APDF for the HF indicators:

1. a register of patients with HF is used to calculate APDF for HF001 and HF002

2. a register of patients with HF due to left ventricular systolic dysfunction (LVSD) is used to calculate APDF for HF003 and HF004.

Register 1. is defined in indicator HF001. Register 2. is a sub-set of register 1. and is composed of patients with a diagnostic code for LVSD as well as HF.

HF indicator 002

The percentage of patients with a diagnosis of heart failure (diagnosed on or after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment 3 months before or 12 months after entering on to the register

HF 002.1 Rationale

This indicator requires that all patients with suspected HF are investigated³⁰ and this is expected to involve, as a minimum, further specialist investigation (such as echocardiography) and often specialist opinion. Serum natriuretic peptides can be used to determine whether patients with clinically suspected HF need a referral for echocardiography and their use is recommended as below. Specialists may include GPs identified by the NHS CB as having a special interest in HF. Many HF patients will be diagnosed following specialist referral or during hospital admission and some will also have their diagnosis confirmed by tests such as cardiac scintigraphy or angiography rather than echocardiography.

Current NICE guidance^{31,32} recommends that patients with suspected HF receive both echocardiography and specialist assessment. The guidance also recommends that serum natriuretic peptides are measured in patients with suspected HF without previous MI. Patients with suspected HF who have had a previous MI or who have very high levels of serum natriuretic peptide are considered to require urgent referral due to their poor prognosis. The SIGN clinical guideline on the management of chronic HF³³ recommends that echocardiography is performed in patients with suspected HF who have either a raised serum natriuretic peptide or abnormal electrocardiograph result to confirm the diagnosis and establish the underlying cause.

HF 002.2 Reporting and verification

See indicator wording for requirement criteria.

HF indicator 003

In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction, the percentage of patients who are currently treated with an ACE-I or ARB

³⁰ Senni et al. J Am College of Cardiology. 1999; 33(1): 164-70; NICE clinical guideline CG108. <http://www.nice.org.uk/CG108/niceguidance/pdf/english>

³¹ NICE clinical guideline CG108. Chronic HF: management of chronic HF in adults in primary and secondary care 2010. <http://www.nice.org.uk/CG108/niceguidance/pdf/english>

³² NICE quality standard. Chronic HF 2011. <http://www.nice.org.uk/media/D6F/93/CHFQualityStandard.pdf>

³³ SIGN clinical guideline 95. Management of chronic HF 2007. <http://www.sign.ac.uk/guidelines/fulltext/95/index.html>

HF 003.1 Rationale

There is strong clinical and cost-effectiveness evidence to support the use of ACE-I in all patients with HF with LVSD. ACE-I improve symptoms, reduce the hospitalisation rate and improve the survival rate. This is applicable in all age groups. ARBs are also effective in the treatment of patients with HF due to LVSD, but may only be used in patients intolerant of ACE-I.

It is possible to have a diagnosis of LVSD without HF, for example, asymptomatic people who might be identified coincidentally but who are at high risk of developing subsequent HF. In such cases, ACE-I's delay the onset of symptomatic HF, reduce cardiovascular events and improve long-term survival. This indicator only applies to patients with HF and therefore excludes this other group of patients who are nevertheless to be considered for treatment with ACE-I.

NICE clinical guideline CG108 and SIGN clinical guideline 95 recommend that ACE-I is used as first-line therapy in all patients with HF due to LVSD and that ARBs are used only in patients who are intolerant of ACE-I.

HF 003.2 Reporting and verification

See indicator wording for requirement criteria.

HF indicator 004

In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction who are currently treated with an ACE-I or ARB, the percentage of patients who are additionally currently treated with a beta-blocker licensed for heart failure

HF 004.1 Rationale

The evidence base for treating HF due to LVSD with beta blockers^{34,35} is at least as strong as the evidence base guiding the HF004 indicator on ACE-I (level 1a), with a 34 per cent reduction in major endpoints of beta-blockers on top of ACE-I compared to placebo and is a standard recommendation in all HF guidelines including NICE. The belief that beta-blockers are contraindicated in HF was disproved, at least for the licensed beta-blockers, in the late 1990s and in some countries (especially in Scandinavia) beta-blockers have never been contraindicated in HF. Furthermore, there are no data to suggest excess risk in the elderly (SENIORS with nebivolol only randomised patients aged over 70 with significant benefits and no safety signal) and there are no contraindications for use in patients with COPD.

However, despite the evidence above, initiating beta-blockers in HF, or switching from one not licensed for HF, is more difficult because of the need to titrate from low doses and small increments over repeated visits. Patients also often suffer a temporary deterioration in symptoms with beta-blocker initiation which needs monitoring.

³⁴ Deedwania PC, Giles TD, Klibaner M, Ghali JK, Herlitz J, Hildebrandt P, Kjekshus J, Spinar J, Vitovec J, Stanbrook H, Wikstrand J, MERIT-HF study group. Efficacy, safety and tolerability of metoprolol CR/XL in patients with DM and chronic HF: experiences from MERIT-HF. *Am Heart Journal*. 2005; 49(1): 159-67

³⁵ CIBIS-II Investigators and Committees. Cardiac Insufficiency Bisoprolol Study II. *Lancet* 1999; 353:9-13

The British National Formulary (BNF) states that “the beta-blockers bisoprolol and carvedilol are of value in any grade of stable HF and LVSD; nebivolol is licensed for stable mild to moderate HF in patients aged over 70, beta-blocker treatment should be initiated at a very low dose and titrated very slowly over a period of weeks or months by those experienced in the management of HF. Symptoms may deteriorate initially, calling for adjustment of concomitant therapy”³⁶.

NICE clinical guideline CG108 and SIGN clinical guideline 95 recommend that beta-blockers licensed for HF are used as first-line therapy in all patients with HF due to LVSD. CG108 recommends that beta-blockers are used in patients with defined co-morbidities such as older adults and those with peripheral vascular disease (PVD), erectile dysfunction (ED), DM, interstitial pulmonary disease and COPD without reversibility. The only co-morbidities with a clear contra-indication to beta-blocker use are those with asthma and reversible airways obstruction (these groups were excluded from clinical trials).

Contractors are advised that patients already prescribed an unlicensed beta-blocker prior to diagnosis of HF due to LVSD do not have their drug therapy changed to meet the criteria of this indicator. Those patients already prescribed an unlicensed beta-blocker will be excluded.

HF 004.2 Reporting and verification

See indicator wording for requirement criteria.

Patients already prescribed a beta-blocker unlicensed for heart failure will be excluded from this indicator.

³⁶ BNF. <http://bnf.org/bnf/bnf/current/119651.htm> (password protected site)

Hypertension (HYP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| HYP001. The contractor establishes and maintains a register of patients with established hypertension | 6 | |
| Ongoing management | | |
| HYP002. The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 150/90 mmHg or less | 10 | 44–84% |
| HYP003. The percentage of patients aged 79 or under with hypertension in whom the last recorded blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less <i>NICE 2012 menu ID: NM53</i> | 50 | 40–80% |
| HYP004. The percentage of patients with hypertension aged 16 or over and who have not yet attained the age of 75 in whom there is an assessment of physical activity, using GPPAQ, in the preceding 12 months <i>NICE 2011 menu ID: NM36</i> | 5 | 40–80% |
| HYP005. The percentage of patients with hypertension aged 16 or over and who have not yet attained the age of 75 who score 'less than active' on GPPAQ in the preceding 12 months, who also have a record of a brief intervention in the preceding 12 months <i>NICE 2011 menu ID: NM37</i> | 6 | 40–80% |

HYP – rationale for inclusion of indicator set

Hypertension is a common medical condition which is largely managed in primary care and represents a significant workload for GPs and the primary care team. Trials of anti-hypertensive treatment have confirmed a significant reduction in the incidence of stroke and CHD in patients with treated hypertension.

HYP indicator 001

The contractor establishes and maintains a register of patients with established hypertension

HYP 001.1 Rationale

A number of patients may be wrongly coded in this group, for example patients who have had one-off high blood pressure readings or women who have been hypertensive in pregnancy.

The NICE clinical guideline on hypertension³⁷ uses the following definitions:

Stage 1 hypertension

Clinic blood pressure is 140/90 mmHg or higher and subsequent ambulatory blood pressure monitoring (ABPM) daytime average or home blood pressure monitoring (HBPM) average blood pressure is 135/85 mmHg or higher.

Stage 2 hypertension

Clinic blood pressure is 160/100 mmHg or higher and subsequent ABPM daytime average or HBPM average blood pressure is 150/95 mmHg or higher.

Severe hypertension

Clinic systolic blood pressure is 180 mmHg or higher or clinic diastolic blood pressure is 110 mmHg or higher.

Elevated blood pressure readings of greater than 140/90 mmHg on three separate occasions have generally been used to confirm sustained high blood pressure. However, the 2011 updated NICE clinical guideline on hypertension now recommends the use of ABPM to confirm the diagnosis of hypertension, particularly if a clinic blood pressure reading is 140/90 mmHg or higher.

The use of ABPM to confirm the diagnosis of hypertension is a change in practice and may take time to be integrated into routine clinical practice.

For patients aged 39 or under with stage 1 hypertension and no evidence of target organ damage, CVD, renal disease or diabetes, NICE recommend that practitioners consider seeking specialist evaluation of secondary causes of hypertension and a more detailed assessment of potential target organ damage. This is because 10-year cardiovascular risk assessments can underestimate the lifetime risk of cardiovascular events in these patients.

Further information

NICE public health guidance 25. Prevention of CVD 2011.

<http://guidance.nice.org.uk/PH25/Guidance/pdf/English>

HYP 001.2 Reporting and verification

See indicator wording for requirement criteria.

The contractor may be required by the NHS CB to discuss their plans for ensuring that new diagnoses are confirmed using ABPM or HBPM as appropriate.

HYP indicator 002

The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 150/90 mmHg or less

³⁷ NICE clinical guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://publications.nice.org.uk/hypertension-cg127>

HYP 002.1 Rationale

This indicator measures the intermediate health outcome of a blood pressure of 150/90 mmHg or less in patients with hypertension. Its intent is to promote the primary and secondary prevention of CVD through satisfactory blood pressure control. This intermediate outcome can be achieved through lifestyle advice and the use of drug therapy.

The NICE clinical guideline on hypertension recommends drug therapy in patients who are aged 79 or under with stage 1 hypertension who have one or more of the following:

1. target organ damage
2. established CVD
3. renal disease
4. diabetes mellitus
5. a 10-year CVD risk equivalent to 20 per cent or greater.

The NICE guideline recommends anti-hypertensive drug treatment for patients of any age with stage 2 hypertension.

The guideline recommends that a referral for specialist evaluation of secondary causes of hypertension and a more detailed assessment of potential target organ damage is considered for patients aged 39 or under with stage 1 hypertension and no evidence of target organ damage, CVD, renal disease or diabetes. This is because 10-year cardiovascular risk assessments can underestimate the lifetime risk of cardiovascular events in these patients.

The guideline also recommends that patients with hypertension have their care reviewed annually to monitor blood pressure, provide support and discuss lifestyle, symptoms and medication. However, the frequency of follow-up depends on factors such as the severity of hypertension, variability of blood pressure, complexity of the treatment regime, patient compliance and the need for non-pharmacological advice.

For QOF purposes it is assumed that repeat blood pressure measurements are undertaken every six months, with the audit standard at nine months.

Further information

NICE public health guidance 25. Prevention of CVD 2010.

HYP 002.2 Reporting and verification

See indicator wording for requirement criteria.

HYP indicator 003 (NICE 2012 menu ID: NM53)

The percentage of patients aged 79 or under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less

HYP 003.1 Rationale

This indicator measures the intermediate outcome of a blood pressure of 140/90 mmHg or less in patients aged 79 or under with hypertension. Its intent is to promote the primary and secondary prevention of CVD through satisfactory blood pressure control. The intermediate outcome can be achieved through lifestyle advice or the use of drug therapy.

The NICE clinical guideline on hypertension³⁸, recommends drug therapy in patients aged 79 or under with stage 1 hypertension as outlined under HYP002. The guideline also recommends anti-hypertensive drug treatment for patients of any age with stage 2 hypertension.

See HYP002.1.

For QOF purposes it is assumed that repeat blood pressure measurements are undertaken every six months, with the audit standard at nine months.

HYP 003.2 Reporting and verification

See indicator wording for requirement criteria.

HYP indicator 004 (NICE 2011 menu ID: NM36)

The percentage of patients with hypertension aged 16 or over and who have not yet attained the age of 75 in whom there is an assessment of physical activity, using GPPAQ, in the preceding 12 months

HYP 004.1 Rationale

People with hypertension are at increased risk of developing CVD. The risks can be reduced by treating hypertension and also by reducing lifestyle risks. A key lifestyle intervention is improving physical activity levels in those who are currently inactive.

The NICE clinical guideline on hypertension³⁹ recommends that healthcare practitioners ascertain the diet and exercise patterns of people with hypertension because a healthy diet and regular exercise can reduce blood pressure. A systematic review of studies of normotensive and hypertensive participants found that multiple risk factor interventions for preventing CVD resulted in an overall reduction in blood pressure of 4.2/2.7 mmHg⁴⁰.

³⁸ NICE clinical guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://publications.nice.org.uk/hypertension-cg127>

³⁹ NICE clinical guideline CG34. Management of hypertension in adults in primary care 2006. www.nice.org.uk/guidance/CG34

⁴⁰ Ebrahim S, Smith GD. Systematic review of RCTs of multiple risk factor interventions for preventing CHD 1997. *BMJ* 314 (7095).

Physical activity comprises a range of behaviours involving movement, expenditure of calories and raised heart rate. It can take the form of sport, recreational and occupational activity, active travel (for example, walking and cycling as a means of transport) and heavy domestic activity (for example, gardening and housework).

The Health Survey for England 2003 estimated that around six out of ten men and seven out of ten women are not active enough to benefit their health. There is a clear link between physical inactivity and ill health⁴¹. People who are physically active reduce their risk of developing major chronic diseases – such as CHD, stroke and type 2 diabetes by up to 50 per cent, and the risk of premature death by about 20-30 per cent⁴².

Primary care has a well-established role in managing chronic disease and other conditions related to physical inactivity. GPs and staff directly employed by the contractor have an important role in identifying inactive adults and promoting physical activity.

The general practitioner physical activity questionnaire (GPPAQ) tool has been evaluated for feasibility in UK primary care and the reports conclude that the GPPAQ is acceptable for use in routine general practice. GPPAQ is now validated for use as a screening tool in primary care for patients aged 16 or over and under the age of 75^{43, 44}.

NICE public health guidance on methods to increase physical activity in adults in primary care recommend that inactive individuals are identified in general practice using a validated tool such as GPPAQ⁴⁵. GPPAQ comprises:

1. a written questionnaire (for completion by patients if done outside consultation)
2. an electronic template of the questionnaire (available in Microsoft Excel) which can be completed during the consultation and automatically generates the physical activity index.

⁴¹ Health Survey for England. 2003.

www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_4098712

⁴² DH. 'At least five a week' Evidence on the impact of physical activity and its relationship to health: a report from the CMO 2004.

www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4080994

⁴³ DH. Let's Get Moving commissioning guidance: a new physical activity care pathway for the NHS 2009.

www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_105945

⁴⁴ DH. GPPAQ: A screening tool to assess adult physical activity levels within primary care 2006, updated 2009.

www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_063812

⁴⁵ Bull F, Milton K, Boehler C. Evaluation of the Physical Activity Care Pathway. Feasibility Pilot – final technical report 2009.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_105975

The physical activity index categorises patients' level of activity, which is correlated to CVD risk. Patients are categorised as:

1. **Inactive** – sedentary job and no physical exercise or cycling
2. **Moderately inactive** – sedentary job and some but less than one hour of physical exercise and/or cycling per week or standing job and no physical exercise or cycling
3. **Moderately active** – sedentary job and one to 2.9 hours of physical exercise and/or cycling per week **or** standing job and some but less than one hour of physical exercise and/or cycling per week **or** physical job and no physical exercise or cycling
4. **Active** – sedentary job and three hours or more of physical exercise and/or cycling per week **or** standing job and one to 2.9 hours of physical exercise and/or cycling per week **or** physical job and some but less than one hour of physical exercise and/or cycling per week **or** heavy manual job.

It is advised that all patients who receive a score of 'less than active' are offered a brief intervention supporting behaviour change to increase physical activity.

HYP 004.2 Reporting and verification

See indicator wording for requirement criteria.

HYP indicator 005 (NICE 2011 menu ID: NM37)

The percentage of patients with hypertension aged 16 or over and who have not yet attained the age of 75 who score 'less than active' on GPPAQ in the preceding 12 months, who also have a record of a brief intervention in the preceding 12 months

HYP 005.1 Rationale

People with hypertension are at increased risk of developing CVD. The risks can be reduced by treating hypertension and also by reducing lifestyle risks⁴⁶. A key lifestyle intervention is improving physical activity levels in those who are currently inactive. Advice on improving physical activity levels may be given using brief interventions.

Brief interventions may involve opportunistic advice, discussion, negotiation or encouragement. They are commonly used in many areas of health promotion and are delivered by a range of primary and community care professionals. The interventions vary from basic advice to more extended, individually-focused attempts to identify and change factors that influence activity levels.

The NICE PH Collaborating Centre reviewed the evidence for brief interventions in primary care. It concluded that there is evidence from controlled trials that brief interventions in primary care can be effective in producing moderate increases in physical activity in middle aged and older populations in the short and longer term. However, for the effect to be sustained at one year, the evidence suggests that follow-

⁴⁶ NICE clinical guideline CG34. Management of hypertension in adults in primary care 2006. www.nice.org.uk/guidance/CG34

up sessions over a period of three to six months are required after the initial consultation episode⁴⁷.

The NICE PH guidance on four commonly used methods to increase physical activity⁴⁸ makes four recommendations relating to the delivery of brief interventions to increase physical activity. It concludes that there is sufficient evidence to recommend the use of brief interventions in primary care. The recommendations take into account the CMO for England's recommendation, that adults achieve at least 30 minutes moderate activity on five or more days of the week⁴⁹. The guidance makes the following recommendations.

1. Primary care practitioners should take the opportunity, whenever possible, to identify inactive adults and advise them to aim for 30 minutes of moderate activity on five days of the week (or more). They should use their judgment to determine when this would be inappropriate (for example, because of medical conditions or personal circumstances). They should use a validated tool, such as the GPPAQ, to identify inactive individuals.
2. When providing physical activity advice, primary care practitioners should take into account the individual's needs, preferences and circumstances. They should agree goals with their patients. They should also provide written information about the benefits of activity and the local opportunities to be active. They should follow them up at appropriate intervals over a three to six month period.
3. Local policy makers, commissioners and managers, together with primary care practitioners, should monitor the effectiveness of local strategies and systems to promote physical activity. They should focus, in particular, on whether or not opportunistic advice is helping to increase the physical activity levels of people from disadvantaged groups, including those with disabilities (and thereby tackling health inequalities). They should also assess how effective professionals from a range of disciplines are at raising long-term physical activity levels among these groups.
4. Local policy makers, commissioners and managers, together with primary care practitioners, should pay particular attention to the needs of hard to reach and disadvantaged communities, including minority ethnic groups, when developing service infrastructures to promote physical activity.

HYP 005.2 Reporting and verification

See indicator wording for requirement criteria.

⁴⁷ NICE PH Physical Activity Collaborating Centre. A rapid review of the effectiveness of brief interventions in primary care to promote physical activity in adults 2006.

www.nice.org.uk/nicemedia/live/11373/43917/43917.pdf

⁴⁸ NICE public health guidance 2. Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling 2006. www.nice.org.uk/guidance/PH2

⁴⁹ DH. At least five a week: Evidence on the impact of physical activity and its relationship to health 2004.

Peripheral arterial disease (PAD)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| PAD001. The contractor establishes and maintains a register of patients with peripheral arterial disease <i>NICE 2011 menu ID: NM32</i> | 2 | |
| Ongoing management | | |
| PAD002. The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less <i>NICE 2011 menu ID: NM34</i> | 2 | 40–90% |
| PAD003. The percentage of patients with peripheral arterial disease in whom the last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less <i>NICE 2011 menu ID: NM35</i> | 3 | 40–90% |
| PAD004. The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken <i>NICE 2011 menu ID: NM33</i> | 2 | 40–90% |

PAD – rationale for inclusion of indicator set

PAD is one of the three main categories of CVD and patients with PAD, including those who are asymptomatic, have an increased risk of mortality from CVD due to MI and stroke. The relative risks of all-cause mortality are two to three times that of age and sex matched to groups without PAD.

Treatment of PAD focuses on cardiovascular risk factor management. Smoking is a very important risk factor for PAD and management of PAD includes smoking cessation (see smoking indicator set). Other established risk factors are high blood pressure and diabetes. This would mean that patients with PAD and high blood pressure would also be included in the hypertension indicator set and patients with diabetes and PAD would also be included in the diabetes indicator set.

The intent of the PAD indicators is to improve the identification and management of PAD and ensure all patients, including those without established risk factors already covered in QOF, are managed for their cardiovascular risk.

Further information

NICE clinical guideline CG147. Lower limb PAD 2012.

<http://guidance.nice.org.uk/CG147/Guidance>

PAD indicator 001 (NICE 2011 menu ID: NM32)

The contractor establishes and maintains a register of patients with peripheral arterial disease

PAD 001.1 Rationale

Patients with PAD may have symptoms, but can also be asymptomatic. About 20 per cent of patients aged 60 or over have PAD, although only a quarter of these patients have symptoms. Symptoms become severe and progressive in approximately 20 per cent of patients with symptomatic PAD.

Reduced ankle brachial pressure index (ABPI) is an independent predictor of cardiac and cerebrovascular morbidity and mortality and may help to identify patients who would benefit from secondary prevention.

The SIGN clinical guideline on the diagnosis and management of PAD⁵⁰ states that a resting ABPI of 0.9 or under has been shown in several clinical studies to be up to 95 per cent sensitive in detecting angiogram positive disease and around 99 per cent specific in identifying supposedly healthy subjects. The guideline also states that there is no strict definition of what constitutes a normal ABPI. In practice, an ABPI of below 0.9 is considered to be abnormal. The ABPI of patients with intermittent claudication typically lies between 0.5 and 0.9. Imaging may be appropriate to exclude PAD when there is a discrepancy between clinical presentation and ABPI.

PAD 001.2 Reporting and verification

See indicator wording for requirement criteria.

PAD indicator 002 (NICE 2011 menu ID: NM34)

The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less

PAD 002.1 Rationale

Most cases of PAD are managed in primary care. The focus of treatment is on the cardiovascular complications of atherosclerosis (managing cardiovascular risk factors such as high blood pressure). Two small UK studies assessing clinical risk management based on the patient records of patients with PAD^{51,52} suggest that these patients have poor hypertension control, use low levels of statin and anti-platelet therapy and receive low levels of smoking cessation advice. This indicator addresses the issue of blood pressure control.

⁵⁰ SIGN clinical guideline 89. Diagnosis and management of PAD 2006.

<http://www.sign.ac.uk/guidelines/fulltext/89/index.html>

⁵¹ Bradley L, Kirker SG. Secondary prevention of arteriosclerosis in lower limb vascular amputees: a missed opportunity 2006. *Euro Journal of Vasc and Endovasc Surgery* 32: 491-493

⁵² Khan S, Flather M, Mister R et al. Characteristics and treatments of patients with PAD referred to UK vascular clinics: results of a prospective registry 2007. *Euro Journal of Vasc and Endovasc surgery* 33: 442-450

SIGN clinical guideline 89 recommends that hypertensive patients with PAD receive treatment to reduce their blood pressure. The guideline developers noted that treatment of PAD has often been considered difficult because of concerns that anti-hypertensive drugs, especially beta-blockers, may have adverse effects on PAD (for example, possible drug-induced peripheral vasoconstriction leading to further ischaemia in the leg). The developers did not find any strong evidence to suggest that beta-blockers should not be used in the presence of PAD, although no study was sufficiently large to demonstrate an absence of adverse effects with certainty.

Recommendation 2.6 in the guideline does not specify a target blood pressure in patients with PAD. However, the guideline developers considered that 140/90 mmHg is a desirable upper limit and that around one third to one half of patients with PAD would be considered hypertensive above this level.

The NICE clinical guideline on hypertension⁵³ sets blood pressure thresholds for the initiation of drug treatment of hypertension and these are outlined within the rationale for the hypertension indicator set. All patients aged 79 or under with CVD and stage 1 hypertension (clinic blood pressure is 140/90 mmHg or higher and subsequent ABPM daytime average or HBPM average blood pressure is 135/85 or higher) are recommended drug therapy for hypertension.

The NICE guideline recommends a target clinic blood pressure below 140/90 mmHg in patients aged 79 or under with treated hypertension and a clinic blood pressure below 150/90 mmHg in patients aged 80 or over with treated hypertension.

For the purpose of QOF, a measurement of 150/90 mmHg has been adopted for this indicator.

Health economic modelling of PAD and the costs and consequences of treating high blood pressure over a patient's lifetime suggests that this treatment is a cost-effective use of NHS resources.

PAD 002.2 Reporting and verification

See indicator wording for requirement criteria.

PAD indicator 003 (NICE 2011 menu ID: NM35)

The percentage of patients with peripheral arterial disease in whom the last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less

PAD 003.1 Rationale

This indicator measures the immediate health outcome of total cholesterol of 5 mmol/l or less in patients with PAD.

Most cases of PAD are managed in primary care. The focus of management is on preventing the cardiovascular complications of atherosclerosis (that is, managing cardiovascular risk factors such as high blood pressure). Two small UK studies assessing

⁵³ NICE clinical guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://publications.nice.org.uk/hypertension-cg127>

clinical risk management based on the patient records of patients with peripheral vascular damage^{54, 55} suggest that these patients have poor hypertension control, use low levels of statin and anti-platelet therapy, and receive low levels of smoking cessation advice. This indicator addresses the issue of cholesterol control.

The NICE clinical guideline on lipid modification⁵⁶ states that statin therapy is recommended for adults with clinical evidence of CVD, including patients with PAD. The SIGN clinical guideline on PAD⁵⁷ states that lipid-lowering therapy with a statin is recommended for patients with PAD and total cholesterol level greater than 3.5 mmol/l.

The NICE guideline also recommends that a total cholesterol level of 5 mmol/l is used as an 'audit' level to assess progress in patients with CVD, in recognition that more than half of them will not achieve a total cholesterol level of less than 4 mmol/l or a LDL cholesterol level of less than 2 mmol/l.

The NICE technology appraisal committee for 'Statins for the prevention of cardiovascular events' concluded that statin therapy to achieve reductions in cholesterol is cost-effective for patients with clinical evidence of CVD⁵⁸.

PAD 003.2 Reporting and verification

See indicator wording for requirement criteria.

PAD indicator 004 (NICE 2011 menu ID: NM33)

The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken

PAD 004.1 Rationale

Most cases of PAD are managed in primary care. The focus of management is on the secondary prevention of CVD. It is important to reduce the cardiovascular complications of atherosclerosis through appropriate cardiovascular risk factor management. Two small UK studies assessing clinical risk management based on the patient records of patients with PAD^{59, 60} suggest that these patients have poor hypertension control, use low levels of statin and anti-platelet therapy, and receive low levels of smoking cessation advice. This indicator addresses the issue of prescribing anti-platelet therapy.

⁵⁴ Bradley L, Kirker SGB. Secondary prevention of arteriosclerosis in lower limb vascular amputees: a missed opportunity 2006. *Euro Journal of Vasc and Endovasc Surgery* 32: 491-493

⁵⁵ Khan S, Flather M, Mister R et al. Characteristics and treatments of patients with PAD referred to UK vascular clinics: results of a prospective registry 2007. *Euro Journal of Vasc and Endovasc surgery* 33: 442-450

⁵⁶ NICE clinical guideline CG67. Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of CVD 2010. www.nice.org.uk/CG67

⁵⁷ SIGN clinical guideline 89. Diagnosis and management of PAD 2006. www.sign.ac.uk/pdf/sign89.pdf

⁵⁸ NICE technology appraisal TA94. Statins for the prevention of cardiovascular events 2006. www.nice.org.uk/TA94

⁵⁹ Bradley L, Kirker SGB. Secondary prevention of arteriosclerosis in lower limb vascular amputees: a missed opportunity 2006. *Euro Journal of Vasc and Endovasc Surgery* 32: 491-493

⁶⁰ Khan S, Flather M, Mister R et al. Characteristics and treatments of patients with PAD referred to UK vasc clinics: results of a prospective registry 2007. *Euro Journal of Vasc and Endovasc surgery* 33: 442-450

The SIGN clinical guideline on PAD⁶¹ states that anti-platelet therapy is recommended for patients with symptomatic PAD.

The Antithrombotic Trialists Collaboration (ATC) meta-analysis showed a 23 per cent reduction in serious vascular events in a subgroup of 9214 people with PAD who were treated with anti-platelet drugs⁶². Similar results were found in a second systematic review of the effects of anti-platelet therapy in patients with PAD⁶³. When comparing the effects of different anti-platelet drugs, the ATC found no evidence of statistically significant differences between anti-platelets.

Further information

NICE clinical guideline CG147. Lower limb PAD 2012.

www.nice.org.uk/guidance/CG147

PAD 004.2 Reporting and verification

See indicator wording for requirement criteria.

Patients already prescribed an anti-coagulant will be excluded from the indicator.

⁶¹ SIGN clinical guideline 89. Diagnosis and management of PAD 2006. www.sign.ac.uk/pdf/sign89.pdf

⁶² ATC. Collaborative meta-analysis of RCTs of anti-platelet therapy for prevention of death, MI and stroke in high-risk patients 2002. BMJ 324: 71-86

⁶³ NICE technology appraisal TA210. Clopidogrel and modified-release dipyridamole for the prevention of occlusive vascular events 2010. www.nice.org.uk/guidance/TA210

Stroke and TIA (STIA)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| STIA001. The contractor establishes and maintains a register of patients with stroke or TIA | 2 | |
| Initial diagnosis | | |
| STIA002. The percentage of patients with a stroke or TIA (diagnosed on or after 1 April 2008) who have a record of a referral for further investigation between 3 months before or 1 month after the date of the latest recorded stroke or TIA | 2 | 45–80% |
| Ongoing management | | |
| STIA003. The percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less | 5 | 40–75% |
| STIA004. The percentage of patients with stroke or TIA who have a record of total cholesterol in the preceding 12 months | 2 | 50–90% |
| STIA005. The percentage of patients with stroke shown to be non-haemorrhagic, or a history of TIA, whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less <i>NICE 2012 menu ID: NM60</i> | 5 | 40–65% |
| STIA006. The percentage of patients with stroke or TIA who have had influenza immunisation in the preceding 1 September to 31 March | 2 | 55–95% |
| STIA007. The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken | 4 | 57–97% |

STIA – rationale for inclusion of indicator set

Stroke is the third most common cause of death in the developed world. One quarter of stroke deaths occur under the age of 65. There is evidence that appropriate diagnosis and management can improve outcomes.

STIA indicator 001

The contractor establishes and maintains a register of patients with stroke or TIA

STIA 001.1 Rationale

For patients diagnosed prior to 1 April 2003 it is accepted that various diagnostic criteria may have been used. For this reason the presence of the diagnosis of stroke or TIA in the records will be acceptable. Generally patients with a diagnosis of transient global amnesia or vertebra-basilar insufficiency are not be included in the retrospective register. However, contractors may wish to review patients previously diagnosed and if appropriate attempt to confirm the diagnosis.

It is up to the contractor to decide, on clinical grounds, when to include a patient on the register e.g. when a 'dizzy spell' becomes a TIA. Patient records coded with 'Amaurosisfugax', but without a code for TIA are excluded from the register.

STIA 001.2 Reporting and verification

See indicator wording for requirement criteria.

STIA indicator 002

The percentage of patients with a stroke or TIA (diagnosed on or after 1 April 2008) who have a record of a referral for further investigation between 3 months before or 1 month after the date of the latest recorded stroke or TIA

STIA 002.1 Rationale

Specialist investigations are often only accessible by a referral to secondary care services, therefore this indicator reflects referral activity rather than confirmation by specific scanning investigations.

The National Audit Office (NAO) report⁶⁴ highlights that UK national guidelines recommend that all patients with suspected TIA are assessed and investigated within seven days, but notes that only a third of patients with TIA are seen in a clinic. The UK guideline and the NAO concern reflect the evidence that there is a high early risk of stroke following TIA and that there is insufficient recognition of the serious nature of this diagnosis.

Contractors are advised that a referral should be considered for each new stroke or TIA unless specific agreement has been reached with a local specialist not to refer the patients. It is recommended that a new TIA in someone who has had previous TIAs is treated as an urgent case.

For the purposes of QOF, an appropriate referral being undertaken between three months before or one month after a diagnosis of presumptive stroke or TIA being made, would be considered as having met the requirements of this indicator.

STIA 002.2 Reporting and verification

See indicator wording for requirement criteria.

⁶⁴ NAO report. The stationary office. Reducing brain damage: faster access to better stroke care 2005. http://www.nao.org.uk/publications/0506/reducing_brain_damage.aspx

STIA indicator 003

The percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less

STIA 003.1 Rationale

This indicator measures the intermediate health outcome of a blood pressure of 150/90 mmHg or less in patients with hypertension and CHD. Its intent is to promote the secondary prevention of CVD through satisfactory blood pressure control. This intermediate outcome can be achieved through lifestyle advice and the use of drug therapy.

In one major overview, a long-term difference of 5-6 mmHg in usual diastolic blood pressure (DBP) is associated with approximately 30–40 per cent less stroke over five years⁶⁵. The PROGRESS trial demonstrated that blood pressure lowering reduces stroke risk in patients with prior stroke or TIA⁶⁶.

The NICE clinical guideline on hypertension⁶⁷ sets blood pressure thresholds for the initiation of drug treatment of hypertension and these are outlined in the rationale for the hypertension indicator set. To summarise, all patients aged 79 or under with CVD and stage one hypertension (clinic blood pressure is 140/90 mmHg or higher and subsequent ABPM daytime average of HBPM average blood pressure is 135/85 mmHg or higher) are recommended drug therapy for hypertension.

The SIGN clinical guideline on the management of patients with stroke or TIA⁶⁸ recommends that patients who have had a stroke or TIA and have hypertension is treated to less than 140/85 mmHg.

