Quality and Outcomes Framework guidance for GMS contract 2011/12

Delivering investment in general practice

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BMA

NHS Employers

Contents

Introduction

The Quality and Outcomes Framework (QOF) rewards practices for the provision of 'quality care' and helps to standardise improvements in the delivery of clinical care. Practice participation in QOF is voluntary but most practices on General Medical Services (GMS) contracts, as well as many on Personal Medical Services (PMS) contracts, take part in QOF. It 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 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. As part of this process, NICE prioritises areas for new indicator development, develop and select indicators for inclusion on the NICE menu of indicators, make recommendations for the retirement of indicators and consult with individuals and stakeholder groups. The recommendations made by NICE are based on current clinical evidence and cost-effectiveness.

The NICE menu of indicators is published in July/August each year and the recommendations are used to inform national contract negotiations between NHS Employers and the GPC on changes to the QOF.

NHS Employers and the GPC use this menu and the associated guidance to agree which indicators should be implemented across the UK and what point value and threshold ranges should apply. The QOF guidance continues to be jointly produced and published by NHS Employers and the GPC and reflects the outcome of these negotiations.

This document outlines changes in relation to QOF payments under the GMS contract for 2011/12 and replaces all guidance issued in previous years. The content of this document reflects the provisions of Annex D of the Statement of Financial Entitlements Directions and forms part of the General Medical Services (GMS) Contract for 2011/12.

Further information about the development of the QOF is available on the NHS Employers website: 'Developing the QOF'

QOF Business Rules Development

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

Further information on the business rules process is available on the NHS Employers website: 'Developing the QOF Business Rules'

Section 1. 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 are 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.

Section 2. QOF queries

2.1 QOF queries

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, 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 is submitted to the incorrect party, the query will be passed to the correct organisation. Alternatively, where a query has been directed incorrectly, the query will be redirected to the appropriate organisation to be dealt with.

NHS Employers and GPC are working on a set of UK QOF FAQs which will cover a number of historical issues and commonly asked questions. This document should be consulted before queries raised with any of the parties outlined below. The document will be available on the NHS Employers website along with this guidance once finalised.

Queries should be directed as follows:

- All queries relating to QOF, in particular clinical and business rules/coding queries should be sent to the IC via enquiries@ic.nhs.uk Where appropriate, the IC will work with other key stakeholders (e.g. NICE) to respond.
- Miscellaneous, non-clinical organisational and patient experience domains queries should be sent to:
  - NHS Primary Care Commissioning for PCTs only via the helpdesk http://helpdesk.pcc.nhs.uk
  - NHS Employers for PCO's via QOF@nhsemployers.org
  - GPC for general practice via info GPC@bma.org.uk

There is no formal helpdesk facility in Northern Ireland therefore queries should be directed as follows:

- queries relating to the content of the QOF tables should be sent to qofdataenquiries@dhsspsni.gov.uk
- queries relating to GMS policy should be sent to gmsenquiries@dhsspsni.gov.uk

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.

2.2 Process for commenting on existing indicators

NICE operates 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 into a rolling programme of reviews and considered by the Advisory Committee. The recommendations of the Committee will then be fed into negotiations between the NHS Employers and the GPC. The online facility is available on the NICE website (http://www.nice.org.uk/aboutnice/qof/comment.jsp)

Section 3. Clinical indicators

3.1. General format

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 in a number of the four nations.

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

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

Indicators across all disease categories are numbered. In the guidance they are prefixed by the disease category to which they belong e.g. chronic heart disease (CHD) indicator number one, becomes CHD1. Indicator 'identifiers' or 'references' are numbered sequentially except where indicators have been removed or amended. Where indicators have been amended, either in relation to the activity being measured, the frequency with which the activity should be completed or where a linked indicator has been changed, the indicator has been renumbered. For example, the 2009/10 diabetes DM23 HbA1c target changed in 2011/12, therefore, the

indicator identifier changed to DM26. For clarity DM24 and DM25 were also renumbered to keep the three target indicators grouped together.

The reason that indicators are renumbered is to avoid inappropriate cross year comparisons between different indicators. Indicators have NOT been renumbered where the only change is in the threshold and range. Indicators that have been developed through the NICE process are identified by the reference '*NICE Menu ID: NMXX*' for information.

The term PCO (Primary Care Organisation) is used throughout, as the structures responsible for the organisation and management of primary care differ in the four countries e.g. primary care trusts in England and local health boards in Wales.

For each indicator, two descriptions are given – 'rationale' and 'reporting and verification'.

3.1.1. 'xx.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, individual papers are also quoted.

In some areas, more extensive information is provided. It is difficult to achieve a balance of providing helpful information without providing a textbook of medicine or replicating guidelines.

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.

In many of the indicators additional time is factored in to the timeframe, either within the wording of the indicator (e.g. BP5) or through the supporting business logic (DEP4). The first recognises that in practice it may be difficult to ensure that all patients have attended for review and have completed the review process within any particular timescale. For example, in relation to indicator BP5, national guidance recommends that all patients with hypertension should have their blood pressure measured every six months. However, the indicator wording looks at the number of patients with hypertension who have had a blood pressure measured in the last nine months. The second recognises that QOF activity can span more than one QOF year thereby ensuring fair and consistent payments to practices and ensuring that patients who are diagnosed or newly registered within the last three months of the QOF year are identified.

3.1.2. 'xx.2 Reporting and verification'

This section defines the audit information which practices will be required to submit annually.

The term 'notes' is used throughout to indicate either electronic or paper patient records.

Reporting should be possible through the use of GP clinical systems and practices can run a report annually which can be submitted to the PCO. Separate guidance has been produced on the electronic queries which can be used to report on the QOF in England[1].

Additional information on the process and content of the QOF review visits in Scotland and Wales can be found at:

www.paymodernisation.scot.nhs.uk/gms/quality/index.htm

[1] http://www.connectingforhealth.nhs.uk/systemsandservices/gpsupport/qmas

http://www.wales.nhs.uk/sites3/page.cfm?orgid=480&pid=6063

Practices that do not hold all the required information on computer may utilise the reporting criteria to undertake a manual audit. However, it is recommended that information be transferred to an electronic format as part of that audit process.

Criteria are also provided under a number of indicators that may be used by a PCO on a verification visit to a practice. In general, those that have been suggested have an identifiable source in the clinical record.

PCOs may also wish to use these principles in the verification of other indicators.

In general, PCOs will not expect or be expected to conduct detailed or intrusive verification procedures, unless they suspect that incorrect figures may have been returned, or where there is suspicion of fraud. PCOs may select cases for more detailed investigation on a random basis.

3.2. Logical Query Indicator Specification and the Dataset and Business Rules

The Logical Query Indicator Specification and the Dataset and Business Rules that support the reporting requirements of the QOF in each home country are based entirely on Read codes (version 2 and Clinical Terms Version 3) and associated dates. Read codes are an NHS standard. Practices using proprietary coding systems and/or local/practice specific codes need to be advised that these codes will not be recognised within QOF reporting. Practices utilising such systems should develop strategies to ensure that they are utilising 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 www.pcc.nhs.uk

3.3 Exception reporting

The QOF includes the concept of exception reporting. This was been introduced to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side effect.

The following criteria have been agreed 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 preceding 12 months

B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. terminal illness, extreme frailty

C. patients newly diagnosed or who have recently registered with the practice 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, contraindication 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 medical records following a discussion between 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 this would apply to the disease register and these patients would be subtracted from the denominator for all other indicators in that disease area. For example, in a practice with 100 patients on the CHD disease register, in 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 practice prevalence. This would apply to all relevant indicators in the CHD set.

In addition, practices may exception-report patients relating to single indicators, for example a patient who has heart failure due to Left Ventricular Dysfunction (LVD) but who is intolerant of ACE inhibitors (ACE-I) could be exception reported. This would again be done by removing the patient from the denominator.

Practices should report the number of exceptions for each indicator set and individual indicator. Practices will not be expected to report why individual patients were exception reported. However, practices may be called on to justify why they have 'excepted' patients from an indicator during verification and this should be identifiable in the clinical record.

Exception reporting guidance can be found at the following location:

www.pcc.nhs.uk/uploads/QOF/october_06/qof212_exception_reporting_guidance_final.pdf

3.4. Disease registers

An important feature of the QOF is the establishment of disease registers. While it is recognised that these may not be completely accurate, it is the responsibility of the practice to demonstrate that it has systems in place to maintain a high-quality register. Verification visits may involve asking how the practice constructed the register and how the register is maintained. PCOs will compare the reported prevalence with the expected prevalence. This is a relatively blunt instrument and there are likely to be good reasons for variations but it is anticipated these will be discussed with practices. An explanation on how points are calculated and how prevalence will be applied can be found in the statement of financial entitlements (SFE).

Some indicator sets e.g. depression do not have an indicator which relates to establishing a register. Where this is the case the underlying target population is stipulated in the business rules. Practices should ensure that their coding of such conditions supports this calculation.

Section 4. Organisational, patient experience and additional services indicators

4.1 General format

The organisational, patient experience and additional services domain indicators include indicator wording along with information in the following areas to support the indicator:

- practice guidance
- written evidence/reporting and verification
- assessment visit
- assessors guidance.

The introduction to the organisational domain goes into further detail on the above areas.

Please note exception reporting does not apply to the organisational and patient experience indicators. It does, however, apply to indicators in the additional services domain.

Summary of indicators – Clinical domain

Secondary prevention of coronary heart disease

Indicator	Points	Payment stages
Records		
CHD1. The practice can produce a register of patients with coronary heart disease	4	
Diagnosis and initial management		
CHD13. For patients with newly diagnosed angina (diagnosed after 1 April 2011), the percentage who are referred for specialist assessment *NICE menu ID: NM08*	7	40–90%
Ongoing management		
CHD6. The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less	17	40–71%
CHD8. The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less	17	40–70%
CHD9. The percentage of patients with coronary heart disease with a record in the preceding 15 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken (unless a contraindication or side effects are recorded)	7	40–90%
CHD10. The percentage of patients with coronary heart disease who are currently treated with a beta-blocker (unless a contraindication or side effects are recorded)	7	40–60%
CHD14. The percentage of patients with a history of myocardial infarction (from 1 April 2011) currently treated with an ACE inhibitor (or ARB if ACE intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin (unless a contraindication or side effects are recorded) *NICE menu ID: NM07*	10	40–80%
CHD12. The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March	7	40–90%

Cardiovascular disease – primary prevention

Indicator	Points	Payment stages
Initial diagnosis		
PP1. In those patients with a new diagnosis of hypertension (excluding those with pre-existing CHD, diabetes, stroke and/or TIA) recorded between the preceding 1 April to 31 March: the percentage of patients aged 30 to 74 years who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within 3 months of the initial diagnosis) using an agreed risk assessment tool *NICE menu ID: NM06*	8	40–70%
Ongoing management		
PP2. The percentage of people diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet	5	40–70%

Heart failure

Indicator	Points	Payment stages
Records		
HF1. The practice can produce a register of patients with heart failure	4	
Initial diagnosis		
HF2. The percentage of patients with a diagnosis of heart failure (diagnosed after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment	6	40–90%
Ongoing management		
HF3. The percentage of patients with a current diagnosis of heart failure due to Left Ventricular Dysfunction (LVD) who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who can tolerate therapy and for whom there is no contraindication	10	40–80%

HF4. The percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers	9	40–60%

Stroke and Transient Ischaemic Attack (TIA)

Indicator	Points	Payment stages
Records		
STROKE 1. The practice can produce a register of patients with stroke or TIA	2	
STROKE 13. The percentage of new patients with a stroke or TIA who have been referred for further investigation	2	40–80%
Ongoing management		
STROKE 6. The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less	5	40–71%
STROKE 7. The percentage of patients with TIA or stroke who have a record of total cholesterol in the preceding 15 months	2	40–90%
STROKE 8. The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less	5	40–60%
STROKE 12. The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anti-coagulant is being taken (unless a contraindication or side effects are recorded)	4	40–90%
STROKE 10. The percentage of patients with TIA or stroke who have had influenza immunisation in the preceding 1 September to 31 March	2	40–85%

Hypertension

Indicator	Points	Payment stages
Records		
BP1. The practice can produce a register of patients with established hypertension	6	
Ongoing management		
BP4. The percentage of patients with hypertension in whom there is a record of the blood pressure in the preceding 9 months	16	40–90%
BP5. The percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less	57	40–70%

Diabetes mellitus

Indicator	Points	Payment stages
Records		
DM19.The practice can produce a register of all patients aged 17 years and over with diabetes mellitus, which specifies whether the patient has Type 1 or Type 2 diabetes	6	
Ongoing management		
DM2.The percentage of patients with diabetes whose notes record BMI in the preceding 15 months	3	40–90%
DM26. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 59 mmol/mol (equivalent to HbA1c of 7.5% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months *NICE menu ID: NM14*	17	40–50%
DM27. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 64 mmol/mol (equivalent to HbA1c of 8% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months	8	40–70%

DM28. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 75 mmol/mol (equivalent to HbA1c of 9% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months	10	40–90%
DM21. The percentage of patients with diabetes who have a record of retinal screening in the preceding 15 months	5	40–90%
DM29. The percentage of patients with diabetes 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 15 months *NICE menu ID: NM13*	4	40–90%
DM10. The percentage of patients with diabetes with a record of neuropathy testing in the preceding 15 months	3	40–90%
DM30. The percentage of patients with diabetes in whom the last blood pressure is 150/90 or less *NICE menu ID: NM01*	8	40–71%
DM31. The percentage of patients with diabetes in whom the last blood pressure is 140/80 or less *NICE menu ID: NM02*	10	40–60%
DM13. The percentage of patients with diabetes who have a record of micro-albuminuria testing in the preceding 15 months (exception reporting for patients with proteinuria)	3	40–90%
DM22. The percentage of patients with diabetes who have a record of estimated glomerular filtration rate (eGFR) or serum creatinine testing in the preceding 15 months	3	40–90%
DM15. The percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists)	3	40–80%
DM17. The percentage of patients with diabetes whose last measured total cholesterol within the preceding 15 months is 5mmol/l or less	6	40–70%
DM18. The percentage of patients with diabetes who have had influenza immunisation in the preceding 1 September to 31 March	3	40–85%

Chronic obstructive pulmonary disease (COPD)

Indicator	Points	Payment stages
Records		
COPD14. The practice can produce a register of patients with COPD	3	
Initial diagnosis		
COPD15. The percentage of all patients with COPD diagnosed after 1 April 2011 in whom the diagnosis has been confirmed by post bronchodilator spirometry	5	40–80%
Ongoing management		
COPD10. The percentage of patients with COPD with a record of FEV_1 in the preceding 15 months	7	40–70%
COPD13. The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months	9	50–90%
COPD8. The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March	6	40–85%

Epilepsy

Indicator	Points	Payment stages
Records		
EPILEPSY 5. The practice can produce a register of patients aged 18 years and over receiving drug treatment for epilepsy	1	
Ongoing management		
EPILEPSY 6. The percentage of patients aged 18 years and over on drug treatment for epilepsy who have a record of seizure frequency in the preceding 15 months	4	40–90%
EPILEPSY 8. The percentage of patients aged 18 years and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 15 months	6	40–70%

EPILEPSY 9. The percentage of women under the age of 55 years who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 15 months *NICE menu ID: NM03*	3	40–90%

Hypothyroid

Indicator	Points	Payment stages
Records		
THYROID 1. The practice can produce a register of patients with hypothyroidism	1	
Ongoing management		
THYROID 2. The percentage of patients with hypothyroidism with thyroid function tests recorded in the preceding 15 months	6	40–90%

Cancer

Indicator	Points	Payment stages
Records		
CANCER 1. The practice can produce a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers from 1 April 2003'	5	
Ongoing management		
CANCER 3. The percentage of patients with cancer, diagnosed within the preceding 18 months who have a patient review recorded as occurring within 6 months of the practice receiving confirmation of the diagnosis	6	40–90%

Palliative care

Indicator	Points	Payment stages
Records		
PC3. The practice has a complete register available of all patients in need of palliative care/support irrespective of age	3	
Ongoing management		
PC2. The practice has regular (at least 3 monthly) multidisciplinary case review meetings where all patients on the palliative care register are discussed	3	

Mental health

Indicator	Points	Payment stages
Records		
MH8. The practice can produce a register of people with schizophrenia, bipolar disorder and other psychoses	4	
Ongoing management		
MH11. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 15 months *NICE menu ID: NM15*	4	40–90%
MH12. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 15 months *NICE menu ID: NM16*	4	40–90%
MH13. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 15 months *NICE menu ID: NM17*	4	40–90%
MH14. The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 15 months *NICE menu ID: NM18*	5	40–80%

MH15. The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose in the preceding15 months *NICE menu ID: NM19*	5	40–80%
MH16. The percentage of patients (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years *NICE menu ID: NM20*	5	40–80%
MH17. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months *NICE menu ID: NM21*	1	40–90%
MH18. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months *NICE menu ID: NM22*	2	40–90%
MH10. The percentage of patients on the register who have a comprehensive care plan documented in the records agreed between individuals, their family and/or carers as appropriate	6	25–50%

Asthma

Indicator	Points	Payment stages
Records		
ASTHMA 1. The practice can produce 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 management		
ASTHMA 8. The percentage of patients aged 8 years and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility	15	40–80%

Ongoing management		
ASTHMA 3. The percentage of patients with asthma between the ages of 14 and 19 years in whom there is a record of smoking status in the preceding 15 months	6	40–80%
ASTHMA 6. The percentage of patients with asthma who have had an asthma review in the preceding 15 months	20	40–70%

Dementia

Indicator	Points	Payment stages
Records		
DEM1. The practice can produce a register of patients diagnosed with dementia	5	
Ongoing management		
DEM2. The percentage of patients diagnosed with dementia whose care has been reviewed in the preceding 15 months	15	25–60%
DEM3. The percentage of patients with a new diagnosis of dementia (from 1 April 2011) with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded 6 months before or after entering on to the register *NICE menu ID: NM09*	6	40–80%

Depression

Indicator	Points	Payment stages
Diagnosis and initial management		
DEP1. The percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression has been undertaken on 1 occasion during the preceding 15 months using two standard screening questions	6	40–90%

DEP4. In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the time of diagnosis using an assessment tool validated for use in primary care *NICE menu ID: NM10*	17	40–90%
DEP5. In those patients with a new diagnosis of depression and assessment of severity recorded between the preceding 1 April to 31 March, the percentage of patients who have had a further assessment of severity 4 - 12 weeks (inclusive) after the initial recording of the assessment of severity. Both assessments should be completed using an assessment tool validated for use in primary care *NICE menu ID: NM11*	8	40–80%

Chronic kidney disease (CKD)

Indicator	Points	Payment stages
Records		
CKD1. The practice can produce a register of patients aged 18 years and over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD)	6	
Initial management		
CKD2. The percentage of patients on the CKD register whose notes have a record of blood pressure in the preceding 15 months	6	40–90%
Ongoing management		
CKD3. The percentage of patients on the CKD register in whom the last blood pressure reading, measured in the preceding 15 months, is 140/85 or less	11	40–70%
CKD5. The percentage of patients on the CKD register with hypertension and proteinuria who are treated with an angiotensin converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded)	9	40–80%
CKD6. 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 15 months	6	40–80%

Atrial fibrillation

Indicator	Points	Payment stages
Records		
AF1. The practice can produce a register of patients with atrial fibrillation	5	
Initial diagnosis		
AF4. The percentage of patients with atrial fibrillation diagnosed after 1 April 2008 with ECG or specialist confirmed diagnosis	10	40–90%
Ongoing management		
AF3. The percentage of patients with atrial fibrillation who are currently treated with anti-coagulation drug therapy or an anti-platelet therapy	12	40–90%

Obesity

Indicator	Points	Payment stages
Records		
OB1. The practice can produce a register of patients aged 16 years and over with a BMI greater than or equal to 30 in the preceding 15 months	8	

Learning disability

Indicator	Points	Payment stages
Records		
LD1. The practice can produce a register of patients aged 18 years and over with learning disabilities	4	
LD2. The percentage of patients on the learning disability register with Down's Syndrome aged 18 years and over who have a record of blood TSH in the preceding 15 months (excluding those who are on the thyroid disease register) *NICE menu ID: NM04*	3	40–70%

Smoking

Indicator	Points	Payment stages
Ongoing management		
Smoking 3. The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 15 months	30	40–90%
Smoking 4. The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who smoke whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the preceding 15 months	30	40–90%

Summary of indicators – Organisational domain

Records and information

	Indicator	Points
Records 3	The practice has a system for transferring and acting on information about patients seen by other doctors out of hours	1
Records 8	There is a designated place for the recording of drug allergies and adverse reactions in the notes and these are clearly recorded	1
Records 9	For repeat medicines, an indication for the drug can be identified in the records (for drugs added to the repeat prescription with effect from 1 April 2004) Minimum Standard 80%	4
Records 11	The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 65% of patients	10
Records 13	There is a system to alert the out of hours service or duty doctor to patients dying at home	2
Records 15	The practice has up to date clinical summaries in at least 60% of patient records	25
Records 17	The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 80% of patients	5
Records 18	The practice has up to date clinical summaries in at least 80% of patient records	8
Records 19	80% of newly registered patients have had their notes summarised within 8 weeks of receipt by the practice	7
Records 20	The practice has up to date clinical summaries in at least 70% of patient records	12
Records 23	The percentage of patients aged 15 years and over whose notes record smoking status in the preceding 27 months (Payment stages 40–90%)	11

Information for patients

	Indicator	Points
Information 5	The practice supports smokers in stopping smoking by a strategy which includes providing literature and offering appropriate therapy	2

Education and training

	Indicator	Points
Education 1	There is a record of all practice-employed clinical staff having attended training/updating in basic life support skills in the preceding 18 months	4
Education 5	There is a record of all practice-employed staff having attended training/updating in basic life support skills in the preceding 36 months	3
Education 6	The practice conducts an annual review of patient complaints and suggestions to ascertain general learning points which are shared with the team	3
Education 7	The practice has undertaken a minimum of 12 significant event reviews in the preceding 3 years which could include: • Any death occurring in the practice premises • New cancer diagnoses • Deaths where terminal care has taken place at home • Any suicides • Admissions under the Mental Health Act • Child protection cases • Medication errors A significant event occurring when a patient may have been subjected to harm, had the circumstance/outcome been different (near miss)	4
Education 8	All practice-employed nurses have personal learning plans which have been reviewed at annual appraisal	5
Education 9	All practice-employed non-clinical team members have an annual appraisal	3
Education 10	The practice has undertaken a minimum of 3 significant event reviews within the preceding year	6

Practice management

	Indicator	Points
Management 1	Individual healthcare professionals have access to information on local procedures relating to Child Protection	1
Management 2	There are clearly defined arrangements for backing up computer data, back-up verification, safe storage of back-up tapes and authorisation for loading programmes where a computer is used	1
Management 3	The Hepatitis B status of all doctors and relevant practice-employed staff is recorded and immunisation recommended if required in accordance with national guidance	0.5
Management 5	The practice offers a range of appointment times to patients, which as a minimum should include morning and afternoon appointments 5 mornings and 4 afternoons per week, except where agreed with the PCO	3
Management 7	The practice has systems in place to ensure regular and appropriate inspection, calibration, maintenance and replacement of equipment including: • A defined responsible person • Clear recording • Systematic pre-planned schedules • Reporting of faults	3
Management 9	The practice has a protocol for the identification of carers and a mechanism for the referral of carers for social services assessment	3
Management 10	There is a written procedures manual that includes staff employment policies including equal opportunities, bullying and harassment and sickness absence (including illegal drugs, alcohol and stress), to which staff have access	2

Medicines management

	Indicator	Points
Medicines 2	The practice possesses the equipment and in-date emergency drugs to treat anaphylaxis	2
Medicines 3	There is a system for checking the expiry dates of emergency drugs on at least an annual basis	2
Medicines 4	The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays)	3
Medicines 6	The practice meets the PCO prescribing adviser at least annually and agrees up to three actions related to prescribing	4
Medicines 8	The number of hours from requesting a prescription to availability for collection by the patient is 48 hours or less (excluding weekends and bank/local holidays)	6
Medicines 10	The practice meets the PCO prescribing adviser at least annually, has agreed up to three actions related to prescribing and subsequently provided evidence of change	4
Medicines 11	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed 4 or more repeat medicines Standard 80%	7
Medicines 12	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed repeat medicines Standard 80%	8

Quality and productivity

	Indicator	Points
QP1	The practice conducts an internal review of their prescribing to assess whether it is clinically appropriate and cost effective, agrees with the PCO 3 areas for improvement and produces a draft plan for each area no later than 30 June 2011	6
QP2	The practice participates in an external peer review of prescribing with a group of practices and agrees plans for 3 prescribing areas for improvement firstly with the group and then with the PCO no later than 30 September 2011	7
QP3	The percentage of prescriptions complying with the agreed plan for the first improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP4	The percentage of prescriptions complying with the agreed plan for the second improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP5	The percentage of prescriptions complying with the agreed plan for the third improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP6	The practice meets internally to review the data on secondary care outpatient referrals provided by the PCO	5
QP7	The practice participates in an external peer review with a group of practices to compare its secondary care outpatient referral data either with practices in the group of practices or with practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO	5

QP8	The practice engages with the development of and follows 3 agreed care pathways 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 and produces a report of the action taken to the PCO no later than 31 March 2012	11
QP9	The practice meets internally to review the data on emergency admissions provided by the PCO	5
QP10	The practice participates in an external peer review with a group of practices to compare its data on emergency admissions either with practices in the group of practices or practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO	15
QP11	The practice engages with the development of and follows 3 agreed care pathways (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 and produces a report of the action taken to the PCO no later than 31 March 2012	27.5

Summary of indicators – Patient experience domain

Indicator	Points
PE 1 Length of consultations The length of routine booked appointments with the doctors in the practice is not less than 10 minutes (If the practice routinely sees extras during booked surgeries, then the average booked consultation length should allow for the average number of extras seen in a surgery session. If the extras are seen at the end, then it is not necessary to make this adjustment). For practices with only an open surgery system, the average face to face time spent by the GP with the patient is at least 8 minutes. Practices that routinely operate a mixed economy of booked and open surgeries should report on both criteria.	33

Summary of indicators – Additional services domain

For practices providing additional services, the following organisational markers will apply.

Cervical screening (CS)

	Indicator	Points
CS1	The percentage of patients (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) whose notes record that a cervical screening test has been performed in the preceding 5 years (Payment stages 40–80%)	11
CS5	The practice has a system for informing all women of the results of cervical smears	2
CS6	The practice has a policy for auditing its cervical screening service, and performs an audit of inadequate cervical smears in relation to individual smear-takers at least every 2 years	2
CS7	The practice has a protocol that is in line with national guidance and practice for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate smear rates	7

Child health surveillance (CHS)

	Indicator	Points
CHS1	Child development checks are offered at intervals that are consistent with national guidelines and policy	6

Maternity services (MAT)

	Indicator	Points
MAT1	Antenatal care and screening are offered according to current local guidelines	6

Contraception (SH)

	Indicator	Points
SH1	The practice can produce a register of women who have been prescribed any method of contraception at least once in the last year, or other appropriate interval e.g. last 5 years for an IUS	4
SH2	The percentage of women prescribed an oral or patch contraceptive method who have also received information from the practice about long acting reversible methods of contraception in the preceding 15 months (Payment stages 40–90%)	3
SH3	The percentage of women prescribed emergency hormonal contraception at least once in the year by the practice who have received information from the practice about long acting reversible methods of contraception at the time of, or within 1 month of, the prescription (Payment stages 40–90%)	3

Secondary prevention of coronary heart disease (CHD)

Indicator	Points	Payment stages
Records		
CHD1. The practice can produce a register of patients with coronary heart disease	4	
Diagnosis and initial management		
CHD13. For patients with newly diagnosed angina (diagnosed after 1 April 2011), the percentage who are referred for specialist assessment *NICE menu ID: NM08*	7	40–90%
Ongoing management		
CHD6. The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less	17	40–71%
CHD8. The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less	17	40–70%
CHD9. The percentage of patients with coronary heart disease with a record in the preceding 15 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken (unless a contraindication or side effects are recorded)	7	40–90%
CHD10. The percentage of patients with coronary heart disease who are currently treated with a beta-blocker (unless a contraindication or side effects are recorded)	7	40–60%
CHD14. The percentage of patients with a history of myocardial infarction (from 1 April 2011) currently treated with an ACE inhibitor (or ARB if ACE intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin (unless a contraindication or side effects are recorded) *NICE menu ID: NM07*	10	40–80%
CHD12. The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 September to 31 March	7	40–90%

CHD – Rationale for inclusion of indicator set

Coronary heart disease (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 in the four nations.

CHD indicator 1

The practice can produce a register of patients with coronary heart disease.

CHD 1.1 Rationale
In order to call and recall patients effectively in any disease category and in order to be able to report on indicators for CHD, practices must be able to identify their patient population with CHD. This will include all patients who have had coronary artery revascularisation procedures such as coronary artery bypass grafting (CABG). Patients with Cardiac Syndrome X should generally not be included on the CHD register.

Practices should record those with a past history of myocardial infarction as well as those with a history of CHD.

CHD 1.2 Reporting and verification
The practice reports the number of patients on its CHD disease register and the number of patients with CHD as a proportion of total list size.

Verification - may require a comparison of the expected prevalence with the reported prevalence.

CHD indicator 13 (NICE menu NM08)

For patients with newly diagnosed angina (diagnosed after 1 April 2011), the percentage who are referred for specialist assessment.

CHD indicator 13.1 Rationale
Angina due to coronary artery disease (CAD) can be diagnosed on clinical grounds but many patients require referral for specialist assessment to confirm or exclude the diagnosis. Patients may then undergo functional or anatomical testing. Functional testing includes myocardial perfusion scanning, anatomical testing includes coronary angiography.

It has been common clinical practice to use exercise testing (also termed exercise electrocardiogram (ECG), stress ECG or exercise tolerance test) to help establish a diagnosis of suspected angina. However, the NICE clinical guideline on chest pain of recent onset[2] explicitly states that exercise ECG should not be used to diagnose or exclude stable angina in people without known coronary artery disease (CAD). This represents a significant shift in current practice.

Recommendation 1.3.1.1 of the NICE guideline states that a diagnosis of stable angina should be based on one of the following:

- clinical assessment alone **or**

[2] NICE clinical guideline 95 (2010). Chest pain of recent onset. www.nice.org.uk/guidance/CG95

- clinical assessment plus diagnostic testing (that is, anatomical testing for obstructive coronary artery disease [CAD] and/or functional testing for myocardial ischaemia)

In order to make a diagnosis on clinical assessment alone, clinicians should take a detailed clinical history and perform a physical examination (see recommendations 1.3.2.1 and 1.3.2.2). Anginal pain is identified as:

- a constricting discomfort in the front of the chest, or in the neck, shoulders, jaw, or arms
- which is precipitated by physical exertion
- and which is relieved by rest or GTN (glyceryl trinitrate) within about five minutes.

The NICE guideline states that when all three of the features described above are identified, this is defined as 'typical' angina. When only two are present this is defined as 'atypical' angina and when only one or none are present then this is defined as 'non-anginal' chest pain.

In addition to the typicality of the reported chest pain, a clinical assessment needs to take account of the patient's age, sex and presence of additional risk factors (diabetes, smoking and hyperlipidaemia). The clinician can then use an estimate of the prevalence of CAD in the population (table 1) to inform their clinical decision as to the likelihood of an individual patient having angina due to CAD and whether or not they need to be referred for further specialist assessment.

Table 1: Percentage of people estimated to have CAD according to typicality of symptoms, age, sex and risk factors

	Non-anginal chest pain				Atypical angina				Typical angina			
	Men		Women		Men		Women		Men		Women	
Age (yrs)	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi
35	3	35	1	19	8	59	2	39	30	88	10	78
45	9	47	2	22	21	70	5	43	51	92	20	79
55	23	59	4	25	45	79	10	47	80	95	38	82
65	49	69	9	29	71	86	20	51	93	97	56	84
For men older than 70 with atypical or typical symptoms, assume an estimate > 90%. For women older than 70 assume an estimate of 61-90% EXCEPT women at high risk and with typical symptoms where a risk of > 90% should be assumed.												
Values are percentage of people at each mid-decade age with significant CAD. Hi = High risk = diabetes, smoking and hyperlipideamia (total cholesterol > 6.47 mmol/litre) Lo = Low risk = none of the above three risk factors The shaded area represents people with symptoms of non-anginal chest pain, who would not be investigates for stable angina routinely. Note: These results are likely to overestimate CAD in primary care populations. If there are resting ECG ST-T changes or Q waves, the likelihood of CAD is higher in each cell of the table.												

In those people who have features of typical angina and their population estimated likelihood of CAD is greater than 90 per cent clinical assessment alone is appropriate to make a diagnosis of stable angina. These patients should be managed as having angina. For example, men aged over 65 years with typical angina symptoms do not need to be referred to confirm the diagnosis. Where the diagnosis is made by clinical assessment alone, then an explanation of how the diagnosis of angina has been made should be included in the patient's notes.

In people with suspected angina where there is uncertainty regarding the diagnosis (people with a population estimated likelihood of CAD of 10–90 per cent), clinical assessment and referral for specialist assessment (diagnostic testing) is required.

In people with a population estimated likelihood of CAD of less than ten per cent, causes of chest pain other than angina should be considered first. These patients are not included in the target population for this indicator unless they are subsequently diagnosed with angina.

Further information
SIGN clinical guideline 96 (2007). Management of stable angina.
www.sign.ac.uk/guidelines/fulltext/96

CHD 13.2 Reporting and verification
The practice reports the percentage of patients diagnosed with angina from 1 April 2011 who have been referred for specialist assessment within 12 months of being added to the register. The practice should also report patients who have been referred up to three months before being added to the register.

Where a patient has been diagnosed on clinical assessment alone, then an explanation should be included in the patient notes as to how the diagnosis has been made. These patients will need to be exception reported against this indicator as referral for specialist assessment only applies to those patients in whom it was not possible to make a diagnosis of angina on clinical grounds alone.

CHD indicator 6

The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.

CHD 6.1 Rationale
The British Hypertension Society (BHSOC) Guidelines propose an optimal blood pressure of 140mmHg or less systolic and 85mmHg or less diastolic for patients with CHD. This guideline also proposes a pragmatic audit standard of a blood pressure reading of 150/90 or less.

Further information
British Hypertension Society (2006). www.bhsoc.org/NICE_BHS_Guidelines.stm

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 CHD[3].

CHD 6.2 Reporting and verification
Practices should report the percentage of patients on the CHD register whose last recorded blood pressure is 150/90 or less. This reading should have been taken in the preceding 15 months.

CHD indicator 8

The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less.

[3] Collins et al. *Lancet* 1990; 335: 827-38

CHD 8.1 Rationale
A number of Randomised Controlled Trials (RCTs) of statin therapy in the secondary prevention of CHD have shown a reduction in relative risk of cardiac events irrespective of the starting level of cholesterol[4]. Recent trials have found greater relative benefit with more potent cholesterol lowering regimes. It is likely that National Guidelines relating to statin therapy in patients with CHD will change to recommend statin therapy for all patients with CHD irrespective of their starting level of total cholesterol.

Joint British Societies' (JBS) recommendations on the prevention of CHD in Clinical Practice (2005)[5] maintains an ''audit standard'' for total cholesterol of, 5.0 mmol/l and recommended therapeutic treatment in patients who have cholesterol of greater than 5mmol/l.

NICE clinical guideline 67[6] on lipid modification recommends that an 'audit' level of total cholesterol of 5mmol/l should be used to assess progress in populations or groups of people with cardiovascular disease.

The guidance here is given in terms of total cholesterol.

CHD 8.2 Reporting and verification
The practice reports the percentage of patients on the CHD register who have a record of total cholesterol in the preceding 15 months which is 5mmol/l or less.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with CHD to look at the proportion with recorded serum cholesterol 5mmol/l or less
3. inspection of a sample of records of patients for whom a record of serum cholesterol at 5mmol/l is claimed, to see if there is evidence of this in the medical records.

CHD indicator 9

The percentage of patients with coronary heart disease with a record in the preceding 15 months that aspirin, an alternative anti-platelet therapy, or an anticoagulant is being taken (unless a contraindication or side effects are recorded).

CHD 9.1 Rationale
Aspirin (75 – 150 mg per day) should be 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 anticoagulated.

Further information
SIGN clinical guideline 96 and 97. Grade A Recommendation.

www.sign.ac.uk/guidelines/fulltext/96/index.html

[4] www.sign.ac.uk/guidelines/fulltext/93-97/index.html
[5] Joint British Societies' JBS (2005). http://www.bcs.com/download/651/JBS2final.pdf
[6] NICE clinical guideline 67 (2010). Recommendation 1.4.25.
http://www.nice.org.uk/nicemedia/live/11982/40689/40689.pdf

www.sign.ac.uk/guidelines/fulltext/97/index.html

Since the original QOF guidance in 2003, NICE have released guidance on the appropriate use of clopidogrel:

- Clopidogrel alone (within its licensed indications) is recommended for people who are intolerant of low-dose aspirin and either have experienced an occlusive vascular event or have symptomatic peripheral artery disease.

  NICE define aspirin intolerance as either of the following: proven hypersensitivity to aspirin-containing medicines or history of severe dyspepsia induced by low-dose aspirin.

- Clopidogrel, in combination with low-dose aspirin, is recommended for use in the management of non-ST-segment-elevation acute coronary syndrome (ACS) in people who are at moderate to high risk of myocardial infarction (MI) or death. NICE recommend that treatment with clopidogrel in combination with low-dose aspirin should be continued for up to 12 months after the most recent acute episode of non-ST-segment-elevation ACS. Thereafter, standard care, including treatment with low-dose aspirin alone, is recommended. Moderate to high risk of MI or death in people presenting with non-ST-segment-elevation ACS can be determined by clinical signs and symptoms, accompanied by one or both of the following:

  1. The results of clinical investigations, such as new ECG changes (other than persistent ST-segment-elevation), indicating ongoing myocardial ischaemia, particularly dynamic or unstable patterns.
  2. The presence of raised blood levels of markers of cardiac cell damage such as troponin.

Further information
NICE technology appraisal 80 (2004). Clopidogrel in the treatment of non-ST-segment-elevation acute coronary syndrome. http://www.nice.org.uk/Guidance/TA80

NICE technology appraisal 90 (2005). Clopidogrel and dipyridamole for the prevention of atherosclerotic events. http://www.nice.org.uk/Guidance/TA90

CHD 9.2 Reporting and verification
The practice reports the percentage of patients on the CHD register who have been prescribed aspirin, clopidogrel or warfarin within the preceding 15 months or have a record of taking over the counter (OTC) aspirin updated in the preceding 15 months.

CHD indicator 10

The percentage of patients with coronary heart disease who are currently treated with a beta-blocker (unless a contraindication or side effects are recorded).

CHD 10.1 Rationale
Long term beta blockade remains an effective and well-tolerated treatment that reduces mortality and morbidity in patients with angina and patients after MI.

Although the trial evidence relates mainly to patients who have had a myocardial infarction, experts have generally extrapolated this evidence to all patients with CHD. Because the evidence is not based on all patients with CHD, the target levels for this indicator have been set somewhat lower than for other process indicators.

Recent evidence against the use of beta-blockers in hypertension should not be extrapolated to patients with CHD.

SIGN clinical guidelines 96 and 97 (2007). Grade A Recommendation.

CHD 10.2 Reporting and verification
The percentage of patients on the CHD register who have been prescribed a beta-blocker in the preceding six months.

CHD indicator 14 (NICE menu NM07)

The percentage of patients with a history of myocardial infarction (from 1 April 2011) currently treated with an ACE inhibitor (or ARB if ACE intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin (unless a contraindication or side effects are recorded).

CHD 14.1 Rationale
There is evidence from meta-analyses and randomised controlled trials (level 1 evidence) for a range of relevant health outcomes, including mortality, to support all patients who have had an acute myocardial infarction (MI) being offered treatment with a combination of the following drugs:

- ACE (angiotensin-converting enzyme) inhibitor (or ARB if ACE intolerant)
- aspirin
- beta-blocker
- statin.

There is also health economic evidence to suggest that these drug interventions are cost-effective.

ACE inhibitor (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 and/or left ventricular systolic dysfunction who have recently experienced an MI was associated with a substantial reduction in all-cause mortality, recurrent MI and re-admission for heart failure.

Where patients are intolerant of an ACE-I (for example because of a cough or allergy) it is recommended that an ARB (angiotensin receptor blocker) is substituted.

Aspirin and alternative antiplatelet 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 antiplatelet therapy) have similar cardiovascular benefits.