The NICE clinical guideline on hypertension recommends a target clinic blood pressure below 140/90 mmHg in patients aged 79 or under with treated hypertension and a clinic blood pressure below 150/90 mmHg in patients aged 80 or over, with treated hypertension.

For the purpose of QOF, an audit standard of 150/90 mmHg has been adopted.

Further information

RCP stroke guideline 2008. <http://bookshop.rcplondon.ac.uk/details.aspx?e=250>

STIA 003.2 Reporting and verification

See indicator wording for requirement criteria.

⁶⁵ Collins et al. Lancet 1990; 335:827-38

⁶⁶ PROGRESS collaborative group, Lancet 2001: 358: 1033-41

⁶⁷ NICE clinical guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://publications.nice.org.uk/hypertension-cg127>

⁶⁸ SIGN clinical guideline 108. The management of patients with stroke or TIA 2008. <http://www.sign.ac.uk/guidelines/fulltext/108/index.html>

STIA indicator 004

The percentage of patients with stroke or TIA who have a record of total cholesterol in the preceding 12 months

STIA 004.1 Rationale

The NICE clinical guideline on lip modification⁶⁹ recommends statin therapy for patients with clinical evidence of CVD. The guideline recommends that the decision on whether to initiate statin therapy is made after an informed discussion between the responsible clinician and the patient about the risks and benefits of statin treatment, taking into account additional factors such as co-morbidities and life expectancy.

The NICE clinical guideline on chronic HF⁷⁰ recommends that treatment for the secondary prevention of CVD is initiated with simvastatin 40 mg. If there are potential drug interactions, or simvastatin 40 mg is contraindicated, a lower dose or alternative statin preparation may be chosen.

For patients taking statins for secondary prevention, NICE recommends that clinicians consider increasing to simvastatin 80 mg or a drug of similar efficacy and acquisition cost is a total cholesterol of less than 4 mmol/l or an LDL cholesterol of less than 2 mmol/l is not attained. It is advised that any decision to offer a higher intensity statin takes into account informed preference, co-morbidities, multiple drug therapy and the benefit and risks of treatment.

SIGN clinical guidelines⁷¹ state that statin therapy after haemorrhagic stroke is not routinely recommended unless the risk of further vascular events outweighs the risk of further haemorrhage.

The RCP stroke guideline⁷² states that treatment with statin therapy be avoided or used with caution (if required for other indications) in individuals with a history of haemorrhagic stroke, particularly those with inadequately controlled hypertension.

STIA 004.2 Reporting and verification

See indicator wording for requirement criteria.

STIA indicator 005 (NICE 2012 menu ID: NM60)

The percentage of patients with stroke shown to be non-haemorrhagic, or a history of TIA whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less

⁶⁹ NICE clinical guideline CG67. Lipid modification 2008. <http://guidance.nice.org.uk/CG67>

⁷⁰ NICE clinical guideline CG108. Chronic HF: management of chronic HF in adults in primary and secondary care 2010. <http://www.nice.org.uk/CG108/niceguidance/pdf/english>

⁷¹ SIGN clinical guideline 108. The management of patients with stroke or TIA 2008. <http://www.sign.ac.uk/guidelines/fulltext/108/index.html>

⁷² RCP stroke guideline 2008. <http://bookshop.rcplondon.ac.uk/details.aspx?e=250>

STIA 005.1 Rationale

This indicator measure the intermediate health outcome of total cholesterol of 5 mmol/l or less in patients with established stroke or TIA (cerebrovascular disease, one of the main causes of CVD) and its intent is to promote the secondary prevention of CVD. This intermediate outcome can be achieved through lifestyle advice and the use of drug therapy.

In April 2013 this indicator was updated to reflect the findings of a systematic review⁷³ on the effectiveness of statins in people with ischaemic and haemorrhagic stroke. The review concluded that there is evidence that statin therapy in patients with a history of ischaemic stroke or TIA significantly reduces subsequent major coronary events but only marginally reduces the risk of stroke recurrence.

However, analysis by type of subsequent stroke (two RCTs: Heart Protection Study and SPARCL) showed evidence for a protective effect of statins for ischaemic stroke (OR 0.78, 95 per cent CI 0.67 to 0.92) but evidence for an increased risk of haemorrhagic stroke (OR 1.72, 95 per cent CI 1.20 to 2.46). It is also noted that there is no national or international consensus on whether statins be used for all types of stroke. For these reasons, the population of the indicator includes people who have had ischaemic stroke or history of TIA.

The NICE also clinical guideline on lipid modification⁷⁴, recommends statin therapy for patients with clinical evidence of cerebrovascular disease. The guideline recommends that the decision on whether to start statin therapy is made after discussion between the clinician and patient about the risks and benefits of statin treatment, taking into account additional factors such as co-morbidities and life expectancy.

NICE recommends that treatment for secondary prevention of cerebrovascular disease be initiated with simvastatin 40 mg. If there are potential drug interactions, or if simvastatin 40 mg is contraindicated, a lower dose or alternative statin preparation may be chosen.

For patients taking statins for secondary prevention, NICE recommends that clinicians consider increasing dosage of simvastatin to 80 mg or a drug of similar efficacy and acquisition cost, if total cholesterol of less than 4 mmol/l or LDL cholesterol of less than 2 mmol/l, is not attained. It is advised that any decision to offer a higher intensity statin takes into account informed preference, co-morbidities, multiple drug therapy and the benefit and risks of treatment.

The SIGN clinical guideline on the management of patients with stroke or TIA⁷⁵, states that a statin is prescribed to patients who have had ischaemic stroke, irrespective of cholesterol level. However, the use of statin after haemorrhagic stroke is not routinely recommended unless the risk of further vascular events outweighs the risk of further haemorrhage.

⁷³ Cochrane review, Manketlow BN, Potter JF, 2009.

⁷⁴ NICE clinical guideline CG67. Lipid modification 2008. <http://publications.nice.org.uk/lipid-modification-cg67>

⁷⁵ SIGN clinical guideline CG108. Management of patients with stroke or TIA 2008. <http://www.sign.ac.uk/guidelines/fulltext/108/index.html>

The RCP clinical guideline on stroke⁷⁶, states that all patients who have had ischaemic stroke or TIA are treated with a statin drug unless contraindicated. However, treatment with statin therapy be avoided or used with caution (if required for other indications) in individuals with a history of haemorrhagic stroke, particularly those with inadequately controlled hypertension.

NICE recommends that an audit level of total cholesterol of 5 mmol/l be used to assess progress in patients with CVD.

STIA 005.2 Reporting and verification

See indicator wording for requirement criteria.

STIA indicator 006

The percentage of patients with stroke or TIA who have had influenza immunisation in the preceding 1 September to 31 March

STIA 006.1 Rationale

While there have been no RCTs looking at the impact of flu vaccination specifically in patients with a history of stroke or TIA, there is evidence from observation studies that flu vaccination reduces risk of stroke⁷⁷.

This is a current recommendation from the CMO and the JCVI.

Further information

DH. Influenza. <http://www.dh.gov.uk/health/category/policy-areas/public-health/influenza/>

STIA 006.2 Reporting and verification

See indicator wording for requirement criteria.

In 1 April 2012, the FLU_COD cluster in the Business Rules was replaced. Contractors should note the change and use the new codes for recording purposes.

STIA indicator 007

The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken

STIA 007.1 Rationale

Long-term anti-platelet therapy reduces the risk of serious vascular events following a stroke by about a quarter. It is advised that anti-platelet therapy is prescribed for the secondary prevention of recurrent stroke and other vascular events in patients who have sustained an ischaemic cerebrovascular event.

⁷⁶ RCP clinical guideline. Stroke 2008. <http://bookshop.rcplondon.ac.uk/details.aspx?e=250>

⁷⁷ Lavalley et al. Stroke 2002; 33: 513-518; Nichol et al. *NEJM* 2003; 1322-32

The BNF⁷⁸ makes the following recommendations:

"Following a TIA, long-term treatment with modified-release dipyridamole 200 mg twice daily in combination with aspirin 75 mg once daily is recommended. If patients are intolerant of aspirin, or it is contra-indicated, then modified-release dipyridamole alone is recommended. If patients are intolerant of dipyridamole, or it is contraindicated, then aspirin alone is recommended. Patients who are intolerant of both aspirin and dipyridamole should receive clopidogrel alone [unlicensed use].

Following an ischaemic stroke (not associated with AF – see below), long-term treatment with clopidogrel 75 mg once daily is recommended. If clopidogrel is contraindicated or not tolerated, patients should received modified-release dipyridamole 200 mg twice daily in combination with aspirin 75 mg once daily. If both aspirin and clopidogrel are contraindicated or not tolerated, then modified-release dipyridamole alone is recommended. If both dipyridamole and clopidogrel are contraindicated or not tolerated, than aspirin alone is recommended. "

It is advised that patients with stroke associated with AF are reviewed for long-term treatment with warfarin or an alternative anti-coagulant (see the AF disease area indicator set).

Further information

NICE technology appraisal TA210. Clopidogrel and modified-release dipyridamole for the prevention of occlusive vascular events (review of TA 90) 2010.

<http://nice.org.uk/guidance/TA210>

STIA 007.2 Reporting and verification

See indicator wording for requirement criteria.

⁷⁸ BNF 62. <http://bnf.org/bnf/index.htm>

Diabetes mellitus (DM)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| DM001. The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed <i>NICE 2011 menu ID: NM41</i> | 6 | |
| Ongoing management | | |
| DM002. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less <i>NICE 2010 menu ID: NM01</i> | 8 | 53–93% |
| DM003. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mmHg or less <i>NICE 2010 menu ID: NM02</i> | 10 | 38–78% |
| DM004. The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5 mmol/l or less | 6 | 40–75% |
| DM005. The percentage of patients with diabetes, on the register, who have a record of an albumin:creatinine ratio test in the preceding 12 months <i>NICE 2012 menu ID: NM59</i> | 3 | 50–90% |
| DM006. The percentage of patients with diabetes, on the register, with a diagnosis of nephropathy (clinical proteinuria) or micro-albuminuria who are currently treated with an ACE-I (or ARBs) | 3 | 57–97% |
| DM007. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59 mmol/mol or less in the preceding 12 months <i>NICE 2010 menu ID: NM14</i> | 17 | 35–75% |
| DM008. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64 mmol/mol or less in the preceding 12 months | 8 | 43–83% |
| DM009. The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 75 mmol/mol or less in the preceding 12 months | 10 | 52–92% |

| | | |
|--|----|--------|
| DM010. The percentage of patients with diabetes, on the register, who have had influenza immunisation in the preceding 1 September to 31 March | 3 | 55–95% |
| DM011. The percentage of patients with diabetes, on the register, who have a record of retinal screening in the preceding 12 months | 5 | 50–90% |
| DM012. The percentage of patients with diabetes, on the register, with a record of a foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 12 months <i>NICE 2010 menu ID: NM13</i> | 4 | 50–90% |
| DM013. The percentage of patients with diabetes, on the register, who have a record of a dietary review by a suitably competent professional in the preceding 12 months <i>NICE 2011 menu ID: NM28</i> | 3 | 40–90% |
| DM014. The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register <i>NICE 2011 menu ID: NM27</i> | 11 | 40–90% |
| DM015. The percentage of male patients with diabetes, on the register, with a record of being asked about erectile dysfunction in the preceding 12 months <i>NICE 2012 menu ID: NM51</i> | 4 | 40–90% |
| DM016. The percentage of male patients with diabetes, on the register, who have a record of erectile dysfunction with a record of advice and assessment of contributory factors and treatment options in the preceding 12 months <i>NICE 2012 menu ID: NM52</i> | 6 | 40–90% |

DM – rationale for inclusion of indicator set

Diabetes mellitus (DM) is one of the common endocrine diseases affecting all age groups with over one million people in the UK having the condition. Effective control and monitoring can reduce mortality and morbidity. Much of the management and monitoring of diabetic patients, particularly patients with type 2 diabetes, is undertaken by the GP and members of the primary care team.

The indicators for diabetes are based on widely recognised approaches to the care of diabetes. Detailed guidelines for health professionals are published by NICE and SIGN.

The SIGN website contains detailed evidence tables, and links to published articles. The English National Service Framework (NSF) for Diabetes website⁷⁹ also includes details of the evidence behind a range of recommendations.

NICE has also published guidance on a number of aspects of diabetic control.

Further information

NICE clinical guideline CG10. Type 2 diabetes – footcare 2004.

<http://guidance.nice.org.uk/CG10/NICEGuidance/pdf/English>

NICE clinical guideline CG87. Type 2 diabetes: the management of type 2 diabetes

2010. <http://guidance.nice.org.uk/CG87>

NICE clinical guideline CG15. Type 1 diabetes 2004. <http://guidance.nice.org.uk/CG15>

SIGN clinical guideline 116. Management of diabetes 2010.

<http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

The indicators for diabetes are generally those which would be expected to be done, or checked, in an annual review. There is no requirement for the contractor to carry out all of these items (e.g. retinal screening) but it is the contractor's responsibility to ensure that they have been done.

DM indicator 001 (NICE 2011 menu ID: NM41)

The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus which specifies the type of diabetes where a diagnosis has been confirmed

DM 001.1 Rationale

A greater understanding and knowledge of the complexities of diabetes has led to increasing difficulty in accurately diagnosing or classifying the type of diabetes. In March 2011, a report by the Royal College of General Practitioners (RCGP) and NHS Diabetes was published which examined the issue of coding, classification and diagnosis of diabetes in primary care in England⁸⁰. The summary findings of the report included an algorithm to provide guidance to healthcare professionals on making a new diagnosis of diabetes⁸¹. In line with this report, the diabetes register indicator includes all types of diabetes within the proposed algorithm. Gestational diabetes will continue to be excluded from this indicator set.

If it is too early in the clinical course to diagnose the specific type of diabetes, or if the specific diagnosis is uncertain, contractors are asked to use the parent term 'diabetes mellitus'. Contractors are expected to update these patients' records when their specific

⁷⁹ DH. www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/Diabetes/fs/en

⁸⁰ RCGP and NHS Diabetes. Coding, classification and diagnosis of diabetes 2011.

<http://gp.dh.gov.uk/2011/03/28/coding-classification-and-diagnosis-of-diabetes/>

⁸¹ NHS Diabetes. www.diabetes.nhs.uk

type of diabetes is confirmed. This is advised to be within six to 12 months of the initial diagnosis of diabetes mellitus.

This indicator does not specify how the diagnosis is made and a record of the diagnosis will, for the purposes of the QOF, be regarded as sufficient evidence of diabetes. However, there are a substantial number of patients with diabetes who remain undiagnosed and also a number of patients receiving treatment with an incorrect diagnosis of diabetes. Contractors are therefore encouraged to adopt a systematic approach to the diagnosis of diabetes.

The World Health Organisation (WHO) 2006⁸² states that fasting plasma glucose ≥ 7.0 mmol/l (126 mg/dl) or 2-h plasma glucose ≥ 11.1 mmol/l (200 mg/dl) is used as criteria for diagnosing diabetes.

In 2011 an addendum to the 2006 WHO diagnostic criteria was published to allow the use of glycated haemoglobin (HbA1c) in diagnosing DM⁸³. The addendum does not invalidate the 2006 recommendations on the use of plasma glucose measurements to diagnose diabetes. The WHO recommend that HbA1c can be used as a diagnostic test for diabetes, provided that stringent quality assurance tests are in place and assays are standardised to criteria aligned to the international reference values, and there are no conditions present that preclude its accurate measurement. An HbA1c of 48 mmol/mol (6.5 per cent)⁸⁴ is recommended as the cut-off point for diagnosing diabetes. A value less than 48 mmol/mol (6.5 per cent) does not exclude diabetes diagnosed using glucose tests. The WHO expert group concluded that there is currently insufficient evidence to make any formal recommendation on the interpretation of HbA1c levels below 48 mmol/mol (6.5 per cent).

The use of HbA1c for diagnosing diabetes can avoid the problem of day-to-day variability of glucose values and importantly it avoids the need for the patient to make preceding dietary preparations (such as fasting or consuming a glucose drink).

The WHO also recommends that the diagnosis of diabetes in an asymptomatic patient is not made on the basis of a single abnormal plasma glucose or HbA1c value. At least one additional HbA1c or plasma glucose test result with a value in the diabetic range is required, either fasting, from a random (casual) sample, or from an oral glucose tolerance test (OGTT).

DM 001.2 Reporting and verification

See indicator wording for requirement criteria.

Verification – The NHS CB may require randomly selecting a number of patient records of patients coded with the parent term 'diabetes mellitus' and requesting information about how long the specific diagnosis has been unknown.

⁸² WHO. Definition and diagnosis of DM and intermediate hyperglycaemia 2006. www.who.int/diabetes/publications/Definition%20and%20diagnosis%20of%20diabetes_new.pdf

⁸³ WHO. Use of HbA1c in the diagnosis of DM. Abbreviated report of a WHO consultation 2011. www.who.int/diabetes/publications/report-hba1c_2011.pdf

⁸⁴ HbA1c should now be reported to the International Federation of Clinical Chemistry (IFCC) units of mmol/mol rather than the Diabetes Control and Complications Trial (DCCT) percentage.

The NHS CB may require contractors to demonstrate that they have processes in place to ensure that patient records are updated once a specific diagnosis has been made. Good practice is that this occurs within six to 12 months of the initial diagnosis.

DM indicator 002 (NICE 2010 menu ID: NM01)

The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less

DM 002.1 Rationale

Blood pressure lowering in patients with diabetes reduces the risk of macrovascular and microvascular disease.

DM003 sets a target of 140/80 mmHg as per the target recommended by NICE⁸⁵ while the target of 150/90 mmHg has been set for those patients who cannot manage this, such as those with retinopathy, micro-albuminuria or cerebrovascular disease.

Setting a blood pressure target at a higher level, but expecting most patients to have blood pressure below this, is intended to encourage practitioners to address the needs of the minority of patients whose blood pressure is hard to control and will avoid the possibility of perverse incentives to focus efforts away from those at highest absolute risk.

DM 002.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 003 (NICE 2010 menu ID: NM02)

The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mmHg or less

DM 003.1 Rationale

Blood pressure lowering in patients with diabetes reduces the risk of macrovascular and microvascular disease.

The target of 140/80 mmHg has been set as per the target recommended by NICE.

DM 003.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 004

The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5 mmol/l or less

DM 004.1 Rationale

⁸⁵ NICE clinical guideline CG87. Type 2 diabetes – newer agents (partial update of CG66) 2008.
www.nice.org.uk/CG87

It is advised that statin therapy to reduce cholesterol is initiated and titrated as necessary to reduce total cholesterol to less than 5 mmol/l. There is ongoing debate concerning the intervention levels of serum cholesterol in diabetic patients who do not apparently have CVD.

The NICE clinical guideline on type 2 diabetes - newer agents⁸⁶ recommends initiating lipid lowering therapy in all patients with type 2 diabetes aged over 40 and for patients aged 39 or under recommends initiating drug therapy in patients with type 2 diabetes who have a poor cardiovascular risk factor profile.

The SIGN clinical guideline on the management of diabetes⁸⁷ recommends lipid lowering drug therapy for primary prevention in patients with type 2 diabetes aged 40 or over irrespective of baseline cholesterol. For patients with type 1 diabetes SIGN recommends lipid lowering drug therapy for patients aged 40 or over and for patients aged 39 or under with both type 1 and type 2 diabetes, recommends considering lipid lowering drug therapy.

Further information

Heart Protection Study Collaborative Group. MRC/BHF heart protection study of cholesterol-lowering with simvastatin in 5963 people with diabetes: a randomised placebo-controlled trial⁸⁸.

Mortality from CHD in subjects with type 2 Diabetes and in non-diabetic subjects with and without Prior MI. Haffner et al⁸⁹.

SIGN clinical guideline 97. Risk estimation and the prevention of CVD 2007.
<http://www.sign.ac.uk/guidelines/fulltext/97/index.html>

DM 004.2 Reporting and verification

See indicator wording for requirement criteria.

The contractor would be expected to explore fully with their CCG whether or not a suitable investigative or secondary service could be commissioned for the patient prior to deciding to except them on the basis that the services was unavailable.

DM indicator 005 (NICE 2012 menu ID: NM59)

The percentage of patients with diabetes, on the register, who have a record of an albumin:creatinine ratio test in the preceding 12 months

⁸⁶ NICE clinical guideline CG87. Type 2 diabetes - newer agents. <http://www.nice.org.uk/CG87>

⁸⁷ SIGN clinical guideline 118. Management of diabetes.
<http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

⁸⁸ Lancet 2003; 361: 2005-2016

⁸⁹ NEJM 1998; 339: 229-234

DM 005.1 Rationale

This indicator measures the process of conducting an albumin:creatinine ratio (ACR) test. Its intent is that patients with diabetes are tested annually for the presence of micro-albuminuria and diabetic nephropathy. Prompt detection and treatment of these complications of diabetes can lead to a reduction in important health outcomes such as end stage renal failure and cardiovascular morbidity and mortality. Both NICE⁹⁰ and SIGN⁹¹ guidelines recommend that all people with diabetes have ACR measured at diagnosis and at regular intervals, usually annually.

The NICE clinical guideline for CKD recommends that ACR be used to detect and identify proteinuria. It has a greater sensitivity than protein:creatinine ratio (PCR) for low levels of proteinuria. ACR is also the recommended method for quantification and monitoring of proteinuria in patients with diabetes.

Micro-albuminuria is defined by as a 24-hour albumin excretion rate of 30–300 mg/24 h. It is the earliest sign of diabetic kidney disease and predicts increased total mortality, cardiovascular mortality and morbidity and end-stage renal failure.

Timed urine collections may be inaccurate and therefore a urinary ACR >2.5 mg/mmol in men and >3.5 mg/mmol in women is generally used to define micro-albuminuria. This is the earliest sign of diabetic kidney disease and predicts increased total mortality, cardiovascular mortality and morbidity and end-stage renal failure.

It is advised that micro-albuminuria be tested for in a first pass morning urine sample on an annual basis. The sample is then sent for laboratory estimation of ACR provided that there is no suspicion of a urinary tract infection (UTI) from standard dipstick testing of the urine for blood, protein, nitrites and leucocytes as appropriate. If a UTI is suspected then it is recommended that it is investigated and treated as appropriate. If proteinuria is detected in the absence of a UTI then it is recommended that the cause is investigated and an ACR done to quantify the extent of the proteinuria. If an abnormal ACR is suggestive of micro-albuminuria (defined as ACR >2.5 mg/mmol for men, >3.5 mg/mmol for women) it is advised the test be repeated, usually within one month. If the second test is also abnormal (defined as ACR >2.5 mg/mmol for men, >3.5 mg/mmol for women) then micro-albuminuria is confirmed. If the second test is normal then a third sample is sent, usually within one month. If the third sample is abnormal (defined as ACR >2.5 mg/mmol for men, >3.5 mg/mmol for women) then micro-albuminuria is confirmed. If the third test is normal then the person does not have micro-albuminuria and the test be repeated at one year.

Diabetic nephropathy is defined by a raised urinary albumin excretion of >300 mg/day (indicating clinical proteinuria) in a patient with or without a raised serum creatinine level. A raised ACR (>30 mg/mmol) in a spot urine sample is consistent with a diagnosis of diabetic nephropathy, providing other causes have been excluded. This represents a more severe and established form of renal disease and is more predictive of total

⁹⁰ NICE clinical guideline CG87. Type 2 Diabetes: the management of Type 2 diabetes 2010. <http://guidance.nice.org.uk/CG87>

⁹¹ SIGN clinical guideline 116. Management of diabetes 2010. <http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

mortality, cardiovascular mortality and morbidity and end-stage renal failure than micro-albuminuria.

DM 005.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 006

The percentage of patients with diabetes, on the register, with a diagnosis of nephropathy (clinical proteinuria) or micro-albuminuria who are currently treated with an ACE-I (or ARBs)

DM 006.1 Rationale

The progression of renal disease in patients with diabetes is slowed by treatment with ACE-I and trial evidence suggests that these are most effective when given in the maximum dose quoted in the BNF. Although trial evidence is based largely on ACE-I, it is believed that similar benefits occur from treatment with ARBs in patients who are intolerant of ACE-I.

It is recommended that patients with a diagnosis of micro-albuminuria or proteinuria are commenced on an ACE-I or considered for treatment with ARBs.

Further information

SIGN clinical guideline 116. Management of diabetes 2010.

<http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

DM 006.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 007 (NICE 2010 menu ID: NM14)

The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59 mmol/mol or less in the preceding 12 months

DM 007.1 Rationale

The three target levels for HbA1c (59, 64 and 75 mmol/mol) in QOF are designed to provide an incentive to improve glycaemic control across the distribution of HbA1c values. The lower level may not be achievable or appropriate for all patients. The 2009 NICE clinical guideline on the management of type 2 diabetes⁹² advises against pursuing highly intensive management to levels below 48 mmol/mol in certain patient sub-groups.

There is a near linear relationship between glycaemic control and death rate in patients with type 2 diabetes⁹³. In the EPIC Norfolk population cohort, a one per cent higher

⁹² NICE clinical guideline CG87. Type 2 Diabetes: the management of Type 2 diabetes 2010.

<http://guidance.nice.org.uk/CG87>

⁹³ Khaw KT, Wareham N, Luben R et al. Glycated haemoglobin, diabetes, and mortality in men in Norfolk cohort of Euro prospective investigation of cancer and nutrition (EPIC-Norfolk) 2001. *BMJ*; 322: 15-18

HbA1c was independently associated with 28 per cent higher risk of death, an association that extended below the diagnostic cut off for diabetes. These results suggest that, as with blood pressure and cholesterol, over the longer term at least, the lower the HbA1c the better⁹⁴.

However, the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial highlighted the risks of adopting an aggressive treatment strategy for patients at risk of CVD. In the trial's intervention group, HbA1c fell from 8.1 per cent to 6.4 per cent, but this was associated with increased mortality⁹⁵. However, a recent meta-analysis did not confirm such an increase in risk⁹⁶ and reassuringly, the ADVANCE study⁹⁷ and the Veteran Affairs Diabetes Trial⁹⁸ found no increase in all-cause mortality in their intensive treatment groups. Also, long-term follow up of the UK Prospective Diabetes Study demonstrated a 'legacy effect' with fewer deaths after ten years in those initially managed intensively⁹⁹.

A retrospective analysis of cohort data from the UK General Practice Research Database (GPRD) has reopened the debate about how low to aim¹⁰⁰. The study found that, among people whose treatment had been intensified by the addition of insulin or a sulphonylurea, there was no benefit in reducing HbA1c below 59 mmol/mol, although these differences were not statistically significant. The mortality rate was higher among those with the tightest control (this lowest decile of cohort had HbA1c below 6.7 per cent; median = 6.4 per cent). The reasons for these findings are unclear, but they raise further questions about the possibility of some groups of patients for whom a tight glycaemic target is inappropriate.

The NICE clinical guideline on type 2 diabetes identifies the following key priorities for implementation to help people with type 2 diabetes achieve better glycaemic control:

- Offer structured education to every patient and/or their carer at and around the time of diagnosis, with annual reinforcement and review. Inform patients and their carers that structured education is an integral part of diabetes care.
- Provide individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition.
- When setting a target HbA1c:

⁹⁴ Elley CR, Kenealy T, Robinson E et al. Glycated haemoglobin and cardiovascular outcomes in people with type 2 diabetes: a large prospective cohort study. *Diabetic medicine* 2008; 25: 1295-1301

⁹⁵ ACCORD Study Group. Effects of intensive glucose lowering in type 2 diabetes 2008. *NEJM*; 358: 2545-59

⁹⁶ Ray KK, Seshasai SR, Wijesuriya S et al. Effect of intensive control of glucose on cardiovascular outcomes and death in patients with DM: a meta-analysis of RCTs 2009. *Lancet*; 373: 1765-72

⁹⁷ ADVANCE collaborative group. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. *NEJM* 2008; 358: 2560-72

⁹⁸ Duckworth W, Abraira C, Moritz T et al. Glucose control and vascular complications in veterans with type 2 diabetes 2009. *NEJM*; 360: 129-39

⁹⁹ Holman RR, Paul SK, Bethel MA et al. 10-year follow-up of intensive glucose control in type 2 diabetes 2008. *NEJM*; 359: 1577-89

¹⁰⁰ Currie CJ, Peters JR, Tynan A, et al. Survival as a function of HbA1c in people with type 2 diabetes: a retrospective cohort study 2010. *The Lancet*; 375: 481-9

1. involve the patient in decisions about their individual HbA1c target level, which may be above that of 48 mmol/mol set for people with type 2 diabetes in general
2. encourage the patient to maintain their individual target unless the resulting side effects (including hypoglycaemia) or their efforts to achieve this impair their quality of life
3. offer therapy (lifestyle and medication) to help achieve and maintain the HbA1c target level
4. inform a patient with higher HbA1c that reduction in HbA1c towards the agreed target is advantageous to future health
5. avoid pursuing highly intensive management to levels of less than 48 mmol/mol.

The NICE and SIGN clinical guidelines are consistent¹⁰¹.

Given that there is strong evidence to support tight glycaemic control in type 1 diabetes, which is reflected in current NICE and SIGN guidelines, this indicator aims to balance risks and benefits for patients with type 2 diabetes. Younger patients with little co-morbidity are more likely to reap the benefits of tighter control, whereas less stringent goals may be more appropriate for patients with established CVD, those with a history of hypoglycaemia, or those requiring multiple medications or insulin to achieve a NICE suggested target HbA1c of 48 mmol/mol.

From June 2009 the way in which HbA1c results are reported in the UK changed. A standard specific for HbA1c was prepared by the IFCC so that HbA1c reported by laboratories is traceable to the IFCC reference method and global comparison of HbA1c results is possible. From 1 June 2011, results were reported only as IFCC-HbA1c mmol/mol (see table one below).

¹⁰¹ Am Diabetes Association, Euro Association for the Study of Diabetes, IFCC and Laboratory Medicine, and the International Diabetes Federation 2007. Consensus Statement on the Worldwide Standardisation of the HbA1C Measurement. *Diabetes Care* 2007. 30: 2399-2400

Table 1. IFCC values expressed as mmol/mol

| DCCT values for HbA1c (%) | IFCC values for HbA1c (mmol/mol) |
|---------------------------|----------------------------------|
| 4.0 | 20 |
| 5.0 | 31 |
| 6.0 | 42 |
| 6.5 | 48 |
| 7.0 | 53 |
| 7.5 | 59 |
| 8.0 | 64 |
| 9.0 | 75 |
| 10.0 | 86 |
| 11.0 | 97 |
| 12.0 | 108 |

DM 007.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 008

The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64 mmol/mol or less in the preceding 12 months

DM 008.1 Rationale

See DM 007.1

Auditing the proportion of patients with an HbA1c below 64 mmol/mol is designed to provide an incentive to improve glycaemic control across the range of HbA1c values.

DM 008.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 009

The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 75 mmol/mol or less in the preceding 12 months

DM 009.1 Rationale

See DM 007.1.

Auditing the proportion of patients with an HbA1c below 75 mmol/mol is designed to provide an incentive to improve glycaemic control amongst those with high levels of HbA1c who are at particular risk.

DM 009.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 010

The percentage of patients with diabetes, on the register, who have had influenza immunisation in the preceding 1 September to 31 March

DM 010.1 Rationale

This is a current recommendation from the CMO and the JCVI.

Further information

DH. Influenza. <http://www.dh.gov.uk/health/category/policy-areas/public-health/influenza/>

DM 010.2 Reporting and verification

See indicator wording for requirement criteria.

In April 2012, the FLU_COD cluster in the Business Rules was replaced. Contractors should note the change and use the new codes for recording purposes.

DM indicator 011

The percentage of patients with diabetes, on the register, who have a record of retinal screening in the preceding 12 months

DM 011.1 Rationale

Screening for diabetic retinal disease is effective at detecting unrecognised sight-threatening retinopathy. It is recommended that systematic annual screening is provided for all patients with diabetes.

SIGN clinical guideline 116. Management of diabetes. Grade B recommendation 2010. <http://www.sign.ac.uk/guidelines/fulltext/116/index.html>

In order to be effective, screening should be carried out by a skilled professional as part of a formal and systematic screening programme to detect sight-threatening diabetic retinopathy. Contractors should ensure the screening received by patients meets national standards (where local services meet those standards) or the NHS CB standards otherwise.

DM 011.2 Reporting and verification

See indicator wording for requirement criteria.

The contractor is not required to carry out the retinal screening, but it is the responsibility of the contractor to ensure that patients have received retinal screening to the required standard. Contractors may be required to provide proof of attendance at an approved retinal screening service for verification purposes.

DM indicator 012 (NICE 2010 menu ID: NM13)

The percentage of patients with diabetes, on the register, with a record of foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 12 months

DM 012.1 Rationale

Patients with diabetes are at high risk of foot complications. Evaluation of skin, soft tissue, musculoskeletal, vascular and neurological condition on an annual basis is important for the detection of feet at raised risk of ulceration.

The foot inspection and assessment includes:

- identifying the presence of sensory neuropathy (loss of ability to feel a monofilament, vibration or sharp touch) and/or the abnormal build-up of callus
- identifying when the arterial supply to the foot is reduced (absent foot pulses, signs of tissue ischaemia or symptoms of intermittent claudication)
- identifying deformities or problems of the foot (including bony deformities, dry skin or fungal infection), which may put it at risk
- identifying other factors that may put the foot at risk (which may include reduced capacity for self-care, impaired renal function, poor glycaemic control, cardiovascular and cerebrovascular disease, or previous amputation).

The NICE clinical guideline on type 2 diabetes¹⁰² advises that foot risk is classified as:

- at low current risk: normal sensation, palpable pulses
- at increased risk: neuropathy or absent pulses or other risk factor
- at high risk: neuropathy or absent pulses plus deformity or skin changes or previous ulcer
- ulcerated foot.

The practitioner carrying out the inspection and assessment is advised to:

- discuss with the patient their individual level of risk and agree plans for future surveillance
- initiate appropriate referrals for expert review of those with increased risk

¹⁰² NICE clinical guideline CG10. Type 2 diabetes: prevention and management of foot problems 2004. www.nice.org.uk/guidance/CG10

- give advice on action to be taken in the event of a new ulcer/lesion arising
- give advice on the use of footwear which will reduce the risk of a new ulcer/lesion
- give advice on other aspects of foot care which will reduce the risk of a new ulcer/lesion.