Warfarin
Patients may be treated with anticoagulants when they are intolerant of aspirin and clopidogrel or for the management of co-morbid conditions such as atrial fibrillation and heart failure. Where a patient is treated with anticoagulant therapy, anti-platelet therapy may not be clinically appropriate. For the purpose of this indicator, anticoagulant 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 clinical guideline 48 (2007). MI secondary prevention in primary and secondary care for patients following a myocardial infarction. www.nice.org.uk/guidance/CG48

NICE technology appraisal 94 (2006). Statins for the prevention of cardiovascular events in patients at increased risk of developing CVD or those with established CVD. www.nice.org.uk/guidance/TA94

NICE clinical guideline 67 (2007). Lipid modification. www.nice.org.uk/guidance/CG67

CHD 14.2 Reporting and verification
This indicator requires a patient to be on four drugs, one from each of the following categories:

- an ACE inhibitor OR (if contraindicated) an ARB; and
- either aspirin OR an alternative anti-platelet or anticoagulant therapy; and
- a beta-blocker; and
- a statin.

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

a. receiving an ACE AND receiving either aspirin or alternative anti-platelet or anticoagulant therapy AND receiving a beta-blocker AND receiving a statin

b. the patient is contraindicated for an ACE BUT receiving an ARB AND receiving either aspirin or an alternative anti-platelet or anticoagulant therapy AND receiving a beta-blocker AND receiving a statin.

A patient will not be counted towards the target if they are:

a. exception reported using one of the nine QOF exception reporting criteria (apart from if they have a contraindication as per b above but receiving the other drugs)

b. receiving a drug from the last three groups but contraindicated for both an ACE and ARB.

A patient will count towards the target (included in the denominator but not the numerator) if they are:

a. not appropriately exception coded

b. not receiving the medicines described above.

The practice reports the percentage of patients who have had a myocardial infarction (from 1 April 2011) currently treated with an ACE-I (or ARB if ACE intolerant), aspirin or an alternative anti-platelet or anticoagulant therapy, beta-blocker and statin (unless a contraindication or side effects are recorded).

CHD indicator 12

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

CHD 12.1 Rationale
This is a current recommendation from the Department of Health and the Joint Committee on Vaccination and Immunisation (JCVI).

CHD 12.2 Reporting and verification
The practice reports the percentage of patients on the CHD register who have had an influenza vaccination administered in the preceding 1 September to 31 March.

Cardiovascular disease – primary prevention

Indicator	Points	Payment stages
Initial diagnosis		
PP1. In those patients with a new diagnosis of hypertension (excluding those with pre-existing CHD, diabetes, stroke and/or TIA) recorded between the preceding 1 April to 31 March: the percentage of patients aged 30 to 74 years who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within 3 months of the initial diagnosis) using an agreed risk assessment tool. *NICE menu ID: NM06*	8	40–70%
Ongoing management		
PP2. The percentage of people diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet.	5	40–70%

Cardiovascular disease – primary prevention – 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 65 years). Moreover, of greater significance for the NHS, CVD is now the commonest cause of disability (through stroke and heart failure 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 (PP) works and evidence based interventions can dramatically reduce risk – in North Karelia which had the highest CVD rates in Europe 25 years ago, CVD mortality has 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, with 68 per cent of the 2530 fewer deaths attributable to CHD (using the IMPACT CHD mortality model) having occurred in people without recognised CHD compared to 32 per cent in CHD patients[7].

[7] Kabir Z., Bennett K., Shelley E., Unal B., Critchley J., Capewell S. *Comparing primary prevention with secondary prevention to explain decreasing Coronary Heart Disease death rates in Ireland*, 1985-2000. BMC Public Health 2007, 7:17

Primary prevention (PP) indicator 1 (NICE menu NM06)

In those patients with a new diagnosis of hypertension (excluding those with pre-existing CHD, diabetes, stroke and/or TIA) recorded between the preceding 1 April to 31 March: the percentage of patients aged 30 to 74 years who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within 3 months of the initial diagnosis) using an agreed risk assessment tool.

Primary prevention 1.1 Rationale
Primary prevention of CVD requires that patients at risk are identified before disease has become established. Risk assessment in those likely to be at high risk of CVD (for example, people with hypertension) requires the use of a validated assessment tool that scores a range of modifiable and non-modifiable risk factors for CVD.

A number of risk tools can be used to assess cardiovascular risk for the purpose of QOF. These include:

- Framingham
- Joint British Society 2 (JBS2)
- QRISK
- Assessing cardiovascular risk using SIGN guidelines to assign preventive treatment (ASSIGN - Scotland only).

In February 2010, NICE withdrew its guidance recommending a particular method of CVD risk estimation (Framingham) so that the decision could be left to local NHS organisations to use the method best suited to their requirements. It should be noted that all four risk equations allow for a structured risk assessment to be undertaken.

In order to allow for all four risk assessment tools to be used (they each have different individual age thresholds), an upper and lower age range for this indicator has been set at 30 to 74 years. Practices will be expected to use one of the four age appropriate tools to risk assess their patients even if it is not a tool normally available on the practices clinical system.

Framingham[8] and JBS[9] are based on the American Framingham equations which are of limited use in the UK as they were developed in an historic American population. The Framingham equations overestimate risk by up to 50 per cent in contemporary northern European populations, particularly in people living in more affluent areas. They 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 dataset.

The newer risk scores, QRISK and ASSIGN, have the advantage of including other variables, such as measures of social deprivation, ethnicity and family history. QRISK uses data from UK general practice databases, whereas ASSIGN was developed using a Scottish cohort and has not been validated in a non-Scottish population.

[8] Anderson KM, Odell, PM, Wilson PW et al. (1991) CVD risk profiles. American Heart Journal 121: 293-8. Risk profile only. www.framinghamheartstudy.org/risk/coronary.html
[9] British Cardiac Society. British Hypertension Society. Diabetes UK. HEART UK. Primary Care Cardiovascular Society. Stroke Association (2005). JBS guidelines on prevention of CVD in clinical practice. Heart, 91: 1.52.

Framingham and JBS2
The variables required for the estimation of risk using the Framingham risk assessment 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 utilises the Framingham variables with the exception of the presence of left ventricular hypertrophy[10].

Key to the use of Framingham is that it should be an assessment of actual as opposed to estimated risk. The values used should have been recorded no longer than six months before the date of the risk assessment and prior to any treatment for hypertension. Framingham should not be used in people with pre-existing CVD (CHD or angina, stroke or transient ischaemic attack – TIA, or peripheral arterial disease), diabetes, chronic kidney disease (CKD) where the patient has an eGFR rate below 60 and familial hypercholesterolemia. The Framingham risk score is not appropriate for use in patients already taking lipid-lowering medication prior to a new diagnosis of hypertension.

The Framingham risk score can be used in patients aged 35 to 74 years. JBS2 can be used in patients aged 40 years and older.

QRISK
The QRISK CVD risk calculator was developed by doctors and academics working in the NHS and is based on routinely collected data from general practitioners (GPs) across the country. The current version of QRISK is QRISK2[11] (see www.qrisk.org). QRISK2 utilises the following variables to calculate CVD risk: self assigned ethnicity, age, sex, smoking status, systolic blood pressure, total cholesterol, high density lipoprotein cholesterol, body mass index, family history of CHD in first degree relative under 60 years, Townsend deprivation score, treated hypertension, type 2 diabetes, renal disease, atrial fibrillation, and rheumatoid arthritis.

QRISK2 can be used in patients aged 30 to 84 years.

ASSIGN
The ASSIGN cardiovascular risk score[12] was developed as part of the SIGN 97 process to reduce the deprivation-related underestimation of CVD risk inherent in previous Framingham-based risk scores for Scottish populations, and continues to be developed[13]. It is available via the Internet to practices in Scotland and, like QRISK calculates deprivation-related risk due to postcode. ASSIGN utilises the following variables to calculate CVD risk: age, sex, Scottish Index of Multiple Deprivation (SIMD), family history of CHD and/or stroke, diabetes, smoking status, systolic blood pressure, total cholesterol and high density lipoprotein cholesterol, Scottish practices should use the ASSIGN risk score or the Framingham 1991 10-year risk equations for the purposes of this indicator.

The ASSIGN risk score can be used in patients aged 30 to 74 years.

Primary prevention 1.2 Reporting and verification
The practice reports the number of patients with a new diagnosis of hypertension (excluding those with a pre-existing diagnosis of CHD, diabetes, stroke and/or TIA) in the preceding 1 April

[10] NICE clinical guideline 67 (2008). Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. www.nice.org.uk/guidance/CG67
[11] Hippisley-Cox J, Coupland C, Vinogradova Y et al. (2008) Predicting cardiovascular risk in England and Wales: prospective derivation and validation of QRISK2. BMJ 336: 1475–82
[12] ASSIGN cardiovascular risk score. www.assign-score.com
[13] SIGN clinical guideline 97 (2007). Risk estimation and the prevention of CVD. www.sign.ac.uk/guidelines/fulltext/97

to 31 March and the percentage of these patients aged 30 to 74 years who have had a face to face CVD risk assessment within three months before and after the date of diagnosis using an agreed risk assessment tool.

Verification – may require randomly selecting a number of case records of patients in which a risk assessment has been recorded as taking place 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. Practices may also be required to demonstrate that an age appropriate risk assessment tools have been used for different patients.

Primary prevention (PP) indicator 2

The percentage of people diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet.

Primary prevention 2.1 Rationale
There is considerable evidence to support the positive impact of increasing physical activity, 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 by also reducing lifestyle risks.

Practices should refer to recognised guidance and advice on advising patients on lifestyle risk.

This advice should be reiterated on an annual basis.

Further information
NICE public health guidance 10 (2008): Smoking cessation services in primary care, pharmacies, local authorities and NICE. http://guidance.nice.org.uk/PH10/Guidance/pdf/English

NHS Health Scotland (2010). A guide to smoking cessation in Scotland.
http://www.healthscotland.com/documents/4661.aspx

NICE public health guidance 6 (2007). Behaviour change at population, community and individual levels. http://guidance.nice.org.uk/PH6/Guidance/pdf/English

NICE public health guidance 25 (2010). Prevention of cardiovascular disease.
http://guidance.nice.org.uk/PH25/Guidance/pdf/English

NICE public health guidance 24 (2010). Alcohol use disorders - preventing harmful drinking.
http://guidance.nice.org.uk/PH24/Guidance/pdf/English

SIGN clinical guideline 74 (2008). The management of harmful drinking and alcohol dependence in primary care. http://www.sign.ac.uk/guidelines/fulltext/74/index.html

Plan for Action on Alcohol Problems Update Scottish Government 2008
http://www.scotland.gov.uk/Publications/2007/02/19150222/12

Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight
http://www.scotland.gov.uk/Publications/2010/02/17140721/0

Scottish Government (2008). Diet and physical activity. Healthy Eating, Active Living: An action plan to improve diet, increase physical activity and tackle obesity.
http://www.scotland.gov.uk/Publications/2008/06/20155902/10

NICE public health guidance 2 (2006). 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.
http://guidance.nice.org.uk/PH2/Guidance/pdf/English

NICE clinical guideline 67 (2008). Management of lifestyle factors can be found in Lipid Modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of CVD.
http://guidance.nice.org.uk/CG67/NICEGuidance/pdf/English

Primary prevention (PP) 2.2 Reporting and verification
The practice reports the percentage of people diagnosed with hypertension on or after 1 April 2009 who have been given lifestyle advice in the preceding 15 months for: increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet.

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

Heart failure

Indicator	Points	Payment stages
Records		
HF1. The practice can produce a register of patients with heart failure	4	
Initial diagnosis		
HF2. The percentage of patients with a diagnosis of heart failure (diagnosed after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment	6	40–90%
Ongoing management		
HF3. The percentage of patients with a current diagnosis of heart failure due to Left Ventricular Dysfunction (LVD) who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who can tolerate therapy and for whom there is no contraindication	10	40–80%
HF4. The percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers.	9	40–60%

Heart failure – rationale for inclusion of indicator set

Heart Failure (HF) represents the only major CVD 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.

Heart failure (HF) indicator 1

The practice can produce a register of patients with heart failure.

Heart failure 1.1 Rationale
From April 2006, all patients with heart failure should be included in the register.

Heart failure 1.2 Reporting and verification
The practice reports the number of patients on its heart failure register and the number of patients with heart failure as a proportion of total list size.

Heart failure (HF) indicator 2

The percentage of patients with a diagnosis of heart failure (diagnosed after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment.

Heart failure 2.1 Rationale
From April 2006, this indicator requires that all patients with suspected HF should be investigated[14] and this is expected to involve, as a minimum, specialist investigation (such as echocardiography or natiuretic peptide assay) and often specialist opinion. Specialists may include GPs identified by their PCO as having a special clinical 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 scintography or angiography rather than echocardiography. Current guidance[15] requires either echocardiography or specialist assessment for all patients with suspected HF, regardless of presumed aetiology.

Further information
NICE clinical guideline 108 (2010). Management of chronic heart failure in adults in primary and secondary care. http://guidance.nice.org.uk/CG108

SIGN clinical guideline 95 (2007). Management of chronic heart failure.
http://www.sign.ac.uk/guidelines/fulltext/95/index.html

Heart failure 2.2 Reporting and verification
The practice reports those patients in whom a new diagnosis of HF has been made since 1 April 2006 who have had an echocardiogram or been referred to a specialist within 12 months of being added to the register. The practice may also include patients who have been referred up to three months before being added to the register.

Heart failure (HF) indicator 3

The percentage of patients with a current diagnosis of heart failure due to Left Ventricular Dysfunction (LVD) who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who can tolerate therapy and for whom there is no contraindication.

Heart failure 3.1 Rationale
The evidence base for treating patients with LVD HF with ARBs is strong, however, this should only be after first attempting to initiate ACE-I[16].

It should also be noted that it is possible to have a diagnosis of LVD 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 inhibitors delay the onset of symptomatic HF, reduce cardiovascular events and improve long term survival. This indicator only concerns patients with HF and thus excludes this other group of patients who should nevertheless be considered for treatment with ACE-I.

Further information
www.clinicalevidence.com/ceweb/conditions/cvd/0204/0204_I13.jsp

SIGN clinical guideline 95 (2007). Management of chronic heart failure.
http://www.sign.ac.uk/guidelines/fulltext/95/index.html

[14] Senni et al. *J Am Coll Cardiol*. 1999; 33(1): 164 – 70; NICE clinical guideline 5 (2003).
[15] Remme et al. *Eur Heart J* 2001; 22: 1527-60
[16] Pfeffer et al. *Lancet* 2003; 362: 759-766

Heart failure 3.2 Reporting and verification
The practice reports the number of patients on their heart failure register with HF due to LVD.

The practice reports the percentage of these patients whose records show they have been prescribed an ACE-I or an ARB in the preceding six months.

Heart failure (HF) indicator 4

The percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker (ARB), who are additionally treated with a beta-blocker licensed for heart failure, or recorded as intolerant to or having a contraindication to beta-blockers.

Heart failure 4.1 Rationale
The evidence base for treating HF due to LVD with beta-blockers[17] [18] is at least as strong as the evidence base guiding the HF3 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 contra-indicated in HF was disproved, at least for the licensed beta-blockers, in the late 1990s and in some countries (especially Scandinavia) beta-blockers have never been contraindicated in HF. Furthermore, there is no data to suggest excess risk in the elderly (SENIORS with nebivolol only randomised people over 75 years with significant benefits and no safety signal) and there are no contraindications for use in people with COPD.

However, this strategy is more difficult in clinical practice than initiating ACE (more contraindications, less tolerated, with a need for slower but more dose titration steps. Furthermore, there are negative trials of beta-blockers in HF[19] and concerns over the effectiveness of atenolol in reducing vascular risk generally. Therefore the beta-blocker used should be one licensed for HF, which is also in line with NICE recommendations. The only such agents in the UK are carvedilol, bisoprolol and nebivolol.

Practices should be aware that patients already prescribed a beta-blocker prior to diagnosis of HF due to LVD should not have their drug therapy changed to meet the criteria of this indicator. Those patients already prescribed a beta-blocker will be excluded from the achievement calculator.

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. The British National Formulary (BNF) states that beta-blockers bisoprolol and carvedilol are of value in any grade of stable HF and left-ventricular systolic dysfunction; nebivolol is licensed for stable mild to moderate HF. Beta-blocker treatment should be started by those experienced in the management of HF, at a

[17] 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 diabetes and chronic heart failure: experiences from MERIT-HF. *Am Heart J*. 2005; 49 (1):159-67.
[18] CIBIS-II Investigators and Committees. The Cardiac Insufficiency Bisoprolol Study II. Lancet 1999; 353: 9-13.
[19] Anderson JL, Krause-Steinrauf H, Goldman S, Clemson BS, Domanski MJ, Hager WD, Murray DR, Mann DL, Massie BM, McNamara DM, Oren R, Rogers WJ; Beta-Blocker Evaluation of Survival Trial (BEST) Investigators. Failure of benefit and early hazard of bucindolol for Class IV heart failure. J Card Fail. 2003; 9 (4): 266-77

very low dose and titrated very slowly over a period of weeks or months. Symptoms may deteriorate initially, calling for adjustment of concomitant therapy[20].

Heart failure 4.2 Reporting and verification
The practice reports the percentage of patients with a current diagnosis of HF due to LVD who are currently treated with an ACE_I or ARB, who are additionally treated with a beta-blocker licensed for HF, or recorded as intolerant to or having a contraindication to beta-blockers.

[20] http://www.bnf.org/bnf/bnf/current/119651.htm (password protected site)

Stroke and Transient Ischaemic Attack (TIA)

Indicator	Points	Payment stages
Records		
STROKE 1. The practice can produce a register of patients with stroke or TIA	2	
STROKE 13. The percentage of new patients with a stroke or TIA who have been referred for further investigation	2	40–80%
Ongoing management		
STROKE 6. The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less	5	40–71%
STROKE 7. The percentage of patients with TIA or stroke who have a record of total cholesterol in the preceding 15 months	2	40–90%
STROKE 8. The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less	5	40–60%
STROKE 12. The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anti-coagulant is being taken (unless a contraindication or side effects are recorded)	4	40–90%
STROKE 10. The percentage of patients with TIA or stroke who have had influenza immunisation in the preceding 1 September to 31 March	2	40–85%

Stroke/TIA - 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 years. There is evidence that appropriate diagnosis and management can improve outcomes.

Stroke indicator 1

The practice can produce a register of patients with stroke or TIA.

Stroke 1.1 Rationale
A register is a prerequisite for monitoring patients with stroke or TIA.

For patients diagnosed prior to 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 Vertebro-basilar insufficiency should not be included in the retrospective register. However, practices may wish to review patients previously diagnosed and if appropriate attempt to confirm the diagnosis.

As with other conditions, it is up to the practice to decide, on clinical grounds, when to include a patient, e.g. when a 'dizzy spell' becomes a TIA.

Stroke 1.2 Reporting and verification
The practice reports the number of patients on its stroke/TIA disease register and the number of patients on its stroke/TIA register as a proportion of total list size.

Verification - may require a comparison of the expected prevalence with the reported prevalence.

Stroke indicator 13

The percentage of new patients with a stroke or TIA who have been referred for further investigation.

Stroke 13.1 Rationale
The original indicator, Stroke 2 suggested that patients needed to be referred for confirmation of the diagnosis by CT or MRI scan. However, specialist investigations are often only accessible by a referral to secondary care services and therefore this indicator has been changed to reflect referral activity rather than confirmation by specific scanning investigations.

The National Audit Office (NAO) Report[21] highlights that UK national guidelines recommend that all patients with suspected TIA should be assessed and investigated within seven days, but notes that only a third of people 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.

This indicator refers to patients diagnosed with a stroke or a TIA from 1 April 2008. Practices should note 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 patient. A new TIA in someone who has had previous TIAs should be treated as an urgent case.

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

Stroke 13.2 Reporting and verification
The practice reports those patients who have been referred for further investigation within one month of being added to the register in whom a new diagnosis of stroke or TIA has been made since 1 April 2008. The practice should also report those who have been referred up to three months before being added to the register.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

[21] National Audit Office report. The Stationary Office (2005). Reducing brain damage: faster access to better stroke care. http://www.nao.org.uk/publications/0506/reducing_brain_damage.aspx

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with stroke or TIA diagnosed after 1 April 2008 to look at the proportion referred for further investigation
3. inspection of a sample of records of patients for whom a record of investigations such as CT or MRI scan is claimed, to see if there is evidence of this in the medical records.

Stroke indicator 6

The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.

Stroke 6.1 Rationale
All patients should have their blood pressure checked and hypertension persisting for over two weeks should be treated. The BHSOC guidelines state that optimal blood pressure treatment targets are systolic pressure less than or equal to 140mmHg and diastolic blood pressure (DBP) less than or equal to 85mmHg. The proposed audit standard is less than or equal to 150/90.

In one major overview, a long term difference of 5 - 6 mmHg in usual diastolic blood pressure (DBP) is associated with approximately 35 - 40 per cent less stroke over five years[22]. The PROGRESS trial demonstrated that blood pressure lowering reduces stroke risk in people with prior stroke or TIA[23].

Further information
RCP Stroke Guideline 2004. Grade A Recommendation.
http://www.rcplondon.ac.uk/pubs/books/stroke/stroke_guidelines_2ed.pdf

Stroke 6.2 Reporting and verification
The practice reports the percentage of patients on the stroke/TIA register in whom the last recorded blood pressure was 150/90 or less. This blood pressure reading should have been taken in the preceding 15 months.

Stroke indicator 7

The percentage of patients with TIA or stroke who have a record of total cholesterol in the preceding 15 months.

Stroke 7.1 Rationale
The Heart Protection Study demonstrated that all cause mortality, vascular and stroke risk was significantly reduced by treating people at high risk of vascular disease with a statin[24]. Subsequent sub-group analyses demonstrated that in patients with prior stroke or TIA, statin therapy reduced risk of subsequent vascular events[25]. An economic analysis of this trial concluded that it was highly cost-effective to treat such patients[26].

Stroke 7.2 Reporting and verification
The practice reports the percentage of patients on the stroke/TIA register who have a record of total cholesterol in the preceding 15 months.

[22] Collins et al. *Lancet* 1990; 335: 827-38
[23] PROGRESS Collaborative Group, *Lancet* 2001; 358:1033-41
[24] Heart Protection Study Collaborative Group, *Lancet* 2002; 360;7-22
[25] Heart Protection Study Collaborative Group, *Lancet* 2004; 363:757-767
[26] Heart Protection Study Collaborative Group, *Lancet* 2005; 365:1779-85

In verifying that this information has been correctly recorded, an inspection of the output from a computer search that has been used to provide information on this indicator could be used.

Stroke indicator 8

The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the preceding 15 months) is 5mmol/l or less.

Stroke 8.1 Rationale
See Stroke 7.1.

Stroke 8.2 Reporting and verification
The practice reports the percentage of patients on the stroke/TIA register that have a record of total cholesterol in the preceding 15 months which is 5mmol/l or less.

In verifying that this information has been correctly recorded, an inspection of the output from a computer search that has been used to provide information on this indicator could be used.

Stroke indicator 12

The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anti-coagulant is being taken (unless a contraindication or side effects are recorded).

Stroke 12.1 Rationale
Long term antiplatelet therapy reduces the risk of serious vascular events following a stroke by about a quarter. Antiplatelet therapy, normally aspirin, should be prescribed for the secondary prevention of recurrent stroke and other vascular events in patients who have sustained an ischaemic cerebrovascular event.

Further information
SIGN clinical guideline 108 (2008). Management of patients with stroke or TIA. Assessment, investigation, immediate management and secondary prevention. Grade A Recommendation.
http://www.sign.ac.uk/guidelines/fulltext/108/index.html

All patients who are not anti-coagulated should be taking aspirin (50 – 300 mg) daily, or a combination of low-dose aspirin and dipyridamole modified release (MR). Where patients are aspirin-intolerant an alternative antiplatelet agent (clopidogrel 75mg daily) should be used.

RCP Stroke Guideline. Grade A Recommendation.
http://bookshop.rcplondon.ac.uk/details.aspx?e=250

The National Clinical Guideline for Stroke (Royal College of Physicians of London, 2004) allows for the use of dipyridamole on its own: 'all patients with ischaemic stroke or TIA who are not on anticoagulation, should be taking an antiplatelet agent, i.e. aspirin (50 - 300 mg daily), clopidogrel, or a combination of low-dose aspirin and dipyridamole modified release. Where patients are aspirin intolerant an alternative antiplatelet agent (e.g. clopidogrel 75mg daily or dipyridamole MR 200mg twice daily) should be used.'

Warfarin should be considered for use in patients with non-valvular atrial fibrillation.

Stroke 12.2 Reporting and verification
The practice reports the percentage of patients with non-haemorrhagic stroke or TIA who have a record in the preceding 15 months of prescribed aspirin, clopidogrel, dipyridamole MR or warfarin, or of taking over the counter aspirin updated in the preceding 15 months.

Stroke indicator 10

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

Stroke 10.1 Rationale
While there have been no randomised controlled trials (RCTs) looking at the impact of flu vaccination specifically in people with a history of stroke or TIA, there is evidence from observation studies that flu vaccination reduces risk of stroke[27].

Stroke 10.2 Reporting and verification
The practice reports the percentage of patients on the stroke/TIA register who have had an influenza vaccination administered in the preceding 1 September to 31 March.

[27] Lavallee et al. Stroke 2002; 33: 513-518; Nichol et al. *NEJM* 2003; 348:1322-32

Hypertension

Indicator	Points	Payment stages
Records		
BP1. The practice can produce a register of patients with established hypertension	6	
Ongoing management		
BP4. The percentage of patients with hypertension in whom there is a record of the blood pressure in the preceding 9 months	16	40–90%
BP5. The percentage of patients with hypertension in whom the last blood pressure (measured in the preceding 9 months) is 150/90 or less	57	40–70%

Hypertension – 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 health care team. Trials of anti-hypertensive treatment have confirmed a significant reduction in the incidence of stroke and CHD in patients with treated hypertension.

Hypertension (BP) indicator 1

The practice can produce a register of patients with established hypertension.

BP 1.1 Rationale
In order to call and recall patients effectively and in order to be able to report on indicators for hypertension, practices must be able to identify their population of patients who have established hypertension. 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 BHSOC recommends that drug therapy should be started in all patients with sustained systolic blood pressures of greater than or equal to 160mmHg or sustained diastolic blood pressures of greater than or equal to 100mmHg despite non-pharmacological measures.

Drug treatment is also indicated in patients with sustained systolic blood pressures of 140 -159 mmHg or diastolic pressures of 90 - 99 mmHg if target organ damage is present or there is evidence of established CVD or diabetes or the ten year risk of CHD is raised.

Elevated blood pressure readings of greater than 140/90 on three separate occasions are generally taken to confirm sustained high blood pressure.

Further information
British Hypertension Society Guidelines (2004). www.bhsoc.org (see guidelines). The routine surveillance of the patient population for hypertension is dealt with in the organisational indicators.

NICE clinical guideline 34 (2006). Hypertension. Management of hypertension in adults in primary care. http://guidance.nice.org.uk/CG34

NICE public health guidance 25 (2010). Prevention of CVD.
http://guidance.nice.org.uk/PH25/Guidance/pdf/English

BP 1.2 Reporting and verification
The practice reports the number of patients on its hypertension disease register and the number of patients on its hypertension register as a proportion of total list size.

Verification – may require a comparison of the expected prevalence with the reported prevalence.

Hypertension (BP) indicator 4

The percentage of patients with hypertension in whom there is a record of the blood pressure in the preceding 9 months.

BP 4.1 Rationale
The frequency of follow-up for treated patients after adequate blood pressure control is attained depends upon factors such as the severity of the hypertension, variability of blood pressure, complexity of the treatment regime, patient compliance and the need for non-pharmacological advice.

British Hypertension Society Guidelines (2004). www.bhsoc.org

There is no specific recommendation in the BHSOC Guidelines regarding frequency of follow-up in patients with hypertension. For the purposes of the contract it has been assumed that this will be undertaken at least six monthly with the audit standard being set at nine months.

BP 4.2 Reporting and verification
The practice reports the percentage of patients on their hypertension register who have had a blood pressure measurement recorded in the preceding 9 months.

Hypertension (BP) indicator 5

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

BP 5.1 Rationale
For most patients an individual target of 140/85 is recommended. However, the BHSOC suggests an audit standard of 150/90 which has been adopted for the QOF. For patients with diabetes mellitus, see indicators DM30 and DM31. For patients with chronic kidney disease, see indicator CKD3.

BP 5.2 Reporting and verification
The practice reports the percentage of patients on their hypertension register whose last recorded blood pressure is 150/90 or less. This blood pressure reading must have been measured in the preceding nine months.

Diabetes mellitus

Indicator	Points	Payment stages
Records		
DM19.The practice can produce a register of all patients aged 17 years and over with diabetes mellitus, which specifies whether the patient has Type 1 or Type 2 diabetes	6	
Ongoing management		
DM2.The percentage of patients with diabetes whose notes record BMI in the preceding 15 months	3	40–90%
DM26. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 59mmol/mol (equivalent to HbA1c of 7.5% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months *NICE menu ID: NM14*	17	40–50%
DM27. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 64mmol/mol (equivalent to HbA1c of 8% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months	8	40–70%
DM28. The percentage of patients with diabetes in whom the last IFCC-HbA1c is 75mmol/mol (equivalent to HbA1c of 9% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months	10	40–90%
DM21. The percentage of patients with diabetes who have a record of retinal screening in the preceding 15 months	5	40–90%
DM29. The percentage of patients with diabetes 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 15 months *NICE menu ID: NM13*	4	40–90%
DM10. The percentage of patients with diabetes with a record of neuropathy testing in the preceding 15 months	3	40–90%

DM30. The percentage of patients with diabetes in whom the last blood pressure is 150/90 or less *NICE menu ID: NM01*	8	40–71%
DM31. The percentage of patients with diabetes in whom the last blood pressure is 140/80 or less *NICE menu ID: NM02*	10	40–60%
DM13. The percentage of patients with diabetes who have a record of micro-albuminuria testing in the preceding 15 months (exception reporting for patients with proteinuria)	3	40–90%
DM22. The percentage of patients with diabetes who have a record of estimated glomerular filtration rate (eGFR) or serum creatinine testing in the preceding 15 months	3	40–90%
DM15. The percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists)	3	40–80%
DM17. The percentage of patients with diabetes whose last measured total cholesterol within the preceding 15 months is 5mmol/l or less	6	40–70%
DM18. The percentage of patients with diabetes who have had influenza immunisation in the preceding 1 September to 31 March	3	40–85%

Diabetes – rationale for inclusion of indicator set

Diabetes mellitus 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 UK NICE and by SIGN.

The SIGN website contains detailed evidence tables, and links to published articles. The English National Service Framework (NSF) for Diabetes website[28] 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 10 (2004). Type 2 Diabetes – Footcare.
http://guidance.nice.org.uk/CG10/NICEGuidance/pdf/English

[28] www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/Diabetes/fs/en

NICE clinical guideline 87 (2010). Type 2 diabetes: The management of type 2 diabetes.
http://guidance.nice.org.uk/CG87

NICE clinical guideline 15 (2004). Type 1 Diabetes.
http://guidance.nice.org.uk/CG15

SIGN clinical guideline 116 (2010). Management of diabetes.
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 on the GP practice to carry out all these items (e.g. retinal screening), but it is the practice's responsibility to ensure that they have been done.

Rather than including a substantial number of individual indicators, there has been discussion about whether a composite indicator such as "the percentage of diabetic patients who have had an annual check" would suffice. The view taken was that this would not make data collection any easier for GPs, since they would still have to satisfy their PCO at periodic visits that annual checks had included those items recommended in national guidance.

This set of indicators relates to both Type 1 and Type 2 diabetes. Although the care of patients with Type 1 diabetes may be shared with specialists, the GP would still be expected to ensure that appropriate annual checks had been carried out.

Diabetes (DM) indicator 19

The practice can produce a register of all patients aged 17 years and over with diabetes mellitus, which specifies whether the patient has Type 1 or Type 2 diabetes.

Diabetes 19.1 Rationale
It is not possible to undertake planned systematic care for patients with diabetes without a register which forms the basis of a recall system, and is needed in order to audit care.

The QOF does not specify how the diagnosis should be made, and a record of the diagnosis will, for the purposes of the QOF, be regarded as sufficient evidence of diabetes. However, in addition to the substantial number of undiagnosed patients with diabetes who exist, other patients are treated for diabetes when they do not in fact have the disease. Practices are therefore encouraged to adopt a systematic approach to the diagnosis of diabetes.

The World Health Organisation (WHO) 2006 criteria for the diagnosis of patients with diabetes mellitus are:

random glucose test: a glucose level above 11.1mmol/l taken at a random time on two occasions is a diagnosis of diabetes

fasting glucose test: a glucose level above 7.0mmol/l measured without anything to eat (usually overnight) and on two different days is also a diagnosis of diabetes

glucose tolerance test: a blood glucose test is taken two hours after a glucose drink is given to the patient. A level above 11.1mmol/l is a diagnosis of diabetes, while a level below 7.8mmol/l is normal. However, if the level falls between these values the patient may have a decreased tolerance for glucose (known as impaired glucose tolerance or IGT).

Distinguishing Type 1 and Type 2 diabetes clinically may not always be easy in primary care. If this is unclear from the patients' paper or electronic records, the code for Type 1 diabetes

should be used if the person is diagnosed with diabetes before the age of 30 years or requires insulin within one year of diagnosis, and otherwise, the code for Type 2 should be used.

Separate coding of Type 1 and Type 2 diabetes allows the development of the QOF indicators that are more closely aligned to NICE guidance.

As the care of children with diabetes mellitus is generally under the control of specialists, the register should exclude those patients aged 16 years and under.

Likewise, the indicators are not intended to apply to patients with gestational diabetes.

Diabetes 19.2 Reporting and verification
The practice separately reports the numbers of patients on their diabetic register (aged 17 years and over) with Type 1 and Type 2 diabetes and the number of patients on their diabetic register (aged 17 years and over) with Type 1 and Type 2 diabetes as a proportion of their total list size.

Practices should note that acceptable read codes for this indicator reflect the need for all patients to be recorded as having either Type 1 or Type 2 diabetes.

Verification – in order to ensure that patients with diabetes are not 'lost' due to the use of high level diagnostic codes which do not specify whether the patient has Type 1 or Type 2 diabetes, a reported practice prevalence for this indicator should be compared with practice prevalence calculated using high level diagnostic codes. Reported practice prevalence should also be compared with national and expected prevalence.

Diabetes (DM) indicator 2

The percentage of patients with diabetes whose notes record BMI in the preceding 15 months.

Diabetes 2.1 Rationale
Weight control in overweight patients with diabetes is associated with improved glycaemic control. There is little evidence to dictate the frequency of recording but it is general clinical practice that BMI is assessed at least annually.

Diabetes 2.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have had a BMI recorded in the preceding 15 months.

Diabetes (DM) indicator 26 (NICE menu NM14)

The percentage of patients with diabetes in whom the last IFCC-HbA1c is 59mmol/mol (equivalent to HbA1c of 7.5% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.

Diabetes 26.1 Rationale
This indicator has been amended (from an HbA1c level of 7.0 to 7.5 per cent in DCCT values [53 to 59 mmol/mol]) following advice from the NICE QOF Advisory Committee in response to concern that a lower level of 7.0 per cent may have unintended consequences in terms of patient care because in order to achieve an average practice target of IFCC-HbA1c of 53mmol/mol (7.0 per cent) a clinician may need to aim for a IFCC-HbA1c below this in individual patients.

The three target levels for IFCC-HbA1c (59, 64 and 75 mmol/mol) in the QOF are designed to provide an incentive to improve glycaemic control across the distribution of IFCC-HbA1c values.

The lower level may not be achievable or appropriate for all patients. Also practitioners should note that in the 2009 guideline for Type 2 diabetes, NICE advises against pursuing highly intensive management to levels below 48mmol/mol in certain patient subgroups[29].

There is a near linear relationship between glycaemic control and death rate in people with type 2 diabetes[30]. In the EPIC Norfolk population cohort, a one per cent higher 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 IFCC-HbA1c the better[31].

However, the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial has highlighted the risks of adopting an aggressive treatment strategy for patients at risk of cardiovascular disease. In the trial's intervention group, HbA1c fell from 8.1 per cent to 6.4 per cent, but this was associated with increased mortality[32]. However, a recent meta-analysis did not confirm such an increase in risk[33] and reassuringly, the ADVANCE study[34] and the Veteran Affairs Diabetes Trial[35] 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 intensively[36].

However, a newly published retrospective analysis of cohort data from the UK General Practice Research Database (GPRD) has reopened the debate about how low to aim[37]. 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 7.5 per cent, 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%; median = 6.4%). 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 the management of 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 person and/or their carer at and around the time of diagnosis, with annual reinforcement and review. Inform people and their carers that structured education is an integral part of diabetes care.

[29] NICE clinical guideline 87 (2009). Type 2 diabetes: the management of type 2 diabetes. www.nice.org.uk/guidance/CG87
[30] Khaw KT, Wareham N, Luben R et al. (2001) Glycated haemoglobin, diabetes, and mortality in men in Norfolk cohort of European prospective investigation of cancer and nutrition (EPIC-Norfolk). BMJ; 322: 15–18 – *see also next footnote*
[31] Elley CR, Kenealy T, Robinson E et al. (2008) Glycated haemoglobin and cardiovascular outcomes in people with type 2 diabetes: a large prospective cohort study. Diabetic Medicine; 25: 1295–1301
[32] Action to Control Cardiovascular Risk in Diabetes Study Group (2008) Effects of intensive glucose lowering in type 2 diabetes. N Engl J Med; 358: 2545–59
[33] Ray KK, Seshasai SR, Wijesuriya S et al. (2009) Effect of intensive control of glucose on cardiovascular outcomes and death in patients with diabetes mellitus: a meta-analysis of randomised controlled trials. Lancet; 373:1765-72
[34] ADVANCE Collaborative Group (2008) Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. N Engl J Med; 358: 2560–72
[35] Duckworth W, Abraira C, Moritz T et al. (2009) Glucose control and vascular complications in veterans with type 2 diabetes. N Engl J Med; 360: 129–39
[36] . Holman RR, Paul SK, Bethel MA et al. (2008) 10-year follow-up of intensive glucose control in type 2 diabetes. N Engl J Med; 359: 1577–89
[37] Currie CJ, Peters JR, Tynan A, et al. (2010) Survival as a function of HbA1c in people with type 2 diabetes: a retrospective cohort study. The Lancet; 375: 481–9

- Provide individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition.
- When setting a target glycated haemoglobin (HbA1c):
    1. involve the person in decisions about their individual IFCC-HbA1c target level, which may be above that of 48mmol/mol set for people with type 2 diabetes in general
    2. encourage the person 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 IFCC-HbA1c target level
    4. inform a person with a higher HbA1c that reduction in IFCC-HbA1c towards the agreed target is advantageous to future health
    5. avoid pursuing highly intensive management to levels of less than 48mmol/mol

The NICE and SIGN clinical guidelines are consistent[38].

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

From June 2009 the way in which HbA1c results are reported in the UK has changed. A standard specific for HbA1c was prepared by the International Federation of Clinical Chemistry and Laboratory Medicine (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 will be reported only as IFCC-HbA1c mmol/mol (see table 2).

[38] The American Diabetes Association, European Association for the Study of Diabetes, International Federation of Clinical Chemistry and Laboratory Medicine, and the International Diabetes Federation (2007) Consensus Statement on the Worldwide Standardization of the Hemoglobin A1C Measurement. Diabetes Care; 30: 2399-2400

Table 2: 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

Diabetes 26.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register in which the last IFCC-HbA1c measurement was 59mmol/mol or less (value 7.5 per cent or less). The test must have been carried out in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with diabetes to look at the proportion with a last recorded IFCC-HbA1c of 59mmol/mol or less
3. inspection of a sample of records of patients for whom a record of IFCC-HbA1c of 59mmol/mol or less is claimed, to see if there is evidence of this in the medical records.

Diabetes (DM) indicator 27

The percentage of patients with diabetes in whom the last IFCC-HbA1c is 64mmol/mol (equivalent to HbA1c of 8% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.

Diabetes 27.1 Rationale
See DM 26.1.

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

Diabetes 27.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register in which the last IFCC-HbA1c measurement was 64mmol/mol or less. The test must have been carried out in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of record of patients with diabetes to look at the proportion with last recorded IFCC-HbA1c 64mmol/mol or less
3. inspection of a sample of records of patients for whom a record of IFCC-HbA1c 64mmol/mol or less is claimed, to see if there is evidence of this in the medical records.