For the purposes of QOF the Read codes for 'moderate risk' are used to record the concept of 'increased risk'.

DM 012.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 013 (NICE 2011 menu ID: NM28)

The percentage of patients with diabetes, on the register, who have a record of a dietary review by a suitably competent professional in the preceding 12 months

DM 013.1 Rationale

Much of the management and monitoring of people with diabetes is undertaken by GPs and members of primary care teams. Their role includes encouraging a healthy lifestyle, monitoring and managing blood pressure and lipid levels and helping patients to achieve and maintain low blood glucose levels in order to reduce the risk of complications. For people with diabetes, an understanding of their condition, an informed choice of management opportunities, and the acquisition of relevant skills for successful self-management play an important role in achieving optimal outcomes. This includes the provision of good dietary advice and nutritional information to help people manage their diabetes.

The NICE clinical guideline on type 2 diabetes¹⁰³ recommends that patients with type 2 diabetes be provided with individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition that:

- is sensitive to the individual's needs, culture and beliefs
- emphasises advice on healthy balanced eating
- encourages a diet with high-fibre, low-glycaemic-index sources of carbohydrate, such as fruit, vegetables, whole grains and pulses; that includes low-fat dairy products and oily fish; and controls the intake of foods containing saturated and trans fatty acids.
- targets, for people who are overweight, an initial body weight loss of 5–10 per cent, lesser amounts may still be of benefit, losing more weight in the longer term has metabolic benefits

¹⁰³ NICE clinical guideline CG87. Type 2 Diabetes: the management of type 2 diabetes 2010. www.nice.org.uk/guidance/CG87

- individualised recommendations for carbohydrate and alcohol intake, and meal patterns
- limited substitution of sucrose-containing foods for other carbohydrate in the meal plan is allowable, but that care is taken to avoid excess energy intake
- discourages the use of foods marketed specifically for people with diabetes.

The NICE clinical guideline on type 1 diabetes¹⁰⁴ recommends that for patients with type 1 diabetes:

- It is advised that the hyperglycaemic effects of different foods a person with type 1 diabetes wishes to eat is discussed in the context of the insulin preparations chosen to match those food choices.
- The choice of content, timing and amount of snacks between meals or at bedtime available to the person with type 1 diabetes is to be agreed on the basis of informed discussion about the extent and duration of the effects of consumption of different food types and the insulin preparations available to match them. Those choices are to be modified on the basis of discussion of the results of self-monitoring tests.
- Information is made available on: effects of different alcohol-containing drinks on blood glucose excursions and calorie intake; use of high-calorie and high-sugar 'treats'; use of foods of high glycaemic index.
- All healthcare professionals providing advice on the management of type 1 diabetes are to be aware of appropriate nutritional advice on common topics of concern and interest to adults living with type 1 diabetes and be prepared to seek advice from colleagues with more specialised knowledge. Suggested common topics include:
 - a. glycaemic index of specific foods
 - b. body weight, energy balance and obesity management
 - c. cultural and religious diets, feasts and fasts
 - d. foods sold as 'diabetic'
 - e. sweeteners
 - f. dietary fibre intake
 - g. protein intake
 - h. vitamin and mineral supplements

¹⁰⁴ NICE clinical guideline CG15. Type 1 diabetes: diagnosis and management of type 1 diabetes in children, young people and adults 2004. www.nice.org.uk/guidance/CG15

- i. alcohol
- j. matching carbohydrate, insulin and physical activity
- k. salt intake in hypertension
- l. co-morbidities including nephropathy and renal failure, coeliac disease, cystic fibrosis or eating disorders
- m. use of peer support groups.

The NICE quality statement on nutrition and physical activity advice in the NICE quality standard for diabetes in adults¹⁰⁵ is based on recommendations from the NICE clinical guidelines CG15 and CG87. It states that 'People with diabetes receive personalised advice on nutrition and physical activity from an appropriately trained healthcare professional or as part of a structured educational programme'.

The NICE quality standard defines an appropriately trained healthcare professional as one with specific expertise and competencies in nutrition. This may include, but is not limited to, a registered dietician who delivers nutritional advice on an individual basis or as part of a structured educational programme. The Diabetes UK competency framework for dieticians¹⁰⁶ sets out level one competencies that are the minimum standard for any staff involved in the healthcare of people with diabetes. Therefore, if non-dieticians are employed to deliver dietary advice, they should conform to the level one competencies described in the Diabetes UK framework as a minimum.

The provision of good dietary advice and nutritional information may also be included as part of diabetes education and self-management programmes.

DM 013.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 014 (NICE 2011 menu ID: NM27)

The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register

DM 014.1 Rationale

Diabetes is a progressive long-term medical condition that is predominantly managed by the person with the diabetes and/or their carer as part of their daily life. Accordingly, understanding of diabetes, informed choice of management options and the acquisition of relevant skills for successful self-management play an important role in achieving optimal outcomes. These needs are not always fulfilled by conventional clinical

¹⁰⁵ NICE quality standard. Diabetes in adults 2010.

www.nice.org.uk/guidance/qualitystandards/diabetesinadults/diabetesinadultsqualitystandard.jsp

¹⁰⁶ Deakin T. An integrated career and competency framework for dieticians and frontline staff 2010.

<http://www.dmeg.org.uk/Documents/DieteticCompetencyFramework2011.pdf>

consultations. Structured educational (SE) programmes have been designed not only to improve people's knowledge and skills, but also to help motivate and sustain people with both type 1 and type 2 diabetes in taking control of their condition and in delivering effective self-management. The indicator requires that SE is offered (preferably through a group education programme) to every person with diabetes and/or their carer from the time of diagnosis, with annual reinforcement and review. An alternative education programme of equal standard may be offered to people unable or unwilling to participate in group education sessions.

The NICE technology appraisal on patient education models¹⁰⁷ and the NICE clinical guideline on type 2 diabetes¹⁰⁸ considered SE models for diabetes to be both clinically and cost-effective. There are a number of SE programmes available for diabetes. Some programmes will be more suitable for type 1 diabetes and others for type 2 diabetes.

The NICE quality standard for diabetes in adults¹⁰⁹ is based on NICE clinical guidelines for diabetes¹¹⁰. The NICE quality statement on SE states that 'People with diabetes and/or their carers receive a structured educational programme that fulfils the nationally agreed criteria from the time of diagnosis, with annual review and access to ongoing education'. The NICE quality standard states that a patient educational programme meets five key criteria laid down by the DH and the Diabetes UK Patient Education Working Group¹¹¹:

- Any programme should be evidence-based and suit the needs of the individual. The programme should have specific aims and learning objectives. It should support the learner plus his or her family and carers in developing attitudes, beliefs, knowledge and skills to self-manage diabetes.
- The programme should have a structured curriculum that is theory-driven, evidence-based and resource-effective, has supporting materials and is written down.
- The programme should be delivered by trained educators who have an understanding of educational theory appropriate to the age and needs of the learners and who are trained and competent to deliver the principles and content of the programme.
- The programme should be quality assured and be reviewed by trained, competent, independent assessors who measure it against criteria that ensure consistency.
- The outcomes from the programme should be regularly audited.

¹⁰⁷ NICE technology appraisal TA60. Guidance on the use of patient education models for diabetes 2003. www.nice.org.uk/guidance/TA60

¹⁰⁸ NICE clinical guideline CG87. Type 2 Diabetes: the management of type 2 diabetes 2010. www.nice.org.uk/guidance/CG87

¹⁰⁹ NICE quality standard. Diabetes in adults 2010. www.nice.org.uk/guidance/qualitystandards/diabetesinadults/diabetesinadultsqualitystandard.jsp

¹¹⁰ NICE clinical guideline CG15. Type 1 diabetes: diagnosis and management of type 1 diabetes in children, young people and adults 2004. www.nice.org.uk/guidance/CG15

¹¹¹ DH/Diabetes UK. Structured patient education in DM: Patient Education Working Group report 2005. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4113195

Some practices may be able to deliver SE programmes in-house. These programmes would need to meet the requirements outlined above.

A NICE commissioning guide on patient education programmes for people with type 2 diabetes¹¹² gives further information on providing services.

This indicator suggests referral to a programme within nine months of entry onto the diabetes register to be appropriate for people with type 1 or type 2 diabetes. A timeframe of nine months for this indicator has been set to take into account the differing expectations for referral into SE programmes from diagnosis for people with type 1 and type 2 diabetes.

DM 014.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 015 (NICE 2012 menu ID: NM51)

The percentage of male patients with diabetes, on the register, with a record of being asked about erectile dysfunction in the preceding 12 months

DM 015.1 Rationale

Erectile dysfunction (ED) is a manifestation of autonomic neuropathy as a complication of long-term hyperglycaemia and as such is a common complication of diabetes. Reported prevalence in men with diabetes ranges from 35-90 per cent, depending upon the study methodology and population characteristics. In the Massachusetts Male Aging Study¹¹³, the age-adjusted probability of complete ED was three times greater in men with type 2 diabetes than in those without.

ED is a traumatic complication for some men with diabetes. Although a benign disorder that is not perceived as life-threatening, it can have a significant impact on the quality of life for men with diabetes, their partners and families.

The NICE clinical guideline on type 2 diabetes¹¹⁴, recommends that all men with diabetes are asked about ED on an annual basis, irrespective of age.

The issue of ED can be a difficult topic for both patients and healthcare professionals. It is important that it is discussed in a sensitive manner which allows patients to voice their concerns in a safe and supportive environment. Contractors may wish to consider who in the practice team is best placed to address this issue with patients, how to discuss the issue and whether or not to integrate it into the diabetes annual review.

¹¹² NICE commissioning guide. Patient education programme for people with type 2 diabetes 2008. www.nice.org.uk/usingguidance/commissioningguides/type2diabetes/patienteducationprogrammeforpeoplewithtype2diabetes-mainpage.jsp

¹¹³ Feldman HA, Goldstein I, Hatzichristou DG, et al. Impotence and its medical and psychosocial correlates: results of the Massachusetts Male Aging Study 1994. *Journal of Urology* 151(1): 54-61

¹¹⁴ NICE clinical guideline CG87. Type 2 diabetes 2009. <http://guidance.nice.org.uk/CG87>

Nurses who feel uncomfortable addressing sexual health issues with patients may wish to follow the Royal College of Nursing's (RCN) guidance on sexuality and sexual health in nursing practice¹¹⁵.

DM 015.2 Reporting and verification

See indicator wording for requirement criteria.

DM indicator 016 (NICE 2012 menu ID: NM52)

The percentage of male patients with diabetes, on the register, who have a record of erectile dysfunction with a record of advice and assessment of contributory factors and treatment options in the preceding 12 months

DM 016.1 Rationale

NICE recommends that men with ED are offered an assessment of contributory factors and a discussion of treatment options if applicable. Risk factors for ED include sedentary lifestyle, obesity, smoking, hypercholesterolemia and metabolic syndrome.

The guideline also recommends that men who need treatment could be offered phosphodiesterase type 5 (PDE-5) inhibitors, which can be prescribed on the NHS for men aged 18 or over with diabetes. If treatment is unsuccessful, men could be referred for other medical, surgical or psychological services.

This indicator specifies that treatment options and their effectiveness be reviewed every 12 months.

DM 016.2 Reporting and verification

See indicator wording for requirement criteria.

¹¹⁵ RCN guidance on sexuality and sexual health in nursing practice.
http://www.rcn.org.uk/newsevents/news/article/uk/rcn_launches_new_sexual_health_skills_framework

Hypothyroidism (THY)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| THY001. The contractor establishes and maintains a register of patients with hypothyroidism who are currently treated with levothyroxine | 1 | |
| Ongoing management | | |
| THY002. The percentage of patients with hypothyroidism, on the register, with thyroid function tests recorded in the preceding 12 months | 6 | 50–90% |

THY – rationale for inclusion of indicator set

Hypothyroidism is a common, serious condition with an insidious onset. The mean incidence is 3.5 per 1,000 in women and 0.6 per 1,000 in men. The probability of developing hypothyroidism increases with age and reaches 14 per 1,000 in women aged 75 or over and under the age of 79.

There is a clear consensus on how hypothyroidism is treated. Monitoring of hypothyroidism is almost entirely undertaken in primary care.

THY indicator 001

The contractor establishes and maintains a register of patients with hypothyroidism who are currently treated with levothyroxine

THY 001.1 Rationale

Many patients will have been diagnosed at some time in the past and the details of the diagnostic criteria may not be available. For this reason the patient population consists of those patients taking thyroxine with a recorded diagnosis of hypothyroidism. The most effective method for identifying the patient population would be a computer search for repeat prescribing of thyroxine with a subsequent check of the records to confirm the clinical diagnosis.

THY 001.2 Reporting and verification

See indicator wording for requirement criteria.

THY indicator 002

The percentage of patients with hypothyroidism, on the register, with thyroid function tests recorded in the preceding 12 months

THY 002.1 Rationale

There is no clear evidence on the appropriate frequency of thyroid stimulating hormone (TSH)/T4 measurement. However, the consensus group on thyroid disease recommended an annual check of TSH/T4 levels in all patients treated with thyroxine. In addition they recommend an annual check in patients previously treated with radio-iodine or partial thyroidectomy¹¹⁶.

Thyroid 002.2 Reporting and verification

See indicator wording for requirement criteria.

¹¹⁶ Consensus statement for good practice and audit measures in the management of hypothyroidism and hyperthyroidism. BMJ 1996; 313: 539-544

Asthma (AST)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| AST001. The contractor establishes and maintains a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months | 4 | |
| Initial diagnosis | | |
| AST002. The percentage of patients aged 8 or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before or anytime after diagnosis | 15 | 45–80% |
| Ongoing management | | |
| AST003. The percentage of patients with asthma, on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions <i>NICE 2011 menu ID: NM23</i> | 20 | 45–70% |
| AST004. The percentage of patients with asthma aged 14 or over and who have not attained the age of 20, on the register, in whom there is a record of smoking status in the preceding 12 months | 6 | 45–80% |

AST – rationale for inclusion of indicator set

Asthma is a common condition which responds well to appropriate management and which is principally managed in primary care.

AST indicator 001

The contractor establishes and maintains a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months

AST 001.1 Rationale

Proactive structured review as opposed to opportunistic or unscheduled review is associated with reduced exacerbation rates and days lost from normal activity. The diagnosis of asthma is a clinical one; there is no confirmatory diagnostic blood test, radiological investigation or histopathological investigation. In most patients, the diagnosis can be corroborated by suggestive changes in lung function tests.

One of the main difficulties in asthma is the variable and intermittent nature of asthma. Some of the symptoms of asthma are shared with diseases of other systems. Features of an airway disorder in adults such as cough, wheeze and breathlessness should be corroborated where possible by measurement of airflow limitation and reversibility. Obstructive airways disease produces a decrease in peak expiratory flow (PEF) and forced expiratory volume in one second (FEV₁) but which persist after bronchodilators have been administered. One or both of these should be measured, but may be normal if the measurement is made between episodes of bronchospasm. If repeatedly normal in the presence of symptoms, then a diagnosis of asthma is in doubt.

A proportion of patients with COPD will also have asthma e.g. they have large reversibility – 400 mls or more on FEV₁ – but do not return to over 80 per cent predicted and have a significant smoking history. These patients will be recorded on both the asthma and COPD registers.

Children

A definitive diagnosis of asthma can be difficult to obtain in young children. Asthma is to be suspected in any child with wheezing, ideally heard by a health professional on auscultation and distinguished from upper airway noises.

In schoolchildren, bronchodilator responsiveness, PEF variability or tests of bronchial hyperactivity may be used to confirm the diagnosis, with the same reservations as above.

Focus the initial assessment in children suspected of having asthma on:

- presence of key features in the history and examination
- careful consideration of alternative diagnoses.

Further information

SIGN clinical guideline 101. SIGN and BTS. British guideline on the management of asthma 2009. <http://www.sign.ac.uk/pdf/grg101.pdf>

It is well recognised that asthma is a variable condition and many patients will have periods when they have minimal symptoms. It is inappropriate to attempt to monitor symptom-free patients on no therapy or very occasional therapy.

This produces a significant challenge for the QOF. It is important that resources in primary care are targeted to patients with the greatest need – in this instance, patients who will benefit from asthma review rather than insistence that all patients with a diagnostic label of asthma are reviewed on a regular basis.

It is for this reason that the asthma register is constructed annually by searching for patients with a history of asthma, excluding those who have had no prescription for asthma-related drugs in the preceding 12 months. This indicator has been constructed in this way as most clinical computer systems will be able to identify the defined patient list.

AST 001.2 Reporting and verification

See indicator wording for requirement criteria.

AST indicator 002

The percentage of patients aged 8 or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before or anytime after diagnosis

AST 002.1 Rationale

There is no single infallible test to confirm a diagnosis of asthma. On the basis of the clinical history and examination it will be possible to decide if the probability of asthma is high, intermediate or low and the aim of investigations is to demonstrate objectively the presence of variability in order to support or reject the diagnosis. There are Read codes for 'suspected asthma' and 'suspected respiratory condition' which may be used whilst investigations are undertaken and the diagnosis confirmed.

Further information about the diagnosis of asthma is provided in the BTS-SIGN asthma guideline¹¹⁷. It is crucial that diagnostic spirometry is performed to published quality standards¹¹⁸.

Asthma history

The diagnosis of asthma is suspected when a patient presents a history of variable wheeze, chest tightness, shortness of breath or cough, commonly triggered by viral infections and/or allergy and/or exercise. A personal or family history of atopy (including positive skin prick testing) increases the probability of asthma.

If asthma is probable

In symptomatic patients airway obstruction may be demonstrated by spirometry (FEV₁/FVC ratio <0.7) and (if available) nitric oxide can be used to measure airway inflammation.

Variability of symptoms and/or lung function may be demonstrated in a reversibility test or may occur spontaneously over time in response to triggers or to treatment; demonstration of variability supports the diagnosis of asthma and may be conveniently achieved in primary care in a number of ways:

- Spirometry may be used to demonstrate reversibility in symptomatic patients with demonstrated airflow obstruction. A bronchodilator reversibility test can be performed with inhaled or nebulised short acting beta agonist and if the obstruction reverses then asthma is confirmed. Significant reversibility is a change in FEV₁ >12 per cent and 200 ml (the absolute change is scaled down according to

¹¹⁷ BTS/SIGN clinical guideline 63. Management of Asthma Thorax 2008; 63 (Suppl 4): 1-121
<http://www.brit-thoracic.org.uk> and <http://www.sign.ac.uk>

¹¹⁸ Levy ML, Quanjer PH, Booker R, Cooper BG, Holmes S, Small I. Diagnostic spirometry in primary care: Proposed standards for general practice compliant with ATS and Euro Respiratory Society recommendations: a General Practice Airways Group document in association with the Association for Respiratory Technology & Physiology and Education for Health. PCRJ 2009; 18:130-47.
<http://dx.doi.org/10.4104/pcrj.2009.00054>

predicted FEV₁ in children). Increases of >400 mls are strongly suggestive of asthma. Lower levels of bronchodilator reversibility may be demonstrated in some patients with COPD¹¹⁹. Normal spirometry, however, does not exclude asthma; indeed the variable nature of asthma means that many of the milder patients seen in primary care will be asymptomatic at the time of the lung function test and will have completely normal lung function with no reversibility at the time of testing.

- Variability of PEF. This may be demonstrated by monitoring diurnal, or day to day variation (recorded twice a day for two weeks using the same peak flow meter) and/or demonstrating an increase after therapy (15 minutes after short-acting bronchodilator, after six weeks of inhaled steroids, or up to two weeks after oral steroid treatment) and/or after exposure to triggers (such as exercise, laughter, or allergens). Significant variability is a change of 20 per cent and >60 l/min (the absolute change is scaled down in children to 20 per cent of predicted PEF). PEF are effort dependent and patients need to be taught the correct technique.
- Variability in objective measures of asthma symptom scores (e.g. RCP questions¹²⁰, ACQ¹²¹, ACT questionnaire¹²², or GINA Control Tool¹²³). Symptom scores may be particularly useful in patients unable to undertake accurate serial measures of lung function and to aid clinical interpretation of lung function (e.g. normal lung function in a symptomatic patient might suggest an alternative cause for the symptoms).

A trial of treatment, with repeated lung function measurements and/or symptoms scores over time will demonstrate objective improvement of symptoms and lung function in people with asthma, thereby confirming the diagnosis. In children it is particularly important to reduce and stop treatment to exclude spontaneous improvement¹²⁴.

If the probability of asthma is intermediate

Spirometry is the key investigation for distinguishing obstructive and restrictive respiratory conditions and will determine subsequent investigations¹²⁵. More specialist assessment may be required in those in whom the diagnosis is still unclear, which may include assessment of airway inflammation (e.g. nitric oxide measurement), bronchial hyper-responsiveness testing and consideration of alternative diagnoses. It is recommended that children with combined food allergy and asthma and any patient

¹¹⁹ NICE clinical guideline CG101. The management of COPD in adults in primary and secondary care. Thorax 2004; 59 (Suppl1):S1–23. <http://guidance.nice.org.uk/CG101>

¹²⁰ Pearson MG, Bucknall CE, editors. Measuring clinical outcome in asthma: a patient-focused approach. RCP 1999.

¹²¹ Juniper EF, O'Byrne PM, Guyatt GH, Ferrie PJ, King DR. Development and validation of a questionnaire to measure asthma control. Euro Respiratory Journal 1999;14:902-7

¹²² Nathan RA, Sorkness CA, Kosinski M, et al. Development of the asthma control test: a survey for assessing asthma control. Journal of Allergy Clinical Immunology 2004;113:59-65

¹²³ GINA. The Global Strategy for Asthma Management and Prevention 2011. <http://www.ginasthma.org>

¹²⁴ Brand P. New guidelines on recurrent wheeze in preschool children: implications for primary care. PCRJ 2008; 17:243-245

¹²⁵ BTS/SIGN clinical guideline 63. Management of Asthma Thorax 2008; 63 (Suppl 4): 1-121 <http://www.brit-thoracic.org.uk> and <http://www.sign.ac.uk>

with late onset asthma where there is a suspicion of an occupational cause are referred for specialist assessment.

If another diagnosis is more likely

If an alternative diagnosis is suspected, investigation and management are to follow guidelines for that condition.

Co-morbidity: asthma and COPD

A proportion of patients with asthma will have both asthma and COPD e.g. they have airway obstruction that does not reverse to normal but also have substantial reversibility¹²⁶.

AST 002.2 reporting and verification

See indicator wording for requirement criteria.

AST indicator 003 (NICE 2011 menu ID: NM23)

The percentage of patients with asthma, on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions

AST 003.1 Rationale

Structured care has been shown to produce benefits for patients with asthma. The reckoning of morbidity, PEF levels, inhaler technique and current treatment and the promotion of self-management skills are common themes of good structured care. The BTS/SIGN clinical guideline¹²⁷ proposes a structured system for recording inhaler technique, morbidity, PEF levels, current treatment and asthma action plans.

The clinical guideline recommends the use of standard questions for the monitoring of asthma. Proactive structured review, rather than opportunistic or unscheduled review, is associated with reduced exacerbation rate and fewer days lost from normal activity.

The QOF now explicitly requires that the following RCP questions¹²⁸ are used as an effective way of assessing symptoms:

In the last month:

- Have you had difficulty sleeping because of your asthma symptoms (including cough)?
- Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness or breathlessness)?

¹²⁶ NICE clinical guideline CG101. The management of COPD in adults in primary and secondary care. Thorax 2004;59 (Suppl1):S1–23.

¹²⁷ BTS/SIGN clinical guideline 101. Management of asthma 2011. <http://www.sign.ac.uk/pdf/grg101.pdf>

¹²⁸ RCP. Pearson MG, Bucknall CE, editors. Measuring clinical outcomes in asthma: patient focused approach.

- Has your asthma interfered with your usual activities (for example, housework, work/school, etc.)?

The questions are to be asked at the same time and as part of the review. A response of 'No' to all questions is consistent with well-controlled asthma¹²⁹.

If the asthma appears to be uncontrolled, the following are to be managed appropriately before increasing asthma therapy:

- smoking behaviour (because smoking interferes with asthma control)
- poor inhaler technique
- inadequate adherence to regular preventative asthma therapy
- rhinitis.

There is increasing evidence to support personalised asthma action plans in adults with persistent asthma. Contractors may wish to follow the advice of the BTS/SIGN guideline and offer a personalised asthma action plan to patients.

Peak flow is a valuable guide to the status of a patient's asthma, especially during exacerbations. However, it is much more useful if there is a record of their best peak flow (that is, peak flow when they are well). Many guidelines for exacerbations are based on the ratio of current to best peak flows. For patients aged 19 or over no particular time limit is needed for measuring best peak flow. However in view of the reduction in peak flow with age, it is recommended that the measurement be updated every few years. For patients aged 18 or under the peak flow will be changing; therefore it is recommended that the best peak flow be re-assessed annually. Inhaler technique is to be reviewed regularly. The BTS/SIGN clinical guideline emphasises the importance of assessing ability to use inhalers before prescribing and regularly reviewing technique, especially if control is inadequate. Inhalers are to be prescribed only after patients have received training in the use of the device and have demonstrated satisfactory technique. Reassess inhaler technique as part of their structured asthma review.

During an asthma review the following takes place:

- assess symptoms (using the three RCP questions)
- measure peak flow
- assess inhaler technique
- consider a personalised asthma plan.

¹²⁹ Thomas M, Gruffydd-Jones K, Stonham C et al. Assessing asthma control in routine clinical practice: use of the RCP '3 Questions' 2009. PCRJ 18: 83-8

If the asthma appears to be uncontrolled, follow the additional steps outlined above.

AST 003.2 Reporting and verification

See indicator wording for requirement criteria.

The Business Rules require that contractors code the review and the responses to the three RCP questions separately and on the same day in order to meet the requirements of this indicator.

AST indicator 004

The percentage of patients with asthma aged 14 or over and who have not attained the age of 20, on the register, in whom there is a record of smoking status in the preceding 12 months

AST 004.1 Rationale

Many young people start to smoke at an early age. It is therefore justifiable to ask about smoking on an annual basis in this age group.

Studies of smoking related to asthma are surprisingly few in number. Starting smoking as a teenager increases the risk of persisting asthma. There are very few studies that have considered the question of whether smoking affects asthma severity. One controlled cohort study suggested that exposure to passive smoke at home delayed the recovery from an acute attack. There is also epidemiological evidence that smoking is associated with poor asthma control¹³⁰.

It is recommended that smoking cessation be encouraged as it is good for general health and may decrease asthma severity¹³¹.

AST 004.2 Reporting and verification

See indicator wording for requirement criteria.

¹³⁰ Price et al. Clin Exp Allergy 2005; 35: 282-287

¹³¹ Thomson et al. Euro Respiratory Journal 2004; 24: 822-833

Chronic obstructive pulmonary disease (COPD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| COPD001. The contractor establishes and maintains a register of patients with COPD | 3 | |
| Initial diagnosis | | |
| COPD002. The percentage of patients with COPD (diagnosed on or after 1 April 2011) in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register | 5 | 45–80% |
| Ongoing management | | |
| COPD003. The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the Medical Research Council dyspnoea scale in the preceding 12 months | 9 | 50–90% |
| COPD004. The percentage of patients with COPD with a record of FEV ₁ in the preceding 12 months | 7 | 40–75% |
| COPD005. The percentage of patients with COPD and Medical Research Council dyspnoea grade ≥ 3 at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months <i>NICE 2012 menu ID: NM63</i> | 5 | 40–90% |
| COPD006. The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March | 6 | 57–97% |

COPD – rationale for inclusion of indicator set

COPD is a common disabling condition with a high mortality. The most effective treatment is smoking cessation. Oxygen therapy has been shown to prolong life in the later stages of the disease and has also been shown to have a beneficial impact on exercise capacity and mental state. Some patients respond to inhaled steroids. Many patients respond symptomatically to inhaled beta-agonists and anti-cholinergics. Pulmonary rehabilitation has been shown to produce an improvement in quality of life.

The majority of patients with COPD are managed by GPs and members of the primary care team with onward referral to secondary care when required. This indicator set focuses on the diagnosis and management of patients with symptomatic COPD.

COPD indicator 001

The contractor establishes and maintains a register of patients with COPD

COPD 001.1 Rationale

A diagnosis of COPD is considered in any patient who has symptoms of a persistent cough, sputum production, or dyspnoea and/or a history of exposure to risk factors for the disease. The diagnosis is confirmed by post bronchodilator spirometry.

See COPD002.1

Where patients have a long-standing diagnosis of COPD and the clinical picture is clear, it would not be essential to confirm the diagnosis by spirometry in order to enter the patient onto the register. However, where there is doubt about the diagnosis contractors may wish to carry out post bronchodilator spirometry for confirmation.

NICE clinical guideline CG101 recommended a change to the diagnostic threshold for COPD in 2010.

Table 2. Gradation of severity of airflow obstruction

| | | NICE CG12 (2004) | ATS/ERS ¹³² 2004 | GOLD 2008 ¹³³ | NICE CG101 (2010) |
|---|---------------------------------|---------------------------------|--------------------------------|--------------------------|-------------------------|
| Post bronchodilator FEV ₁ /FVC | FEV ₁ % predicted | Severity of airflow obstruction | | | |
| | | | Post bronchodilator | Post bronchodilator | Post bronchodilator |
| < 0.7 | ≥ 80% | | Mild | Stage 1 – Mild | Stage 1 – Mild* |
| < 0.7 | 50-79% | Mild | Moderate | Stage 2 – Moderate | Stage 2 – Moderate |
| < 0.7 | 30-49% | Moderate | Severe | Stage 3 – Severe | Stage 3 – Severe |
| < 0.7 | < 30% | Severe | Very severe | Stage 4 – Very severe** | Stage 4 – Very severe** |

* Symptoms present to diagnose COPD in patients with mild airflow obstruction (see recommendation 1.1.1.1).

** Or FEV₁ (forced expiratory volume in one second) < 50 per cent with respiratory failure.

COPD 001.2 Reporting and verification

See indicator wording for requirement criteria.

Where patients have co-existing COPD and asthma they will be included on both disease registers. Approximately 15 per cent of patients with COPD will also have asthma.

¹³² Celli BR, Macnee W. Standards for diagnosis and treatment of patients with COPD: a summary of the ATS/ERS position paper 2004. Euro Respiratory Journal 23(6): 932-46.

¹³³ Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global strategy for the diagnosis, management and prevention of COPD 2008.

COPD indicator 002

The percentage of patients with COPD (diagnosed on or after 1 April 2011) in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register

COPD 002.1 Rationale

A diagnosis of COPD relies on clinical judgement based on a combination of history, physical examination and confirmation of the presence of airflow obstruction using spirometry.

The NICE clinical guideline on COPD¹³⁴ provides the following definition of COPD:

- airflow obstruction is defined as a reduced FEV₁/FVC ratio (where FEV₁ is forced expired volume in one second and FVC is forced vital capacity), such that FEV₁/FVC is < 0.7
- if FEV₁ is greater than or equal to 80 per cent predicted normal a diagnosis of COPD would only be made in the presence of respiratory symptoms, for example breathlessness or cough.

The NICE clinical guideline requires post bronchodilator spirometry for diagnosis and gradation of severity of airways obstruction. Failure to use post bronchodilator readings has been shown to overestimate the prevalence of COPD by 25 per cent¹³⁵. Spirometry is to be performed after the administration of an adequate dose of an inhaled bronchodilator (e.g. 400 mcg salbutamol).

Prior to performing post bronchodilator spirometry, patients do not need to stop any therapy, such as long-acting bronchodilators or inhaled steroids.

Routine reversibility testing is not recommended. However, where doubt exists as to whether the diagnosis is asthma or COPD, reversibility testing may add additional information to post bronchodilator readings alone and peak flow charts are useful. It is acknowledged that COPD and asthma can co-exist and that many patients with asthma who smoke will eventually develop irreversible airways obstruction. Where asthma is present, these patients would be managed as asthma patients as well as COPD patients. This will be evidenced by a greater than 400mls response to a reversibility test and a post bronchodilator FEV₁ of less than 80 per cent of predicted normal as well as an appropriate medical history.

Patients with reversible airways obstruction will be included on the asthma register. Patients with coexisting asthma and COPD will be included on the register for both conditions.

¹³⁴ NICE clinical guideline CG101. The management of COPD in adults in primary and secondary care 2010. <http://guidance.nice.org.uk/CG101>

¹³⁵ Johannessen et al. Thorax 2005; 60(10): 842-847

The guideline on COPD recommends that all health professionals involved in the care of patients with COPD have access to spirometry and be competent in the interpretation of the results. Quality statement 1 (diagnosis) in the NICE quality standard for COPD in adults¹³⁶, states that patients with COPD have the diagnosis confirmed by post bronchodilator spirometry carried out on calibrated equipment by healthcare professionals competent in its performance and interpretation.

From April 2011 the diagnostic codes for this indicator were updated to include new codes for post bronchodilator spirometry. The previous codes for reversibility testing will not be acceptable for QOF purposes.

COPD 002.2 Reporting and verification

See indicator wording for requirement criteria.

COPD indicator 003

The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the Medical Research Council dyspnoea scale in the preceding 12 months

COPD 003.1 Rationale

COPD is increasingly recognised as a treatable disease with large improvements in symptoms, health status, exacerbation rates and even mortality if managed appropriately. Appropriate management is based on NICE clinical guideline CG101 and international GOLD guidelines in terms of both drug and non-drug therapy.

In making assessments of the patient's condition as part of an annual review and when considering management changes it is essential that health care professionals are aware of:

1. current lung function
2. exacerbation history
3. degree of breathlessness (Medical Research Council (MRC) dyspnoea scale).

A tool such as the Clinical COPD Questionnaire¹³⁷ could be used to assess current health status.

Additionally there is evidence that inhaled therapies can improve the quality of life in some patients with COPD. However, there is evidence that patients require training in inhaler technique and that such training requires reinforcement. Where a patient is prescribed an inhaled therapy their technique is to be assessed during any review.

¹³⁶ NICE quality standard on COPD 2011.