Diabetes (DM) indicator 28

The percentage of patients with diabetes in whom the last IFCC-HbA1c is 75mmol/mol (equivalent to HbA1c of 9% in DCCT values) or less (or equivalent test/reference range depending on local laboratory) in the preceding 15 months.

Diabetes 28.1 Rationale
See DM 26.1

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

Diabetes 28.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register in which the last IFCC-HbA1c measurement was 75mmol/mol or less. The test must have been carried out in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with diabetes to look at the proportion with last recorded IFCC-HbA1c 75 mmol/mol or less
3. inspection of a sample of records of patients for whom a record of IFCC-HbA1c 75 mmol/mol or less is claimed, to see if there is evidence of this in the medical records.

Diabetes (DM) indicator 21

The percentage of patients with diabetes who have a record of retinal screening in the preceding 15 months.

Diabetes 21.1 Rationale
Screening for diabetic retinal disease is effective at detecting unrecognised sight-threatening retinopathy. Systematic annual screening should be provided for all people with diabetes.

SIGN clinical guideline 116 (2010). Management of diabetes. Grade B Recommendation. http://www.sign.ac.uk/guidelines/fulltext/116/index.html

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

In Scotland, the local Diabetic Retinopathy Screening (DRS) service provided under the auspices of the Scottish DRS Programme is the only approved screening service for the purposes of this indicator (HDL 2006).

Diabetes 21.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have had retinal screening performed in the preceding 15 months. To meet this indicator practices must now demonstrate that patients have received retinal screening to the required standard.

Verification – proof of attendance at an approved retinal screening service may be required.

Diabetes (DM) indicator 29 (NICE Menu NM13)

The percentage of patients with diabetes 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 15 months.

Diabetes 29.1 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 should include:

- identifying the presence of sensory neuropathy (loss of the 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 guideline on Type 2 diabetes: the prevention and management of foot problems[39] advises that foot risk should be 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

[39] NICE clinical guideline 10 (2004). Type 2 diabetes: prevention and management of foot problems. www.nice.org.uk/guidance/CG10

- ulcerated foot.

The practitioner carrying out the inspection and assessment should:

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

In NHS Scotland, foot risk is calculated by using the SCI-DC electronic foot risk screening tool which is based on the SIGN clinical guideline 116 foot risk algorithm and as such is recognised as best practice and encouraged for use in Scotland.

Diabetes 29.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have had a foot examination within the preceding 15 months that classifies the level of risk as follows: 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 or previous ulcer) or 4) ulcerated foot.

Diabetes (DM) indicator 10

The percentage of patients with diabetes with a record of neuropathy testing in the preceding 15 months

Diabetes 10.1 Rationale
Patients with diabetes are at high risk of foot complications. Inspection for vasculopathy and neuropathy is needed to detect problems. These checks should be carried out at an annual review.

It is very important that correct testing for sensory neuropathy is carried out using the appropriate equipment. The foot inspection and assessment should include identifying the presence of sensory neuropathy (loss of the ability to feel a monofilament, vibration or sharp touch) and/or the abnormal build up of callus.

Both vibration perception threshold measurement using a biothesiometer and sensation threshold measurement using a 10g monofilament accurately predict neuropathic patients at raised risk of ulceration. The 10g monofilament is convenient and easy to use. Longevity and recovery testing suggests that each monofilament will survive usage on approximately ten patients before needing a recovery time of 24 hours (to restore buckling strength) before further use. Identification of neuropathy based on insensitivity to a 10g monofilament is convenient and appears cost-effective.

Further information
NICE clinical guideline 10 (2004). Type 2 diabetes: prevention and management of foot problems. http://guidance.nice.org.uk/CG10

SIGN clinical guideline 116 (2010). Management of diabetes, 2010.
http://www.sign.ac.uk/guidelines/fulltext/116/index.html

Diabetes 10.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register with a record of neuropathy testing in the preceding 15 months.

Diabetes (DM) indicator 30 (NICE menu NM01)

The percentage of patients with diabetes in whom the last blood pressure is 150/90 or less.

Diabetes 30.1 Rationale
Blood pressure BP lowering in people with diabetes reduces the risk of macrovascular and microvascular disease.

This indicator, along with indicator DM31 are replacements to the 2009/10 indicator DM12 (The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less). DM31 sets a target of 140/80 mmHg as per the target recommended by NICE[40] while the target of 150/90 mmHg has been set for those people who cannot manage this, such as those with retinopathy, microalbuminuria or cerebrovascular disease.

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

Diabetes 30.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register in which the last blood pressure measurement was 150/90 or less. The pressure must have been measured in the preceding 15 months.

Diabetes (DM) indicator 31 (NICE menu NM02)

The percentage of patients with diabetes in whom the last blood pressure is 140/80 or less.

Diabetes 31.1 Rationale
Blood pressure (BP) lowering in people with diabetes reduces the risk of macrovascular and microvascular disease.

This indicator, along with indicator DM30, are replacements of the 2009/10 QOF indicator DM12 (The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less). The target of 140/80 mmHg has been set as per the target recommended by NICE.

Diabetes 31.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register in which the last blood pressure measurement was 140/80 or less. The pressure must have been measured in the preceding 15 months.

[40] NICE clinical guideline 87 (2008). Type 2 Diabetes - newer agents (partial update of CG66).
www.nice.org.uk/CG87

Diabetes (DM) indicator 13

The percentage of patients with diabetes who have a record of micro-albuminuria testing in the preceding 15 months (exception reporting for patients with proteinuria).

Diabetes 13.1 Rationale
Diabetic patients are at risk of developing nephropathy. Measurements of urinary albumin loss and serum creatinine are the best screening tests for diabetic nephropathy. Urinary microalbuminuria has been identified as an independent risk factor for cardiovascular complications. Its presence is therefore a pointer to the need for more rigorous management of all cardiovascular risk factors. All patients with diabetes should have their urinary albumin concentration and serum creatinine measured at diagnosis and at regular intervals, usually annually.

Further information
SIGN clinical guideline 116 (2010). Management of diabetes.
http://www.sign.ac.uk/guidelines/fulltext/116/index.html

NICE clinical guideline 87 (2010). Type 2 Diabetes: The management of Type 2 diabetes.
http://guidance.nice.org.uk/CG87

Diabetic nephropathy is defined by a raised urinary albumin excretion of greater than 300mg/day (indicating clinical proteinuria). Patients with proteinuria should only be recorded as such after urinary tract infection has been excluded.

Diabetes 13.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have a record of microalbuminuria testing in preceding 15 months and the percentage of patients on the diabetic register who have proteinuria who have not therefore been tested for microalbuminuria.

Diabetes (DM) indicator 22

The percentage of patients with diabetes who have a record of estimated glomerular filtration rate (eGFR) or serum creatinine testing in the preceding 15 months

Diabetes 22.1 Rationale
See DM 13.1

Estimated glomerular filtration rate (eGFR), based on serum creatinine is reported as a better means to detect and monitor early renal disease and has been routinely reported since 2006.

Diabetes 22.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have a record of eGFR or serum creatinine in the preceding 15 months. In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with diabetes to look at the proportion with recorded eGFR or serum creatinine
3. inspection of a sample of records of patients for whom a record of eGFR or serum creatinine is claimed, to see if there is evidence of this in the medical records.

Diabetes (DM) indicator 15

The percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists).

Diabetes 15.1 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 Angiotensin II antagonists (A2) in patients who are intolerant of ACE-I.

Patients with a diagnosis of microalbuminuria or proteinuria should be commenced on an ACE-I or considered for Angiotensin II antagonist therapy.

Further information
SIGN clinical guideline 116 (2010). Management of diabetes.
http://www.sign.ac.uk/guidelines/fulltext/116/index.html

Diabetes 15.2 Reporting and verification
The practice reports the number of patients with a prescription for ACE-I or A2 antagonist in the preceding six months as a percentage of patients on the diabetic register who have microalbuminuria or proteinuria.

Diabetes (DM) indicator 17

The percentage of patients with diabetes whose last measured total cholesterol within the preceding 15 months is 5mmol/l or less.

Diabetes 17.1 Rationale
In patients whose total cholesterol is greater than 5.0mmol/l, statin therapy to reduce cholesterol should be initiated and titrated as necessary to reduce total cholesterol to less than 5mmol/l. There is ongoing debate concerning the intervention levels of serum cholesterol in diabetic patients who do not apparently have CVD.

The age when a statin should be initiated is unclear. It is pragmatically suggested that the prescription of a statin should be considered for all diabetic patients over the age of 40 years, particularly if their cholesterol is greater than 5.0mmol/l. Below the age of 40 years a decision needs to be reached between the doctor and the patient and may involve assessment of other risk factors and the actual age of the patient.

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 trial[41].

Mortality from CHD in Subjects with Type 2 Diabetes and in Nondiabetic Subjects with and without Prior Myocardial Infarction Haffner et al[42].

[41] *Lancet* 2003; 361:2005-2016
[42] *NEJM* 1998; 339: 229-234

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

Diabetes 17.2 Reporting and verification
The practice reports the percentage of patients on the diabetes register whose last measured cholesterol was 5mmol/l or less. The measurement should have been carried out in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with diabetes to look at the proportion with recorded serum cholesterol less than 5mmol/l
3. inspection of a sample of records of patients for whom a record of serum cholesterol is less than 5mmol/l is claimed, to see if there is evidence of this in the medical records.

Diabetes (DM) indicator 18

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

Diabetes 18.1 Rationale
This is a current recommendation from the Department of Health and the Joint Committee on Vaccination and Immunisation (JCVI).

Diabetes 18.2 Reporting and verification
The practice reports the percentage of patients on the diabetic register who have had an influenza vaccination administered in the preceding 1 September to 31 March.

Chronic obstructive pulmonary disease (COPD)

Indicator	Points	Payment stages
Records		
COPD14. The practice can produce a register of patients with COPD	3	
Initial diagnosis		
COPD15. The percentage of all patients with COPD diagnosed after 1 April 2011 in whom the diagnosis has been confirmed by post bronchodilator spirometry	5	40–80%
Ongoing management		
COPD10. The percentage of patients with COPD with a record of FEV_1 in the preceding 15 months	7	40–70%
COPD13. The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months	9	50–90%
COPD8. The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March	6	40–85%

COPD – rationale for inclusion of indicator set

Chronic Obstructive Pulmonary Disease (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 healthcare 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 14

The practice can produce a register of patients with COPD.

COPD 14.1 Rationale
A register is a prerequisite for monitoring patients with COPD.

A diagnosis of COPD should be considered in any patient who has symptoms of 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 COPD 15.1.

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 practices may wish to carry out post bronchodilator spirometry for confirmation.

NICE clinical guideline 101 recommended a change to the diagnostic threshold for COPD (see table 3). As this may lead to an increase in the recorded prevalence of COPD, this indicator has been renumbered from April 2011 in recognition of this.

Table 3: Gradation of severity of airflow obstruction

		NICE clinical guideline 12 (2004)	ATS/ERS[43] 2004	GOLD 2008[44]	NICE clinical guideline 101 (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 should be present to diagnose COPD in people with mild airflow obstruction (see recommendation 1.1.1.1).
**Or FEV_1 < 50% with respiratory failure.

COPD 14.2 Reporting and verification
The practice reports the number of patients on its COPD disease register and the number of patients on its COPD disease register as a proportion of total list size.

[43] Celli BR, MacNee W (2004) Standards for the diagnosis and treatment of patients with COPD: a summary of the ATS/ERS position paper. European Respiratory Journal 23(6): 932–46.
[44] Global Initiative for Chronic Obstructive Lung Disease (GOLD) (2008). Global strategy for the diagnosis, management, and prevention of COPD.

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

Verification – may require a comparison of the expected prevalence with the reported prevalence.

COPD indicator 15

The percentage of all patients with COPD diagnosed after 1 April 2011 in whom the diagnosis has been confirmed by post bronchodilator spirometry.

COPD 15.1 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.

NICE clinical guidelines provide the following definition of COPD:

- airflow obstruction is defined as a reduced FEV_1/FVC ratio (where FEV_1 is forced expired volume in one second and FVC is forced vital capacity), such that FEV_1/FVC is less than 0.7
- if FEV_1 is greater than or equal to 80 per cent predicted normal a diagnosis of COPD should only be made in the presence of respiratory symptoms, for example breathlessness or cough.

The NICE guidelines require 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 cent[45]. Spirometry should be performed after the administration of an adequate dose of an inhaled bronchodilator (e.g. 400mcg 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 should 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 FEV_1 of less than 80 per cent of predicted normal as well as an appropriate medical history.

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

Further information
NICE clinical guideline 101 (2010). Chronic obstructive pulmonary disease.
http://guidance.nice.org.uk/CG101/NICEGuidance/pdf/English

From April 2011 the diagnostic codes for this indicator have been updated to include new codes for post bronchodilator spirometry. The previous codes for reversibility testing will no longer be acceptable for QOF purposes.

[45] Johannessesn et al. *Thorax* 2005; 60(10): 842-847

COPD 15.2 Reporting and verification
The practice reports the percentage of patients diagnosed after 1 April 2011 who are on their COPD register, who have a record that the diagnosis has been confirmed by post bronchodilator spirometry.

For the purposes of the QOF, post bronchodilator spirometry undertaken between three months before and 12 months after a diagnosis of COPD being made would be considered as meeting the requirements of this indicator.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with COPD to look at the proportion with a record of post bronchodilator spirometry
3. inspection of a sample of records of patients for whom a record of post bronchodilator spirometry is claimed, to see if there is evidence of this in the medical records.

COPD indicator 10

The percentage of patients with COPD with a record of FEV_1 in the preceding 15 months.

COPD 10.1 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.

NICE clinical guideline 101 recommends that FEV_1 and inhaler technique should be assessed at least annually for people with mild/moderate/severe COPD (and in fact at least twice a year for people 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 101 – see table 6.

Practices 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 should 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 101.

COPD 10.2 Reporting and verification
The practice reports the percentage of patients on the COPD register who have had spirometry performed in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with COPD to look at the proportion with spirometry results in the last two years
3. inspection of a sample of records of patients with COPD for whom a record of spirometry is claimed, to see if there is evidence of this in the medical records.

COPD indicator 13

The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months.

COPD 13.1 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 should be based on NICE clinical guideline 101 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:

- current lung function
- exacerbation history
- degree of breathlessness (MRC dyspnoea scale).

A tool such as the Clinical COPD Questionnaire could be used to assess current health status[46].

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 should be assessed during any review

The MRC dyspnoea scale gives a measure of breathlessness and is recommended as part of the regular review. It is available under Section 1.1, Diagnosing COPD, in table one of the NICE clinical guideline 101 on COPD.

COPD 13.2 Reporting and verification
The practice reports the percentage of patients on the COPD register who have had a review of their COPD by a healthcare professional which included an assessment of breathlessness using the MRC dyspnoea score in the preceding 15 months.

[46] Clinical COPD Questionnaire. http://www.ccq.nl/

Verification - may require randomly selecting a number of case records of patients in which the review has been recorded as taking place to confirm that the defined elements are recorded as having been addressed, if applicable.

COPD indicator 8

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

COPD 8.1 Rationale
This is a current recommendation from the Departments of Health and the Joint Committee on Vaccination and Immunisation (JCVI).

COPD 8.2 Reporting and verification
The practice reports the percentage of patients on the COPD register who have had an influenza vaccination administered in the preceding 1 September to 31 March.

Epilepsy

Indicator	Points	Payment stages
Records		
EPILEPSY 5. The practice can produce a register of patients aged 18 years and over receiving drug treatment for epilepsy	1	
Ongoing management		
EPILEPSY 6. The percentage of patients age 18 years and over on drug treatment for epilepsy who have a record of seizure frequency in the preceding 15 months	4	40–90%
EPILEPSY 8. The percentage of patients aged 18 years and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 15 months	6	40–70%
EPILEPSY 9. The percentage of women under the age of 55 years who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 15 months *NICE menu ID: NM03*	3	40–90%

Epilepsy – 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 people with epilepsy to lead a full and productive life. For the purposes of the QOF, epilepsy is defined as 'recurrent unprovoked seizures'.

Epilepsy indicator 5

The practice can produce a register of patients aged 18 years and over receiving drug treatment for epilepsy.

Epilepsy 5.1 Rationale
The clinical indicators of epilepsy care cannot be checked unless the practice has a register of patients with epilepsy. The phrase 'receiving treatment' has been included in order to exclude the large number of patients who had epilepsy in the past, and may have been off treatment and 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 should be excluded from the register. Drugs on repeat prescription will be picked up on search.

It is proposed that the disease register includes patients aged 18 years and over as care for younger patients is generally undertaken outside of primary care.

Epilepsy 5.2 Reporting and verification
The practice reports the number of patients aged 18 years and over on its epilepsy disease register and the number of patients aged 18 years and over on its epilepsy disease register as a proportion of total list size.

Verification - 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.

Epilepsy indicator 6

The percentage of patients aged 18 years and over on drug treatment for epilepsy who have a record of seizure frequency in the preceding 15 months.

Epilepsy 6.1 Rationale
It is recommended that the following information should be recorded routinely in patients' notes at each review:

- seizure type and frequency, including date of last seizure
- antiepileptic drug therapy and dosage
- any adverse drug reactions arising from antiepileptic drug therapy
- key indicators of the quality of care i.e. topics discussed and plans for future review.

NICE clinical guideline 20 suggests that 'all individuals with epilepsy should have a regular structured review …in adults this review should be carried out at least yearly by either a generalist or a specialist'. This guidance therefore supports the current epilepsy indicators which are in essence the component parts of an annual structured face to face review, where clinically appropriate. An updated version of this guidance was in progress at the time of publication of this document. The updated guidance will be published on the NICE website once available.

Further information
NICE clinical guideline 20 (2004). The diagnosis and management of the epilepsies in adults and children in primary and secondary care.
http://guidance.nice.org.uk/CG20/NICEGuidance/pdf/English

SIGN clinical guideline 70 (2003). Diagnosis and management of epilepsy in adults.
http://www.sign.ac.uk/guidelines/fulltext/70/index.html

Epilepsy 6.2 Reporting and verification
The practice reports the percentage of patients on the epilepsy register who have a record of seizure frequency in the preceding 15 months.

Epilepsy indicator 8

The percentage of patients aged 18 years and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 15 months.

Epilepsy 8.1 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 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. for patients with forms of brain injury which mean that their seizures cannot be controlled, patients who find the side effects of medication intolerable etc).

The top level in this indicator has been deliberately kept at a lower level in order to encourage GPs to record the frequency of seizures as accurately as possible.

Leaflets for patients with epilepsy, including advice about medication, are available through Epilepsy Scotland on the link below:

http://www.epilepsyscotland.org.uk/information_section/healthpro/information_healthpro.html

Epilepsy 8.2 Reporting and verification
The practice reports the percentage of patients with epilepsy who have been seizure free in the preceding 12 months, recorded in patients in the preceding 15 months.

Epilepsy Indicator 9 (NICE menu NM03)

The percentage of women under the age of 55 years who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 15 months.

Epilepsy 9.1 Rationale
It is estimated that in the UK 131,000 women with epilepsy are of child bearing age (12 – 50 years). Approximately 25 per cent of all people with epilepsy are women of reproductive age and 1 in 200 women attending antenatal clinics are receiving antiepileptic drugs (AEDs)[47]. Around 2500 women with epilepsy will have a baby each year in the UK.

Antiepileptic drugs taken during pregnancy are associated with an increased risk of major congenital malformations (MCMs). Women in the general population have a one to 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 taking two or more AEDs the average chance increases to 6 per cent[48]. 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 – 34 years have received information about oral contraception and epilepsy medication[49]. 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.

[47] Royal Society of Medicine (2004). Primary care guidelines for the management of females with epilepsy. www.rsmpress.co.uk/epilepsy_web.pdf
[48] Morrow J, Russell A, Guthrie E et al. (2006) Malformation risks of antiepileptic drugs in pregnancy: a prospective study from the UK Epilepsy and Pregnancy Register. Journal of Neurology, Neurosurgery and Psychiatry 77: 193–8
[49] Crawford P, Hudson S (2003) Understanding the information needs of women with epilepsy at different lifestages: results of the 'Ideal World' survey. Seizure 12: 502–7

NICE clinical guideline 20 on epilepsy made the following recommendation as a key priority for implementation:

> Women with epilepsy and their partners, as appropriate, must be given accurate information and counseling 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 should use their judgment 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 the15 month period.

Advice must be given in the context of a face to face consultation.

Epilepsy 9.2 Reporting and verification
The practice reports the percentage of women on the epilepsy register from 18 to 55 years who have been given information and advice in the preceding 15 months for contraception, conception and pregnancy (unless not clinically necessary e.g. post hysterectomy and early menopause).

Practices are required to deliver all three pieces of advice as outlined in this indicator in order for the patient to be included in the target. 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.

Practices should 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 can be demonstrated by a print out or summary of appointment bookings.

Hypothyroid

Indicator	Points	Payment stages
Records		
THYROID 1. The practice can produce a register of patients with hypothyroidism	1	
Ongoing management		
THYROID 2. The percentage of patients with hypothyroidism with thyroid function tests recorded in the preceding 15 months	6	40–90%

Hypothyroidism – rationale for inclusion of indicator set

Hypothyroidism is a common, serious condition with an insidious onset. The mean incidence is 3.5 per 1000 in women and 0.6 per 1000 in men. The probability of developing hypothyroidism increases with age and reaches 14 per 1000 in women aged between 75 and 80 years.

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

THYROID indicator 1

The practice can produce a register of patients with hypothyroidism.

Thyroid 1.1 Rationale
A register is a prerequisite for monitoring patients with hypothyroidism. 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 should consist 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.

Thyroid 1.2 Reporting and verification
The practice reports the number of patients on its hypothyroidism disease register and the number of patients on its hypothyroidism disease register as a proportion of total list size.

Verification – may require a comparison of the expected prevalence with the reported prevalence.

THYROID indicator 2

The percentage of patients with hypothyroidism with thyroid function tests recorded in the preceding 15 months.

Thyroid 2.1 Rationale
There is no clear evidence on the appropriate frequency of TSH (thyroid stimulating hormone)/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 thyroidectomy[50].

Thyroid 2.2 Rationale
The practice reports the percentage of patients on its hypothyroid register who have had a TSH or T4 undertaken in the preceding 15 months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients with hypothyroidism to look at the proportion with recorded TSH/T4
3. inspection of a sample of records of patients with hypothyroidism for whom a record of TSH/T4 is claimed, to see if there is evidence of this in the medical records.

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

Cancer

Indicator	Points	Payment stages
Records		
CANCER 1. The practice can produce a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers from 1 April 2003'	5	
Ongoing management		
CANCER 3. The percentage of patients with cancer, diagnosed within the preceding 18 months who have a patient review recorded as occurring within 6 months of the practice receiving confirmation of the diagnosis	6	40–90%

Cancer – rationale for inclusion of indicator set

Cancer is a clinical priority in all four countries. It is recognised that the principal active management of cancers occurs in the secondary care setting. General practice often has a key role in the referral and subsequent support of these patients and in ensuring that care is appropriately coordinated. This indicator set is not evidence-based but does represent good professional practice.

Cancer indicator 1

The practice can produce a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers from 1 April 2003'.

Cancer 1.1 Rationale
A register is a prerequisite for ensuring follow-up of patients with cancer. 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 should be included except non-melanomatous skin lesions.

Cancer 1.2 Reporting and verification
The practice reports the number of patients added to its cancer register in the preceding 12 months and the number of patients added to its cancer register in the preceding 12 months as a proportion of total list size.

Verification – may require a comparison of the expected prevalence of new cases with the reported prevalence.

Cancer indicator 3

The percentage of patients with cancer, diagnosed within the preceding 18 months who have a patient review recorded as occurring within 6 months of the practice receiving confirmation of the diagnosis.

Cancer 3.1 Rationale
Most practices will see patients with a new cancer diagnosis following assessment and management in a secondary or tertiary care setting.

Whilst the indicator suggests that this should occur within six months of receiving confirmation of the diagnosis, good practice would suggest that a review should occur between three to six months.

A cancer review is an opportunity to cover the following issues:

- the patient's individual health and support needs (this will vary with e.g. the diagnosis, staging, age and pre-morbid health of the patient and their social support networks)
- the coordination of care between sectors

Further information
Better Cancer Care: An Action Plan.
http://www.scotland.gov.uk/Publications/2008/10/24140351/0

Cancer 3.2 Reporting and verification
The practice reports the number of patients with cancer diagnosed in the preceding 18 months with a review recorded in the six months after diagnosis.

Verification – may require randomly selecting a number of case records of patients in which the review has been recorded as taking place to confirm that the two components have been undertaken and recorded.

Palliative care

Indicator	Points	Payment stages
Records		
PC3. The practice has a complete register available of all patients in need of palliative care/support irrespective of age	3	
Ongoing management		
PC2. The practice has regular (at least 3 monthly) multidisciplinary case review meetings where all patients on the palliative care register are discussed	3	

Palliative care – 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) Strategy was published in July 2008. It builds on work such as the NHS cancer plan 2000, NICE guidance 2004 and NHS EOLC programme 2005.

In Scotland, "Living and Dying Well, a national action plan for palliative and end of life care in Scotland"[51] places great emphasis on the role of primary care in providing palliative care for all patients with such needs, regardless of diagnosis. The action plan uses the concepts of planning and delivery of care, and of communication and information sharing as a framework to support a person centred approach to delivering consistent palliative and end of life care in Scotland.

The way primary care teams provide palliative care in the last months of life has changed and developed extensively in recent years with:

- over 99 per cent of practices now using a palliative care register since the introduction of this indicator set
- 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 and "Living and Dying Well" suggest that all practices should adopt a systematic approach to end of life care and work to develop measures and markers of good

[51] Living and Dying Well, a national action plan for palliative and end of life care in Scotland (2008). http://www.scotland.gov.uk/Publications/2008/10/01091608/0

care. They recommend the 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 Gold Standard Framework (GSF) 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 practices to focus on implementing high quality patient centred care.

http://www.goldstandardsframework.nhs.uk/

Palliative care (PC) indicator 3

The practice has a complete register available of all patients in need of palliative care/support, irrespective of age.

Palliative care 3.1 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 should be possible therefore to predict the majority of deaths, however, this is difficult and errors occur 30 per cent of the time. Two-hirds of errors are based on over optimism and one third on over 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 proactively[52].

A patient should be 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 themselves '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 GSF website).
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)

[52] NAO End of Life Care report (November 2008). '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 a quarter of these had been in hospital for over a month'

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.

Palliative care 3.2 Reporting and verification
The practice reports the number of patients on its palliative care register.

Verification – in the rare case of a nil register at year end, if a practice can demonstrate that it had a register in year then it will be eligible for payment.

Palliative care indicator 2

The practice has regular (at least 3 monthly) multidisciplinary case review meetings where all patients on the palliative care register are discussed.

Palliative care 2.1 Rationale
The QOF monitors occurrence of the multi-disciplinary meetings but it is up to the practice to ensure the meetings are effective. The aims of the meetings are to:

- ensure all aspects of the patients care have been considered (this should then be documented in the patients notes)
- 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
- coordinate 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 practices 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 2 and the assessment tools on the GSF website.

Scottish practices participating in the Palliative Care DES will have access to a reporting template which can be used and adapted for this purpose and available at annex D of the DES:

http://www.sehd.scot.nhs.uk/pca/PCA2008(M)12.pdf

Palliative care 2.2 Reporting and verification
The practice should submit written evidence to the PCO describing the system for initiating and recording meetings.

Mental health

Indicator	Points	Payment stages
Records		
MH8. The practice can produce a register of people with schizophrenia, bipolar disorder and other psychoses	4	
Ongoing management		
MH11. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 15 months *NICE menu ID: NM15*	4	40–90%
MH12. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 15 months *NICE menu ID: NM16*	4	40–90%
MH13. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 15 months *NICE menu ID: NM17*	4	40–90%
MH14. The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 15 months *NICE menu ID: NM18*	5	40–80%
MH15. The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose in the preceding 15 months *NICE menu ID: NM19*	5	40–80%
MH16. The percentage of women (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years *NICE menu ID: NM20*	5	40–80%

MH17. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months *NICE menu ID: NM21*	1	40–90%
MH18. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months *NICE menu ID: NM22*	2	40–90%
MH10. The percentage of patients on the register who have a comprehensive care plan documented in the records agreed between individuals, their family and/or carers as appropriate	6	25–50%

Mental health – 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 MH11 – MH16 relate to the care of people with a diagnosis of schizophrenia, bipolar or other affective disorders. Indicators MH17 and MH18 relate to the care of patients who are currently prescribed lithium. Indicator MH8 requires practices to maintain a register of individuals with a diagnosis of serious mental illness (SMI) i.e. schizophrenia, bipolar or other affective disorders. Within the business rules there is a second component to the MH register which relates to those who are currently receiving treatment with lithium.

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

Mental health problems are also included in some of the organisational indicators. These include significant event audits which focus specifically on mental health problems and methods of addressing the needs of carers. 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 MH11 – MH16
In the 2009/10 indicator MH9, it was recommended that patients should receive an annual health promotion and prevention review and advice appropriate to their age, gender and health status.

From 1 April 2011, the components of the 2009/10 indicator MH9 have been separated out to create a series of indicators that define a physical health review. The annual timeframe for these indicators is in line with NICE clinical guideline on schizophrenia[53].

NICE clinical guideline 38 on bipolar disorder[54] recommends that patients with bipolar disorder should have an annual physical health review, normally in primary care, to ensure that the following are assessed each year:

[53] NICE clinical guideline 82 (2009). Schizophrenia. Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care. www.nice.org.uk/guicance/CG82
[54] NICE clinical guideline 38 (2006). Bipolar disorder. The management of bipolar disorder in adults, children and adolescents, in primary and secondary care. www.nice.org.uk/guidance/CG38

- lipid levels, including cholesterol in all patients over 40 years even if there is no other indication of risk
- plasma glucose levels
- 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 and dyslipidaemia), which is a predictor of Type 2 diabetes and CHD[55].

Mental health (MH) indicator 8

The practice can produce a register of people with schizophrenia, bipolar affective disorder and other psychoses.

Mental health 8.1 Rationale
The register includes all people with a diagnosis of schizophrenia, bipolar affective disorder and other psychoses to avoid a generic phrase that is open to variations in interpretation. The notion of regular follow-up is not referenced in the indicator to acknowledge the variation in interpretation of this clause.

Remission from serious mental illness
Historically, patients have been added to the QOF mental health register for schizophrenia, bipolar affective disorder and other psychoses but over time it has become apparent that it may 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 judgment. A recent 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 recovery[56] is used.

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

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

[55] Mackin P, Bishop D, Watkinson H et al. (2007) Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community. Br J Psychiatry 191: 23–9
[56] Harrison, G., Hopper, K., Craig, T., Laska, E., Siegel, C., Wanderling, J. et al. (2001) Recovery from psychotic illness: A 15- and 25-year international follow-up study. British Journal of Psychiatry, 178:506-517

From 1 April 2011 practices may record patients as being in remission. 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 indicators MH10 – MH16 inclusive.

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 medical record.

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

Mental health 8.2 Reporting and verification
The practice reports the number of patients on its mental health register for schizophrenia, bipolar affective disorder and other psychoses and the number of patients on its lithium therapy register as a proportion of total list size. This will include both patients with a current condition and those recorded as being in remission.

Verification – may require randomly selecting a number of case 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'. Practices are expected to 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. Practices will be expected 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.

Mental Health (MH) indicator 11 (NICE menu NM15)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 15 months.

Mental health 11.1 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 effects[57]. 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 men and 14 units or alcohol for women a week[58], [59]. Bipolar affective disorder is also highly comorbid with alcohol and other substance abuse[60].

Mental health 11.2 Reporting and verification
The practice reports the percentage of patients on its mental health register for schizophrenia, bipolar affective disorder and other psychoses that have a record of alcohol consumption in the preceding 15 months

[57] Banerjee S, Clancy C, Crome I, editors (2001) Co-existing problems of mental disorder and substance misuse (dual diagnosis). An information manual. London: Royal College of Psychiatrists' Research and Training Unit
[58] Meltzer H, Gill B, Pettigrew M et al. (1996) OPCS Survey of Psychiatric Morbidity in Great Britain. Report 3: Economic activity and social functioning of adults with psychiatric disorders. London: HMSO
[59] Farrell M, Howes S, Taylor C et al. (1998) Substance misuse and psychiatric comorbidity: an overview of the OPCS National Psychiatric Morbidity Survey. Addictive Behaviors 23: 909–18
[60] Kessler RC, Rubinow DR, Holmes C et al. (1997) The epidemiology of DSM-III-R bipolar I disorder in a general population survey. Psychological Medicine 27: 1079–89

Mental Health (MH) indicator 12 (NICE menu NM16)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 15 months.

Mental health 12.1 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 type 2 diabetes mellitus. Superimposed on this are lifestyle issues (not all actively chosen) for people with psychosis, generating an escalation of cardiovascular risks[61].

In particular, people 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 heavily[62]. In addition to lifestyle factors, 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, and dyslipidaemia), which is a predictor of Type 2 diabetes and CHD[63].

Approximately 40 per cent of people with schizophrenia are obese[64] and obesity is also common in people with bipolar disorders[65].

NICE clinical guideline 43 (2006). Obesity. The prevention, identification, assessment and management of overweight and obesity in adults and children.
http://guidance.nice.org.uk/CG43

SIGN guideline 115 (2010). Management of obesity.
http://www.sign.ac.uk/guidelines/fulltext/115/index.html

Mental health 12.2 Reporting and verification
The practice reports the percentage of patients on its mental health register for schizophrenia, bipolar affective disorder and other psychoses that have had their BMI calculated in the preceding 15 months.

Mental Health (MH) indicator 13 (NICE menu NM17)

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 15 months.

Mental health 13.1 Rationale
People with schizophrenia have a mortality of 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

[61] Heiskanen T, Niskanen L, Lyytikäinen R et al. (2003) Metabolic syndrome in patients with schizophrenia. J Clin Psychiatry 64: 575–9
[62] McCreadie R, MacDonald E, Blacklock C et al. (1998) Dietary intake of schizophrenic patients in Nithsdale, Scotland: case–control study. BMJ 317: 784–5
[63] Mackin P, Bishop D, Watkinson H et al. (2007) Metabolic disease and cardiovascular risk in people treated with antipsychotics in the community. Br J Psychiatr 191: 23–9
[64] Hennekens C, Hennekens A, D Hollar (2005) Schizophrenia and increased risks of cardiovascular disease. Am Heart J 150: 1115–21
[65] Elmsie JL, Silverstone JT, Mann JI et al. (2000) Prevalence of overweigh and obesity in bipolar patients. Journal of Clinical Psychiatry 61: 179–84

community cohort of 370 people with schizophrenia found that the increased mortality risk is probably life-long, and it suggested that the cardiovascular mortality of schizophrenia has increased over the past 25 years relative to the general population[66]. 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 population[67]. 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 cent[68].

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 people with asthma, people with schizophrenia and other attendees indicated that practices were less likely to screen people with schizophrenia for cardiovascular risk compared with the other two groups[69].

Recording (and treating) cardiovascular risk factors are therefore very important for people with a serious mental illness.

Mental health 13.2 Reporting and verification
The practice reports the percentage of patients on its mental health register for schizophrenia, bipolar affective disorder and other psychoses that have had their blood pressure measured in the preceding 15 months.

Mental Health (MH) indicator 14 (NICE menu NM18)

The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol:hdl ratio in the preceding 15 months.

Mental health 14.1 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 cent[70]. People with schizophrenia also have a much higher risk of raised total cholesterol:hdl ratio than the general population[71].

Mental health 14.2 Reporting and verification
The practice reports the percentage of patients aged 40 years and over on its mental health register for schizophrenia, bipolar affective disorder and other psychoses that have had their total cholesterol:hdl ratio measured in the preceding 15 months.

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[66] Brown S, Kim M, Mitchell C et al. (2010) 25 year mortality of a community cohort with schizophrenia. Br J Psychiatr 196:116–21
[67] Hennekens C, Hennekens A, Hollar D (2005) Schizophrenia and increased risks of cardiovascular disease. Am Heart J 150: 1115-21
[68] Kilbourne AM, Cornelius JR, Han X et al. (2004) Burden of general medical conditions among individuals with bipolar disorder. Bipolar Disorder 6: 368–73
[69] Roberts L, Roalfe A, Wilson S et al. (2007) Physical health care of patients with schizophrenia in primary care: a comparative study. Fam Pract 24: 34–40
[70] Kilbourne AM, Cornelius JR, Han X et al. (2004) Burden of general medical conditions among individuals with bipolar disorder. Bipolar Disorder 6: 368–73
[71] Oud M, Meyboom-de Jong B (2009) Somatic diseases in patients with schizophrenia in general practice: their prevalence and health care. BMC Family Practice 10: 32

Mental Health (MH) indicator 15 (NICE menu NM19)

The percentage of patients aged 40 years and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose in the preceding 15 months.

Mental health 15.1 Rationale
A cross-sectional study of 4310 patients diagnosed with bipolar disorder in 2001 receiving care at veterans' administration facilities found a prevalence of diabetes of 17 per cent[72]. The relative risk of developing diabetes mellitus is two to three times higher in people with schizophrenia than in the general population[73].

The NICE QOF Advisory Committee noted that there was lack of evidence to support the use of blood glucose testing in all people with schizophrenia, bipolar affective disorder and other psychoses and therefore recommended that an age limit of 40 years or above should be applied to this indicator.

This indicator is intended to encourage case finding of diabetes in those with a serious mental illness through the use of random or fasting blood glucose measurements. Patients in whom diabetes has already been diagnosed will be excluded from the denominator of this indicator. They should be managed according to the diabetes indicator set.

Mental health 15.2 Reporting and verification
The practice reports the percentage of patients on its mental health register for schizophrenia, bipolar affective disorder and other psychoses, aged 40 years and over who have had a test for blood glucose levels in the preceding 15 months.

Mental Health (MH) indicator 16 (NICE menu NM20)

The percentage of women (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years.

Mental health 16.1 Rationale
A recent 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 previous five years (63 per cent) compared with the general population (73 per cent). This did not apply to patients with bipolar affective disorder[74]. This finding may reflect an underlying attitude that such screening is less appropriate for women with schizophrenia. This indicator therefore encourages practices to ensure that women with schizophrenia, bipolar affective disorder or other psychoses are given cervical screening according to devolved national guidelines.

[72] Kilbourne AM, Cornelius JR, Han X, et al. (2004) Burden of general medical conditions among individuals with bipolar disorder. Bipolar Disorder 6: 368–73
[73] Oud M, Meyboom-de Jong B (2009) Somatic diseases in patients with schizophrenia in general practice: their prevalence and health care. BMC Family Practice 10: 32.
[74] Hippisley-Cox J, Pringle M (2005). Health inequalities experienced by people with schizophrenia and manic depression: Analysis of general practice data in England and Wales. Nottingham: QRESEARCH. www.qresearch.org/SitePages/publications.aspx

Mental health 16.2 Reporting and verification
The practice reports the percentage of women (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding five years.

Mental Health (MH) indicator 17 (NICE menu NM21)

The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months.

Mental health 17.1 Rationale
It is important to check thyroid and renal function regularly in patients taking lithium, since there is a much higher than normal incidence of hypothyroidism and hypercalcaemia, and of abnormal renal function tests in patients on lithium. Overt hypothyroidism has been found in between eight per cent and 15 per cent of people on lithium.

The NICE clinical guideline on bipolar disorder recommends that practitioners should 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 should be carried out every six months and more often if there is evidence of impaired renal function.

Mental health 17.2 Reporting and verification
The practice reports the percentage of patients on lithium therapy with a record of TSH in the preceding nine months. Practices should report the percentage of patients on lithium therapy with a record of serum creatinine in the preceding nine months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients on lithium therapy to look at the proportion with recorded TSH and creatinine in the last nine months
3. inspection of a sample of records of patients on lithium therapy for whom a record of TSH and creatinine is claimed, to see if there is evidence of this in the medical records.

Mental Health (MH) indicator 18 (NICE menu NM22)

The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months.

Mental health 18.1 Rationale
Lithium monitoring is essential due to the narrow therapeutic range of serum lithium and the potential toxicity from intercurrent 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 treatment for bipolar disorder, which demonstrated that wrong or unclear dose or strength, and monitoring were key issues for lithium therapy[75]. A search of all medication

[75] NPSA. Patient safety alert 0921(2009). Safer lithium therapy. www.nrls.npsa.nhs.uk/alerts

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' events[76].

The NICE clinical guideline on bipolar disorder states that for patients with bipolar disorder on lithium treatment, prescribers should:

- monitor serum lithium 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 lithium levels.