<http://www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandards.jsp>

¹³⁷ Clinical COPD Questionnaire. <http://www.ccg.nl/>

The MRC dyspnoea scale gives a measure of breathlessness and is recommended as part of the regular review. It is available in the NICE clinical guideline on COPD, section 1.1, diagnosing COPD table one.

COPD 003.2 Reporting and verification

See indicator wording for requirement criteria.

COPD indicator 004

The percentage of patients with COPD with a recorded FEV₁ in the preceding 12 months

COPD 004.1 Rationale

There is a gradual deterioration in lung function in patients with COPD. This deterioration accelerates with the passage of time. There are important interventions which can improve quality of life in patients with severe COPD. It is therefore important to monitor respiratory function in order to identify patients who might benefit from pulmonary rehabilitation or continuous oxygen therapy.

The NICE clinical guideline on COPD recommends that FEV₁ and inhaler technique are assessed at least annually for patients with mild/moderate/severe COPD (and at least twice a year for patients with very severe COPD). The purpose of regular monitoring is to identify patients with increasing severity of disease who may benefit from referral for more intensive treatments/diagnostic review.

Further information

NICE clinical guideline CG101 – see table six.

Contractors should identify those patients who could benefit from long-term oxygen therapy and pulmonary rehabilitation.

These measures require specialist referral because of the need to measure arterial oxygen saturation to assess suitability for oxygen therapy and the advisability of specialist review of patients prior to starting pulmonary rehabilitation.

The long-term administration of oxygen (more than 15 hours per day) to patients with chronic respiratory failure has been shown to increase survival and improve exercise capacity. Referral for consideration for long-term oxygen therapy and/or pulmonary rehabilitation is to be made to those with appropriate training and expertise. This may include a respiratory physician, a general physician or a GP with a special interest (GPwSI) in respiratory disease. The specific clinical criteria for referral for long-term oxygen therapy and pulmonary rehabilitation are set out in NICE clinical guideline CG101.

COPD 004.2 Reporting and verification

See indicator wording for requirement criteria.

COPD indicator 005 (NICE 2012 menu ID: NM63)

The percentage of patients with COPD and Medical Research Council dyspnoea grade ≥ 3 at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months

COPD 005.1 Rationale

As COPD progresses, patients often become hypoxaemic. Many patients tolerate mild hypoxaemia well, but once the resting partial pressure of oxygen in arterial blood (PaO₂) falls below 8 KPa patients begin to develop signs of right-sided HF (cor pulmonale), principally peripheral oedema. The prognosis is poor and if untreated the five year survival is less than 50 per cent.

In stable COPD, patients use oxygen therapy for long periods during the day and night. Long-term oxygen therapy can improve survival in patients with COPD who have severe hypoxaemia, where PaO₂ is less than 8 KPa. It can also reduce the incidence of polycythaemia (that is, raised red cell count), reducing the progression of pulmonary hypertension and improving psychological wellbeing.

NICE clinical guideline CG101 recommends that patients with oxygen saturations of 92 per cent or lower when breathing air, be considered for oxygen therapy. Pulse oximetry (SpO₂) provides an estimate of arterial oxygen saturation (SaO₂) and is non-invasive.

Pulse oximetry allows practitioners to assess patients' level of oxygen saturation to determine if whether referral for clinical assessment and long-term oxygen therapy is appropriate. Pulse oximetry is a valuable screening tool for identifying patients who are appropriate for referral for long-term oxygen therapy. A normal pulse oximetry reading (SpO₂ greater than 92 per cent) can reliably identify patients who do not need referral. However, pulse oximetry cannot predict which patients with an abnormal reading (SpO₂ of 92 per cent or lower) have sufficiently severe hypoxaemia to require long-term oxygen therapy, therefore these patients require further assessment.

COPD 005.2 Reporting and verification

See indicator wording for requirement criteria.

The Business Rules require that a record that pulse oximetry has been performed AND the resulting oxygen saturation value are recorded to meet the requirements for this indicator.

COPD indicator 006

The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March

COPD 006.1 Rationale

This is a current recommendation from the CMO and the JCVI.

Further information

DH. Influenza. <http://www.dh.gov.uk/health/category/policy-areas/public-health/influenza/>

COPD 006.2 Reporting and verification

See indicator wording for requirement criteria.

From April 2012, the FLU_COD cluster in the Business Rules was replaced. Contractors should note the change and use the new codes for recording purposes.

Dementia (DEM)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| DEM001. The contractor establishes and maintains a register of patients diagnosed with dementia | 5 | |
| Ongoing management | | |
| DEM002. The percentage of patients diagnosed with dementia whose care has been reviewed in a face-to-face review in the preceding 12 months | 15 | 35–70% |
| DEM003. The percentage of patients with a new diagnosis of dementia recorded in the preceding 1 April to 31 March with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded between 6 months before or after entering on to the register <i>NICE 2010 menu ID: NM09</i> | 6 | 45–80% |

DEM – rationale for inclusion of indicator set

Dementia is a syndrome characterised by an insidious but ultimately catastrophic progressive global deterioration in intellectual function and is a main cause of late-life disability. The prevalence of dementia increases with age and is estimated to be approximately 20 per cent at the age of 80. The annual incidence of vascular dementia is 1.2/100 overall person years at risk and is the same in all age groups. Alzheimers disease accounts for 50–75 per cent of cases of dementia.

The annual incidence of dementia of the Alzheimers type rises to 34.3/100 person years at risk in the 90 year age group; the prevalence is higher in women than in men due to the longer lifespan of women. Other types of dementia such as Lewy Body dementia and fronto-temporal dementia are relatively rare but can be very distressing. In a third of cases, dementia is associated with other psychiatric symptoms (depressive disorder, adjustment disorder, generalised anxiety disorder, alcohol related problems). A complaint of subjective memory impairment is an indicator of dementia especially where there is altered functioning in terms of activities of daily living.

DEM indicator 001

The contractor establishes and maintains a register of patients diagnosed with dementia

DEM 001.1 Rationale

There is little evidence to support screening for dementia and it is expected that the diagnosis will largely be recorded from correspondence when patients are referred to secondary care with suspected dementia or as an additional diagnosis when a patient is

seen in secondary care. However it is also important to include patients where it is inappropriate or not possible to refer to a secondary care provider for a diagnosis and where the GP has made a diagnosis based on their clinical judgement and knowledge of the patient.

DEM 001.2 Reporting and verification

See indicator wording for requirement criteria.

DEM indicator 002

The percentage of patients diagnosed with dementia whose care has been reviewed in a face-to-face review in the preceding 12 months

DEM 002.1 Rationale

The face-to-face review focuses on support needs of the patient and their carer. In particular the review addresses four key issues:

1. an appropriate physical and mental health review for the patient
2. if applicable, the carer's needs for information commensurate with the stage of the illness and his or her and the patient's health and social care needs
3. if applicable, the impact of caring on the care-giver
4. communication and co-ordination arrangements with secondary care (if applicable).

A series of well-designed cohort and case control studies have demonstrated that patients with Alzheimer-type dementia do not complain of common physical symptoms, but experience them to the same degree as the general population. Patient assessments therefore include the assessment of any behavioural changes caused by:

- concurrent physical conditions (e.g. joint pain or inter-current infections)
- new appearance of features intrinsic to the disorder (e.g. wandering) and delusions or hallucinations due to the dementia or as a result of caring behaviour (e.g. being dressed by a carer).

Depression could also be considered as it is more common in patients with dementia than those without¹³⁸.

Patients and carers are to be given relevant information about the diagnosis and sources of help and support (bearing in mind issues of confidentiality). Evidence suggests that healthcare professionals can improve satisfaction for carers by acknowledging and dealing with their distress and providing more information on dementia¹³⁹. As the illness progresses, needs may change and the review may focus more on issues such as respite care.

¹³⁸ Burt et al. Psychol Bull 1995; 117: 285-305

¹³⁹ Eccles et al. BMJ 1998; 317: 802-808

There is good evidence from well designed cohort studies and case control studies of the benefit of healthcare professionals asking about the impact of caring for a person with dementia and the effect this has on the caregiver. It is important to remember that male carers are less likely to complain spontaneously and that the impact of caring is dependent not on the severity of the cognitive impairment but on the presentation of the dementia, for example, on factors such as behaviour and affect. If the carer is not registered at the practice, but the GP is concerned about issues raised in the consultation, then with appropriate permissions they can contact the carer's own GP for further support and treatment.

As the illness progresses and more agencies are involved, the review could additionally focus on assessing the communication between health and social care and non-statutory sectors as appropriate, to ensure that potentially complex needs are addressed. Communication and referral issues highlighted in the review need to be followed up as part of the review process.

Further information

NICE clinical guideline CG42. Dementia. Supporting people with dementia and their carers in health and social care 2006.

<http://guidance.nice.org.uk/CG42/NICEGuidance/pdf/English>

The Audit Commission Report. Forget me not 2002. <http://www.audit-commission.gov.uk/nationalstudies/health/mentalhealth/Pages/forgetmenot2002.aspx>

The NSF for Older People.

http://www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/DH_4003066

NICE public health guidance 16. Mental wellbeing in older people 2008.

<http://publications.nice.org.uk/occupational-therapy-interventions-and-physical-activity-interventions-to-promote-the-mental-ph16>

SIGN clinical guideline 86. Managing patients with dementia 2006.

<http://www.sign.ac.uk/pdf/sign86.pdf>

Coping with Dementia – a Handbook for Carers 2008.

<http://www.healthscotland.com/uploads/documents/7632-CopingWithDementia2008.pdf>

DEM 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification – the NHS CB may require randomly selecting a number of patient records of patients in which the review has been recorded as taking place to confirm that the four key issues are recorded as having been addressed, if applicable.

DEM indicator 003 (NICE 2010 menu ID: NM09)

The percentage of patients with a new diagnosis of dementia recorded in the preceding 1 April to 31 March with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded between 6 months before or after entering on to the register.

DEM 003.1 Rationale

There is no universal consensus on the appropriate diagnostic tests to be undertaken in those with suspected dementia. However, a review of 14 guidelines and consensus statements found considerable similarity in recommendations¹⁴⁰. The main reason for undertaking investigations in a patient with suspected dementia is to exclude a potentially reversible or modifying cause for the dementia and to help exclude other diagnoses (e.g. delirium). Reversible or modifying causes include metabolic and endocrine abnormalities (e.g. vitamin B12 and folate deficiency, hypothyroidism, diabetes and disorders of calcium metabolism).

The NICE clinical guideline on dementia¹⁴¹ states that a basic dementia screen is performed at the time of presentation, usually within primary care. It includes:

- routine haematology
- biochemistry tests (including electrolytes, calcium, glucose, and renal and liver function)
- thyroid function tests
- serum vitamin B12 and folate levels.

DEM 003.2 Reporting and verification

See indicator wording for requirement criteria.

For the purpose of this indicator, if a test for HbA1c has been carried out within the timeframe permitted by this indicator, then a test for glucose would not be required. All tests are required to be carried out (with the exception of glucose in the above scenario) to meet the requirements of this indicator. Where the test is declined by the patient, then the patient may be exception reported.

This indicator only applies to patients with a new diagnosis of dementia in the QOF year. However the workload has the potential to span more than one QOF year. Therefore the associated Business Rules cover 18 months to capture patients whose care could span more than one QOF year e.g. six months before or after a new diagnosis is recorded.

¹⁴⁰ Beck C, Cody M, Souder E et al. Dementia diagnostic guidelines: methodologies, results and implementation costs 2000. *Journal of the Am Geriatrics Society* 48: 1195-1203

¹⁴¹ NICE clinical guideline CG42. Dementia. Supporting people with dementia and their carers in health and social care 2006. www.nice.org.uk/CG42

Depression (DEP)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Initial diagnosis | | |
| DEP001. The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have had a bio-psychosocial assessment by the point of diagnosis. The completion of the assessment is to be recorded on the same day as the diagnosis is recorded <i>NICE 2012 menu ID: NM49</i> | 21 | 50–90% |
| Initial management | | |
| DEP002. The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have been reviewed not earlier than 10 and not later than 35 days after the date of diagnosis <i>NICE 2012 menu ID: NM50</i> | 10 | 45–80% |

DEP – rationale for inclusion of the indicator set

Depression is common and disabling.

In 2000, the estimated point prevalence for a depressive episode among people aged 16 or over and under the age of 74 in the UK was 2.6 per cent (males 2.3 per cent, females 2.8 per cent). If the broader and less specific category of 'mixed depression and anxiety' is included, these figures increase dramatically to 11.4 per cent (males 9.1 per cent, females 13.6 per cent¹⁴²). It contributes 12 per cent of the total burden of non-fatal global disease and by 2020, looks set to be second after CVD in terms of the world's disabling diseases¹⁴³. Major depressive disorder is increasingly seen as chronic and relapsing, resulting in high levels of personal disability, lost quality of life for patients, their family and carers, multiple morbidity, suicide, higher levels of service use and many associated economic costs. In 2000, 109.7 million lost working days and 2615 deaths were attributable to depression. The total annual cost of adult depression in England has been estimated at over £9 billion, of which £370 million represents direct treatment costs.

¹⁴² NICE clinical guideline CG90. The treatment and management of depression in adults 2009. <http://guidance.nice.org.uk/CG90>

¹⁴³ Murray CJL and Lopez AD. The global burden of disease. Boston, Mass: WHO and Harvard University Press, 1996.

DEP indicator 001 (NICE 2012 menu NM49)

The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have had a bio-psychosocial assessment by the point of diagnosis. The completion of the assessment is to be recorded on the same day as the diagnosis is recorded

DEP 001.1 Rationale

The NICE clinical guideline for depression in adults¹⁴⁴ states that patients with suspected depression have a comprehensive assessment which includes severity of symptoms, degree of functional impairment and/or disability associated with the possible depression and duration of the episode.

Consideration may also be given to factors which may have affected the development, course and severity of this episode such as past history of depression, previous treatments and access to personal and social support. The guideline also recommends that people with depression are asked directly about suicidal ideation and intent.

A bio-psychosocial assessment (BPA) is a qualitative assessment of a patient presenting with suspected depression which considers physical, psychological and social aspects of the condition. While the assessment can be carried out over more than one consultation as clinically appropriate the indicator requires that the assessment is recorded as completed on the same date as the diagnosis of depression is recorded in the patient record. The assessment follows good clinical practice and addresses the following:

- current symptoms including duration and severity
- personal history of depression
- family history of mental illness
- the quality of interpersonal relationships with, for example, partner, children and/or parents
- living conditions
- social support
- employment and/or financial worries
- current or previous alcohol and substance use
- suicidal ideation
- discussion of treatment options

¹⁴⁴ NICE clinical guideline CG90. Depression in adults 2009. <http://publications.nice.org.uk/depression-in-adults-cg90>

- any past experience of, and response to, treatments.

Clinicians may optionally wish to use formal assessment questionnaires such as PHQ9, HADS and BDI-II to assess the duration and severity of the current episode. Additionally, clinicians may wish to address the following:

- co-morbid mental health or physical disorders
- any past history of mood elevation, to determine if the depression may be part of a bipolar disorder
- awareness of sources of help
- patient's views of the cause of their symptoms
- discussion of the need for follow-up.

In circumstances where a patient is diagnosed with depression outside of primary care, contractors may exception report or use the indicator thresholds.

DEP 001.2 Reporting and verification

See indicator wording for requirement criteria.

The disease register for the depression indicators for the purpose of calculating the APDF is defined as all patients aged 18 or over, diagnosed on or after 1 April 2006, who have an unresolved record of depression in their patient record.

The indicator requires that the diagnosis of depression and the BPA codes are recorded on the same date to meet the requirements for this indicator.

This indicator requires that the contractor records the BPA as complete at the same time that diagnosis is recorded. When the BPA and diagnosis of depression are made in secondary care by specialist mental health services and the contractor doesn't know whether the BPA has been completed, the contractor can exception report the patient. This is because once a patient has been diagnosed with depression, it is not clinically appropriate to deliver a further BPA.

It is recommended that where the diagnosis is made by specialist mental health services and the patient has been discharged for follow-up by the primary care team, the contractor should try to find out the diagnosis date in order to record this and invite the patient for a review within the timeframe for DEP002. If the date of diagnosis is unknown or the letter arrives too late then the contractor records the date of diagnosis as the date the letter arrives and invites the patient for review within the timeframe for DEP002 from that date.

Suspected depression seen in secondary care may not always be referred to specialist mental health services for further assessment and management. It may be in the form of a discharge letter from an acute medical or surgical ward, A&E or from an outpatient appointment. It may be reasonable in these circumstances for a contractor to contact

the patient to ask them to attend for an assessment to assess if they have a clinical diagnosis of depression. In such cases, the BPA can be carried out at that time.

Where the ongoing care for patients is being provided by specialist mental health services the patients should be exception reported from DEP002. Where a patient has been excepted from DEP001 using a domain level exception code because they are being managed in secondary care, they will also be excepted from DEP002.

Verification - the NHS CB may wish to review the records of patients who are claimed as a success against this indicator to ensure that all essential elements of the assessment have been recorded.

DEP indicator 002 (NICE 2012 menu ID: NM50)

The percentage of patients aged 18 or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have been reviewed not earlier than 10 days after and not later than 35 days after the date of diagnosis

DEP 002.1 Rationale

The NICE clinical guideline on depression in adults states that patients with mild depression or sub-threshold symptoms be reviewed and re-assessed after initial presentation, normally within two weeks.

CG90 recommends that patients with mild or moderate depression who start antidepressants are reviewed after one week if they are considered to present an increased risk of suicide or after two weeks if they are not considered at increased risk of suicide. Patients are then re-assessed at regular intervals determined by their response to treatment and whether or not they are considered to be at an increased risk of suicide.

This indicator promotes a single depression review between ten and 35 days after the date of diagnosis. For some patients this may not be their first review as they will have been reviewed initially within a week of the diagnosis. Unless a patient's symptoms have resolved, further reviews may be required.

Practitioners are reminded of the importance of regular follow-up in this group of patients to monitor response to treatment, identify any adherence issues and provide on-going support. This review could address the following:

- a review of depressive symptoms
- a review of social support
- a review of alternative treatment options where indicated
- follow-up on progress of external referrals
- an enquiry about suicidal ideation

- highlighting the importance of continuing with medication to reduce the risk of relapse
- the side-effects and efficacy of medication. In the USA, 40 per cent of patients prescribed an antidepressant will discontinue its use within one month. Analysis of the GPRD 145 from 1993 to 2005 found that more than half of patients treated with antidepressants had only received prescriptions for one or two months of treatment and that this pattern had not changed over the 13-year period.

Additionally, clinicians may wish to use formal assessment questionnaires such as PHQ9, HADS and BDI-II to monitor response to treatment.

In most clinical circumstances, the review would be performed during a face-to-face consultation so that body language and non-verbal cues may be observed. However, there is some evidence that telephone review may be appropriate for patients starting antidepressants^{146,147} or for patients with mild depression who are not considered at increased risk of suicide and:

- the patient is well known to the GP who is conducting the telephone consultation
- the GP feels confident in their ability to perform a telephone consultation in this context
- the patient has failed to attend a face-to-face review and is proactively contacted on the telephone by a GP
- the patient has expressed a preference for telephone follow-up.

Only face-to-face or telephone contact with a GP or nurse practitioner is acceptable to meet the requirements for this indicator.

DEP 002.2 Reporting and verification

See indicator wording for requirement criteria.

Those patients exception reported from DEP001 using a domain level exception code because the BPA and the diagnosis of depression were made by specialist mental health services will be exception reported from DEP002.

Those patients whose ongoing case is being provided by specialist mental health services should be exception reported.

It is recommended that where the diagnosis is made by specialist mental health services and the patient has been discharged for follow-up by the primary care team, the

¹⁴⁵ Moore M, Yuen HM, Dunn N, et al. Explaining the rise in antidepressant prescribing: a descriptive study using the GPRD 2009. *BMJ*, 339:b3999.

¹⁴⁶ *Journal of the AMA*, 292:935-42. Simon G, Ludman Y, Tutty S, et al. Telephone psychotherapy and telephone care management for primary care patients starting antidepressant treatment 2004.

¹⁴⁷ *Archives of General Psychiatry*, 58:395-401. Simon G, Von Korff M, Rutter C, et al. Treatment process and outcomes for managed care patients receiving new antidepressant treatment prescriptions from psychiatrists and primary care physicians 2001.

contractor should try to find out the diagnosis date in order to record this and invite the patient for a review within the timeframe for DEP002. If the date of diagnosis is unknown or the letter arrives too late then the contractor records the date of diagnosis as the date the letter arrives and invites the patient for review within the timeframe for DEP002 from that date.

Suspected depression seen in secondary care may not always be referred to specialist mental health services for further assessment and management. It may be in the form of a discharge letter from an acute medical or surgical ward, A&E or from an outpatient appointment. It may be reasonable in these circumstances for a contractor to contact the patient to ask them to attend for an assessment to assess if they have a clinical diagnosis of depression. In such cases, the BPA can be carried out at that time.

The disease register for the depression indicators for the purpose of calculating the APDF is defined as all patients aged 18 or over, diagnosed on or after 1 April 2006, who have an unresolved record of depression in their patient record.

Verification - the NHS CB may wish to ask contractors about the percentage of telephone reviews conducted and who they were delivered by.

Mental health (MH)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| MH001. The contractor establishes and maintains a register of patients with schizophrenia, bipolar affective disorder and other psychoses and other patients on lithium therapy | 4 | |
| Ongoing management | | |
| MH002. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan documented in the record, in the preceding 12 months, agreed between individuals, their family and/or carers as appropriate | 6 | 40–90% |
| MH003. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months <i>NICE 2010 menu ID: NM17</i> | 4 | 50–90% |
| MH004. The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 12 months <i>NICE 2010 menu ID: NM18</i> | 5 | 45–80% |
| MH005. The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose or HbA1c in the preceding 12 months <i>NICE 2011 menu ID: NM42</i> | 5 | 45–80% |
| MH006. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 12 months <i>NICE 2010 menu ID: NM16</i> | 4 | 50–90% |
| MH007. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 12 months <i>NICE 2010 menu ID: NM15</i> | 4 | 50–90% |
| MH008. The percentage of women aged 25 or over and who have not attained the age of 65 with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years <i>NICE 2010 menu ID: NM20</i> | 5 | 45–80% |

| | | |
|---|---|--------|
| MH009. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months <i>NICE 2010 menu ID: NM21</i> | 1 | 50–90% |
| MH010. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months <i>NICE 2010 menu ID: NM22</i> | 2 | 50–90% |

MH – rationale for inclusion of indicator set

This indicator set reflects the complexity of mental health problems, and the complex mix of physical, psychological and social issues that present to GPs.

Indicators MH002 – MH008 relate to the care of patients with a diagnosis of schizophrenia, bipolar or other affective disorders. Indicators MH009 and MH010 relate to the care of patients who are currently prescribed lithium. Indicator MH001 requires contractors to establish and maintain a register of individuals with a diagnosis of serious mental illness e.g. schizophrenia, bipolar or other affective disorders and other patients on lithium therapy.

For many patients with mental health problems, the most important indicators relate to the interpersonal skills of the doctor, the time given in consultations and the opportunity to discuss a range of management options.

This indicator set focuses on patients with serious mental illness. There are separate indicator sets that focus on patients with depression and dementia.

Mental health indicators MH003 – MH008

It is recommended that patients receive an annual health promotion and prevention review and advice appropriate to their age, gender and health status.

The components of an annual review have been separated out to create a series of indicators. The annual timeframe for these indicators is in line with the NICE clinical guideline on schizophrenia¹⁴⁸.

The NICE clinical guideline on bipolar disorder¹⁴⁹ recommends that patients with bipolar affective disorder have an annual physical health review, normally in primary care, to ensure that the following are assessed each year:

- lipid levels, including cholesterol in all patients aged 40 or over even if there is no other indication of risk
- plasma glucose levels

¹⁴⁸ NICE clinical guideline CG82. Schizophrenia. Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care 2009. www.nice.org.uk/guidance/CG82

¹⁴⁹ NICE clinical guideline CG38. Bipolar disorder. The management of bipolar disorder on adults, children and adolescents, in primary and secondary care 2006. www.nice.org.uk/guidance/CG38

- weight
- smoking status and alcohol use
- blood pressure.

In addition to lifestyle factors, such as smoking, poor diet and lack of exercise, antipsychotic drugs vary in their liability for metabolic side effects such as weight gain, lipid abnormalities and disturbance of glucose regulation. Specifically, they increase the risk of the metabolic syndrome, a recognised cluster of features (hypertension, central obesity, glucose intolerance or insulin resistance or dyslipidaemia) which is a predictor of type 2 diabetes and CHD¹⁵⁰.

MH indicator 001

The contractor establishes and maintains a register of patients with schizophrenia, bipolar affective disorder and other psychoses and other patients on lithium therapy

MH 001.1 Rationale

The register includes all patients with a diagnosis of schizophrenia, bipolar affective disorder and other psychoses and other patients on lithium therapy..

Remission from serious mental illness

Historically, patients have been added to the mental health disease register for schizophrenia, bipolar affective disorder and other psychoses, but over time it has become apparent that it would be appropriate to exclude some of them from the associated indicators because their illness is in remission.

Making an accurate diagnosis of remission for a patient with a diagnosis of serious mental illness can be challenging and the evidence base to support when to use the 'remission code' is largely based on clinical judgement. A longitudinal international study of recovery from psychotic illnesses found that as many as 56 per cent of patients recovered from psychotic illnesses to some extent, although only 16 per cent recover if a more stringent concept of recovery¹⁵¹ is used.

In the absence of strong evidence of what constitutes 'remission' from serious mental illness, it is advised that clinicians should only consider using the remission codes if the patient has been in remission for at least five years, that is where there is:

- no record of antipsychotic medication
- no mental health in-patient episodes; and
- no secondary or community care mental health follow-up for at least five years.

¹⁵⁰ Mackin P, Bishop D, Watkinson H et al. Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community 2007. *BJP* 191: 23-9.

¹⁵¹ Harrison G, Hopper K, Craig T, Laska E, Siegel C, Wanderling J et al. Recovery from psychotic illness: A 15 and 25 year international follow-up study 2001. *BJP*, 178: 506-517.

Where a patient is recorded as being 'in remission' they remain on the register (in case their condition relapses at a later date) but they are excluded from the denominator for mental health indicators MH002 to MH008.

The accuracy of this diagnosis and the coding should be reviewed on an annual basis by a GP. If a patient who has been coded as 'in remission' experience a relapse then this should be recorded as such in their patient record.

In the event that a patient experiences a relapse and is coded as such, they will once again be included in all the associated indicators for schizophrenia, bipolar affective disorder and other psychoses.

MH 001.2 Reporting and verification

See indicator wording for requirement criteria.

The register includes patients with a current condition and also those recorded as being in remission, however patients recorded as 'in remission' will be excluded from mental health indicators MH002 to MH008.

Verification – the NHS CB may require randomly selecting a number of patient records of patients in which a 'remission code' has been recorded and request evidence as to why it was appropriate for that patient to be considered 'in remission'.

Contractors may be expected to demonstrate they have a protocol to guide their clinicians as to how this would work and who would be suitable to make the decision. It would not be appropriate for non-clinical members of the practice to make the decision as to when to enter this code.

The NHS CB may require contractors to demonstrate that patients coded as being in remission have received no anti-psychotic medications, mental health in-patient admissions, or mental health secondary or community care for at least five years prior to the entry of the remission code in their record.

MH indicator 002

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan documented in the records, in the preceding 12 months, agreed between individuals, their family and/or carers as appropriate

MH 002.1 Rationale

This indicator reflects good professional practice and is supported by NICE clinical guidelines¹⁵².

¹⁵² NICE clinical guideline CG82. Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care 2009.
<http://guidance.nice.org.uk/CG82/NICEGuidance/pdf/English>

Patients on the mental health disease register should have a documented primary care consultation that acknowledges, especially in the event of a relapse, a plan for care. This consultation may include the views of their relatives or carers where appropriate.

Up to half of patients who have a serious mental illness are seen only in a primary care setting. For these patients, it is important that the primary care team takes responsibility for discussing and documenting a care plan in their primary care record.

When constructing the primary care record, research supports the inclusion of the following information:

1. Patient's current health status and social care needs including how needs are to be met, by whom, and the patient's expectations.
2. How socially supported the individual is: e.g. friendships/family contacts/voluntary sector organisation involvement. People with mental health problems have fewer social networks than average, with many of their contacts related to health services rather than sports, family, faith, employment, education or arts and culture. One survey found that 40 per cent of people with ongoing mental health problems had no social contacts outside mental health services¹⁵³.
3. Co-ordination arrangements with secondary care and/or mental health services and a summary of what services are actually being received
4. Occupational status. In England, only 24 per cent of people with mental health problems are currently in work, the lowest employment rate of any group of people (office of national statistics (ONS) Labour Force Survey, Autumn 2003). People with mental health problems also earn only two thirds of the national average hourly rate (ONS, 2002). Studies show a clear interest in work and employment activities among users of mental health services with up to 90 per cent wishing to go into or back to work¹⁵⁴.
5. "Early warning signs" from the patient's perspective that may indicate a possible relapse¹⁵⁵. Many patients may already be aware of their early warning signs (or relapse signature) but it is important for the primary care team to also be aware of noticeable changes in thoughts, perceptions, feelings and behaviours leading up to their most recent episode of illness as well as any events the patient thinks may have acted as triggers.
6. The patient's preferred course of action (discussed when well) in the event of a clinical relapse, including who to contact and wishes around medication.

It is recommended that a care plan is accurate, easily understood, reviewed annually and discussed with the patient, their family and/or carers. If a patient is treated under

¹⁵³ See Ford et al. *Psychiatric Bulletin* 1993. 17(7): 409-411 and office of the Deputy Prime Minister, *Mental health and social exclusion (Social Exclusion Unit Report)* 2004. ODPM.

¹⁵⁴ See Grove and Drurie. *Social firms: an instrument for social and economic inclusion*. Redhill, Social Firms UK, 1999.

¹⁵⁵ Birchwood et al. *Advances in Psychiatric Treatment* 2000; 6: 93-101 and Birchwood and Spencer. *Clinical Psychology Review* 2001; 21(8): 1211-26

the care programme approach (CPA), then they have a documented care plan discussed with their community key worker available. This is acceptable for the purposes of QOF.

Where a patient has relapsed after being recorded as being in remission their care plan should be updated subsequent to the relapse. Care plans dated prior to the date of the relapse will not be acceptable for QOF purposes.

MH 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification - the NHS CB may require contractors to randomly select a number of care plans to ensure that they are being maintained annually.

MH indicator 003 (NICE 2010 menu ID: NM17)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months

MH 003.1 Rationale

Patients with schizophrenia have mortality between two and three times that of the general population and most of the excess deaths are from diseases that are the major causes of death in the general population. A recent prospective record linkage study of the mortality of a community cohort of 370 patients with schizophrenia found that the increased mortality risk is probably life-long and it suggested that cardiovascular mortality of schizophrenia has increased over the past 25 years relative to the general population¹⁵⁶. The NICE clinical guideline on bipolar disorder also states that the standardised mortality ratio for cardiovascular death may be twice that of the general population but appears to be reduced if patients adhere to long-term medication.

Hypertension in people with schizophrenia is estimated at 19 per cent compared with 15 per cent in the general population¹⁵⁷. A cross-sectional study of 4310 patients diagnosed with bipolar disorder in 2001 receiving care at veterans' administration facilities found a prevalence of hypertension of 35 per cent¹⁵⁸.

There is evidence to suggest that physical conditions such as cardiovascular disorders go unrecognised in psychiatric patients. A direct comparison of cardiovascular screening (blood pressure, lipid levels and smoking status) of patients with asthma, patients with schizophrenia and other attendees indicated that general practice were less likely to screen patients with schizophrenia for cardiovascular risk compared with the other two groups¹⁵⁹.

¹⁵⁶ Brown S, Kim M, Mitchell C et al. 25 year mortality of a community cohort with schizophrenia. *BJP* 196: 116-21 2010.

¹⁵⁷ Hennekens C, Hennekens A, Hollar D. Schizophrenia and increased risks of CVD 2005. *Am Heart Journal* 150: 1115-21

¹⁵⁸ Kilbourne AM, Cornelius JR, Han X et al. Burden of general medical conditions among individuals with bipolar disorder 2004. *Bipolar Disorder* 6: 368-73

¹⁵⁹ Roberts L, Roalfe A, Wilson S et al. Physical health care of patients with schizophrenia in primary care: a comparative study 2007. *FamPract* 24: 34-40

Recording (and treating) cardiovascular risk factors are therefore very important for patients with a serious mental illness.

MH 003.2 Reporting and verification

See indicator wording for requirement criteria.

MH indicator 004 (NICE 2010 menu ID: NM18)

The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 12 months

MH 004.1 Rationale

A cross-sectional study of 4310 patients diagnosed with bipolar disorder in 2001 receiving care at veterans' administration facilities found a prevalence of hyperlipidaemia of 23 per cent¹⁶⁰. Patients with schizophrenia also have a much higher risk of raised total cholesterol:hdl ratio than the general population¹⁶¹.

MH 004.2 Reporting and verification

See indicator wording for requirement criteria.

From April 2012, patients with established CVD are excluded from this indicator because the intention of the indicator is to help manage CVD risk in patients with a serious mental illness without established CVD. If a patient already has CVD, then the cholesterol:hdl ratio test is not required.

MH indicator 005 (NICE 2011 menu ID: NM42)

The percentage of patients aged 40 or over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose or HbA1c in the preceding 12 months

MH 005.1 Rationale

This indicator supports annual case finding for diabetes through the use of random or fasting blood glucose or HbA1c measurement.

Studies have suggested that people with mental health disorders have a higher prevalence of chronic diseases, including diabetes, compared with the general population. For example, a US cross-sectional study of 4310 patients diagnosed with bipolar disorder in 2001 receiving care at veterans' administration facilities found a prevalence of diabetes of 17 per cent. The relative risk of developing DM is reported to be two to three times higher in people with schizophrenia than in the general population.

¹⁶⁰Kilbourne AM, Cornelius JR, Han X et al. Burden of general medical conditions among individuals with bipolar disorder. *Bipolar Disorder* 6: 368-73 2004.

¹⁶¹Oud M, Meyboom-de Jong B. Somatic diseases in patients with schizophrenia in general practice: their prevalence and health care. *BMC Family Practice* 10: 32 2009.