The aim should be to maintain serum lithium levels between 0.6 and 0.8 mmol/litre 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/litre should be considered. If the range differs locally, the PCO will be required to allow for this.

Where a practice is prescribing, it has responsibility for checking that routine blood tests have been done (not necessarily by the practice) and for following up patients who default.

Mental health 18.2 Reporting and verification
The practice reports the percentage of patients on lithium whose last serum lithium level is in the therapeutic range. The level should have been undertaken in the preceding four months.

In verifying that this information has been correctly recorded, a number of approaches could be taken:

1. inspection of the output from a computer search that has been used to provide information on this indicator
2. inspection of a sample of records of patients on lithium therapy to look at the proportion with recorded serum lithium in the therapeutic range
3. inspection of a sample of records of patients on lithium therapy for whom a record of serum lithium in the therapeutic range is claimed, to see if there is evidence of this in the medical records.

Mental health (MH) indicator 10

The percentage of patients on the register who have a comprehensive care plan documented in the records agreed between individuals, their family and/or carers as appropriate.

Mental health 10.1 Rationale
This indicator reflects good professional practice and supported by NICE clinical guidelines[77].

[76] Prescribing Observatory for Mental Health (2009). Topic 7 baseline report. Monitoring of patients prescribed lithium: baseline.
[77] NICE clinical guideline 82 (2009). Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care.
http://guidance.nice.org.uk/CG82/NICEGuidance/pdf/English

Patients on the mental health 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 people 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.
3. 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 services[78].
4. Coordination arrangements with secondary care and/or mental health services and a summary of what services are actually being received.
5. Occupational status.
6. 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 (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 amongst users of mental health services with up to 90 per cent wishing to go into or back to work[79].
7. Early Warning Signs.
8. "Early warning signs" from the patient's perspective that may indicate a possible relapse[80]. 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 person thinks may have acted as triggers.
9. 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.

A care plan should be accurate, easily understood, reviewed annually and discussed with the patient, their family and/or carers. If a patient is treated under the care programme approach (CPA), then they should have a documented care plan discussed with their community key worker available. This is acceptable for the purposes of the 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.

[78] 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). London, ODPM, 2004
[79] See Grove and Drurie. (Social firms: an instrument for social and economic inclusion. Redhill, Social Firms UK,1999
[80] See Birchwood et al. Advances in Psychiatric Treatment 2000; 6: 93-101 and Birchwood and Spencer. Clinical Psychology Review 2001; 21(8): 1211-26

Further information
The Mental Health (Care and Treatment) (Scotland) Act 2003.
www.opsi.gov.uk/legislation/scotland/acts2003/asp_20030013_en_1

Mental health 10.2 Reporting and verification
The practice reports the percentage of patients on the mental health register for schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan recorded.

Verification – may require randomly selecting a number of care plans to ensure that they are being maintained annually.

Asthma

Indicator	Points	Payment stages
Records		
ASTHMA 1. The practice can produce 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 Management		
ASTHMA 8. The percentage of patients aged 8 years and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility	15	40–80%
Ongoing management		
ASTHMA 3. The percentage of patients with asthma between the ages of 14 and 19 years in whom there is a record of smoking status in the preceding 15 months	6	40–80%
ASTHMA 6. The percentage of patients with asthma who have had an asthma review in the preceding 15 months	20	40–70%

Asthma – 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.

This indicator set was originally informed by the British Thoracic Society (BTS)/SIGN guidelines which were published in early 2003. In keeping with the other indicators, not all areas of management are included in the indicator set in an attempt to keep the data collection within manageable proportions.

Asthma indicator 1

The practice can produce a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months.

Asthma 1.1 Rationale
Proactive structured review as opposed to opportunistic or unscheduled review is associated with reduced exacerbation rates and days lost from normal activity. A register of patients who require follow-up is a pre-requisite for structured asthma care.

The diagnosis of asthma is a clinical one; there is no confirmatory diagnostic blood test, radiological investigation or histopathological investigation. In most people, 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 (FEV_1) 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 must be in doubt.

A proportion of patients with COPD will also have asthma i.e. they have large reversibility – 400mls or more on FEV_1 – but do not return to over 80 per cent predicted and have a significant smoking history. From 1 April 2006 these patients should be recorded on both the asthma and COPD registers.

Children
A definitive diagnosis of asthma can be difficult to obtain in young children. Asthma should 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.

SIGN clinical guideline 101 (2009). SIGN and BTS. British Guideline on the Management of Asthma. http://www.sign.ac.uk/pdf/qrg101.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 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.

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

Asthma 1.2 Reporting and verification

Asthma 1.2.1
The practice reports the number of patients with active asthma (i.e. a diagnosis of asthma, excluding those who have had no prescription issued for an asthma-related drug in the preceding 12 months) and the number of patients with active asthma (i.e. diagnosis of asthma, excluding those who have had no prescription issued for an asthma-related drug in the preceding 12 months) as a proportion of their practice list size.

Asthma 1.2.2
Practices should be able to report the number of patients with inactive asthma (i.e. those who have a diagnosis of asthma who have had no asthma-related drug issued in the preceding 12 months) and the number of patients with inactive asthma (i.e. those who have a diagnosis of asthma who have had no asthma-related drug issued in the preceding 12 months) as a proportion of their practice list size.

Verification – may require a comparison of the expected prevalence with the reported prevalence.

Asthma indicator 8

The percentage of patients aged 8 years and over, diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.

Asthma 8.1 Rationale
Accurate diagnosis is fundamental in order to avoid untreated symptoms as a result of under-diagnosis, and inappropriate treatment as a result of over-diagnosis. Both scenarios have implications both to the health of the patient and the cost of providing healthcare. National and international guidelines emphasise the importance of demonstrating variable lung function in order to confirm the diagnosis of asthma. Variability of PEF and FEV_1, either spontaneously over time or in response to therapy is a characteristic feature of asthma.

SIGN Guideline 101 states: "…measurements of airflow limitation, its reversibility and its variability are considered critical in establishing a clear diagnosis of asthma" (Global Initiative for Asthma http://www.ginasthma.org). One peak flow measurement provides no information about variability and therefore can neither confirm, nor refute, the diagnosis.

Objective measurement of variability either spontaneously over time or in response to therapy is thus fundamental to the diagnosis of asthma and may be conveniently achieved in primary care with serial peak flow measurements. Significant variability in peak flow is defined as a change of 20 per cent or greater with a minimum change of at least 60l/min ideally for three days in a week for two weeks seen over a period of time and may be demonstrated by monitoring diurnal variation, demonstrating an increase after therapy (15 minutes after short-acting bronchodilator, after six weeks inhaled steroids, two weeks oral steroids) or a reduction after exercise or when the patient next meets their trigger. Spirometry (greater than 15 per cent and 200ml change in FEV_1) may still be used to confirm variability, though the limitation imposed by a surgery based measurement means that changes over time may be missed.

It is important to recognise that while repeated normal readings in a symptomatic patient cast doubt on a diagnosis of asthma, the natural variation of the disease means that many patients with asthma will not necessarily have significant variability at any given time. Confirmation of the diagnosis may therefore require further recordings e.g. during a subsequent exacerbation. In circumstances of persisting doubt then more specialist assessment is required which may include hyper-responsiveness testing and consideration of alternative diagnoses.

It is of note that a proportion of patients with COPD will also have asthma i.e. they have large reversibility – 400mls or more on FEV_1 – but do not return to over 80 per cent predicted, and a significant smoking history. Evidence would suggest that this should not usually be more than 15 per cent of the overall COPD population.

Asthma 8.2 Reporting and verification
The practice reports the percentage of patients aged eight or over diagnosed as having asthma after 1 April 2006 with measures of variability or reversibility.

Asthma indicator 3

The percentage of patients with asthma between the ages of 14 and 19 years in whom there is a record of smoking status in the preceding 15 months.

Asthma 3.1 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.

The number of 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 recovery from an acute attack. There is also epidemiological evidence that smoking is associated with poor asthma control[81].

It is recommended that smoking cessation be encouraged as it is good for general health and may decrease asthma severity[82].

Asthma 3.2 Reporting and verification
The practice reports the percentage of patients on the asthma register between the ages of 14 and 19 years where smoking status has been recorded in the preceding 15 months.

Asthma indicator 6

The percentage of patients with asthma who have had an asthma review in the preceding 15 months.

Asthma 6.1 Rationale
Structured care has been shown to produce benefits for patients with asthma. The recording of morbidity, PEF levels, inhaler technique and current treatment and the promotion of self-management skills are common themes of good structured care. SIGN/BTS proposes a structured system for recording inhaler technique, morbidity, PEF levels, current treatment and asthma action plans.

National and international guidelines recommend the use of standard questions for the monitoring of asthma. Proactive structured review, as opposed to opportunistic or unscheduled review, is associated with reduced exacerbation rate and days lost from normal activity.

The QOF suggests the utilisation of the RCP three questions 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)?
- Has your asthma interfered with your usual activities e.g. housework, work/school etc?

[81] See Price et al. Clin Exp Allergy 2005; 35: 282-287.
[82] Thomson et al. Eur Respir J 2004; 24: 822 – 833

Guidelines suggest it should be abnormal in patients with mild to moderate asthma to have any nocturnal waking or activity limitation. Asthma symptoms may be expected on up to three days per week.

If asthma appears to be uncontrolled the following should be examined as part of the asthma review before increasing asthma therapy and treated appropriately:

- smoking behaviour as smoking interferes with asthma control
- poor inhaler technique
- inadequate adherence with regular preventative asthma therapy
- rhinitis.

There is increasing evidence for personalised asthma action plans in adults with persistent asthma. Practices 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 patients' best peak flow, i.e. their peak flow when they are well. Many guidelines for exacerbations are based on the ratio of current to best peak flows. For patients over the age of 18 years there need be no particular time limit on when the best peak flow was measured although in view of the reduction of peak flow with age it is recommended that the measurement be within the preceding five years. For patients aged 18 years and under the peak flow will be changing; therefore it is recommended that the best peak flow should be re-assessed annually.

Inhaler technique should be reviewed regularly. National and international guidelines emphasise the importance of assessing ability to use inhalers before prescribing, and regularly reviewing technique, especially if control is inadequate. Prescribe inhalers only after patients have received training in the use of the device and have demonstrated satisfactory technique. Reassess inhaler technique as part of structured clinical review.

See SIGN guideline 101 (SIGN and BTS) British Guideline on the Management of Asthma 2008

Summary of Asthma Review:

- assess symptoms (using RCP 3 questions)
- measure peak flow
- assess inhaler technique
- consider personalised asthma plan.

If asthma appears to be uncontrolled follow steps as outlined above. It is recognised that a significant number of patients with asthma do not regularly attend for review. For this reason the percentage achievement for the asthma indicators has been set at a lower level compared to process indicators in some other chronic disease areas.

Asthma 6.2 Reporting and verification
The practice reports the percentage of patients on their asthma register who have had an asthma review in the preceding 15 months.

Verification – may require randomly selecting a number of case records of patients in which the review has been recorded as taking place in order to confirm that the four elements have been addressed.

Dementia

Indicator	Points	Payment stages
Records		
DEM1. The practice can produce a register of patients diagnosed with dementia	5	
Ongoing management		
DEM2. The percentage of patients diagnosed with dementia whose care has been reviewed in the preceding 15 months	15	25–60%
DEM3. The percentage of patients with a new diagnosis of dementia (from 1 April 2011) with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded 6 months before or after entering on to the register *NICE menu ID: NM09*	6	40–80%

Dementia – 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 80 years of age. The annual incidence of vascular dementia is 1.2/100 overall person years at risk and is the same in all age groups. Alzheimer's disease accounts for 50 - 75 per cent of cases of dementia.

The annual incidence of dementia of the Alzheimer 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 when there is altered functioning in terms of activities of daily living.

Dementia (DEM) indicator 1

The practice can produce a register of patients diagnosed with dementia.

Dementia 1.1 Rationale
A register is a pre-requisite for the organisation of good primary care for a particular patient group. 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.

Dementia 1.2 Reporting and verification
The practice reports the number of patients with dementia on its register and the number of people with dementia as a proportion of its list size.

Dementia (DEM) indicator 2

The percentage of patients diagnosed with dementia whose care has been reviewed in the preceding 15 months.

Dementia 2.1 Rationale
The face to face review should focus on support needs of the patient and their carer. In particular the review should address 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 coordination arrangements with secondary care (if applicable).

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

- concurrent physical conditions (e.g. joint pain or intercurrent 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 should also be considered since it is more common in people with dementia than those without[83].

Further information
The Audit Commission Report (2002). Forget Me Not.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

Both recommend that patients and carers should 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 dementia[84]. As the illness progresses, needs may change and the review may focus more on issues such as respite care.

[83] Burt et al. *Psychol Bull* 1995; 117: 285-305
[84] 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 should contact the carer's own GP for further support and treatment[85].

As the illness progresses and more agencies are involved, the review should 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 42 (2006). Dementia. Supporting people with dementia and their carers in health and social care. http://guidance.nice.org.uk/CG42/NICEGuidance/pdf/English

No decision has been taken on the endorsement of clinical guideline 42 in Northern Ireland but the position is under review. Information on NICE guidance endorsed in NI may be found at: http://www.dhsspsni.gov.uk/sqsd-guidance-nice-guidance

NICE public health guidance 16 (2008). Mental wellbeing in older people.
http://guidance.nice.org.uk/PH16/NICEGuidance/pdf/English

SIGN clinical guideline 86 (2006). Managing patients with dementia.
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

Dementia 2.2 Reporting and verification
The practice reports the percentage of patients with dementia on its register who have had their care reviewed in the preceding 15 months.

Verification – may require randomly selecting a number of case 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.

Dementia (DEM) 3 (NICE menu NM03)

The percentage of patients with a new diagnosis of dementia (from 1 April 2011) with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded 6 months before or after entering on to the register.

Dementia 3.1 Rationale
There is no universal consensus on the appropriate diagnostic tests that should be undertaken in those with suspected dementia. However, a review of 14 guidelines and consensus statements found considerable similarity in recommendations[86]. The main reason for undertaking investigations in a person with suspected dementia is to exclude a potentially

[85] see Eccles et al. *BMJ* 1998; 317: 802-808
[86] Beck C, Cody M, Souder E et al. (2000) Dementia diagnostic guidelines: methodologies, results, and implementation costs. Journal of the American Geriatrics Society 48: 1195–1203

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).

However, it should be noted that in recent studies the prevalence of reversible dementias was found to be low. Thirty nine studies were reviewed including over 7,000 cases of dementia, and found potentially reversible causes in nine per cent though dementia was actually reversed in only 0.6 per cent of cases[87].

The NICE clinical guideline on dementia[88] states that a basic dementia screen should be performed at the time of presentation, usually within primary care. It should include:

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

Dementia 3.2 Reporting and verification
The practice reports the percentage of patients on the dementia register diagnosed from 1 April 2011 who have had tests for FBC, calcium, glucose, renal, liver and thyroid function, and have serum vitamin B12 and folate levels, recorded up to six months before or six months after entering on to the register.

[87] Clarfield AM (2003) The decreasing prevalence of reversible dementias: an updated meta-analysis. Archives of Internal Medicine 163: 2219–2229
[88] NICE clinical guideline 42 (2006). Dementia. Supporting people with dementia and their carers in health and social care. www.nice.org.uk/CG42

Depression

Indicator	Points	Payment stages
Diagnosis and initial management		
DEP1. The percentage of patients on the diabetes register and /or the CHD register for whom case finding for depression has been undertaken on one occasion during the preceding 15 months using two standard screening questions	6	40–90%
DEP4. In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the time of diagnosis using an assessment tool validated for use in primary care *NICE menu ID: NM10*	17	40–90%
DEP5. In those patients with a new diagnosis of depression and assessment of severity recorded between the preceding 1 April to 31 March, the percentage of patients who have had a further assessment of severity 4 - 12 weeks (inclusive) after the initial recording of the assessment of severity. Both assessments should be completed using an assessment tool validated for use in primary care *NICE menu ID: NM11*	8	40–80%

Depression – rationale for inclusion of the indicator set

Depression is common and disabling.

In 2000, the estimated point prevalence for a depressive episode among 16 – 74-year-olds 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 13.6per cent[89]. 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 diseases[90]. 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.

[89] NICE clinical guideline 90 (2009). The treatment and management of depression in adults. http://guidance.nice.org.uk/CG90

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

Depression (DEP) indicator 1

The percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression has been undertaken on one occasion during the preceding 15 months using two standard screening questions.

Depression 1.1 Rationale
Depression is more common in people with CHD and presence of depression is associated with poorer outcomes. Up to 33 per cent of patients develop depression after a myocardial infarction[91].

The presence of depression in people with CHD is associated with reduced compliance with treatment, increased use of health resources, increased social isolation and poorer outcomes[92].

A meta-analysis of 20 trials[93] found that depressive symptoms and clinical depression in people with CHD increased mortality for all follow-up periods even after adjustment for other risk factors. In other words, depression was an independent risk factor for mortality in people with CHD. There is Grade A evidence from two randomised controlled trials that (selective serotonin reuptake inhibitors) SSRI antidepressant treatment in people with CHD is safe and effective in reducing depression, at least among those with a prior history of depression and more severe symptoms[94]. Patients treated with an SSRI were also found to have a 42 per cent reduction in death or recurrent MI in a sub-group analysis of outcomes in a trial of cognitive behavioural therapy (CBT), although this was a post-hoc observation, and assignment to antidepressants was not randomised[95].

There is a 24 per cent lifetime prevalence of co-morbid depression in individuals with diabetes mellitus[96] a prevalence rate three times higher than the general population. A recent meta-analysis of 42 studies found that depression is clinically relevant in nearly one in three patients with diabetes[97]. People with both diabetes and depression are less physically and socially active[98] and less likely to comply with diet and treatment than people with diabetes alone, leading to worse long term complications and higher mortality. It may also be that practitioners provide poorer care to patients with co-morbid depression and diabetes because depression impairs communication with patients[99]. There is good evidence from five randomised controlled trials that effective treatment with either antidepressants or CBT improves the outcome of depression in patients with diabetes[100]. While treatment has not been shown consistently to improve glycaemic control, psychological well-being has been identified as an important goal of diabetes management in its own right by the St Vincent Declaration.

NICE guidance on depression suggests that "screening should be undertaken in primary care …for depression in high-risk groups" and that "screening for depression should include the use of at least two questions concerning mood and interest:

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[91] Davies et al. BMJ 2004; 328: 939-943
[92] Carney et al, *American Journal of Cardiology* 2003;92(11): 1277-81
[93] Barth et al. *Psychosomatic Medicine* 2004; 66: 802-13
[94] Glassman et al. *Journal of the American Medical Association* 2002; 288: 701-709; Taylor et al. *Archives of General Psychiatry* 2005; 62: 792-798
[95] Lesperance et al. *Journal of the American Medical Association* 2007; 297: 367-379
[96] Goldney et al. *Diabetes Care* 2004; 27(5): 1066-70
[97] Anderson et al. *Diabetes Care* 2001; 24: 1069-78
[98] Von Korf et al. *Psychosomatic Medicine* 2005; 67: 233-40
[99] Piette et al. *American Journal of Managed Care* 2004; 10: 152-162
[100] Lustman et al. *Psychosomatic Medicine* 1997; 59: 241-50; Lustman et al. *Annals of Internal Medicine* 1998; 129: 613-621; Lustman et al. *Diabetes Care* 2000; 23: 618-23; Katon et al. *Archives of General Psychiatry* 2004; 61: 1042-49; Williams et al. *Annals of Internal Medicine* 2004; 140: 1015-24

- during the last month, have you often been bothered by feeling down, depressed or hopeless?; and
- during the last month, have you often been bothered by having little interest or pleasure in doing things?"

A "yes" answer to either question is considered a positive test. A "no" response to both questions makes depression highly unlikely. These two brief questions could be asked as part of a diabetes or CHD review and patients who answer "yes" to either questions could be referred to the GP for further assessment of other symptoms such as tiredness, guilt, poor concentration, change in sleep pattern and appetite and suicidal ideation to confirm a diagnosis of depression. This assessment should be informed by using a questionnaire measure of severity such as the PHQ-9, HADS, or BDI, as used for the DEP4 indicator[101].

The specificity of screening has been shown to be improved by the addition of a third 'help' question asked of patients answering 'yes' to either of the first two questions: Is this something with which you would like help?[102]. This third question has three possible responses: 'no', 'yes, but not today', or 'yes'. A 'no' response to this third question makes major depression highly unlikely (negative predictive value (NPV) of 94 per cent). It is important to stress therefore that a negative result to the two to three item screen can usually be taken to indicate that the patient doesn't have depression.