There is insufficient evidence to support the use of blood glucose testing in patients of all ages with schizophrenia, bipolar affective disorder or other psychoses and therefore an age limit of 40 or over has been adopted for this indicator.

The WHO diagnostic criteria¹⁶² states that fasting plasma glucose ≥ 7.0 mmol/l (126 mg/dl) or 2-h plasma glucose ≥ 11.1 mmol/l (200 mg/dl) should be used as criteria for diagnosing diabetes.

In January 2011 an addendum to the 2006 WHO diagnostic criteria was published to allow the use of HbA1c for diagnosing DM¹⁶³. The WHO recommend that HbA1c can be used as a diagnostic test for diabetes, provided that stringent quality assurance tests are in place and assays are standardised to criteria aligned to the international reference values, and there are no conditions present that preclude its accurate measurement. A HbA1c of 48 mmol/l¹⁶⁴ is recommended as the cut-off point for diagnosing diabetes. A value less than 48 mmol/l does not exclude diabetes diagnosed using glucose tests. The WHO expert group concluded that there is currently insufficient evidence to make any formal recommendation on the interpretation of HbA1c levels below 48 mmol/l.

This is an important change in practice. The inclusion of HbA1c as well as plasma glucose to incentivise case finding for diabetes in patients with serious mental illness has the potential to simplify and improve access to diabetes case finding and improve adherence to the indicator. The use of HbA1c can avoid the problem of day-to-day variability of glucose values, and avoids the need for the patient to make preceding dietary preparations (such as fasting or consuming a glucose drink).

MH 005.2 Reporting and verification

See indicator wording for requirement criteria.

Patients in whom diabetes has already been diagnosed are excluded from the denominator for this indicator as these patients are managed according to the diabetes indicator set.

MH indicator 006 (NICE 2010 menu ID: NM16)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 12 months

MH 006.1 Rationale

The general population in developed countries is experiencing an escalation in cardiovascular risk factors, such as obesity and lack of exercise and increased rates of

¹⁶²WHO Definition and diagnosis of diabetes and intermediate hyperglycaemia 2006.

www.who.int/diabetes/publications/definition%20and%20diagnosis%20of%20diabetes_new.pdf

¹⁶³WHO. Use of HbA1c in the diagnosis of diabetes: abbreviated report of a WHO consultation 2011.

www.who.int/diabetes/publications/report-hba1c_2011.pdf

¹⁶⁴Oud M, Meyboom-de Jong B. Somatic diseases in patients with schizophrenia in general practice: their prevalence and health care. BMC Family Practice 10: 32 2009.

type 2 diabetes. Superimposed on this are lifestyle issues (not all actively chosen) for people with psychosis, generating an escalation of cardiovascular risks¹⁶⁵.

In particular, patients with psychosis may lead more sedentary lives, eat less fruit and vegetables, be much more likely to be obese, are two to three times more likely to smoke cigarettes and five times more likely to smoke heavily¹⁶⁶. In addition to lifestyle factors, anti-psychotic drugs vary in their liability for metabolic side-effects, such as weight gain, lipid abnormalities and disturbance of glucose regulation. Specifically, they increase the risk of the metabolic syndrome, a recognised cluster of features (hypertension, central obesity, glucose intolerance or insulin resistance and dyslipidaemia), which is a predictor of type 2 diabetes and CHD¹⁶⁷.

Approximately 40 per cent of patients with schizophrenia are obese¹⁶⁸ and obesity is also common in people with bipolar disorders¹⁶⁹.

Further information

NICE clinical guideline CG43. Obesity. The prevention, identification, assessment and management of overweight and obesity in adults and children 2006.
<http://www.nice.org.uk/CG043>

SIGN clinical guideline 115. Management of obesity 2010.
<http://guidance.nice.org.uk/CG115>

MH 006.2 Reporting and verification

See indicator wording for requirement criteria.

MH indicator 007 (NICE 2010 menu ID: NM15)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 12 months

MH 007.1 Rationale

Substance misuse by people with schizophrenia is increasingly recognised as a major problem, both in terms of its prevalence and its clinical and social effects¹⁷⁰. The National Psychiatric Morbidity Survey in England found that 16 per cent of people with schizophrenia were drinking over the recommended limits of 21 units of alcohol for

¹⁶⁵ Heiskanen T, Niskanen L, Lyytikäinen R et al. Metabolic syndrome in patients with schizophrenia. *JCP* 64: 575-9 2003.

¹⁶⁶ McCreddie R, MacDonald E, Blacklock C et al. Dietary intake of schizophrenic patients in Nithsdale, Scotland: case-control study. *BMJ* 317: 784-5 1998.

¹⁶⁷ Mackin P, Bishop D, Watkinson H et al. Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community. *BJP* 191: 23-9 2007.

¹⁶⁸ Hennekens C, Hennekens A, Hollar D. Schizophrenia and increased risks of CVD. *Am Heart Journal* 150: 1115-21 2005.

¹⁶⁹ Elmsie JL, Silverstone JT, Mann JI et al. Prevalence of overweight and obesity in bipolar patients. *JCP* 61: 179-84 2000.

¹⁷⁰ RCP Research and Training Unit. Banerjee S, Clancy C, Crome I, editors. Co-existing problems of mental disorder and substance misuse (dual diagnosis) 2001. Information manual.

men and 14 units of alcohol for women a week^{171, 172}. Bipolar affective disorder is also highly co-morbid with alcohol and other substance abuse¹⁷³.

MH 007.2 Reporting and verification

See indicator wording for requirement criteria.

MH indicator 008 (NICE 2010 menu ID: NM20)

The percentage of women aged 25 or over and under the age of 65 with schizophrenia, bipolar affective disorder and other psychoses whose records note that a cervical screening test has been performed in the preceding 5 years

MH 008.1 Rationale

A report by the Disability Rights Commission based on the primary care records of 1.7 million primary care patients found that women with schizophrenia were less likely to have had a cervical sample taken in the preceding five years (63 per cent) compared with the general population (73 per cent). This did not apply to patients with bipolar affective disorder¹⁷⁴. This finding may reflect an underlying attitude that such screening is less appropriate for women with schizophrenia. This indicator therefore encourages contractors to ensure that women with schizophrenia, bipolar affective disorder or other psychoses are given cervical screening according to national guidelines.

MH 008.2 Reporting and verification

See indicator wording for requirement criteria.

MH indicator 009 (NICE 2010 menu ID: NM21)

The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months

MH 009.1 Rationale

It is important to check thyroid and renal function regularly in patients taking lithium, as there is a much higher than normal incidence of hypothyroidism and hypercalcaemia and of abnormal renal function tests. Overt hypothyroidism has been found in between eight per cent and 15 per cent of patients on lithium.

NICE clinical guideline CG38 recommends that practitioners check thyroid function every six months together with levels of thyroid antibodies if clinically indicated (for example, by the thyroid function tests). It also recommends that renal function tests are

¹⁷¹ Meltzer H, Gill B, Pettigrew M et al. OPCS Survey of Psychiatric Morbidity in GB. Report 3: Economic activity and social functioning of adults with psychiatric disorders 1996.

¹⁷² Farrell M, Howes S, Taylor C et al. Substance misuse and psychiatric co-morbidity: an overview of the OPCS National Psychiatric Morbidity Survey. *Addictive behaviours* 23: 909-18 1998.

¹⁷³ Kessler RC, Rubinow DR, Holmes C et al. The epidemiology of DSM-III-R bipolar I disorder in a general population survey. *Psychological Medicine* 27: 1079-89 1997.

¹⁷⁴ Hippisley-Cox J, Pringle M. Health inequalities experienced by people with schizophrenia and manic depression: Analysis of general practice data in England and Wales. QRESEARCH 2005.

www.qresearch.org/SitePages/publications.aspx

carried out every six months and more often if there is evidence of impaired renal function.

MH 009.2 Reporting and verification

See indicator wording for requirement criteria.

Due to the way repeat prescribing works in general practice, patients on lithium therapy are defined as patients with a prescription of lithium within the preceding six months.

MH indicator 010 (NICE 2010 menu ID: NM22)

The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months

MH 010.1 Rationale

Lithium monitoring is essential due to the narrow therapeutic range of serum lithium and the potential toxicity from inter-current illness, declining renal function or co-prescription of drugs, for example thiazide diuretics or non-steroidal anti-inflammatory drugs (NSAIDs) which may reduce lithium excretion.

The National Patient Safety Agency (NPSA) recently conducted a review of the use of oral lithium for bipolar disorder, which demonstrated that wrong or unclear dose or strength and monitoring were key issues for lithium therapy¹⁷⁵. A search of all medication incidents related to the use of lithium reported to the National Reporting and Learning System between November 2003 and December 2008 identified a total of 567 incidents. Two of these resulted in 'severe' harm to the patient, although the majority were reported as 'no harm' events¹⁷⁶.

NICE clinical guideline CG38 states that for patients with bipolar disorder on lithium treatment, prescribers:

- monitor serum levels normally every three months
- monitor older adults carefully for symptoms of lithium toxicity, because they may develop high serum levels of lithium at doses in the normal range and lithium toxicity is possible at moderate serum levels.

The aim is to maintain serum lithium levels between 0.6 and 0.8 mmol/l in patients who are prescribed lithium for the first time. For patients who have relapsed previously while taking lithium or who still have sub-threshold symptoms with functional impairment while receiving lithium, a trial of at least six months with serum lithium levels between 0.8 and 1.0 mmol/l should be considered. If the range differs locally, the NHS CB will be required to allow for this.

¹⁷⁵ NPSA alert 0921. Safer lithium therapy 2009. www.nrls.npsa.uk/alerts

¹⁷⁶ Prescribing Observatory for Mental Health. Topic 7 baseline report. Monitoring of patients prescribed lithium: baseline. 2009.

Where a contractor is prescribing lithium, they are responsible for checking that routine blood tests have been done (not necessarily by the practice) and for following up patients who default.

MH 010.2 Reporting and verification

See indicator wording for requirement criteria.

Due to the way repeat prescribing works in general practice, patient on lithium therapy are defined as patients with a prescription of lithium within the preceding six months.

Cancer (CAN)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| CAN001. The contractor establishes and maintains a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers diagnosed on or after 1 April 2003' | 5 | |
| Ongoing management | | |
| CAN002. The percentage of patients with cancer, diagnosed within the preceding 15 months, who have a patient review recorded as occurring within 3 months of the contractor receiving confirmation of the diagnosis <i>NICE 2012 menu ID: NM62</i> | 6 | 50–90% |

CAN – rationale for inclusion of indicator set

It is recognised that the principal active management of cancers occurs in the secondary care setting. However, general practice often has a key role in the referral and subsequent support of these patients and in ensuring that care is appropriately co-ordinated. This indicator set is not evidence-based but does represent good professional practice.

CAN indicator 001

The contractor establishes and maintains a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers diagnosed on or after 1 April 2003'

CAN 001.1 Rationale

The register can be developed prospectively as the intention is to ensure appropriate care and follow-up for patients with a diagnosis of cancer. For the purposes of the register all cancers are included except non-melanomatous skin lesions.

CAN 001.2 Reporting and verification

See indicator wording for requirement criteria.

CAN indicator 002 (NICE 2012 menu ID: NM62)

The percentage of patients with cancer, diagnosed within the preceding 15 months, who have a patient review recorded as occurring within 3 months of the contractor receiving confirmation of the diagnosis

CAN 002.1 Rationale

A GP will have an average of eight or nine new cancer diagnoses per year and will be looking after 20 to 30 patients with cancer. The increasing number of cancer survivors has led to an increase in the number of people requiring follow-up care, monitoring and management. Given the importance of primary care practitioners making early contact with patients who have been diagnosed with cancer, the timeframe for this indicator has been set at three months.

Most practices will see patients with a new cancer diagnosis following assessment and management in a secondary or tertiary care setting. These patients quickly resume consultations in general practice at an increased rate to pre-diagnosis and treatment, therefore primary care has an important role in managing survivorship. This review represents an initial opportunity to address patients' needs for individual assessment, care planning and on-going support and information requirements.

A cancer review in primary care includes:

- The patient's individual health and support needs, which will vary with, for example, the diagnosis, staging, age and pre-morbid health of the patient and their social support networks. In collaboration with the National Cancer Survivorship Initiative (NCSI)¹⁷⁷, Macmillan primary care community has produced a template¹⁷⁸ which recommends that this could cover a discussion of the diagnosis and recording of cancer therapy, an offer of relevant information, medication review, benefits counselling and recording of a carer's details.
- The coordination of care between sectors.

Further information on survivorship and the potential role for primary care can be found on the NCSI website¹⁷⁹.

It is preferable that a review should be face-to-face in most cases, making contact with a patient over the telephone will meet the requirements for this indicator. Where contact is made over the phone, an offer of a subsequent face-to-face review is advised.

CAN 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification – the NHS CB may wish to review records where a review is claimed to confirm that both elements have been completed.

¹⁷⁷ NCSI. <http://www.ncsi.org.uk/what-we-are-doing/assessment-care-planning/cancer-care-review/>

¹⁷⁸ Macmillan primary care community template. <http://www.ncsi.org.uk/wp-content/uploads/EMIS-guide-info.pdf>

¹⁷⁹ NCSI website. <http://www.ncsi.org.uk/>

Chronic kidney disease (CKD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| CKD001. The contractor establishes and maintains a register of patients aged 18 or over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD) | 6 | |
| Ongoing management | | |
| CKD002. The percentage of patients on the CKD register in whom the last blood pressure reading (measured in the preceding 12 months) is 140/85 mmHg or less | 11 | 41–81% |
| CKD003. The percentage of patients on the CKD register with hypertension and proteinuria who are currently treated with an ACE-I or ARB | 9 | 45–80% |
| CKD004. The percentage of patients on the CKD register whose notes have a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months | 6 | 45–80% |

CKD – rationale for inclusion of indicator set

The international classification developed by the US National Kidney Foundation describes five stages of CKD using an estimated glomerular filtration rate (eGFR) to measure kidney function (see table three). Patients with CKD stages 3 to stage 5 have, by definition, less than 60 per cent of their kidney function. Stage three is a moderate decrease in glomerular filtration rate (GFR) with or without other evidence of kidney damage. Several groups (NICE, SIGN, UK Consensus) have recommended splitting stage three into 3A and 3B (table three). Stage 4 is a severe decrease in GFR with or without other evidence of kidney damage and stage 5 is established renal failure. This indicator set refers to patients with stage 3 to stage 5 CKD.

CKD is a long-term condition; the most recent population data from the National Health and Nutrition Examination Survey (NHANES 1999-2004) suggests that the age standardised prevalence of stage 3 to 5 CKD in the non-institutionalised American population is approximately six per cent¹⁸⁰. The prevalence in females was higher than in males (6.9 per cent versus 4.9 per cent). In the fully adjusted model, the prevalence of low GFR was strongly associated with diagnosed diabetes (OR, 1.54; 95 per cent CI, 1.28-1.80) and hypertension (OR, 1.98; 95 per cent CI, 1.73-2.67) as well as higher BMI (OR, 1.08; 95 per cent CI, 1.02-1.15 per 5-unit increment of BMI). In the UK the prevalence of CKD stage 3 to 5 was 8.5 per cent and was higher in females, 10.6 per cent in females versus 5.8 per cent in males¹⁸¹. The Association of

¹⁸⁰ Coresh et al JAMA. 2007; 298(17): 2038-2047

¹⁸¹ Stevens et al. Kidney International 2007; 72: 92-9

Public Health Observatories (APHO)¹⁸² has modelled the prevalence of CKD for England and Wales based on the results of the study by Stevens et al and report a population prevalence of 8.9 per cent.

Table 3. eGFR to measure kidney function

| Stage | GFR* | Description | Included in QOF |
|-------|-------|--|-----------------|
| 1 | 90+ | Normal kidney function but urine findings or structural abnormalities or genetic trait point to kidney disease | No |
| 2 | 60-89 | Mildly reduced kidney function, and other findings (as for stage 1) point to kidney disease | No |
| 3 | 30-59 | Moderately reduced kidney function Subdivided into 3A (45 to 59) and 3B (30 to 44) | Yes |
| 4 | 15-29 | Severely reduced kidney function | Yes |
| 5 | <15 | Very severe, or established kidney failure | Yes |

* All GFR values are normalized to an average surface area (size) of 1.73m²

Further information

NSF for Renal Services 2005. <http://www.kidney.org.uk/campaigns/Renal-nsf/nsf-pt2.pdf>

This indicator set applies to patients with stage 3, 4 and 5 CKD (eGFR <60 mL/min/1.73 m² confirmed with at least two separate readings over a three month period).

CKD may be progressive; prevalence increase with age and female sex but progression increases with male sex, and South Asian and African Caribbean ethnicity. People of South Asian origin are particularly at risk of having both diabetes and CKD. Diabetes is more common in this community than in the population overall. People of African and African Caribbean origin have an increased risk of CKD progression linked to hypertension.

Only a minority of patients with stage 1 or 2 CKD go on to develop more advanced disease and symptoms do not usually appear until stage 4. Where eGFR has persistently been recorded below 60 the CKD (stage 3) label continues to apply, even if future management may lead to an improvement in eGFR.

Early identification of CKD is important as it allows appropriate measures to be taken not only to slow or prevent the progression to more serious CKD but also to combat the major risk of illness or death due to CVD. The presence of proteinuria is a key risk multiplier at all stages of CKD and CKD is an independent risk factor for CVD and a multiplier of other risk factors¹⁸³.

Further information

NICE clinical guideline CG73. Early identification and management of CKD in adults in primary and secondary care 2008. <http://www.nice.org.uk/CG73>

¹⁸² APHO. <http://www.apho.org.uk/resource/item.aspx?RID=63798>

¹⁸³ Wali and Henrich. *CardiolClin* 2005; 23(3): 343-62

SIGN clinical guideline 103. Diagnosis and management of CKD in adults 2008.
<http://www.sign.ac.uk/guidelines/fulltext/103/index.html>

These indicators reflect both of the guidance documents.

1. ACR is the preferred measure of proteinuria.
2. NICE suggests blood pressure is kept below 140 (systolic) and 90 (diastolic) with a target for systolic of between 120 and 139 mmHg. There is a tougher standard for diabetes. This compares with a blood pressure audit standard of 145/85 mmHg in this guidance for 40 to 70 per cent of the CKD population.
3. NICE recommends that the use of ACE-I when there is hypertension and an ACR of ≥ 30 mg/mmol. However, when ACR ≥ 70 mg/mmol NICE recommends ACE-I even in the absence of hypertension. As with BP there are stricter standards in diabetes.
4. NICE divides stage 3 into stage 3a and 3b. NICE recommend testing for bone disease and anaemia in stage 3b (eGFR 30 to 44), as well as stages 4 and 5.
5. NICE also recommends addition of the suffix (p) to denote significant proteinuria, defined as an ACR ≥ 30 mg/mmol (PCR ≥ 50 mg/mmol).

CKD indicator 001

The contractor establishes and maintains a register of patients aged 18 or over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD)

CKD 001.1 Rationale

Patients aged 18 or over with a persistent eGFR or GFR of < 60 ml/min/1.73 m² are included in the register. From 2006, eGFR has been reported automatically when serum creatinine concentration is measured. Studies of general practice computerised patient records show that it is feasible to identify patients with CKD¹⁸⁴ and that computer records are a valid source of data¹⁸⁵.

The compilation of a register of patients with CKD will enable appropriate advice, treatment and support for the patient to preserve kidney function and to reduce the risk of CVD.

Eating a meal containing protein can elevate creatinine, therefore it is recommended that patients do not eat meat in the 12 hours before their creatinine is measured and eGFR estimated.

CKD 001.2 Reporting and verification

See indicator wording for requirement criteria.

¹⁸⁴ de Lusignan et al. *Fam Pract* 2005; 22(3): 234-41

¹⁸⁵ Anandarajah et al. *Nephrology Dial Transplant* 2005; 20(10): 2089-96

CKD indicator 002

The percentage of patients on the CKD register in whom the last blood pressure reading, measured in the preceding 12 months, is 140/85 mmHg or less

CKD 002.1 Rationale

Studies have shown that in patients aged 65 or over and in patients with diabetes, normal blood pressure is hard to achieve but is important¹⁸⁶.

The NICE clinical guideline on CKD¹⁸⁷ recommends that in patients with CKD the clinician aims to keep the systolic blood pressure below 140 mmHg (target range 120-139 mmHg) and the DBP below 90 mmHg. In patients with CKD and diabetes and also in people with an ACR 70 mg/mmol or more (approximately equivalent to PCR 100 mg/mmol or more, or urinary protein excretion 1 g/24hr or more) the clinician aims to keep the systolic blood pressure below 130 mmHg (target range 120-129 mmHg) and the DBP below 80 mmHg.

The SIGN clinical guideline on CKD¹⁸⁸ recommends that blood pressure be controlled to slow the deterioration of the glomerular filtration rate and reduce proteinuria. Patients with >1 g/day of proteinuria (approximately equivalent to a PCR of 100 mg/mmol) have a target maximum systolic blood pressure of 130 mmHg.

The lower the blood pressure achieved the better for patient care therefore an audit standard of 140/85 mmHg has been adopted for this indicator.

CKD 002.2 Reporting and verification

See indicator wording for requirement criteria.

CKD indicator 003

The percentage of patients on the CKD register with hypertension and proteinuria who are currently treated with an ACE-I or ARB

CKD 003.1 Rationale

ACE-I and ARBs are generally more effective than other anti-hypertensives in minimising deterioration in kidney function and this effect is most marked where there is significant proteinuria. Such treatment is both clinically and cost-effective¹⁸⁹.

The gold standard test for measuring proteinuria is a 24-hour urine collection; though problems with timing and completeness make this an impractical test to use in general practice. The alternatives are to test the ACR or PCR in the urine or to use a stick test.

¹⁸⁶ Anderson et al. Am Journal of Kidney Disease 2005; 45(6): 994-1001

¹⁸⁷ NICE clinical guideline CG73. CKD in adults in primary and secondary care 2008.

<http://www.nice.org.uk/nicemedia/pdf/CG073NICEGuideline.pdf>

¹⁸⁸ SIGN clinical guideline 103. Diagnosis and management of CKD in adults 2008.

<http://www.sign.ac.uk/guidelines/fulltext/103/index.html>

¹⁸⁹ Kent et al JASN 2007; 18: 1959-1965. See also: Lewis et al. NEJM 1993; 329:1456-1462; Brenner et al. NEJM 2001; 345:861-869; Ruggenenti et al. Lancet 1999; 354: 359-364

The SIGN clinical guideline on CKD¹⁹⁰ recommends measuring proteinuria with ACR in patients with diabetes and TPCR in non-diabetic patients, reflecting the differing evidence base for these two patient populations whereas recent the NICE clinical guideline on CKD¹⁹¹ suggests that the ACR be used in all patients.

Therefore, patients who are non-diabetic stage 3 to 5 CKD should have an annual test of proteinuria ideally using ACR, or PCR according to local guidance. Patients with diabetes already have an annual micro-albuminuria test.

A systematic review has shown that investigation for infection of asymptomatic patients with one "+" or more is not indicated¹⁹². It is advised that practitioners only send a midstream urine sample or perform another test to look for infection if there are symptoms.

It is not possible to derive a simple correct factor that allows the conversion of ACR values to PCR or 24-hour urinary protein excretion rates because the relative amounts of albumin and other proteins will vary depending on the clinical circumstances; however, the following table of approximate equivalents will allow clinicians unfamiliar with ACR values to see the approximate equivalent PCR and 24-hour urinary protein excretion rates (see table four).

Table 4. Approximate equivalent ACR, PCR and 24-hour urinary protein excretion

| ACR (mg/mmol) | PCR (mg/mmol) | 24-hour urinary protein excretion (g/day) |
|---------------|---------------|---|
| 30 | 50 | 0.5 |
| 70 | 100 | 1 |

CKD 003.2 Reporting and verification

See indicator wording for requirement criteria.

CKD indicator 004

The percentage of patients on the CKD register whose notes have a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months

CKD 004.1 Rationale

Quantitative measurement of proteinuria will enable appropriate management of patients with CKD. There is good observational evidence linking proteinuria to adverse outcomes¹⁹³.

¹⁹⁰ SIGN clinical guideline 103. Diagnosis and management of CKD in adults 2008

¹⁹¹ NICE clinical guideline CG73. CKD in adults in primary and secondary care 2008.

¹⁹² Carter JL et al Nephrology Dial Transplant. 2006 Nov; 21 (11):3031-7

¹⁹³ Foster M. Arch Intern Med. 2007; 167(13):1386-92. Hallan S. Arch Intern Med. 2007; 167(22):2490-2496. Cirillo M. Arch Intern Med. 2008; 168(6):617-24. Brantsma A, J. Am SocNephrol. 2008; 19(9):1785-91

NICE recommends the use of ACE-I when there is hypertension and an ACR of ≥ 30 mg/mmol. When ACR ≥ 70 mg/mmol NICE recommends ACE-I are prescribed; even in the absence of hypertension.

SIGN recommends the use of ACE-I and/or ARBs as agents of choice in patients with proteinuria >0.5 g/day (approximately equivalent to a PCR of >50 mg/mmol).

As with blood pressure there are stricter standards for those with diabetes; ACR >2.5 mg/mmol in men and >3.5 mg/mmol in women - with or without hypertension.

CKD 004.2 Reporting and verification

See indicator wording for requirement criteria.

Epilepsy (EP)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| EP001. The contractor establishes and maintains a register of patients aged 18 or over receiving drug treatment for epilepsy | 1 | |
| Ongoing management | | |
| EP002. The percentage of patients aged 18 or over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 12 months | 6 | 45–70% |
| EP003. The percentage of women aged 18 or over and who have not attained the age of 55 who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 12 months <i>NICE 2010 menu ID: NM03</i> | 3 | 50–90% |

EP – rationale for inclusion of indicator set

Epilepsy is the most common serious neurological condition, affecting about five to ten per 1000 of the population at any one time. Few epilepsies are preventable, but appropriate clinical management can enable most patients with epilepsy to lead a full and productive life. For the purposes of the QOF, epilepsy is defined as 'recurrent unprovoked seizures'.

EP indicator 001

The contractor establishes and maintains a register of patients aged 18 or over receiving drug treatment for epilepsy

EP 001.1 Rationale

The disease register includes patients aged 18 or over, as care for younger patients is generally undertaken outside of primary care.

The phrase 'receiving treatment' has been included in order to exclude the large number of patients who may have had epilepsy in the past, may have not received treatment and been fit-free for many years. Some patients may still be coded as 'epilepsy' or 'history of epilepsy' and will be picked up on computer searches.

Patients who have a past history of epilepsy who are not on drug therapy are excluded from the register. Drugs on repeat prescription will be picked up on a search.

EP 001.2 Reporting and verification

See indicator wording for requirement criteria.

Verification – the NHS CB may require a comparison of the expected prevalence with the reported prevalence recognising that reported prevalence will be reduced as the register is limited to those patients receiving drug treatment.

EP indicator 002

The percentage of patients aged 18 or over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 12 months

EP 002.1 Rationale

Seizure control gives some indication of how effective the management of epilepsy is.

However it is recognised that seizure control is often under the influence of factors outside of the GP's control. It is expected that exception reporting in the epilepsy data set will be more common than in other chronic conditions (e.g. patients with forms of brain injury which mean that their seizures cannot be controlled, patients who find the side-effects of medication intolerable etc).

GPs should record the frequency of seizures as accurately as possible.

Leaflets for patients with epilepsy, including advice about medication, are available through Epilepsy Action¹⁹⁴:

EP 002.2 Reporting and verification

See indicator wording for requirement criteria.

EP indicator 003 (NICE 2010 menu ID: NM03)

The percentage of women aged 18 or over and who have not attained the age of 55 who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 12 months

EP 003.1 Rationale

It is estimated that in the UK 131,000 women with epilepsy are of child bearing age (12 or over and under the age of 50). Approximately 25 per cent of all patients with epilepsy are women of reproductive age and one in 200 women attending antenatal clinics are receiving antiepileptic drugs (AEDs)¹⁹⁵. Around 2500 women with epilepsy will have a baby each year in the UK.

AEDs taken during pregnancy are associated with an increased risk of major congenital malformation (MCMs). Women in the general population have a one or two per cent chance of having a baby with an MCM. Women with epilepsy taking one AED have a chance of having a baby with an MCM of slightly over 3.5 per cent, while for women

¹⁹⁴ Epilepsy Action. <http://www.epilepsy.org.uk/>

¹⁹⁵ Royal Society of Medicine. Primary Care guidelines for the management of females with epilepsy 2004. http://www.rsm.ac.uk/media/downloads/epiguide_pdf.pdf

taking two or more AEDs the average chance increases to 6 per cent¹⁹⁶. The risk of MCMs occurring can relate to having epilepsy and to taking AEDs while pregnant.

In a survey of women with epilepsy, only 28 per cent of participants aged 19 or over and under the age of 34 have received information about oral contraception and epilepsy medication¹⁹⁷. In the same group, 71 per cent said that the risk of epilepsy and/or an AED affecting the unborn child is an important issue. Only 46 per cent of women with epilepsy who have had children had been told before conceiving or during pregnancy that their medication might affect their unborn child.

NICE clinical guideline CG137 on epilepsy made the following recommendation as a key priority for implementation:

"Women and girls with epilepsy and their partners, as appropriate, must be given accurate information and counselling about contraception, conception, pregnancy, caring for children, breastfeeding and menopause."

SIGN clinical guideline 70 on epilepsy states:

"Advice on contraception should be given before young women are sexually active. Women with epilepsy should be advised to plan their pregnancies."

Clinicians are advised to use their judgement as well as the evidence base presented in this guidance to ensure that appropriate advice is given and is tailored to the women's individual needs. Not all three pieces of advice (contraception, conception and pregnancy) need to be given at the same time, but may be given separately at any point over the 12 month period.

Contractors are advised that it is best practice to give the advice in the context of a face-to-face consultation.

EP 003.2 Reporting and verification

See indicator wording for requirement criteria.

The Business Rules require that contractors deliver all three pieces of advice as described in this indicator in order to meet the requirements for this indicator. However, the advice does not need to be given on the same day. Where one or more of these elements of advice are not clinically appropriate, for example if the patient is already pregnant, then normal exception reporting rules apply.

Verification - the NHS CB may require contractors to demonstrate how patients are given such advice e.g. provide examples of leaflets and any specific practice protocols. Evidence that the advice has been given in the context of a face-to-face consultation may be demonstrated by a print out of summary of appointment bookings.

¹⁹⁶ Morrow J, Russell A, Guthrie E et al. Malformation risks of antiepileptic drugs in pregnancy: a prospective study from the UK Epilepsy and Pregnancy Register 2006. *Journal of Neurology, Neurosurgery and Psychiatry* 77: 193-8

¹⁹⁷ Crawford P, Hudson S. Understanding the information needs of women with epilepsy at different life stages: results of the 'Ideal World' survey 2003. *Seizure* 12: 502-7

Learning disabilities (LD)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| LD001. The contractor establishes and maintains a register of patients aged 18 or over with learning disabilities | 4 | |
| Ongoing management | | |
| LD002. The percentage of patients on the learning disability register with Down's Syndrome aged 18 or over who have a record of blood TSH in the preceding 12 months (excluding those who are on the thyroid disease register) <i>NICE 2010 menu ID: NM04</i> | 3 | 45–70% |

LD – rationale for inclusion of indicator set

People with learning disabilities are among the most vulnerable and socially excluded in our society. It is estimated that there are approximately 20/1,000 people with mild learning disabilities and 3-4/1,000 with severe and profound learning disabilities in the UK. Over the past three decades, almost all the long-stay NHS beds for people with learning disabilities have closed and virtually all people with learning disabilities are now living in the community and depend on general practice for their primary care needs.

Further information

RCN learning disabilities guidance.

http://www.rcn.org.uk/development/practice/social_inclusion/learning_disabilities/guidance

DH. 'Valuing People Now' 2009.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093377

Valuing People Now delivery plan 2010/2011 (published in 2010, this paper includes a section on further work needed following the 2009 paper.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_115173

DH Review. 'Transforming care: A national response to Winterbourne View Hospital' 2012. <http://www.dh.gov.uk/health/2012/12/final-winterbourne/>

DH. Independent Inquiry into Access to Healthcare for People with Learning Disabilities 2008.

http://www.dh.gov.uk/en/Publicationsandstatistics/PublicationsPolicyAndGuidance/DH_099255

LD indicator 001

The contractor establishes and maintains a register of patients aged 18 or over with learning disabilities

LD 001.1 Rationale

The idea of a learning disability register for adults in primary care has been widely recommended by professionals and charities alike¹⁹⁸. The creation of a full register of patients aged 18 or over with learning disabilities will provide primary care practitioners with the first important building block in providing better quality and more appropriate services for this patient population.

Learning disability is defined in Valuing People as the presence of:

- a significantly reduced ability to understand new or complex information, to learn new skills (impaired intelligence); with
- a reduced ability to cope independently (impaired social functioning)
- which started before adulthood (under the age of 18), with a lasting effect on development.

The definition encompasses people with a broad range of disabilities. It includes adults with autism who also have learning disabilities, but not people with a higher level autistic spectrum disorder who may be of average or above average intelligence. The presence of an Intelligence Quotient below 70, is not, in isolation, to be used in deciding whether someone has a learning disability.

The definition does not include all those people who have a “learning difficulty”, e.g. specific difficulties with learning, such as dyslexia.

For many people, there is little difficulty in reaching a decision whether they have a learning disability or not. However, in those individuals where there is some doubt about the diagnosis and the level of learning disability, referral to a multi-disciplinary specialist learning disability team (where available) may be necessary to assess the degree of disability and diagnose any underlying condition. In some areas, Locality Community Learning Disability Teams, working along with CCGs, provide expertise and data about and for people with learning disabilities. Contractors may wish to liaise with Social Services Departments, Community Learning Disability Teams and Primary Healthcare Facilitators where available to assist in the construction of a primary care database¹⁹⁹.

Further information

British Institute of Learning Disabilities. <http://www.bild.org.uk/>

¹⁹⁸ See Treat Me Right, Mencap 2004. www.mencap.org.uk

¹⁹⁹ See Martin and Martin. Journal of Learning Disabilities, 2000; 4(1): 37-48

Public Health Institute of Scotland's Autistic Spectrum Disorder. Needs Assessment Report 2001. <http://www.scotland.gov.uk/Publications/2006/02/28094616/0>

LD 001.2 Reporting and verification

See indicator wording for requirement criteria.

LD indicator 002 (NICE 2010 menu ID: NM04)

The percentage of patients on the learning disability register with Down's Syndrome aged 18 or over who have a record of blood TSH in the preceding 12 months (excluding those who are on the thyroid disease register)

LD 002.1 Rationale

Children and adults with Down's Syndrome are at increased risk of thyroid dysfunction, particularly hypothyroidism, compared with the general population and the incidence of thyroid dysfunction increases with age²⁰⁰. Poor thyroid function can impair an individual's quality of life. Earlier intervention and management can help to improve health outcomes.

LD 002.2 Reporting and verification

See indicator wording for requirement criteria.

Patients with a diagnosis of hypothyroidism will be excluded from this indicator as these patients are managed according to the hypothyroid indicator set.

²⁰⁰ Rooney S, Walsh E. Prevalence of abnormal thyroid function in a Down's Syndrome population. International Journal of Medical Science 1997. 166: 80-2

Osteoporosis: secondary prevention of fragility fractures (OST)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| OST001. The contractor establishes and maintains a register of patients: 1. Aged 50 or over and who have not attained the age of 75 with a record of a fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan, and 2. Aged 75 or over with a record of a fragility fracture on or after 1 April 2012 <i>NICE 2011 menu ID: NM29</i> | 3 | |
| Ongoing management | | |
| OST002. The percentage of patients aged 50 or over and who have not attained the age of 75, with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent <i>NICE 2011 menu ID: NM30</i> | 3 | 30–60% |
| OST003. The percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2012, who are currently treated with an appropriate bone-sparing agent <i>NICE 2011 menu ID: NM31</i> | 3 | 30–60% |

OST – rationale for inclusion of indicator set

Osteoporotic fragility fractures can cause substantial pain and severe disability and are associated with decreased life expectancy. Osteoporotic fragility fractures occur most commonly in the spine (vertebrae), hip (proximal femur) and wrist (distal radius). They also occur in the arm (humerus), pelvis, ribs and other bones. Fractures of the hands and feet (for example metacarpal and metatarsal fractures) are not generally regarded as osteoporotic fragility fractures.

Interventions for secondary prevention of fractures in patients who have had an osteoporotic fragility fracture include pharmacological intervention.

OST indicator 001 (NICE 2011 menu ID: NM29)

The contractor establishes and maintains a register of patients:

1. Aged 50 or over and who have not attained the age of 75 with a record of a fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan; and
2. Aged 75 or over with a record of a fragility fracture on or after 1 April 2012.

OST 001.1 Rationale

Fragility fractures are fractures that result from low-level trauma, which means mechanical forces that would not ordinarily cause fracture. The WHO has described this as a force equivalent to a fall from a standing height or less. Reduced bone density is a major risk factor for fragility fractures²⁰¹.

Osteoporosis is a disease characterised by low bone mass and structural deterioration of bone tissue. The WHO defines osteoporosis as a bone mineral density of 2.5 or more standard deviations below that of a normal young adult (T-score of -2.5 or less) measured by a central dual-energy X-ray absorptiometry (DXA) scan. Bone mineral density is the major criterion used to diagnose and monitor osteoporosis.

The NICE clinical guideline on osteoporosis fragility fractures²⁰² recommends that a diagnosis of osteoporosis may be assumed in women and men aged 75 or over with a fragility fracture if the responsible clinician considers a DXA scan to be clinically inappropriate or unfeasible²⁰³. The SIGN clinical guideline on the management of osteoporosis²⁰⁴ recommends that in frail elderly women (aged 80 or over) a DXA scan would be a prerequisite to establish that bone mass density (BMD) is sufficiently low before starting treatment with bone-sparing agents (bisphosphonates), unless the patient has suffered multiple vertebral fractures.

Osteoporotic fragility fractures can cause substantial pain and severe disability, and are associated with decreased life expectancy. Osteoporotic fragility fractures occur most commonly in the spine (vertebrae), hip (proximal femur) and wrist (distal radius). They also occur in the arm (humerus), pelvis, ribs and other bones. Fractures of the hands and feet (for example, metacarpal and metatarsal fractures) are not generally regarded as osteoporotic fragility fractures.

In women, the prevalence of osteoporosis increases markedly with age after menopause, from approximately two per cent at 50 years, rising to more than 25 per cent at 80 years. The NICE cost impact report for technology appraisal TA161 uses a prevalence of 11 per cent of post-menopausal women aged 50 or over with osteoporosis and a clinically apparent osteoporotic fragility fracture, rising to 19 per cent for ages 65 or over. There are an estimated 180,000 new fragility fractures in postmenopausal women in the UK each year; three quarters in women aged 65 or over.

²⁰¹ WHO. Guidelines for preclinical evaluation and clinical trials in osteoporosis 1998.

²⁰² NICE clinical guideline CG146. Osteoporosis fragility fracture 2012. <http://www.nice.org.uk/CG146>

²⁰³ NICE technology appraisal TA161. Alendronate, etidronate, risedronate, raloxifene, strontium ranelate and teriparatide for the secondary prevention of osteoporotic fragility fractures in postmenopausal women 2011. <http://www.nice.org.uk/guidance/TA161>

²⁰⁴ SIGN clinical guideline 71. Management of osteoporosis 2003. <http://www.sign.ac.uk/guidelines/fulltext/71/index.html>

Postmenopausal women with an initial fracture are at substantially greater risk of subsequent fractures. Half of patients with a hip fracture have previously had a fragility fracture of another bone.

Hip fractures are associated with increased mortality; estimates of the relative mortality risk vary from two to greater than ten in the 12 months following hip fracture. However, it is unclear to what extent this can be attributed to fracture alone, as opposed to pre-existing co-morbidity²⁰⁵.

The SIGN clinical guideline recommends that patients who have suffered one or more fragility fractures are priority targets for investigation and treatment of osteoporosis.

This indicator promotes structured case finding for osteoporosis in patients who have had a fragility fracture. Its aim is to promote the secondary prevention of fragility fracture in patients with osteoporosis.

OST 001.2 Reporting and verification

The Business Rules for the two part register will look for the following criteria:

In patients aged 50 or over and who have not attained the age of 75:

- the earliest DXA scan with a positive result of osteoporosis
- the earliest diagnosis of osteoporosis
- a fragility fracture at any point on or after the implementation date (1 April 2012).

In patients aged 75 or over:

- a fragility fracture at any point on or after the implementation date (1 April 2012).

Patients aged 50 or over and under the age of 75 in whom a diagnosis of osteoporosis has not been confirmed with DXA scanning will not be included in the register. Patients with fragility fractures sustained in the last three months of the year will be excepted from this indicator.

Although this indicator defines two separate registers, The disease register for the purpose of calculating the APDF is defined as the sum of the number of patients on both registers.

OST indicator 002 (NICE 2011 menu ID: NM30)

The percentage of patients aged 50 or over and who have not attained the age of 75 with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent

²⁰⁵ WHO. Guidelines for preclinical evaluation and clinical trials in osteoporosis 1998.

OST 002.1 Rationale

The management of osteoporosis includes lifestyle advice, such as advice on adequate nutrition, regular weight-bearing exercise, stopping smoking and avoiding alcohol, to reduce the risks of osteoporosis. Interventions for secondary prevention of fractures in patients who have had an osteoporotic fragility fracture include pharmacological intervention.

The SIGN clinical guideline on the management of osteoporosis²⁰⁶ addresses the pharmacological management in three groups of postmenopausal women: postmenopausal women with multiple vertebral fractures (DXA scan not essential but other destructive diseases are excluded); postmenopausal women with osteoporosis determined by DXA scan and a history of at least one vertebral fracture; and postmenopausal women with osteoporosis determined by DXA scan with or without a previous non-vertebral fracture.

For all these groups bone-sparing agents are indicated to reduce subsequent fracture risk. NICE technology appraisal TA161 states that the bone-sparing agent alendronate is recommended as a treatment option for the secondary prevention of osteoporotic fragility fractures in postmenopausal women who are confirmed to have osteoporosis. When the decision has been made to initiate treatment with alendronate, it is recommended that the preparation prescribed is chosen on the basis of the lowest acquisition cost available. The bone-sparing agents risedronate and etidronate are recommended as alternative treatment options for secondary prevention of osteoporotic fragility fractures in postmenopausal women:

- who are unable to comply with the special instructions for the administration of alendronate, or have a contraindication to or are intolerant of alendronate and
- who also have a combination of T-score, age and number of independent clinical risk factors for fracture as indicated in the following table.

Table 5. T-scores (SD) at (or below) which risedronate or etidronate is recommended when alendronate cannot be taken

| Age (years) | Number of independent clinical risk factors for fracture* | | |
|-------------|---|------|------|
| | 0 | 1 | 2 |
| 50-54 | -** | -3.0 | -2.5 |
| 55-59 | -3.0 | -3.0 | -2.5 |
| 60-64 | -3.0 | -3.0 | -2.5 |
| 65-69 | -3.0 | -2.5 | -2.5 |
| 70 or over | -2.5 | -2.5 | -2.5 |

*Independent clinical risk factors for fractures are parental history of hip fracture, alcohol intake of four or more units per day, and rheumatoid arthritis.

**Treatment with risedronate or etidronate is not recommended.

In deciding between risedronate and etidronate, clinicians and patients need to balance the overall proven effectiveness profile of the drugs against their tolerability and adverse effects in individual patients.

²⁰⁶ SIGN clinical guideline 71. Management of osteoporosis 2003.
<http://www.sign.ac.uk/guidelines/fulltext/71/index.html>

The SIGN clinical guideline makes recommendations on men with a diagnosis of osteoporosis determined by DXA scan. It states that to reduce fracture risks at all sites, men with low BMD and/or a history of one or more vertebral fractures or one non-vertebral osteoporotic fractures are treated with oral alendronate.

It is recommended that calcium and vitamin D supplementation are used in combination with bone-sparing agents. The guideline also recommends that patients who have had a fragility fracture who require treatment with a bone-sparing agent also receive appropriate calcium and/or vitamin D supplementation.

OST 002.2 Reporting and verification

See indicator wording for requirement criteria.

OST indicator 003 (NICE 2011 menu ID: NM31)

The percentage of patients aged 75 or over with a fragility fracture on or after 1 April 2012, who are currently treated with an appropriate bone-sparing agent

OST 003.1 Rationale

See OST 002.1.

This indicator does not require that a diagnosis of osteoporosis is confirmed by DXA scan in patients aged 75 or over with a fragility fracture. But it is recommended clinical practice that this group are considered for a DXA scan. NICE recommends that a diagnosis of osteoporosis may be assumed in women aged 75 or over with a fragility fracture if the responsible clinician considers a DXA scan to be clinically inappropriate or unfeasible²⁰⁷. SIGN recommends that in frail elderly women (aged 80 or over) a DXA scan would be a prerequisite to establish BMD is sufficiently low before starting treatment with bone-sparing agents (biophosphonates), unless the patient has suffered multiple vertebral fractures.

OST 003.2 Reporting and verification

See indicator wording for requirement criteria.

A diagnosis of osteoporosis is not required in patients aged 75 or over who have a fragility fracture. If, however, a patient aged 80 or over has a DXA scan and this shows the patient not to have osteoporosis then the patient can be exception reported.

²⁰⁷ NICE technology appraisal TA161.

Rheumatoid arthritis (RA)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| RA001. The contractor establishes and maintains a register of patients aged 16 or over with rheumatoid arthritis <i>NICE 2012 menu ID: NM55</i> | 1 | |
| Ongoing management | | |
| RA002. The percentage of patients with rheumatoid arthritis, on the register, who have had a face-to-face review in the preceding 12 months <i>NICE 2012 menu ID: NM58</i> | 5 | 40–90% |
| RA003. The percentage of patients with rheumatoid arthritis aged 30 or over and who have not attained the age of 85 who have had a cardiovascular risk assessment using a CVD risk assessment tool adjusted for RA in the preceding 12 months <i>NICE 2012 menu ID: NM56</i> | 7 | 40–90% |
| RA004. The percentage of patients aged 50 or over and who have not attained the age of 91 with rheumatoid arthritis who have had an assessment of fracture risk using a risk assessment tool adjusted for RA in the preceding 24 months <i>NICE 2012 menu ID: NM57</i> | 5 | 40–90% |

RA – rationale for inclusion of indicator set

Rheumatoid arthritis (RA) is a chronic, disabling auto-immune disease characterised by inflammation in the peripheral joints, which causes swelling, stiffness, pain and progressive joint destruction. For a small proportion of people with RA, inflammatory disease outside the joints (for example, eye and lung disease, vasculitis) can pose a significant problem. RA affects around one per cent of the population; of these people, approximately 15 per cent have severe RA.

Although the confirmation of diagnosis and initiation of treatment may take place in secondary care, primary care has an important role to play in the management of RA. This may include checking cardiovascular risk and blood pressure, checking the person's risk for osteoporosis and assessing for signs of low mood or depression. An annual face-to-face review in primary care is an opportunity to assess the effect of the disease upon the person's life, for example side effects to medication and whether they would benefit from any referrals to the multi-disciplinary team.

RA indicator 001 (NICE 2012 menu ID: NM55)

The contractor establishes and maintains a register of patients aged 16 or over with rheumatoid arthritis

RA 001.1 Rationale

The RA register includes patients aged 16 or over with established and recent-onset disease and in whom there is a definite diagnosis of RA, irrespective of evidence of positive serology and current disease activity status.

When creating the register from historical diagnoses, the diagnosis may have been made by either a GP or a specialist. In future, it is anticipated that new diagnoses will be made by a specialist.

The register is restricted to patients aged 16 or over, to conform to international standards for differentiating RA from juvenile idiopathic arthritis.

The register also includes patients with inactive RA. There are three potential groups of patients whose disease may be referred to as inactive:

- patients who are being treated and whose disease is in remission
- patients who are not receiving treatment for RA but have evidence of past disease, for example, joint deformities. This type of RA is sometimes known as 'burnt out' RA. These patients are on the register as they remain at risk of the systemic effects of RA
- patients who are not receiving treatment for RA who have no evidence of past disease but there is doubt about their diagnosis. The contractor may wish to request erythrocyte sedimentation rate (ESR) or plasma viscosity, C-reactive protein (CRP), rheumatoid factor and hand X-ray to determine the accuracy of the diagnosis. Inaccurate diagnoses can be removed from the patient's patient record which would also remove them from the register.

Recognition of synovitis in primary care and prompt referral for specialist advice is key to the early identification and treatment of RA. Synovitis is inflammation of the membrane that lines the inside of synovial joints (most of the joints in the body). Symptoms of inflammation include pain, swelling, heat and loss of function of an affected joint.

Identifying recent-onset RA can be challenging in primary care because of the variety of ways in which synovitis can present itself and the small number of patients who have RA compared with the number of patients with musculoskeletal symptoms. The NICE clinical guideline on RA²⁰⁸ recommends that patients with persistent synovitis are referred for specialist opinion. Urgent referral is needed when any of the following are present:

²⁰⁸ NICE clinical guideline CG79. RA 2009. <http://publications.nice.org.uk/rheumatoid-arthritis-cg79>

- the small joints of the hands or feet are affected
- more than one joint is affected
- there has been a delay of three months or longer between the onset of symptoms and seeking medical advice.

Early identification of recent-onset RA is important because long-term outcomes are improved if disease modifying anti-rheumatic drugs (DMARDs) treatment is started within three months of the onset of symptoms.

RA 001.2 Reporting and verification

See indicator wording for requirement criteria.

Verification - the NHS CB may wish to discuss with contractors the process they use to identify patients with RA, and the number of patients with inactive disease whose diagnoses have been reviewed and the outcomes of this review.

RA indicator 002 (NICE 2012 menu ID: NM58)

The percentage of patients with rheumatoid arthritis, on the register, who have had a face-to-face review in the preceding 12 months

RA 002.1 Rationale

RA is a chronic disease with a variable course over a long period of time. Therefore, there is a need for regular monitoring to determine disease status, assess severity, efficacy and toxicity of drug therapy and identify co-morbidities or complications.

Patients with satisfactorily controlled established disease require review appointments for ongoing drug monitoring, additional visits for disease flares and rapid access to specialist care. RA and its treatment can also have a negative effect upon a patient's quality of life. It is recommended that contractors review the following aspects of care with a patient:

- disease activity and damage, which may include requesting C-reactive protein (CRP) or erythrocyte sedimentation rate (ESR) or plasma viscosity test
- a discussion of DMARDS, if relevant
- the need for referral for surgery
- the effect the disease is having on their life, for example employment or education
- the need to organise appropriate cross-referral within the multi-disciplinary team.

As a minimum, it is advised that this review covers disease activity and damage, the effect of the disease upon the patient's life and whether they would benefit from any referrals to the multi-disciplinary team.

RA 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification - the NHS CB may wish to review patient records to ensure that all essential elements of the review have been performed.

RA indicator 003 (NICE 2012 menu ID: NM56)

The percentage of patients with rheumatoid arthritis aged 30 or over and under the age of 85 who have had a cardiovascular risk assessment using a CVD risk assessment tool adjusted for RA in the preceding 12 months

RA 003.1 Rationale

RA is a significant, independent risk factor for CVD and causes increased mortality compared with the general population. The increased risk appears to be due to both an increased prevalence of traditional risk factors, such as smoking, in addition to inflammation.

Most existing CVD risk assessment models do not treat RA as an independent risk factor for CVD and therefore the scores underestimate the person's risk.

Currently, the only tool which adjusts for RA as an independent risk factor within the risk algorithm itself is QRISK2²⁰⁹. This tool was developed and validated using primary care data from 26,907 patients with RA.

This indicator may be updated with new tools which adjust for RA.

It is recommended that the CVD risk assessment is repeated annually, unless patients have established CVD (for example, CHD, stroke and transient ischemic attack), or familial hypercholesterolemia. The assessment is repeated annually because lipid levels have an impact on the risk of developing CVD and lipids may not be constant in patients with RA and therefore can change over a course of a year. RA treatment for the control of inflammations may alter lipid levels.

Further information

Goodson NJ, Wiles NJ, Lun M, et al. Mortality in early inflammatory polyarthritis: cardiovascular mortality is increased in seropositive patients 2002. *Arthritis and Rheumatism*; 46: 2010-19.

Aho K, Heliövaara M. Risk factors for RA 2004. *Annals of Medicine*; 36(4): 242-51.

²⁰⁹ QRISK2 website. <http://qrisk.org/>

Peters MJL, Symmons DPM, McCarey D, et al. EULAR evidence-based recommendations for cardiovascular risk management in patients with RA and other forms of inflammatory arthritis 2010. *Annals of Rheumatic Diseases* 69:325-331.

Hippisley-Cox J, Coupland C, Vinogradova Y. et al. Predicting cardiovascular risk in England and Wales: prospective derivation and validation of QRISK2 2008. *BMJ* 336; 7659: 1475-1482.

Collins GS and Altman DG. An independent and external validation of QRISK2 CVD risk score: a prospective open cohort study 2010. *BMJ* 340; c2442.

RA 003.2 Reporting and verification

See indicator wording for requirement criteria.

Patients with CHD, stroke, transient ischemic attack, or familial hypercholesterolemia, are excluded from this indicator.

RA indicator 004 (NICE 2012 menu ID: NM57)

The percentage of patients aged 50 or over and who have not attained the age of 91 with rheumatoid arthritis who have had an assessment of fracture risk using a risk assessment tool adjusted for RA in the preceding 24 months

RA 004.1 Rationale

Osteoporosis is more common in patients with RA because of reduced mobility, inflammation and the effects of pharmacological treatments, especially steroids. NICE²¹⁰ and SIGN²¹¹ clinical guidelines highlight the importance of checking for the development of osteoporosis. Therefore, assessing for risk of fracture is an important part of holistic primary care for patients with RA.

Draft recommendations from NICE²¹² propose that fracture risk assessment is considered in women aged 65 or over, in men aged 75 or over and in younger patients if they have the following risk factors:

- previous fragility fracture
- current use or frequent past use of oral glucocorticoids
- history of falls
- family history of hip fracture
- other secondary causes of osteoporosis including RA

²¹⁰ NICE clinical guideline CG79. RA 2009. <http://publications.nice.org.uk/rheumatoid-arthritis-cg79>

²¹¹ SIGN clinical guideline 123. Management of early RA 2011. <http://www.sign.ac.uk/guidelines/fulltext/123/index.html>

²¹² (Draft) NICE clinical guideline. Osteoporosis: assessing the risk of fragility fracture. <http://guidance.nice.org.uk/CG/Wave25/2>

- low BMI (less than 18.5 kg/m²)
- smoking more than ten cigarettes per day
- alcohol intake of more than 14 units per week for women and more than 21 units per week for men.

However, it is recommended that fracture risk assessment is not routinely performed in patients aged 50 or under unless they have major risk factors such as current or frequent use of oral or systemic glucocorticoids, untreated, premature menopause or previous fragility fracture. Therefore, the age range for this indicator has been set at 50 or over and under the age of 91.

A ten year predicted absolute fracture risk can be calculated using either FRAX²¹³ (without a bone mineral density value) or QFracture²¹⁴.

FRAX is the WHO's fracture risk assessment tool which is available to use free of charge. It gives a ten year probability of hip fracture and a ten year probability of a major osteoporotic fracture (for example, clinical spine, forearm, shoulder or hip fracture).

QFracture is also available to use free of charge and it estimates an individual's risk of developing a hip fracture or an osteoporotic fracture (for example, hip, vertebral or distal radius fracture) over the next ten years. The original research was carried out using the QResearch anonymised primary care research database and has since been validated in a different primary care database.

The draft NICE guidance recommends that, following risk assessment, measurement of bone mineral density be considered:

- in patients whose fracture risk is in the region of the intervention threshold for proposed treatment; or
- before starting treatments that may adversely affect bone density, for example high dose glucocorticoids.

Absolute fracture risk is then recalculated using FRAX.

The draft guidance also recommends that fracture risk be recalculated when there is a change in the patient's risk factors or after a minimum of two years if the original calculated risk was close to the intervention threshold for treatment. This indicator requires that fracture risk assessment is recalculated every 24 months.

Further information

Hippisley-Cox J and Coupland C. Derivation and validation of updated QFracture algorithm to predict risk of osteoporotic fracture in primary care in the UK prospective open cohort study 2012. *BMJ*. 344;e3427.

²¹³ FRAX. <http://www.shef.ac.uk/FRAX/>

²¹⁴ Qfracture. <http://www.qfracture.org/>

Collins GS and Altman DG. Predicting risk of osteoporotic and hip fracture in the UK: prospective independent and external validation of QFracture scores 2011. *BMJ*. 342;d3651.

RA 004.2 Reporting and verification

See indicator wording for requirement criteria.

Patients with a pre-existing diagnosis of osteoporosis or who are currently treated with bone-sparing agents will be excluded from this indicator.

Palliative care (PC)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| PC001. The contractor establishes and maintains a register of all patients in need of palliative care/support irrespective of age | 3 | |
| Ongoing management | | |
| PC002. The contractor has regular (at least 3 monthly) multi-disciplinary case review meetings where all patients on the palliative care register are discussed | 3 | |

PC – rationale for inclusion of indicator set

Palliative care is the active total care of patients with life-limiting disease and their families by a multi-professional team. The first National End of Life Care (EoLC) Strategy²¹⁵ was published in July 2008. It builds on work such as the NHS cancer plan 2000, NICE guidance 2004 and NHS EoLC programme 2005.

The way primary care teams provide palliative care in the last months of life has changed and developed extensively in recent years with:

- since the introduction of this indicator set over 99 per cent of practices now using a palliative care register
- specific emphasis on the inclusion of patients with non-malignant disease and of all ages since April 2008
- patients and carers being offered more choice regarding their priorities and preferences for care including their preferred place of care in the last days of life (evidence shows that more patients achieve a home death if they have expressed a wish to do so)
- increasing use of anticipatory prescribing to enable rapid control of symptoms if needed and a protocol or integrated care pathway for the final days of life
- identification of areas needing improvement by the NAO e.g. unnecessary hospital admissions during the last months of life

The National EoLC Strategy suggests that all contractors adopt a systematic approach to EoLC and work to develop measures and markers of good care. They recommend the

²¹⁵ DH. National End of Life Care (EoLC) Strategy 2008.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_086277

Gold Standards Framework (GSF) and the associated After Death Analysis (ADA) as examples of good practice. Evidence suggests that over 60 per cent of practices across the UK now use GSF to some degree to improve provision of palliative care by their primary care team.

The introduction of the GSF²¹⁶ to primary care and its associated audit tool, the ADA, are associated with a considerable degree of research and evaluation. The GSF provides ideas and tools that help contractors to focus on implementing high quality patient-centred care.

PC indicator 001

The contractor establishes and maintains a register of all patients in need of palliative care/support irrespective of age

PC 001.1 Rationale

About one per cent of the population in the UK die each year (over half a million), with an average of 20 deaths per GP per year. A quarter of all deaths are due to cancer, a third from organ failure, a third from frailty or dementia and only one twelfth of patients have a sudden death. It may therefore be possible to predict the majority of deaths, however, this is difficult and errors occur 30 per cent of the time. Two thirds of errors are based on over optimism and one third on pessimism. However, the considerable benefits of identifying these patients include providing the best health and social care to both patients and families and avoiding crises, by prioritising them and anticipating need.

Identifying patients in need of palliative care, **assessing** their needs and preferences and proactively **planning** their care, are the key steps in the provision of high quality care at the end of life in general practice. This indicator set is focused on the maintenance of a register (identifying the patients) and on regular multidisciplinary meetings where the team can ensure that all aspects of a patient's care have been assessed and future care can be co-ordinated and planned proactively²¹⁷.

A patient is included on the register if any of the following apply:

1. Their death in the next 12 months can be reasonably predicted (rather than trying to predict, clinicians often find it easier to ask 'the 'surprise question' - 'Would I be surprised if this patient were still alive in 12 months?')
2. They have advanced or irreversible disease and clinical indicators of progressive deterioration and thereby a need for palliative care e.g. they have one core and one disease specific indicator in accordance with the GSF Prognostic Indicators Guidance (see QOF section of the GSF website)

²¹⁶ GSF. <http://www.goldstandardsframework.org.uk/>

²¹⁷ NAO EoLc Report. 'In one PCT 40 per cent of patients who died in hospital in October 2007 did not have medical needs which required them to be treated in hospital, and nearly quarter of these had been in hospital for over a month'. November 2008.

3. They are entitled to a DS 1500 form (the DS 1500 form is designed to speed up the payment of financial benefits and can be issued when a patient is considered to be approaching the terminal stage of their illness. For these purposes, a patient is considered as terminally ill if they are suffering from a progressive disease and are not expected to live longer than six months).

The register applies to all patients fulfilling the criteria regardless of age or diagnosis. The creation of a register will not in itself improve care but it enables the wider practice team to provide more appropriate and patient focussed care.

PC 001.2 Reporting and verification

See indicator wording for requirement criteria.

In the rare case of a nil register at year end, if a contractor can demonstrate that it established and maintained a register in the financial year then they will be eligible for payment.

PC indicator 002

The contractor has regular (at least 3 monthly) multi-disciplinary case review meetings where all patients on the palliative care register are discussed

PC 002.1 Rationale

The aims of multidisciplinary case review meetings are to:

- ensure all aspects of the patients care have been considered and documented in the patients records
- improve communication within the team and with other organisations (e.g. care home, hospital, community nurse specialist) and particularly improve handover of information to out-of-hours services
- co-ordinate each patient's management plan ensuring the most appropriate member of the team takes any action, avoiding duplication
- ensure patients are sensitively enabled to express their preferences and priorities for care, including preferred place of care
- ensure that the information and support needs of carers are discussed, anticipated and addressed where ever reasonably possible.

Many staff directly employed by the contractor find use of a checklist during the meeting helpful, as it helps to ensure all aspects of care are covered e.g. supportive care register (SCR) templates SCR1 and SCR2 the assessment tools on the GSF website.

PC 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification - the NHS CB may request that the contractor provides evidence that the meetings took place which could be in the form of minutes of the meetings.

Contractors may also be required to provide written evidence describing the system for initiating and recording meetings.

Section 4: Public health (PH) domain

Public health domain introduction

The public health (PH) domain was introduced to QOF in April 2013. This was to recognise the commitment made in the November 2010 Government White Paper 'Healthy Lives, Healthy People: our strategy for Public Health England' for part of the QOF to be dedicated to evidence-based PH and primary prevention indicators.

The clinical and health improvement indicators within this domain follow the layout of the clinical domain indicators, referring to sections on the indicator rationale and reporting and verification.

The additional services indicators, within this domain either:

1. follow the format of the four areas below along with information to support the indicator:
 - contractor guidance
 - reporting and verification
2. follow the format of the clinical domain indicators.

Further detail on the above two formats is included in the 'format' section below.

Format

For each of the indicators (X.X) using the first format above, there are four descriptions unless it is reported electronically.

X.1 Rationale

This section contains a range of information, dependent on the indicator, including:

- justification for the indicator
- a more detailed description of the indicator
- references which contractors may find useful

X.2 Reporting and verification

This section outlines the evidence which the NHS CB may require the contractor to produce for verification purposes. The evidence would not need to be submitted unless requested. In some instances no evidence will be required but may be requested by the NHS CB at any time.

Cardiovascular disease – primary prevention (CVD-PP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Initial diagnosis | | |
| CVD-PP001. In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an assessment tool agreed with the NHS CB) of $\geq 20\%$ in the preceding 12 months: the percentage who are currently treated with statins <i>NICE 2011 menu ID: NM26</i> | 10 | 40–90% |
| Ongoing management | | |
| CVD-PP002. The percentage of patients diagnosed with hypertension (diagnosed on or after 1 April 2009) who are given lifestyle advice in the preceding 12 months for: smoking cessation, safe alcohol consumption and healthy diet | 5 | 40–75% |

CVD-PP – rationale for inclusion of indicator set

Cardiovascular disease (CVD) is the most common cause of death in the UK and importantly for patients, the major cause of premature death (before the age of 65). Moreover, of greater significance for the NHS, CVD is not the commonest cause of disability (through stroke and HF particularly) and hospital admission. This results in CVD being the major cost driver for health utilisation and remains the end point disease for many other chronic disorders, especially diabetes and renal disease.

Primary prevention works and evidence-based interventions can dramatically reduce risk. This was evidenced in North Karelia when CVD mortality was reduced by 50 per cent through rigid implementation of public health and individual patient interventions. Analysis of CHD trends in Ireland found that over a 15 year period, primary prevention achieved a two-fold larger reduction in CHD deaths than secondary prevention, where 68 per cent of the 2530 fewer deaths attributable to CHD (using the IMPACT CHD mortality model) having occurred in patients without recognised CHD compared to 32 per cent in CHD patients.

CVD-PP indicator 001 (NICE menu 2011: NM26)

In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an assessment tool agreed with the NHS CB) of $\geq 20\%$ in the preceding 12 months: the percentage who are currently treated with statins

CVD-PP 001.1 Rationale

For primary prevention of CVD, people at risk need to be identified before CVD has become established. To assess risk in those likely to be at high-risk (for example, people with hypertension) a validated assessment tool is needed that evaluates a range of modifiable and non-modifiable risk factors.

The NICE clinical guideline on lipid modification²¹⁸ recommends statin therapy for the primary prevention of CVD for adults who have an estimated 20 per cent or greater 10-year risk of developing CVD.

A number of risk assessment tools can be used to estimate cardiovascular risk for this QOF indicator. These include:

- Framingham
- Joint British Society 2 (JBS2)
- QRISK.

The three assessment tools listed above allow a structured risk assessment to be undertaken. However, each has a different age threshold; so to include the use of all three tools, the age range for this indicator has been set at aged 30 or over and under the age of 75. Contractors will be expected to use one of the three tools to assess their patients. If the tool normally available on the contractor's clinical system is not age appropriate, one of the other tools may be used.

Framingham²¹⁹ and JBS2²²⁰ are based on the American Framingham equations. These equations are of limited use in the UK because they were developed in a historic US population. The equations overestimate risk by up to 50 per cent in most contemporary northern European populations, particularly for people living in more affluent areas and underestimate risk in higher risk populations, such as people who are the most socially deprived. Framingham makes no allowance for a family history of premature CHD and does not take account of ethnicity, but does have a full data set.

²¹⁸ NICE clinical guideline CG67. Lipid modification. www.nice.org.uk/guidance/CG67

²¹⁹ Anderson KM, Odell PM, Wilson PW et al. CVD risk profiles. Am Heart Journal 1991. 121: 293–8. Risk profile only. www.framinghamheartstudy.org/risk/coronary.html

²²⁰ BCS/BHS/Diabetes UK et al. JBS guidelines on prevention of CVD in clinical practice 2005. Heart 91: 1–52

The newer risk score QRISK has the advantage of including other variables, such as measures of social deprivation, ethnicity and family history. QRISK uses data from UK general practice databases.

Framingham and JBS2

The variables needed to estimate risk using the Framingham tool are age, sex, systolic blood pressure (mean of two previous systolic readings), total cholesterol, high density lipoprotein cholesterol, smoking status and presence of left ventricular hypertrophy. JBS2 uses the Framingham variables with the exception of the presence of left ventricular hypertrophy.

Framingham is an assessment of actual, not estimated, risk. The values used should have been recorded no longer than six months before the date of the risk assessment and before any treatment for hypertension. Framingham is not suitable for patients with pre-existing CVD (CHD, angina, stroke, TIA or PAD), diabetes, CKD (if the patient has an eGFR below 60) or familial hypercholesterolemia, or in patients already taking lipid-lowering medication before a new diagnosis of hypertension.

The Framingham risk score may be used in patients aged 35 or over and under the age of 75. JBS2 may be used in people aged 40 or over.

QRISK

The QRISK CVD risk calculator was developed by doctors and academics working in the NHS and is based on routinely collected data from GPs across the country. The current version of QRISK is QRISK2^{221, 222}. QRISK2 uses the following variables to calculate CVD risk: self-assigned ethnicity, age, sex, smoking status, systolic blood pressure, total cholesterol, HDL cholesterol, BMI, family history of CHD in a first degree relative younger than 60, Townsend deprivation score, treated hypertension, type 2 diabetes, renal disease, AF and RA.

QRISK2 may be used in patients aged 30 or over and under the age of 85.

Clinical effectiveness of primary prevention

For people without clinical evidence of CVD, statin therapy is associated with a reduction of fatal and nonfatal MI and the composite outcome CHD death or nonfatal MI, fatal and nonfatal stroke and revascularisation. In trials predominantly comprising primary prevention but including a minority of people with established CVD, meta-analysis found that statin therapy was associated with a reduction in the risk of all-cause mortality, fatal and nonfatal MI and the composite outcomes of CHD death, nonfatal MI, fatal or nonfatal stroke and coronary revascularisation. For primary prevention lower intensity statins are safe and cost-effective. It is recommended that treatment for the primary prevention of CVD in patients with hypertension be initiated with simvastatin 40 mg. If there are potential drug interactions, or simvastatin 40 mg is contraindicated, a lower dose or alternative statin preparation may be chosen.

²²¹ Hippisley-Cox J, Coupland C, Vinogradova Y et al. Predicting cardiovascular risk in England and Wales: prospective derivation and validation of QRISK2 2008. *BMJ* 336: 1475–82

²²² QRISK. www.qrisk.org

The NICE clinical guideline on lipid modification makes recommendations on how a 10-year CVD risk score of 20 per cent or greater should be managed. It also makes recommendations on communication between practitioners and patients about CVD risk assessment and treatment. These include the following.

- Setting aside adequate time during the consultation to provide information on risk assessment and to allow any questions to be answered.
- Documenting the discussion relating to the consultation on risk assessment and the patient's decision.
- Offering information about the person's absolute risk of CVD and about the absolute benefits and harms of an intervention over a 10-year period. This information:
 1. presents individualised risk and benefit scenarios
 2. presents the absolute risk of events numerically
 3. uses appropriate diagrams and text.

See www.npci.org.uk for more information about explaining risk.

The guideline also recommends that if the patient's CVD risk is considered to be at a level that merits intervention but they decline the offer of treatment, they are advised that their CVD risk should be considered again in the future. The guideline also notes that CVD risk may be underestimated in people who are already taking anti-hypertensive or lipid modification therapy, or who have recently stopped smoking. It recommends that clinical judgement be used in such cases to decide on further treatment of risk factors in people who are below the 20 per cent CVD risk threshold.

For patients with hypertension, the guideline recommends that before they are offered lipid modification therapy for primary prevention, all other modifiable CVD risk factors are considered and their management optimised if possible. Baseline blood tests and clinical assessment are to be performed and co-morbidities and secondary causes of dyslipidaemia treated. Assessment includes:

- smoking status
- alcohol consumption
- BMI or other measures of obesity (see the NICE clinical guideline on Obesity²²³)
- fasting total cholesterol, LDL cholesterol, HDL cholesterol and triglycerides (if fasting levels are not already available)
- fasting blood glucose

²²³ NICE clinical guideline CG43. Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children 2006. www.nice.org.uk/guidance/CG43

- renal function
- liver function (transaminases)
- TSH if dyslipidaemia is present.

The NICE guideline on lipid modification also recommends that the decision whether to initiate statin therapy is made after an informed discussion between the responsible clinician and the person about the risks and benefits of statin treatment, taking into account additional factors such as co-morbidities and life expectancy.

The guideline also states that a target for total or LDL cholesterol is not recommended for people who are treated with a statin for primary prevention of CVD and that once a person has been started on a statin for primary prevention, repeat lipid measurement is unnecessary. It is recommended that clinical judgement and patient preference should guide the review of drug therapy and whether to review the lipid profile.

CVD-PP 001.2 Reporting and verification

See indicator wording for requirement criteria.

Patients with the following conditions are excluded from this indicator:

- CHD or angina
- stroke or TIA
- peripheral vascular disease
- familial hypercholesterolemia
- diabetes
- CKD with an eGFR below 30.

Verification - the NHS CB may request that the contractor randomly selects a number of case records of patients recorded as having had a risk assessment, to confirm that the key risk factors have been addressed and that biochemical and other clinical data used to inform the risk assessment are up-to-date. The NHS CB may also require contractors to demonstrate that age-appropriate risk assessment tools have been used.

CVD-PP indicator 002

The percentage of patients diagnosed with hypertension (diagnosed on or after 1 April 2009) who are given lifestyle advice in the preceding 12 months for: smoking cessation, safe alcohol consumption and healthy diet

CVD-PP 002.1 Rationale

There is considerable evidence to support the positive impact of smoking cessation, reducing unsafe alcohol consumption and improving diet on cardiovascular health.

Patients with hypertension are at increased risk of developing CVD and this risk can be reduced, not only by treating their hypertension, but also by reducing lifestyle risks.

It is recommended that contractors refer to recognised guidance on advising patients on lifestyle risk.

Further information

NICE public health guidance 10. Smoking cessation services in primary care, pharmacies, local authorities and NICE 2008. <http://guidance.nice.org.uk/PH10>

NICE public health guidance 6. Behaviour change at population, community and individual levels 2007. <http://guidance.nice.org.uk/PH6>

NICE public health guidance 25. Prevention of CVD 2010. <http://guidance.nice.org.uk/PH25>

NICE public health guidance 24. Alcohol use disorders – preventing harmful drinking 2010. <http://guidance.nice.org.uk/PH24>

SIGN clinical guideline 74. The management of harmful drinking and alcohol dependence in primary care 2008. <http://www.sign.ac.uk/guidelines/fulltext/74/index.html>

CVD-PP 002.2 Reporting and verification

See indicator wording for requirement criteria.

Verification – the NHS CB may request that the contractor randomly selects a number of patient records of patients in which this advice has been recorded as taking place to confirm that the three key issues are recorded as having been addressed, if applicable.

Blood pressure (BP)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| BP001. The percentage of patients aged 40 or over who have a record of blood pressure in the preceding 5 years <i>NICE 2012 menu ID: NM61</i> | 15 | 50–90% |

BP indicator 001 (NICE 2012 menu ID: NM61)

The percentage of patients aged 40 or over who have a record of blood pressure in the preceding 5 years

BP 001.1 Rationale

This indicator replaces two 2012/13 indicators from the organisational domain on the measurement of blood pressure (Records 11 and 17). The previous two indicators have been merged to reflect changes in the construction of the indicator. The merged indicator is measured as a fractional indicator in common with other clinical and PH indicators. This change allows for the measurement of continuous quality improvement.

Detecting elevated blood pressure and, where indicated, treating it, is known to be an effective health intervention. Raised blood pressure is common if it is measured on a single occasion but with repeated measurement blood pressure tends to drop. Guideline recommendations for the diagnosis and treatment of hypertension²²⁴ are to be followed by practitioners when deciding on whether to treat raised blood pressure.

The age limit of aged 40 or over, has been chosen as the vast majority of patients develop hypertension after this age. It is also to align the indicator more closely with the vascular checks programme and the cost-effectiveness modelling undertaken to support that programme. The age range 40 or over, coupled with a five year reference period, is designed to ensure that a blood pressure measurement takes place by the time someone reaches the age of 40.

It is anticipated that contractors will opportunistically check blood pressures in all adult patients.

BP 001.2 Reporting and verification

See indicator wording for requirement criteria.

²²⁴ NICE clinical guideline CG34. Hypertension: management of hypertension in adults in primary care 2006. <http://guidance.nice.org.uk/CG34>

Obesity (OB)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| Records | | |
| OB001. The contractor establishes and maintains a register of patients aged 16 or over with a BMI ≥ 30 in the preceding 12 months | 8 | |

OB – rationale for inclusion of indicator set

The prevalence of obesity is a major PH challenge for the UK. In England, for example, 23 per cent of adults are obese²²⁵. In Scotland in 2010, 27.4 per cent of the adult population aged 16 or over and under the age of 65 were obese (BMI >30).

There is a substantive evidence base on the epidemiology of obesity and its association with poor clinical outcomes. In addition to the obvious associated disease burden such as inactivity, degenerative joint disease, lower employment and mood disorders, obesity is also a major contributory factor for some of the most common causes of death and disability in developed economies, most notably greater rates of diabetes²²⁶ and accelerated onset of CVD²²⁷. Obesity has therefore become a major health issue for the UK. The Foresight UK Tackling Obesities report 2007 estimated the cost to the UK of obesity to be £50 billion in 2050 at today's prices.

Tackling obesity is a high priority in England, the Government published "A call to action on obesity in England" in October 2011. This sets out new national ambitions for tackling excess weight in children and adults and calls on a range of partners to play their part.

Further information

NICE public health guidance 2. Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling 2006.

<http://guidance.nice.org.uk/PH2>

NICE public health guidance 6. Behaviour change at population, community and individual levels 2007. <http://guidance.nice.org.uk/PH6/Guidance/pdf/English>

<http://webarchive.nationalarchives.gov.uk/+http://www.bis.gov.uk/foresight/our-work/projects/current-projects/tackling-obesities/reports-and-publications>

²²⁵ Health Survey for England 2009. <http://www.ic.nhs.uk/pubs/hse09report>

²²⁶ Sullivan et al. Diabetes Care 2005; 28 (7): 1599-603

²²⁷ Gregg et al. JAMA 2005; 293 (15): 1868-74

NICE clinical guideline CG43. Prevention, identification, assessment and management of overweight and obesity in adults and children 2008.

<http://www.nice.org.uk/Guidance/CG43>

OB indicator 001

The contractor establishes and maintains a register of patients aged 16 or over with a BMI ≥ 30 in the preceding 12 months

OB 001.1 Rationale

The register includes all patients whose BMI has been recorded in the practice as part of routine care. It is expected that this data will inform PH measures.

OB 001.2 Reporting and verification

See indicator wording for requirement criteria.

Smoking (SMOK)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| Records | | |
| SMOK001. The percentage of patients aged 15 or over whose notes record smoking status in the preceding 24 months | 11 | 50–90% |
| SMOK002. The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months <i>NICE 2011 menu ID: NM38</i> | 25 | 50–90% |
| Ongoing management | | |
| SMOK003. The contractor supports patients who smoke in stopping smoking by a strategy which includes providing literature and offering appropriate therapy | 2 | |
| SMOK004. The percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 24 months <i>NICE 2011 menu ID: NM40</i> | 12 | 40–90% |
| SMOK005. The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 12 months <i>NICE 2011 menu ID: NM39</i> | 25 | 56–96% |

Requirements for recording smoking status

Smokers

For patients who smoke, smoking status should be recorded in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002.

Non-smokers

It is recognised that life-long non-smokers are very unlikely to start smoking and indeed find it quite irritating to be asked repeatedly regarding their smoking status. Smoking status for this group of patients should be recorded in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002 until the end of the financial year in which the patient reaches the age of 25.

Once a patient is over the age of 25 years (e.g. in the financial year in which they reach their age of 26 or in any year following that financial year) to be classified as a non-smoker they should be recorded as:

- never smoked after their 25th birthday for SMOK001
- never smoked which is both after their 25th birthday and after the earliest diagnosis date for the disease which led to the patients inclusion on the SMOK002 register (e.g. one of the conditions listed on the SMOK002 register).

Ex-smokers

There are two ways in which a patient can be recorded as an ex-smoker. Ex-smokers can be recorded as such in the preceding 24 months for SMOK001 or in the preceding 12 months for SMOK002. Practices may choose to record ex-smoking status on an annual basis for three consecutive financial years and after that smoking status need only be recorded if there is a change. This is to recognise that once a patient has been an ex-smoker for more than three years they are unlikely to restart.

SMOK indicator 001

The percentage of patients aged 15 or over whose notes record smoking status in the preceding 24 months.

SMOK 001.1 Rationale

There is evidence that when doctors and other healthcare professionals advise patients to stop smoking, this is effective. This indicator examine whether smoking status is recorded in the patient record.

See requirements for recording smoking status for further information.

SMOK 001.2 Reporting and verification

See indicator wording for requirement criteria.

There is no APDF calculation for SMOK001, SMOK003 and SMOK004.

SMOK indicator 002 (NICE 2011 menu ID: NM38)

The percentage of patients with any of any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months

SMOK 002.1 Rationale

CHD

Smoking is known to be associated with an increased risk of CHD.

SIGN clinical guideline 97. Risk estimation and the prevention of CVD 2007.

<http://www.sign.ac.uk/guidelines/fulltext/97/index.html>

ESC. European Guidelines. CVD Prevention in clinical practice.
<http://www.sign.ac.uk/guidelines/fulltext/97/index.html>

PAD

PAD is associated with older age and with smoking. Cigarette smoking is a very important contributor to PAD and as such the management of PAD includes smoking cessation.

Stroke or TIA

There are few RCTs of the effects of risk factor modification in the secondary prevention of ischaemic or haemorrhagic stroke. However, inferences can be drawn from the finds of primary prevention trials that cessation of cigarette smoking be advocated.

SIGN clinical guideline 108. Management of patients with stroke or TIA: assessment, investigation, immediate management and secondary prevention 2008.
<http://www.sign.ac.uk/guidelines/fulltext/108/index.html>

Hypertension

There is no strong direct link between smoking and blood pressure. However, there is overwhelming evidence of the relationship between smoking and cardiovascular and pulmonary diseases. The NICE clinical guideline on hypertension²²⁸ recommends that patients who smoke are offered advice and help to stop smoking.

Diabetes

The risk of vascular complications in patients with diabetes is substantially increased. Smoking is an established risk factor for cardiovascular and other diseases.

COPD

Smoking cessation is the single most effective and cost-effective intervention to reduce the risk of developing COPD and stop its progression.

NICE clinical guideline CG101. Management of COPD in adults in primary and secondary care 2010. <http://guidance.nice.org.uk/CG101>

GOLD Guidelines. <http://www.goldcopd.org/>

Asthma

There are a surprisingly small number of studies on smoking related asthma. Starting smoking as a teenager increases the risk of persisting asthma. One controlled cohort study suggested that exposure to passive smoke at home delayed recovery from an acute attack. Smoking reduces the benefits of inhaled steroids and this adds further

²²⁸ NICE Clinical Guideline CG127. Hypertension: clinical management of primary hypertension in adults 2011. <http://www.nice.org.uk/nicemedia/live/13561/56008/56008.pdf>

justification for recording this outcome²²⁹. There is also epidemiological evidence that smoking is associated with poor asthma control²³⁰.

CKD

There is good evidence from observational studies that patients with CKD are at increased cardiovascular risk and hence the rationale for including CKD here.

Schizophrenia, bipolar affective disorder or other psychoses

Patients with a serious mental illness are far more likely to smoke than the general population (61 per cent of patients with schizophrenia and 46 per cent of patients with bipolar disorder smoke compared to 33 per cent of the general population). Premature death and smoking related diseases, such as respiratory disorders and heart disease, are however, more common among patients with serious mental illness who smoke than in the general population of smokers²³¹.

See requirements for recording smoking status for further information.

SMOK 002.2 Reporting and verification

See indicator wording for requirement criteria.

For patients who smoke this recording is to be made in the preceding 12 months. Ex-smokers are to be recorded as described above. Those who have never smoked are to be recorded as such in the preceding 12 months up to and including the age of 25.

The disease register for the purpose of calculating APDF for SMOK002 and SMOK005 is defined as the sum of the number of patients on the disease registers for each of the conditions listed in the indicator wording. Patients with one or more co-morbidities e.g. diabetes and CHD are only counted once.

SMOK indicator 003

The contractor supports patients who smoke in stopping smoking by a strategy which includes providing literature and offering appropriate therapy

SMOK 003.1 Rationale

There is good evidence about the effectiveness of healthcare professionals in assisting patients to stop smoking.

A number of studies have recently shown benefits from the prescription of nicotine replacement therapy to bupropion in patients who have indicated a wish to quit smoking.

The strategy does not need to be written by the practice team. A local or national protocol could be adapted for use specifically by the contractor and implemented. The

²²⁹ Tomlinson JE, McMahon AD, Chaudhuri R et al. Efficacy of low and high dose inhaled corticosteroids in smokers versus non-smokers with mild asthma. *Thorax* 2005; 60:282-7

²³⁰ Price D, Zhang Q, Kocevar V et al. Effect of a concomitant diagnosis of allergic rhinitis on asthma related health care use by adults. *ClinExp Allergy* 2005; 35: 282-7

²³¹ McDonald C. Cigarette smoking in patients with schizophrenia. *BJP* 2000; 176: 596-7

provision of dedicated smoking cessation services remains the responsibility of the NHS CB.

SMOK 003.2 Reporting and verification

See indicator wording for requirement criteria.

Verification - the NHS CB may choose to review prescribing data and may also examine the literature available for patients who wish to quit smoking. Signs of implementation may be evident in the contractor's prescribing data or in the patient leaflets that are used by the contractor.

There is no APDF calculation for SMOK001, SMOK003 and SMOK004.

SMOK indicator 004 (NICE 2011 menu ID: NM40)

The percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 24 months

SMOK 004.1 Rationale

This indicator builds on SMOK001.

Smoking remains the main cause of preventable morbidity and premature death, leading to an estimated annual average of 86,500 deaths between 1998 and 2002 in England²³². It is the primary reason for the gap in healthy life expectancy between the rich and the poor²³³.

A wide range of diseases and conditions are caused by cigarette smoking, including cancers, respiratory diseases, CHD and other circulatory diseases, stomach and duodenal ulcers, ED and infertility, osteoporosis, cataracts, age-related macular degeneration and periodontitis (US DH and Human Services 2004).

Women who smoke during pregnancy have a substantially higher risk of spontaneous abortion (miscarriage) than those who do not smoke. Smoking can also cause complications in pregnancy and labour, including ectopic pregnancy, bleeding during pregnancy, premature detachment of the placenta and premature rupture of the membranes²³⁴.

Around 43 per cent of patients who smoke try to quit each year, often several times a year. Many of these attempts fail because they are made without treatment and the aim of this domain is to increase the proportion of quit attempts that succeed by providing best available support and treatment. The one year continuous abstinence rate in untreated smokers who try to quit without help is about three per cent²³⁵.

²³² Twigg L, Moon G, Walker S. Health development agency (HDA). The smoking epidemic in England 2004.

²³³ Jarvis M, Wardle J. Oxford University Press. Social patterning of individual health behaviours: the case of cigarette smoking 1999. In: Marmot M, Wilkinson R, editors. Social determinants of health.

²³⁴ NICE public health guidance 10. Smoking cessation services 2008.

<http://www.nice.org.uk/guidance/PH10>

²³⁵ Health Scotland. A guide to smoking cessation in Scotland 2010.

<http://www.healthscotland.com/documents/4661.aspx>

There is evidence that when doctors and other health professionals advise on smoking cessation and particularly when they offer support and treatment, that people are more likely to quit.

Around four per cent of patients who quit without using either pharmacotherapy or behavioural support will remain abstinent at 12 months. With pharmacotherapy and brief supervision from a GP or other clinician, this would be about eight per cent. If a patient takes up the offer of referral to an NHS Stop Smoking Service or a specially trained member of staff directly employed by the contractor, such as a practice nurse, providing regular weekly support, the one year continuous abstinence rate doubles to about 15 per cent.

See SMOK005.1 for guidance on 'support and treatment' and smoking cessation.

SMOK 004.2 Reporting and verification

See indicator wording for requirement criteria.

There is no APDF calculation for SMOK001, SMOK003 and SMOK004.

SMOK indicator 005 (NICE 2011 menu ID: NM39)

The percentage of patients with any of any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 12 months

SMOK 005.1 Rationale

This indicator relates to patients who are on the disease registers for CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma and mental health who are recorded as current smokers.

See requirements for recording smoking status for further information.

In 2009, 21 per cent of the adult population of Great Britain were cigarette smokers. The overall prevalence of smoking has been at this level since 2007²³⁶. At any one time, about 12 per cent of smokers intend to stop smoking in the last month²³⁷.

Around 43 per cent of the population of England have tried to stop in the past year, but only two to three per cent of the population succeed in stopping²³⁸.

There is good evidence to suggest that offering support and treatment is sufficient to motivate some smokers to attempt to stop who would not have done so with brief advice to quit alone.

²³⁶ ONS 2011. General Lifestyle Survey 2009: Smoking and drinking among adults 2009. <http://www.ons.gov.uk/ons/rel/ghs/general-lifestyle-survey/2009-report/index.html>

²³⁷ ONS. Smoking related behaviour and attitudes 2008/09. <http://www.ons.gov.uk/ons/rel/lifestyles/smoking-related-behaviour-and-attitudes/2008-09/index.html>

²³⁸ West R. Key performance indicators: findings from the Smoking Toolkit Study. Smoking in England 2008. <http://www.smokinginengland.info/>

For example, a Cochrane review that included 132 trials of nicotine replacement therapy (NRT), with over 40,000 people in the main analysis, found evidence that all forms of NRT made it more likely that a person's attempt to quit smoking would succeed. The chances of stopping smoking were increased by 50 to 70 per cent²³⁹.

NHS Stop Smoking Services, combine psychological support and medication. Results for April 2008 to March 2009 showed that 671,259 people who had contact with the service had set a quit date. Four weeks later, 337,054 people had successfully quit (based on self-report) representing half of those who set a quit date²⁴⁰.

'An offer of support and treatment' therefore means offering a referral or self-referral to a local NHS Stop Smoking Service adviser (who might be a member of the practice team) plus pharmacotherapy. Where such support is not acceptable to the patient, an alternative form of brief support, such as follow-up appointments with a GP or practice nurse trained in smoking cessation, may be offered.

The NICE public health guidance on smoking cessation²⁴¹ states that healthcare professionals who advise on, or prescribe, NRT, varenicline or bupropion:

1. offer NRT, varenicline or bupropion, as appropriate, to patients who are planning to stop smoking
2. offer advice, encouragement and support, including referral to the NHS Stop Smoking Service, to help patients in their attempt to quit
3. when deciding which therapies to use and in which order, discuss the options with the client and take into account:
 - whether a first offer of referral to the NHS Stop Smoking Service has been made
 - contra-indications and the potential for adverse effects
 - the client's personal preferences
 - the availability of appropriate counselling or support
 - the likelihood that the client will follow the course of treatment
 - their previous experience of smoking cessation aids.

The guidance also states that managers and providers of NHS Stop Smoking Services:

1. offer behavioural counselling, group therapy, pharmacotherapy, or a combination of treatments that have been proven to be effective

²³⁹ Stead LF, Perera R, Bullen C etc al. Nicotine replacement therapy for smoking cessation. Cochrane Database of Systematic Reviews. 2008. John Wiley and Sons, Ltd no.1

²⁴⁰ HSCIC. Statistics on NHS Stop Smoking Services 2008/09 published 2009.

<http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/nhs-stop-smoking-services/statistics-on-nhs-stop-smoking-services-england-april-2008-to-march-2009>

²⁴¹ NICE public health guidance 10. Smoking cessation services. <http://www.nice.org.uk/guidance/PH10>

2. ensure clients receive behavioural support from a person who has had training and supervision that complies with the 'Standard for training in smoking cessation treatments'²⁴² or its updates
3. provide tailored advice, counselling and support, particularly to clients from minority ethnic and disadvantaged groups
4. provides services in the language chosen by clients, wherever possible.

For further information see NICE public health guidance 1 and 10²⁴³ and the Primary Care Respiratory Society UK statement on managing smoking cessation in primary care²⁴⁴.

SMOK 005.2 Reporting and verification

See indicator wording for requirement criteria.

The disease register for the purpose of calculating APDF for SMOK002 and SMOK005 is defined as the sum of the number of patients on the disease registers for each of the conditions listed in the indicator wording. Patients with one or more co-morbidities e.g. diabetes and CHD are only counted once.

²⁴² HDA. Standard for training in smoking cessation treatments 2003. http://www.nice.org.uk/aboutnice/whoweare/aboutthehda/hdapublications/standard_for_training_in_smoking_cessation_treatments.jsp

²⁴³ NICE public health guidance 1. Brief interventions and referral for smoking cessation in primary care and other settings 2006. <http://guidance.nice.org.uk/ph1>

²⁴⁴ Primary Care Respiratory Society UK. Managing smoking cessation in primary care. Opinion No 17 2010. http://www.pcrs-uk.org/resources/os17_smoking_cess.pdf

Public health domain – additional services

For contractors providing additional services the following indicators apply.

Please note exception reporting does not apply to those additional services indicators that do not have achievement thresholds.

Cervical screening (CS)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| CS001. The contractor has a protocol that is in line with national guidance agreed with the NHS CB for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate sample rates | 7 | |
| CS002. The percentage of women aged 25 or over and who have not attained the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years | 11 | 45–80% |
| CS003. The contractor ensures there is a system for informing all women of the results of cervical screening tests | 2 | |
| CS004. The contractor has a policy for auditing its cervical screening service and performs an audit of inadequate cervical screening tests in relation to individual sample-takers at least every 2 years | 2 | |

CS indicator 001

The contractor has a protocol that is in line with national guidance agreed with the NHS CB for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate sample rates

CS 001.1 Rationale

If a robust system for the management of cervical screening is not in place then this is an area of great risk for general practice. The policy may have been drawn up outside the practice and is recommended to be in line with national guidance.

See guidance on exception reporting in section CS 002.1 contractor guidance.

The contractors protocol could be in the form of a written policy covering the issues outlined in the indicator wording.

CS 001.2 Reporting and verification

See indicator wording for requirement criteria.

The relevant practice staff are to be aware of the policy and the NHS CB may require that the contractor can demonstrate how the systems operate.

CS indicator 002

The percentage of women aged 25 or over and who have not attained the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years

CS 002.1 Rationale

This indicator is designed to encourage and incentivise contractors to continue to achieve high levels of uptake in cervical screening.

The contractor may be required to provide evidence of the number of eligible women, aged 25 or over and under the age of 65, who have had a cervical screening test performed in the last five years/60 months.

This indicator differs from all the other additional service indicators in that a sliding scale will apply between 45 and 80 per cent, in a similar way to the clinical indicators.

Exception reporting (as detailed in the clinical domain) will apply and specifically includes women who have had a hysterectomy involving the complete removal of the cervix.

The exception reporting rules regarding criteria A require that three separate invitations are offered to the patient before that patient can be recorded as 'did not attend'.

Therefore:

- In those areas where the first two invitations are sent via the central screening service, then contractors are responsible for offering the third invitation before exception reporting patients as DNA; or
- Where the central screening service sends out only one letter, then contractors are responsible for offering the second and third invitations before exception reporting patients as DNA.

The exception reporting criteria is not applicable to contractors that have opted to run their own call/recall system. These contractors will still be required to offer all three invitations directly in order to meet the DNA criteria. Copies of the letters sent by the contractor may be required for assessment purposes.

Women can choose to withdraw from the national screening programme. As the indicator requires that screening is delivered every five years, in order for a woman to be exception reported for this period, criteria G which requires that a discussion has taken place between the patient and the practitioner before 'informed dissent' can be recorded.

Women who withdraw from cervical screening call/recall will receive no further offers of screening from the central screening service.

England. NHS Cancer Screening Programme.
<http://www.cancerscreening.nhs.uk/cervical/index.html>

CS 002.2 Reporting and verification

See indicator wording for requirement criteria.

The NHS CB may require that the contractor can provide a computer print-out showing the number of eligible women on the contractor list, the number exception reported and the number who have had a cervical screening test performed in the preceding five years. Contractors can exception report patients in the same way as the clinical indicators and the NHS CB may enquire how patients who are exception reported are identified and recorded.

CS indicator 003

The contractor ensures there is a system for informing all women of the results of cervical screening tests

CS 003.1 Rationale

It is generally accepted as good practice for all women who have had a cervical screening test performed to be actively informed of the result. The central screening service are responsible for informing women of the results in writing and the contractor ensures that all women have received the results.

CS 003.2 Reporting and verification

See indicator wording for requirement criteria.

The NHS CB may ask the practice team to explain how women are informed of the way they will obtain the result of their screening test and how queries from patients are managed.

CS indicator 004

The contractor has a policy for auditing its cervical screening service and performs an audit of inadequate cervical screening tests in relation to individual sample-takers at least every 2 years

CS 004.1 Contractor guidance

In this audit the criteria, the results, corrective action, the results of the re-audit and a discussion of them needs to be presented. The standard or level of performance against which the criterion is judged would usually involve looking for sample-takers who are obvious outliers in relation to the reading laboratory's average for inadequate samples.

CS 004.2 Written evidence

See indicator wording for requirement criteria.

The NHS CB may require that an audit of inadequate samples is recorded.

The NHS CB may also request a discussion takes place with sample-takers covering the audit and any educational needs which arose and how these were met.

Child health surveillance (CHS)

| Indicator | Points | Achievement thresholds |
|--|--------|------------------------|
| CHS001. Child development checks are offered at intervals that are consistent with national guidelines and policy agreed with the NHS CB | 6 | |

CHS indicator 001

Child development checks are offered at intervals that are consistent with national guidelines and policy agreed with the NHS CB

CHS 001.1 Rationale

The CHS programme is based on national guidelines²⁴⁵. It is important that the contractor has a system to ensure follow-up of any identified concern and that referrals are made as appropriate²⁴⁶.

CHS 001.2 Reporting and verification

See indicator wording for requirement criteria.

The NHS CB may require a description of the system in place within the practice and may ask staff employed by the contractor for details of CHS in the practice and how concerns are followed up.

The contractor may be required to demonstrate awareness of which guidelines it has adopted.

²⁴⁵ Healthy Child Programme. Pregnancy and the first five years of life 2009. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107563

²⁴⁶ Hall, D and Elliman D. Health for all children (fourth ed) 2003. Oxford University Press

Maternity services (MAT)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| MAT001. Antenatal care and screening are offered according to current local guidelines agreed with the NHS CB | 6 | |

MAT indicator 001

Antenatal care and screening are offered according to current local guidelines agreed with the NHS CB

MAT 001.1 Rationale

Most local areas have produced guidelines, which are adopted within the practice.

MAT 001.2 Reporting and verification

See indicator wording for requirement criteria.

The NHS CB may require that the contractor has written guidelines on ante-natal care and screening. The contractor may be required to provide a description of ante-natal care, using the illustration of one case to demonstrate that the contractor understands the guidance and it is being used.

Contraception (CON)

| Indicator | Points | Achievement thresholds |
|---|--------|------------------------|
| CON001. The contractor establishes and maintains a register of women aged 54 or under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS | 4 | |
| CON002. The percentage of women, on the register, prescribed an oral or patch contraceptive method in the preceding 12 months who have also received information from the contractor about long acting reversible methods of contraception in the preceding 12 months | 3 | 50–90% |
| CON003. The percentage of women, on the register, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor who have received information from the contractor about long acting reversible methods of contraception at the time of or within 1 month of the prescription | 3 | 50–90% |

CON – rationale for inclusion of indicator set

The vast majority of contractors are providing the additional service for contraception and many are also providing enhanced services including long acting reversible contraception (LARC) methods. All contractors providing any level of contraception need to be able to advise women about all methods to ensure they can make an informed choice. It is advised that clinical staff in practices are aware of local services and local referral pathways.

This indicator set seeks to increase the awareness of women seeking contraceptive advice in general practices of LARC methods and thus to increase the percentage of women using these methods²⁴⁷.

CON indicator 001

The contractor establishes and maintains a register of women aged 54 or under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS

CON 001.1 Rationale

Any woman who has been prescribed any method at least once in the last year (or the appropriate prescribing interval for method of choice) is included on the register.

²⁴⁷ See also J Fam Plann Reprod Health Care; 34(4): 000-000 "Attitudes of women in Scotland to contraception: a qualitative study to explore acceptability of long-acting methods. 2008. Anna Glasier, Jane Scorer, Alison Bigrigg.

General practice provide 80 per cent of prescribed contraception in the UK. This register is applicable to all methods of contraception that have been prescribed by the contractor.

CON 001.2 Reporting and verification

See indicator wording for requirement criteria.

This register is applicable to all methods of contraception that have been prescribed by the contractor:

- emergency hormonal contraception (EHC)
- combined oral contraception
- progestogen only oral contraception
- contraceptive patch
- contraceptive diaphragm
- intrauterine device (IUD)
- intrauterine system (IUS)
- contraceptive injectable.

The indicator is prospective from 1 April 2009.

CON indicator 002

The percentage of women, on the register, prescribed an oral or patch contraceptive method in the preceding 12 months who have also received information from the practice about long acting reversible methods of contraception in the preceding 12 months

CON 002.1 Rationale

A woman's contraceptive needs can change over her reproductive lifespan. This indicator requires that women requiring contraception are given detailed information about and offered a choice of all methods, including LARC. It seeks to encourage contractors to review these needs on a regular basis and ensure that women are informed of advances in contraceptive choices.

All currently available LARC methods are more cost-effective than the combined oral contraceptive even at one year use. LARC methods include IUDs, the IUS, injectable contraceptives and implants. This is largely because their effectiveness is independent of patient compliance. Of the LARC methods, injectable contraceptives are the least cost-effective. Increasing the uptake of LARC methods will reduce the number of unintended pregnancies. However, currently in the UK, about eight per cent of

contraceptive users use LARC. Whilst international comparison is difficult, this percentage is very low.

Information from the contractor is in written and verbal form. Leaflets can be obtained from a number of sources including the Family Planning Association^{248, 249}, a UK-wide sexual health charity, which produces an excellent range of contraception leaflets including 'Your guide to Contraception', which among other things, indicated LARC and non-LARC methods clearly through the use of shading.

Further information

NICE clinical guideline CG30. Guidance on LARCs 2008.

<http://www.nice.org.uk/guidance/cg30>

CON 002.2 Reporting and verification

See indicator wording for requirement criteria.

The NHS CB may require contractors to demonstrate how patients are given such advice, examples of leaflets and any specific practice protocols.

CON indicator 003

The percentage of women, on the register, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor, who have received information from the contractor about LARC at the time of or within 1 month of the prescription

CON 003.1 Rationale

Women requiring EHC are given detailed information about and offered a choice of all methods, including LARC. It is often possible (and in many cases ideal practice) to commence an ongoing method of contraception at the same time as EHC is given.

Some women seeking EHC may be best served by being offered an emergency IUD. Emergency IUDs offer a slightly longer window period for action after unprotected intercourse than hormonal EC; they have a higher efficacy in prevention of pregnancy - and they provide excellent ongoing contraception if required.

Information from the contractor in written and verbal form. Leaflets can be obtained from a number of sources however the FPA, a UK-wide sexual health charity, has an excellent range of contraception leaflets including 'Your guide to Contraception', which, amongst other things, indicated LARC and non-LARC methods clearly through the use of shading.

CON 003.2 Reporting and verification

See indicator wording for requirement criteria.

²⁴⁸ FPA. <http://www.fpa.org.uk/home>

²⁴⁹ Faculty of sexual & reproductive Healthcare guidelines on contraceptive methods. www.ffprhc.org.uk

Section 5: Quality and productivity (QP) domain

| Indicator | Points |
|--|--------|
| QP001. The contractor reviews data on secondary care outpatient referrals, for patients on the contractor's registered list, provided by the NHS CB | 5 |
| QP002. The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its secondary care outpatient referral data with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements | 5 |
| QP003. The contractor engages with the development of and follows 3 care pathways, agreed with the NHS CB, for improving the management of patients in the primary care setting (unless in individual cases they justify clinical reasons for not doing this) to avoid inappropriate outpatient referrals | 11 |
| QP004. The contractor reviews data on emergency admissions, for patients on the contractor's registered list, provided by the NHS CB | 5 |
| QP005. The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its data on emergency admissions with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements | 15 |
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QP indicator 001

The contractor reviews data on secondary care outpatient referrals, for the patients on the contractor's registered list, provided by the NHS CB

QP 001.1 Rationale

The NHS CB is responsible for providing contractors with data on secondary care referrals, for patients on the contractor's registered list, which the contractor reasonably requires to conduct the review. Contractors should discuss with the NHS CB what data is required for the review meeting and when. The NHS CB will work in partnership with clinical commissioning groups (CCGs) at a local level to agree the most appropriate way of fulfilling this function.

Clinicians in the practice will meet at least once during the year to carry out the internal review. It is recommended that the meeting involves the range of clinicians working within the practice.

At the meeting the contractor identifies any apparent anomalies in referral patterns and discusses the reasons why this might be the case. Contractors are advised to compare the referral patterns with reference to existing care pathways in order to identify areas where improvements might be made to the referrals process.

The output of this review should be made available to the group of contractors taking part in the external peer review.

QP 001.2 Reporting and verification

The contractor may be asked to provide a summary of the discussions that took place at the meeting. This may be in the form of a meeting note.

QP indicator 002

The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its secondary care outpatient referral data with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements

QP 002.1 Rationale

The contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out an external review of their secondary care outpatient referrals. The group should contain a minimum of six practices unless the NHS CB agrees otherwise. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements.

The external review should consist of a comparison of the contractor's data with comparable data from the other contractors in the group. This is to determine why there are variances and where it may be appropriate for the contractor to amend current arrangements for the management of hospital referrals. The focus of the review should be to reflect on referral behaviour and whether clinicians can learn from the data to improve how they refer and if they can reduce unnecessary hospital

attendances either by following existing care pathways more closely or through the use of alternative care pathways.

Following the review, the contractor should agree with the other contractors in the group, areas for commissioning or service design improvements.

QP 002.2 Reporting and verification

The contractor may be asked to provide a summary of the review meeting, including when the external review took place, who was involved, the key discussion points (if any) and what areas have been proposed for commissioning or service design improvement. This may be in the form of a meeting note.

For indicators QP002, QP005 and QP008, the contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out the external review. The group should contain a minimum of six practices unless the NHS CB agrees otherwise. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements.

QP indicator 003

The contractor engages with the development of and follows 3 care pathways, agreed with the NHS CB, for improving the management of patients in the primary care setting (unless in individual cases they justify clinical reasons for not doing this) to avoid inappropriate outpatient referrals

QP 003.1 Rationale

The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements to agree the three care pathways with contractors. It is expected that CCGs will lead the development of care pathways working with contractor groups. The CCG may, if the contractor consents, seek the views of the LMC for its area on the development of the care pathway.

Contractor GPs should actively respond to the care pathway development process for the purpose of this indicator. This may, for example, involve attending meetings with other healthcare professionals concerned with the care pathway or commenting to the pathway group electronically. Where possible, focus of the care pathways is to be on long-term conditions.

Contractors should then follow the agreed care pathways in the treatment of their patients, unless in individual cases, they can justify clinical reasons for not doing so.

QP 003.2 Reporting and verification

The contractor may be asked about which care pathways were followed and if any changes in the patterns of referral have resulted.

Achievement will be rewarded on the basis that contractors have both engaged in the development of care pathways and delivered care along the agreed care pathways.

It is expected that a contractor will follow the agreed care pathways for all patients. However, it is recognised that it may not be clinically appropriate for every patient, for example not all patients may be able to tolerate certain drugs. In these circumstances the contractor may be asked whether consideration was given for following the care pathway in treating these patients and the reasons as to why it was not clinically appropriate in those individual circumstances.

QP indicator 004

The contractor reviews data on emergency admissions, for patients on the contractor's registered list, provided by the NHS CB

QP 004.1 Rationale

The NHS CB is responsible for providing contractors with data on emergency admissions, for patients on the contractor's registered list, which the contractor reasonably requires to conduct the review. Contractors should discuss with the NHS CB what data is required for the review meeting and when. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate way of fulfilling this function..

Clinicians in the practice will meet at least once during the year to carry out the internal review. It is recommended that this meeting involves the range of clinicians working within the practice. Emergency admissions are defined as admissions that are unpredictable and at short notice because of clinical need²⁵⁰.

Exploration of the reasons for emergency admissions with reference to available pathways could be useful for the contractor, in helping to identify areas where improvement might be made.

The output of this review should be made available to the group of contractors taking part in the external peer review.

QP 004.2 Reporting and verification

The contractor may be asked to provide a summary of the discussions that took place at the meeting. This may be in the form of a meeting note.

QP indicator 005

The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its data on emergency admissions with that of the other contractors. The contractor agrees with the group areas for commissioning or service design improvements

QP 005.1 Rationale

The steps outlined in indicator QP002 apply to QP005, with references to "secondary outpatient referrals" replaced with references to "emergency admissions".

²⁵⁰ NHS Data Dictionary - Admission method codes 21, 22, 23, 24 and 28.

QP 005.2 Reporting and verification

The contractor may be asked to provide a summary of the review meeting, including when the external review took place, who was involved, the key discussion points (if any) and what areas have been proposed for commissioning or service design improvement. This may be in the form of a meeting note.

For indicators QP002, QP005 and QP008, the contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out the external review. The group should contain a minimum of six practices unless the NHS CB agrees otherwise. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements.

QP indicator 006

The contractor engages with the development of and follows 3 care pathways, agreed with the NHS CB (unless in individual cases they justify clinical reasons for not doing this), in the management and treatment of patients in aiming to avoid emergency admissions

QP 006.1 Contractor guidance

The steps outlined in indicator QP003 apply to QP006, with references to "secondary outpatient referrals" replaced with references to "emergency admissions".

QP 006.2 Reporting and verification

The contractor may be asked about which care pathways were followed and if any changes in the rates of emergency admissions have resulted.

Achievement will be rewarded on the basis that contractors have both engaged in the development of care pathways and delivered care along the agreed pathways.

It is expected that a contractor will follow the agreed care pathways for all patients. However, it is recognised that it may not be clinically appropriate for every patient, for example not all patients will be able to tolerate certain drugs. In these circumstances the contractor may be asked whether consideration was given for following the care pathway in treating these patients and the reasons as to why it is was not clinically appropriate in those individual circumstances.

QP indicator 007

The contractor reviews data on accident and emergency attendances, for the patients on the contractor's registered list, provided by the NHS CB. The review will include consideration of whether access to clinicians in the contractors premises is appropriate, in light of the patterns on accident and emergency attendance

QP 007.1 Rationale

The NHS CB is responsible for providing contractors with data on A&E attendances, for patients on the contractor's registered list, which the contractor reasonably requires to conduct the review. It is advised that the initial data provided should be from the final quarter of 2012/13 financial year (1 January to 31 March 2013) and thereafter updated

data should be provided monthly. The data should where possible include patient details, reasons for attendance/diagnosis and the time/date of attendance. Contractors should discuss with the NHS CB what data is required for the review meeting and by when. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate way of fulfilling this function.

Attendances at A&E are defined as those patients seen in a Type 1 A&E department for both first and follow-up attendances for the same condition (excluding planned follow-ups). The definition in the document *A&E Clinical Quality Indicators Data Definitions*, published by the DH in England²⁵¹, defines a Type 1 A&E department as "a consultant led 24-hour service with full resuscitation facilities and designated accommodation for the reception of A&E patients".

In circumstances where there is no Type 1 A&E department or where the majority of patients do not use a Type 1 A&E department, contractors should identify the most frequently used local urgent care service and agree with the NHS CB, working in partnership with CCGs, those that will be included (for example Type 2 and/or Type 3 A&E departments). The type of A&E attendance will be limited to both first and follow-up attendances for the same condition (excluding planned follow-ups).

Clinicians in the practice will meet at least once to carry out the internal review. It is recommended that this meeting involves the range of clinicians working within the practice.

At the meeting the contractor explores the reasons for registered patients' attendance(s) at A&E and any emerging patterns and discusses this with reference to available care pathways and the capability and access within primary care to see and treat patients. It is advised that focus should be given to:

1. older patients with co-morbidities at high risk of admission
2. children with minor illness/injury; and
3. patients who frequently re-attend A&E that could be dealt with in primary care.

The review should also specifically consider whether same day access to clinicians in the contractor's premises is appropriate and whether any comparisons can be drawn between this and the level of A&E attendances. The contractor then uses this information to identify where improvements might be made to reduce avoidable A&E attendances.

The output of this review should be made available to the other contractors in the group taking part in the external peer review (see QP007).

QP 007.2 Reporting and verification

The contractor may be asked to provide a summary of the review meeting, including when the review took place and the key discussions points (if any). This may be in the

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http://www.dh.gov.uk/prod_consum_dh/groups/dh.digitalassets/@dh/@en/@ps/documents/digitalasset/dh_122892.pdf

form of a meeting note. The contractor may also be asked what the current access arrangements are.

QP indicator 008

The contractor participates in an external peer review with other contractors who are members of the same clinical commissioning group to compare its data on accident and emergency attendances with that of the other contractors. The contractor agrees an improvement plan with the group. The review should include, if appropriate, proposals for improvement to access arrangements to the contractors premises in order to reduce avoidable accident and emergency attendances and may also include proposals for commissioning or service design improvements

QP 008.1 Rationale

The contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out an external review of their A&E attendances. The group should contain a minimum of six practices unless the NHS CB agrees otherwise. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements. The groups may be the same as those used for other QP indicators.

The external review should consist of a comparison of the contractor's data with comparable data from the other contractors in the group. This is to determine the reasons why there are any variances and where it may be appropriate for the contractor to amend current arrangements to help reduce avoidable A&E attendances. The focus of the review will be to reflect on the reasons and/or patterns of A&E attendances, and identify where improvements may be made to improve the quality of care for patients at the interface of primary care and A&E, in order to help reduce avoidable A&E attendances. Again, both in the discussion and final improvement plan, it is advised that focus should be given to:

1. older patients with co-morbidities at high risk of admission
2. children with minor illness/injury; and
3. patients who frequently re-attend A&E that could be dealt with in primary care.

In circumstances where contractors are already managing their patients in a way that means they have very low levels of 'avoidable A&E attendances', the plan may focus on how the contractor intends to maintain or further reduce the current level of 'avoidable A&E attendances'.

Contractors may also propose areas for commissioning or service design improvements with the other contractors in the group that could help to reduce avoidable A&E admissions.

Following the review, an improvement plan for each contractor is agreed by the contractors in the group and the relevant improvement plan is held by the contractor. A

copy of the improvement plan is to be made available for review by the NHS CB upon request.

QP 008.2 Reporting and verification

The contractor may be asked to provide a summary of the review meeting, including when the external review took place, who was involved, the key discussion points (if any) and details of the agreed improvement plan that aims to reduce avoidable A&E attendances. This may be in the form of a meeting note that includes the agreed improvement plan.

For indicators QP002, QP005 and QP008, the contractor will identify a group of contractors, who are members of the same CCG, with which it will carry out the external review. The group should contain a minimum of six practices unless the NHS CB agrees otherwise. The NHS CB will work in partnership with CCGs at a local level to agree the most appropriate arrangements.

QP indicator 009

The contractor implements the improvement plan that aims to reduce avoidable accident and emergency attendances

QP 009.1 Rationale

The contractor will implement the arrangements and actions set out in their improvement plan and retain evidence to support the implementation which is to be made available to the NHS CB upon request.

Contractors will need to review their monthly data on the percentage of patients who frequently re-attend A&E and consider how improvements in care and access to primary care can be made for these patients.

QP 009.2 Reporting and verification

The contractor may be asked to provide the improvement plan and a summary of action taken aimed at reducing avoidable A&E attendances.

Verification - information may be requested about patients who frequently re-attend A&E and how any improvements in care and access in primary care have helped to reduce avoidable A&E attendances. If the data quality provided to the contractor does not allow this to be done for all patients then it is to be noted.

Section 6: Patient experience domain (PE)

Please note exception reporting does not apply to this domain.

| Indicator | Points |
|---|--------|
| <p>PE001 (Length of consultations)</p> <p>The contractor ensures that the length of routine booked appointments with doctors in the surgery is not less than 10 minutes. If the contractor routinely admits extra patients during booked surgeries, then the average booked consultation length should allow for the average number of extra patients seen in a surgery session such that the length of booked appointment is not less than 10 minutes. If the extra patients are seen at the end of surgery, then it is not necessary to make this adjustment. For contractors with only an open surgery system, the average face-to-face time spent by the GP with the patient is not less than 8 minutes. Contractors that routinely operate a mixed economy of booked and open surgeries should ensure that the length of booked appointments is not less than 10 minutes and the length of open surgery appointments is not less than 8 minutes.</p> | 33 |

PE indicator 001

The contractor ensures that the length of routine booked appointments with doctors in the surgery is not less than 10 minutes. If the contractor routinely admits extra patients during booked surgeries, then the average booked consultation length should allow for the average number of extra patients seen in a surgery session such that the length of the booked appointment is not less than 10 minutes. If the extras are seen at the end, then it is not necessary to make this adjustment. For contractors with only an open surgery system, the average face-to-face time spent by the GP with the patient is not less than 8 minutes. Contractors that routinely operate a mixed economy of booked and open surgeries should ensure that the length of booked appointments is not less than 10 minutes and the length of open surgery is not less than 8 minutes.

PE 001.1 Rationale

The QOF includes an incentive for contractors to provide longer consultations. This has been included as a proxy for many of the things that are crucial parts of general practice, yet cannot easily be measured e.g. listening to patients, taking time, involving patients in decisions, explaining treatments, in addition to providing high quality care for the many conditions not specifically included in the QOF.

Contractors with appointment systems

For contractors where patients are seen in booked appointments of ten minutes or more and surgery sessions are not interrupted by extra patients, the contract requirement is met. In this case, non-booked consultations for extra patients who need to be assessed on the same day would take place at the end of surgery, after the booked appointments.

If extra patients are routinely seen during surgeries, this will reduce the effective length of time for consultation. For example, if a surgery session has 12 consultations booked at ten minute intervals, but six extra patients are routinely added in, then the average time for patients will be $120/19$ which equals 6.7 minutes. These slots would not meet the ten minute requirement. If the contractor routinely admits extra patients during booked surgeries, then the average booked consultation length should allow for the average number of extra patients seen in a surgery session such that the length of booked appointment is not less than ten minutes.

Contractors without appointment systems or with mixed systems

Some contractors do not run an appointment system. In this case, or where some surgeries are regularly 'open', contractors are advised to measure the actual time of consultations in two separate sample weeks during each year.

For contractors using computerised clinical systems, the length of routine consultations can be recorded automatically from the computer. Where actual consultation length is measured, the face-to-face time with patients in routine consultations is not to be less than eight minutes.

Unusual systems

Contractors organise consulting in a wide variety of ways. This guidance covers the majority of systems. Where different systems are used, the contractor will need to assess whether the indicator requirements are still met and declare achievement accordingly. It is for the NHS CB to decide whether it requires further information to verify that this is the case.

PE 001.2 Reporting and verification

For contractors where patients are seen for routine appointments in booked appointments for ten minutes or more and surgery sessions are not interrupted by 'extras' the contract requirement is met. For contractors with only open surgery systems, the average consultation time is not to be less than eight minutes. For contractors operating a mixed economy, booked appointments are not to be less than 10 minutes and open surgery appointments not less than eight minutes.

If the NHS CB requires evidence that this indicator has been met, contractors may carry out a survey on two separate weeks of consultation length either manually or through a computer should be made available upon request.

Verification - if the contractor operates an appointment system, the NHS CB may inspect the appointments book (whether paper or computerised), looking at a sample of days over the preceding year. In reviewing this data, the contractor may be required to provide a number of sample days to confirm that routine consultations have been booked at least at ten minute intervals.

Section 7: Queries process

Queries can be divided into three main categories:

1. those which can be resolved by referring to the guidance and/or FAQs
2. those which require interpretation of the guidance or Business Rules
3. those where scenarios have arisen which were not anticipated in developing guidance.

Within these categories, there will be issues relating to coding, Business Rules, payment, QMAS (up to and including 2012/13 QOF payments) and CQRS (from 2013/14), clinical issues and policy issues and in some cases the query can incorporate elements from each of these areas.

If there are queries which cross the above areas, the recipient will liaise with the other relevant parties in order to resolve/respond. In addition, where a query has been directed incorrectly, the query will be redirected to the appropriate organisation to be dealt with.

Where an issue relating to clinical indicators has arisen mid-year that cannot be resolved with simple clarification of the guidance, this will fall in to the NICE process of reviewing QOF indicators.

QOF queries should be directed as follows:

1. All queries relating to QOF, in particular clinical and Business Rules/coding queries should be sent to the HSCIC via enquiries@ic.nhs.uk Where required, the HSCIC will work with other key stakeholders (e.g. NICE) to respond.
2. Miscellaneous, non-clinical organisational (inc quality and productivity) and patient experience domain queries should be sent to:
 - o Primary Care Commissioning only via the helpdesk <http://helpdesk.pcc.nhs.uk/>
 - o NHS Employers for the NHS CB Area Teams via QOF@nhsemployers.org
 - o GPC for general practice via info.gpc@bma.org.uk

NICE operate an online facility which allows stakeholders to comment on current QOF indicators. Comments will be used to review existing QOF indicators against set criteria which include:

- evidence of unintended consequences
- significant changes to the evidence base
- changes in current practice.

Comments are fed in to a rolling programme of reviews and considered by the QOF Advisory Committee. The recommendations of the Committee will then be fed in to negotiations between NHS Employers and the GPC. The online facility is available on the NICE website²⁵².

²⁵² NICE website. QOF. <http://www.nice.org.uk/aboutnice/qof/qof.jsp>

Section 8: Exception reporting guidance

Purpose of guidance

Exception reporting was introduced into the QOF in 2004. It is intended to allow contractors to pursue the quality improvement agenda without being penalised for patient specific clinical circumstances or other circumstances beyond the contractor's control which lead to failure to achieve the indicator. For example, where a medication cannot be prescribed due to a contra-indication or side-effect, where patients do not attend for review or where secondary care services are not available..

Since 2004, it became clear that a variety of interpretations and applications of the nationally defined exception reporting criteria are possible. NHS Employers and the BMA published guidance in October 2006 regarding what constitutes good practice in exception reporting. The 2006 guidance was designed to provide additional clarity, to the information contained in the QOF guidance, in order to help maintain a consistent approach to exception reporting.

From April 2013, the exception reporting guidance has been updated and supersedes any previous guidance issued. It is supplementary to the paragraphs included in section one of this document.

Principles

The overriding principles to follow in deciding to except a patient are that:

- The duty of care remains for all patients, irrespective of exception reporting arrangements.
- It is good practice for clinicians to review from time to time those patients who are excepted from treatment e.g. to have continuing knowledge of health status and personal health goals.
- The decision to exception report should be based on clinical judgement, relevant to the patient, with clear and auditable reasons coded or entered in free text on the patient record.
- There should be no blanket exceptions: the relevant issues with each patient should be considered by the clinician at each level of the clinical indicator set.

In each case where a patient is exception reported, in addition to recording what should be reported for payment purposes (in accordance with the Business Rules), the contractor should also ensure that the clinical reason for the exception is fully recorded in a way that can facilitate an audit in the patient record. This is both in order to manage the care of that particular patient and for the purpose of verification.

Definitions

There is an important distinction to be made between “exclusions” and “exceptions”. This guidance is about “exceptions”.

Exclusions are patients on a particular clinical register, but who for definitional reasons are not included in a particular indicator denominator. For example, an indicator (and therefore the denominator) may refer only to patients of a specific age group, patients with a specific status (e.g. those who smoke), or patients with a specific length of diagnosis, within the register for that clinical area.

Exceptions are patients who are on the disease register and who would ordinarily be included in the indicator denominator. However they are excepted from the indicator denominator because they meet at least one of the exception criteria set out in the SFE. Although patients may be excepted from the denominator, they should still be the recipients of best clinical care and practice.

The criteria under which a patient may be excepted from a QOF indicator are set out in the SFE and also in section one of this document.

Although the SFE sets out nine reasons why a patient may be exception reported, the national QOF achievement analysis systems (CQRS) identifies exception reporting against a limited number of codes. For example, criteria A and G are both coded as “informed dissent” or “patient refused”. Any patient is only excepted once by the system for a given indicator, but any patient’s clinical record could contain more than one type of exception reporting Read code entered by the contractor. It is therefore not possible to extract completely accurate or meaningful data on exceptions broken down by each of the criteria defined in the SFE from the national systems. Therefore the HSCIC only reports the total numbers of patients excepted for each indicator.

For the purposes of managing the care of the patient and for subsequent audit and verification, it is important that the reason the patient meets one or more of the exception reporting criteria and any underlying clinical reason for this is recorded in the patient’s clinical record. For example, where a patient has not tolerated medication, the nature of the contraindication should be recorded in the patient’s notes as well as the exception reporting code applied.

Detailed guidance on exception reporting

Each of the nine criteria for exception reporting are detailed below:

- A. Patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months.

Invitations to attend a review should be made to the individual patient and can be in writing or by telephone. This can include a note at the foot of the patient's prescription requesting that they attend for review.

The three invitations need to have taken place within the financial year in question (e.g. 1 April 2013 to 31 March 2014 if applying to the year 2013/14). There should be three separate invitations at three unique periods of time. The only exception to this rule is indicator CS002, where the period in which the three invitations are sent reflects the timeframe of the indicator e.g. five years.

The telephone call invitation may lead to the application of exception criteria G, 'informed dissent', if the patient refuses to take up the invitation to attend.

The following are examples that are not acceptable as an invitation:

1. A generic invitation on the right hand side of the script to attend a clinic or an appointment e.g. influenza immunisation.
2. A notice in the waiting room inviting particular groups of patient to attend clinics or make appointments (e.g. influenza immunisation).

Influenza immunisation indicators

Exception reporting for influenza immunisation has caused some confusion because it is also remunerated through a DES. For the DES, payment is based on the number of at-risk patients immunised. The DES nevertheless requires the contractor to develop a proactive approach and a robust call and reminder system for the at-risk groups.

For QOF, the payment is based on the percentage of patients immunised in each relevant disease area. Exception reporting rules apply to the QOF indicators and patients need to have been personally invited on at least three occasions that year to be excluded from the denominator for achievement under criteria A.

Cervical screening indicators

Exception reporting (as detailed in the clinical domain) will apply and specifically includes women who have had a hysterectomy involving the complete removal of the cervix.

The exception reporting rules regarding criteria A require that three separate invitations are offered to the patient before that patient can be recorded as 'did not attend'. Therefore:

- In those areas where the first two invitations are sent via the central screening service, then contractors are responsible for offering the third invitation before exception reporting patients as DNA; or
- Where the central screening service sends out only one letter, then contractors are responsible for offering the second and third invitations before exception reporting patients as DNA.

The exception reporting criteria is not applicable to contractors that have opted to run their own call/recall system. These contractors will still be required to offer all three invitations directly in order to meet the DNA criteria. Copies of the letters sent by the contractor may be required for assessment purposes.

Women can choose to withdraw from the national screening programme. As the indicator requires that screening is delivered every five years, in order for a woman to be exception reported for this period, criteria G which requires that a discussion has taken place between the patient and the practitioner before 'informed dissent' can be recorded.

Women who withdraw from cervical screening call/recall will receive no further offers of screening from the central screening service.

B. Patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. terminal illness, extreme frailty.

The overriding principle is that blanket exception reporting is not acceptable and individual decisions based on clinical judgment should be made.

It is not acceptable to exclude all patients above a certain age or all those with a particular diagnosis e.g. dementia or cancer. However, age, diagnosis, co-morbidity, health and functional status should be taken into account when deciding whether to exception report individual patients under this criteria. In each individual case there is a question of degree which requires clinical judgement to be exercised.

C. Patients newly diagnosed or who have recently registered with the contractor, who should have measurements made within three months and delivery of clinical standards within nine months e.g. blood pressure or cholesterol measurements within target levels.

Exception reporting is done automatically through the national achievement analysis system. Where the contractor has delivered the appropriate clinical standard within the timeframe for the indicator, the achievement would automatically override the exception.

D. Patients who are on maximum tolerated doses of medication whose levels remain sub-optimal.

The over-riding principle is that blanket exception reporting is not acceptable and each case is to be considered on its own merits, making a clinical judgment (see criteria B).

It is not acceptable to exclude all patients who are under the care of a consultant. Each case needs to be carefully considered and all reasonable efforts made to provide optimal care.

Even when a patient is under the care of a consultant only, the contractor should ensure it has evidence that all the requirements of the contract have been carried out. If this evidence is not available, the contractor should assume that the action has not been carried out. The patient should not be exception reported on the basis that they are under the care of a consultant. The contractor should either fulfil the requirements of the relevant indicator(s) or obtain evidence from secondary care that the particular test/check has been carried out. Where the secondary care clinician, in agreement with

the primary care clinician, has exercised clinical judgement and decided further action or testing is inappropriate, exception reporting will be allowed. This should be noted in the patient record.

- E. Patients for whom prescribing a medication is not clinically appropriate e.g. those who have an allergy, another contra-indication or have experienced an adverse reaction.

The nature of the contra-indication, allergy or adverse drug reaction should be recorded in the patient record as well as the exception reporting code applied.

- F. Where a patient has not tolerated medication.

The nature of the intolerance should be recorded in the patient record as well as the exception reporting code applied.

- G. Where a patient does not agree to investigation or treatment (informed dissent) and this has been recorded in their patient record following a discussion with the patient.

A personal contact or discussion should be documented in the patient's record for this criteria to apply. This can include either face-to-face or telephone contact between a health professional and the patient.

Patients not responding to invitations to attend or failing to arrive at appointments cannot be exception reported under criteria G, e.g. DNA alone does not fulfil the criteria for informed dissent. Patients failing to respond after three invitations can be exception reported under criteria A.

The informed dissent should have been given in the period 1 April 2013 to 31 March 2014 if applying to the year 2013/14) (except cervical screening where a patient has withdrawn from the call and recall system).

- H. Where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. cholesterol reduction where the patient has liver disease.

The nature of the supervening condition should be recorded in the patient's notes as well as the exception reporting code applied.

- I. Where an investigative or secondary care service is unavailable.

The contractor would be expected to explore fully with their CCG whether or not a suitable investigative or secondary service could be commissioned for the patient prior to deciding to except them on the basis that the services was unavailable.

Section 9: Glossary of terms

| Abbreviation | Definition |
|------------------------|---|
| ABPI | Ankle Brachial Pressure Index |
| ABPM | Ambulatory Blood Pressure Monitoring |
| ACCORD | Action to Control Cardiovascular Risk in Diabetes |
| ACE-Inhibitor or ACE-I | Angiotensin Converting Enzyme Inhibitor |
| ACR | Albumin:Creatinine Ratio |
| ACS | Acute Coronary Syndrome |
| ACTIVE-W | Atrial Fibrillation Clopidogrel Trial with Irbesartan for Prevention of Vascular Events |
| ADA | After Death Analysis |
| AED | Antiepileptic Drugs |
| AF | Atrial Fibrillation |
| AMA | American Medical Association |
| APHO | Association of Public Health Observatories |
| ARB | Angiotensin Receptor Blocker |
| AST | Asthma |
| ATC | Antithrombotic Trialists Collaboration |
| BAFTA | Birmingham Atrial Fibrillation Treatment of the Aged |
| BDI-II | Beck Depression Inventory, second edition |
| BHSOC | British Hypertension Society |
| BLS | Basic Life Support |
| BMD | Bone Mass Density |
| BMI | Body Mass Index |
| BMA | British Medical Association |
| BMJ | British Medical Journal |

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| BNF | British National Formulary |
| BP | Blood Pressure |
| BPA | Bio-psychosocial Assessment |
| BTS | British Thoracic Society |
| CABG | Coronary Artery Bypass Grafting |
| CAD | Coronary Artery Disease |
| CAN | Cancer |
| CBT | Cognitive Behavioural Therapy |
| CCG | Clinical Commissioning Group |
| CHD | Coronary Heart Disease |
| CHS | Child Health Surveillance |
| CHADS ₂ | Congestive (HF) Hypertension Age (75 or over) Diabetes Stroke |
| CI | Confidence Interval |
| CKD | Chronic Kidney Disease |
| CMO | Chief Medical Officer |
| CON | Contraception |
| COPD | Chronic Obstructive Pulmonary Disease |
| CPA | Care Programme Approach |
| CQRS | Calculating Quality Reporting Service |
| CRP | C-Reactive Protein |
| CS | Cervical Screening |
| CVD | Cardiovascular Disease |
| CVD-PP | CVD Primary Prevention |
| DBP | Diastolic Blood Pressure |
| DCCT | Diabetes Control and Complications Trial |
| DH | Department of Health |
| DEM | Dementia |

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| DEP | Depression |
| DM | Diabetes Mellitus |
| DNA | Did Not Attend |
| DRS | Diabetic Retinopathy Screening |
| DSM-IV | Diagnostic and Statistical Manual of Mental Disorders, fourth edition |
| DXA | Dual-Energy X-ray Absorptiometry |
| ED | Erectile Dysfunction |
| EHC | Emergency Hormone Contraception |
| eGFR | Estimated Glomerular Filtration Rate |
| EOLC | End of Life Care |
| EP | Epilepsy |
| EPIC | European Prospective Investigation into Cancer |
| ERJ | European Respiratory Journal |
| ESR | Erythrocyte Sedimentation Rate |
| FBC | Full Blood Count |
| FEV ₁ | Forced Expiratory Volume in One Second |
| FVC | Forced Vital Capacity |
| GFR | Glomerular Filtration Rate |
| GMP | Good Medical Practice |
| GMS | General Medical Services |
| GOLD | The Global Initiative for Chronic Obstructive Lung Disease |
| GP | General Practitioner |
| GPC | General Practitioners Committee |
| GPPAQ | GP Physical Activity Questionnaire |
| GPRD | General Practice Research Database |
| GPwSI | GP with a Special Interest |
| GSF | Gold Standards Framework |

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| HAD-D | Hospital Anxiety and Depression Scale Depression Sub-Scale |
| HADS | Hospital Anxiety and Depression Scale |
| HbA1c | Glycated Haemoglobin |
| HBPM | Home Blood Pressure Monitoring |
| HDA | Health Development Agency |
| HF | Heart Failure |
| HSCIC | NHS Health and Social Care Information Centre |
| HYP | Hypertension |
| IFCC | International Federation of Clinical Chemistry and Laboratory Medicine |
| IUD | Intrauterine Device |
| IUS | Intrauterine System |
| JBS | Joint British Societies |
| JCVI | Joint Committee on Vaccination and Immunisation |
| LARC | Long Acting Reversible Contraception |
| LD | Learning Disabilities |
| LDL | Low Density Lipoprotein |
| LMC | Local Medical Committee |
| LVSD | Left Ventricular Systolic Dysfunction |
| MAT | Maternity |
| MCM | Major Congenital Malformation |
| MH | Mental Health |
| MI | Myocardial Infarction |
| mmHg | Millimetres of Mercury |
| mmol/l | Millimoles per Litre |
| MR | Modified Release |
| MRC | Medical Research Council |
| MRI | Magnetic Resonance Imaging |

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| NAO | National Audit Office |
| NEJM | New England Journal of Medicine |
| NHANES | National Health and Nutrition Examination Survey |
| NHS | National Health Service |
| NHS CB | NHS Commissioning Board |
| NICE | National Institute for Health and Clinical Excellence |
| NPSA | National Patient Safety Agency |
| NPV | Negative Predictive Value |
| NRT | Nicotine Replacement Therapy |
| NSAIDs | Non-Steroidal Anti-Inflammatory Drugs |
| NSF | National Service Framework |
| OB | Obesity |
| OGTT | Oral Glucose Tolerance Test |
| ONS | Office for National Statistics |
| OST | Osteoporosis |
| OTC | Over The Counter |
| PAD | Peripheral Arterial Disease |
| PC | Palliative Care |
| PCR | Protein:Creatinine Ratio |
| PE | Patient Experience |
| PEF | Peak Expiratory Flow |
| PHQ-9 | Nine Item Patient Health Questionnaire |
| PCRJ | Primary Care Respiratory Journal |
| PVD | Peripheral Vascular Disease |
| QMAS | Quality Management and Analysis System |
| QOF | Quality and Outcomes Framework |
| QP | Quality and Productivity |

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| RA | Rheumatoid Arthritis |
| RCGP | Royal College of General Practitioners |
| RCP | Royal College of Physicians |
| RCN | Royal College of Nurses |
| RCTs | Randomised Controlled Trials |
| SCR | Supportive Care Register |
| SIGN | Scottish Intercollegiate Guidelines Network |
| SMOK | Smoking |
| SSRI | Selective Serotonin Reuptake Inhibitors |
| STIA | Stroke or Transient Ischemic Attack |
| TIA | Transient Ischemic Attack |
| THY | Thyroid |
| TPCR | Total Protein: Creatinine Ratio |
| TSH | Thyroid Stimulating Hormone |
| UK | United Kingdom |
| WHO | World Health Organisation |

NHS Employers

www.nhsemployers.org
QOF@nhsemployers.org

General Practitioners Committee

www.bma.org.uk
info.gpc@bma.org.uk

NHS Commissioning Board

www.commissioningboard.nhs.uk

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