Depression 1.2 Reporting and verification
The practice reports the percentage of patients on their diabetes and CHD registers whose records show that they have been screened for depression using the two standard questions. This screening will have been recorded in the preceding 15 months. These questions should be asked as part of a consultation and should not be posted to patients.

Verification – may require randomly selecting a number of case records of patients in whom screening has been undertaken to ensure that the two standard questions are being used.

Depression (DEP) Indicator 4 (NICE menu NM10)

In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the time of diagnosis using an assessment tool validated for use in primary care.

Depression 4.1 Rationale
This indicator applies to adults aged 18 years and over with a new diagnosis of depression in the preceding 1 April to 31 March. This indicator does not include women with postnatal depression.

Assessment of severity in patients with depression is essential to decide on appropriate interventions and improve the quality of care. An assessment of severity as close as possible to the time of diagnosis enables a discussion with the patient about relevant treatment and options, guided by the stepped care model of depression described in the NICE clinical guideline 90. The guideline states, for example, that antidepressants are not recommended for the initial treatment of mild depression but should be routinely considered for all patients with moderate or severe depression. The British Association of Psychopharmacology guideline on treating depressive disorders with antidepressants state 'that antidepressants are a first-line treatment for moderate to severe major depression irrespective of environmental factors and that

[101] see also Whooley et al. *Journal of General Internal Medicine* 1997; 12 (7): 439-45
[102] Arroll et al. *British Medical Journal* 2005; doi:10.1136/bmj.38607.464537.7c

antidepressants are not indicated for milder depression unless it has persisted for two years or more' ('dysthymia')[103].

The three suggested severity measures validated for use in a primary care setting are the nine item Patient Health Questionnaire (PHQ-9), the Beck Depression Inventory, second edition (BDI-II) and the Hospital Anxiety and Depression Scale (HADS). It is advisable for a practice to choose one of these measures and become familiar with its questions and scoring systems.

Patient Health Questionnaire
The PHQ-9 is a nine-question self-report measure of severity that takes approximately three minutes to complete. It uses the 'Diagnostic and Statistical Manual of Mental Disorders, fourth edition' (DSM-IV) criteria for depression and scores are categorised as minimal (1–4), mild (5–9), moderate (10–14), moderately severe (15–19) and severe depression (20–27). It was developed and validated in the United States and can be downloaded free of charge: http://www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/

Hospital Anxiety and Depression Scale
Despite its name, the HADS has been validated for use in community and primary care settings. It is self-administered and takes up to five minutes to complete. It comprises seven questions rated from a score of zero to three depending on the severity of the problem described in each question. The two subscales can also be aggregated to provide an overall anxiety and depression score. The anxiety and depression scores are categorised as normal (0–7), mild (8–10), moderate (11–14) and severe (15–21).

The HADS allows the severity of both anxiety and depression to be established simultaneously. Separate scores are given for anxiety and depression, which are independent measures. The HADS can be ordered from: http://shop.gl-assessment.co.uk/home.php?cat=417&gclid=CPPr3fjJhpkCFQ6wQwodI2Krlw

The HADS depression subscale (HAD-D) has 90 per cent sensitivity and 86 per cent specificity for depression compared to the gold standard of a structured diagnostic interview[104 105].

Beck Depression Inventory, second edition
The BDI-II is a 21 item self-report instrument that uses DSM-IV criteria. It takes approximately five minutes to complete. A total score of 0 – 13 is considered minimal range, 14 – 19 is mild, 20 – 28 is moderate and 29 – 63 is severe. The instruments and manuals can be ordered online from: www.pearson-uk.com/product.aspx?n=1316&s=1322&cat=1426&skey=2646&gclid=CIuxq5CioZMCFQ6KMAodj16TrQ

Not all severity assessment measures map directly onto NICE guidance, which uses ICD-10 symptoms in defining mild, moderate, severe and severe depression with psychotic symptoms. However, the underlying principle of all three suggested measures is that a higher score indicates greater severity requiring different types of intervention.

Recent research has shown that the use of severity measures is valued by patients and that doctors' intervention and referral rates are related to the scores on the measures. Qualitative interviews with patients who had been assessed with the measures revealed that they saw them

[103] Anderson IM, Ferrier IN, Baldwin RC et al. (2008) Evidence-based guidelines for treating depressive disorders with antidepressants: a revision of the 2000 BAP guidelines. Journal of Psychopharmacology 22: 343–96. www.bap.org.uk/pdfs/antidepressants.pdf
[104] Zigmond AS, Snaith RP (1983) The hospital anxiety and depression scale. Acta Psychiatr Scand 67: 361–70
[105] Wilkinson MJ, Barczak P (1988) Psychiatric screening in general practice: comparison of the general health questionnaire and the hospital anxiety depression scale. Journal of the RCGP 38: 311–3

as evidence that GPs were carrying out a full assessment which helped them to receive intervention in line with the severity of their depression. The measures also helped some patients to understand how their different symptoms made sense when considered together as the syndrome of depression[106].

Prior to the introduction of the questionnaire measures into the QOF, an audit was carried out of the use of the HAD-D by volunteer GPs in Southampton. The likelihood of being prescribed an antidepressant increased significantly with severity on the HAD-D measure and was associated with improved targeting of antidepressant treatment when compared to a study carried out in the same area prior to the introduction of the HAD-D measure[107].

A more recent analysis of the use of the two most commonly used measures (the PHQ-9 and HAD-D) in 38 practices in three centres also found that rates of intervention and referral increased in line with higher scores. However, it was found that overall rates of intervention and referral were very similar for patients assessed with either measure, despite the fact that the PHQ-9 classified significantly more patients as moderately to severely depressed and in need of intervention, compared to the HAD-D. These results suggest practitioners do not decide on drug treatment or referral on the basis of the severity questionnaire scores alone[108]. They also suggest that the two most commonly used measures are inconsistent, the PHQ-9 rating more people above the recommended threshold for intervention than the HAD-D. This is consistent with other new evidence suggesting the thresholds for intervention for these instruments should be revised.

Revised thresholds for intervention

A study in which the PHQ-9 and HAD-D were administered together to a single sample of patients also found that a greater proportion of the sample was classified as depressed according to the PHQ-9 compared with the HAD-D[109]. Validation studies against more extensive 'gold standard' diagnostic assessments have suggested that the validity of the measures in terms of identifying major depressive disorder could be improved by using a more conservative cut-off score of 12 rather than ten on the PHQ-9 and a less conservative cut-off of ten rather than 11 on the HAD-D [110], [111]. Changing the recommended threshold scores for intervention would therefore make these measures more valid against longer assessments, more consistent with each other, and more consistent with practitioners' clinical judgment.

The revised recommended thresholds for considering intervention are therefore:

- PHQ-9 score: 12
- HAD-D score: 10
- BDI-II score: 20

However, it is important to stress that symptom scores alone should not be used to determine the presence of depression which needs treatment.

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[106] Dowrick C, Leydon GM, McBride A et al. (2009) Patients' and doctors' views on depression severity questionnaires incentivised in UK the QOF: qualitative study. BMJ 19: 338

[107] Kendrick T, King F, Albertella L et al. (2005) GP treatment decisions for patients with depression. British Journal of General Practice 55: 280–6

[108] Kendrick T, et al. BMJ, in press.

[109] Cameron I, Crawford J, Lawton K et al. (2008) Psychometric comparison of PHQ-9 and HADS for measuring depression severity in primary care. British Journal of General Practice 58: 32–6

[110] Löwe B, Spitzer RL, Gräfe K et al. (2004) Comparative validity of three screening questionnaires for DSM-IV depressive disorders and physicians' diagnoses. J Affect Disord 78: 131–40

[111] Gilbody S, Richards D, Barkham M (2007) Diagnosing depression in primary care using self-completed instruments: UK validation of PHQ-9 and CORE-OM. British Journal of General Practice 57: 650–2

It is also important for clinicians to consider family and previous history as well as the degree of associated disability and patient preference in making an assessment of the need for treatment, rather than relying completely on a single symptom count at one point in time.

Decisions about treatment and referral should take into account the:

- severity of symptoms (assessed clinically as well as with a measure)
- functional impairment (significant effects on work and daily activities)
- duration (watchful waiting for around eight weeks for mild symptoms)
- course (trajectory of scores, past history).

In addition, the PHQ-9 and the BDI-II have not been validated in terms of their cultural sensitivity and it is important to bear this in mind if using them with black and minority ethnic populations.

Depression 4.2 Reporting and verification
The practice reports the percentage of patients with a new diagnosis of depression whose notes record that they have had an assessment of severity at the time of diagnosis, defined as within 28 days of the initial diagnosis. New diagnoses are those which have been made between the preceding 1 April to 31 March. The practice should also report in each patient record which of the three assessment tools they used.

Verification – may require randomly selecting a number of case records of patients with a new diagnosis of depression to verify that their notes record an assessment of severity.

Timeframe
The original DEP2 indicator was introduced to QOF in April 2006. From April 2009 the associated business rules were revised to deal with a cross-year indicator where workload spans more than one QOF year, to:

- ensure fair and consistent payments to all practices
- ensure that patients who were diagnosed in the last three months of the QOF year are identified

The QOF is set up to support annual activity that is completed in one QOF calendar year, which runs from 1 April to 31 March. Prior to the business rule change in April 2009, any patient newly diagnosed with depression between January and February would have been removed from the denominator, due to the new diagnosis exception criteria. Furthermore, because the indicator specifically relates to a new diagnosis, the same patient would not be picked up in the following QOF year.

The depression indicator business rules were therefore revised, from 1 April 2009, to cover 15 months so as to address this issue.

DEP2 was reviewed and updated through the NICE process and replaced by DEP4 in April 2011. The above explanation for the timeframe and the business rules still applies.

Depression (DEP) indicator 5 (NICE menu NM11)

In those patients with a new diagnosis of depression and assessment of severity recorded between the preceding 1 April to 31 March, the percentage of patients who have had a further assessment of severity 4 –12 weeks (inclusive) after the initial recording of the assessment of severity. Both assessments should be completed using an assessment tool validated for use in primary care.

Depression 5.1 Rationale
The rationale for such follow-up measurement is derived from the recognition that depression is often a chronic disease, yet treatment is often episodic and short-lived.[112]

The change to the wording of this indicator, from 5 – 12 weeks to 4 – 12 weeks, recognises that in clinical practice most prescriptions or follow-up appointments are given for one, two or four weeks at this stage in the illness.

If treatment with antidepressants is initiated, patients should be followed-up regularly for several months. The NICE clinical guideline 90 recommends that 'for people started on antidepressants who are not considered to be at increased risk of suicide, normally see them after two weeks. See them regularly thereafter, for example at intervals of two to four weeks in the first three months and then at longer intervals if the response is good. 'Early cessation of treatment is associated with a greater risk of relapse.

The guideline also suggests that a person who has benefited from taking an antidepressant should continue medication for at least six months after remission of an episode of depression. However, one study showed that only up to one-third of patients prescribed antidepressants were still receiving medication at four to six months[113].

Analysis of the GP Research Database for the years 1993 to 2005 has confirmed this finding: more than half of patients treated with antidepressants for a new diagnosis of depression during those years received prescriptions for only one or two months of treatment, and that this pattern had not changed over the 13 year period[114].

If drug treatment is not started after the initial diagnosis, patients should in any case be reassessed to see whether their symptoms have resolved or worsened to the point where treatment becomes advisable.

Recent research into the use of severity measures has shown that patients whose GPs used the measures for follow-up in addition to initial assessment valued having repeated scores to help monitor their progress and assess the effectiveness of treatment[115]. Most of the GPs interviewed for the same study believed that there was value in repeating the score as a way of monitoring patients' progress.

[112] Kates N, Mach M (2007) Chronic disease management for depression in primary care: a summary of the current literature and implications for practice. Canadian Journal of Psychiatry 52: 77-85
[113] Donoghue J (2000) Antidepressant use patterns in clinical practices: comparisons among tricyclic antidepressants and selective serotonin reuptake inhibitors. Acta Psychiatrica Scandinavica 101: (suppl 403): 57–61
[114] Moore M, Yuen HM, Dunn N et al. (2009) Explaining the rise in antidepressant prescribing: a descriptive study using the GPRD. BMJ 339: b3999
[115] Dowrick C, Leydon GM, McBride A et al. (2009) Patients' and doctors' views on depression severity questionnaires incentivised in the UK QOF: qualitative study. BMJ 338: b6636.

The nine item Patient Health Questionnaire (PHQ-9) has been shown to be a responsive and reliable measure for gauging response to treatment in individual patient care.[116]

Depression 5.2 Reporting and verification
The practice reports the percentage of patients with a new diagnosis of depression whose notes record that they have had an assessment of severity 4 – 12 weeks (inclusive) after the initial recording of the assessment of severity related to a new diagnosis of depression. New diagnoses are those which have been made between the preceding 1 April to 31 March. To be included in the numerator for this indicator a patient needs to have had both an initial and a subsequent severity assessment.

Practices also report in each patient record which of the three assessment tools they used.

Verification – may require randomly selecting a number of case records of patients with a new diagnosis of depression to verify that their notes record a follow-up assessment of severity 4 – 12 weeks after the initial assessment of severity.

Timeframe
The DEP3 indicator was introduced to QOF in April 2009 and for that reason, the first line of the supporting business rules excluded patients newly diagnosed before April 2009. The business rules for DEP3, like DEP2 (now DEP4), were structured to take account of the cross-year issue which ensures fair and consistent payment to practices and good patient care. The business rules therefore look back 68 weeks to address this issue.

DEP3 was reviewed and updated through the NICE process and replaced by DEP5 in April 2011. The above explanation for the timeframe and the business rules still applies.

[116] Löwe B, Unützer J, Callahan CM et al. (2004) Monitoring depression treatment outcomes with the PHQ-9. Medical Care 42: 1194-1201

Chronic kidney disease (CKD)

Indicator	Points	Payment stages
Records		
CKD1. The practice can produce a register of patients aged 18 years and over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD)	6	
Initial management		
CKD2. The percentage of patients on the CKD register whose notes have a record of blood pressure in the preceding 15 months	6	40–90%
Ongoing management		
CKD3. The percentage of patients on the CKD register in whom the last blood pressure reading, measured in the preceding 15 months, is 140/85 or less	11	40–70%
CKD5. The percentage of patients on the CKD register with hypertension and proteinuria who are treated with an angiotensin converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded)	9	40–80%
CKD6. 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 15 months	6	40–80%

Chronic kidney disease – rationale for inclusion of indicator set

The international classification developed by the US National Kidney Foundation describes five stages of Chronic Kidney Disease (CKD) using an estimated glomerular filtration rate (eGFR) to measure kidney function (see table three). People with CKD stages three to five have, by definition, less than 60 per cent of their kidney function. Stage three is a moderate decrease in 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 4). Stage four is a severe decrease in GFR with or without other evidence of kidney damage and stage five is established renal failure. The QOF indicator set refers to people 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 cent[117]. The prevalence in females was higher than in males (6.9 per cent

[117] Coresh et al *JAMA. 2007;298(17):2038-2047*

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% CI, 1.28-1.80) and hypertension (OR, 1.98; 95%CI, 1.73-2.67) as well as higher BMI (OR, 1.08; 95% CI, 1.02-1.15 per 5-unit increment of BMI).

In the UK the prevalence of CKD stage 3–5 was 8.5 per cent and was higher in females, 10.6 per cent in females versus 5.8 per cent in males[118]. The Association of Public Health Observatories (APHO) 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:

http://www.apho.org.uk/resource/item.aspx?RID=65647
http://www.apho.org.uk/resource/item.aspx?RID=63798

The NHS Information Centre reports a prevalence of CKD for 2009/10 of 4.3 per cent using QMAS returns suggesting that, to date, CKD is under-reported in English GP practices.

Table 4: Estimated glomerular filtration rate (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 1.73m^2

Further information
National service framework for Renal Services (2005).
http://www.kidney.org.uk/campaigns/Renal-nsf/nsf-pt2.pdf

This indicator set applies to people with stage three, four and five CKD (eGFR <60mL/min/1.73m^2 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 people with stage one or two CKD go on to develop more advanced disease and symptoms do not usually appear until stage four. Where eGFR has persistently been recorded below 60 (<60) the CKD (stage 3) label should continue to apply, even if future management may lead to an improvement in eGFR.

[118] Stevens et al. Kidney International 2007; 72: 92-9

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 cardiovascular disease. 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 factors[119].

Further information
NICE clinical guideline 73 (2008). Early identification and management of CKD in adults in primary and secondary care. http://www.nice.org.uk/CG73

SIGN clinical guideline 103 (2008). Diagnosis and management of CKD in adults. http://www.sign.ac.uk/guidelines/fulltext/103/index.html

These indicators reflect both of the guidance documents:

- Albumin:creatinine ratio (ACR) is the preferred measure of proteinuria
- NICE suggests BP should be 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 BP audit standard of 145/85 in this guidance for 40 to 70 per cent of the CKD population
- NICE recommends that the use of ACE-I when there is hypertension and an ACR of ≥30mg/mmol. However, when ACR ≥70mg/mmol NICE recommends ACE-I even in the absence of hypertension. As with BP there are stricter standards in diabetes
- NICE divides stage three into stage 3a and 3b. They recommend testing for bone disease and anaemia in stage 3b (eGFR 30 to 44), as well as stages four and five
- NICE also recommends addition of the suffix (p) to denote significant proteinuria, defined as an ACR ≥30 mg/mmol (PCR ≥50 mg/mmol)

The QOF indicators are likely to converge with NICE guidance over coming years.

Chronic kidney disease (CKD) indicator 1

The practice can produce a register of patients aged 18 years and over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD).

Chronic kidney disease 1.1 Rationale
Patients aged 18 years and over with a persistent estimated GFR or GFR of <60ml/min/1.73m^2 should be included in the register. From 2006, eGFR has been reported automatically when serum creatinine concentration is measured. Studies of general practice computerised medical records show that it is feasible to identify people with CKD[120] and that computer records are a valid source of data[121].

The compilation of a register of people 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 protein containing meal 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.

[119] Wali and Henrich. Cardiol Clin 2005; 23(3): 343-62
[120] de Lusignan et al. Fam Pract 2005; 22(3): 234-41
[121] Anandarajah et al. Nephrol Dial Transplant 2005; 20(10): 2089-96

Chronic kidney disease 1.2 Reporting and verification
The practice reports the number of patients on its CKD register and the number of patients with CKD as a proportion of total list size.

Chronic kidney disease (CKD) indicator 2

The percentage of patients on the CKD register whose notes have a record of blood pressure in the preceding 15 months.

Chronic kidney disease 2.1 Rationale
Studies show that reducing blood pressure in people with CKD reduces the rate of deterioration of their kidney function whether or not they have hypertension or diabetes.[122]

Chronic kidney disease 2.2 Reporting and verification
The practice reports the percentage of patients on its CKD register who have had a blood pressure measurement recorded in the preceding 15 months.

Chronic kidney disease (CKD) indicator 3

The percentage of patients on the CKD register in whom the last blood pressure reading, measured in the preceding 15 months, is 140/85 or less.

Chronic kidney disease 3.1 Rationale
Studies have shown that in people over 65 years and in people with diabetes, normal blood pressure is hard to achieve but is important[123].

See also the BHSOC guidelines 2004[124]. This suggests an "optimal" BP target in CKD of 130/80 mmHg or 127/75 mmHg if >1g proteinuria. These targets in turn are derived from the Modification of Diet in Renal Disease study[125].

In practice, these targets are often hard to achieve and the indicator's 40 per cent to 70 per cent audit standard reflects this. The lower the blood pressure achieved the better for patient care; 140/85 mmHg is used here as an audit standard for this indicator.

Further information
NICE clinical guideline 73 (2008). CKD in adults in primary and secondary care.
http://www.nice.org.uk/Guidance/CG73

SIGN clinical guideline 103 (2008). Diagnosis and management of CKD in adults.
http://www.sign.ac.uk/guidelines/fulltext/103/index.html

Chronic kidney disease 3.2 Reporting and verification
The practice reports the percentage of patients on its CKD register whose last recorded blood pressure measurement is 140/85 mm Hg or less. This reading should have been in the preceding 15 months.

[122] Jafar et al. Ann Int Med 2003; 139: 244-52
[123] Anderson et al. American Journal of Kidney Disease 2005; 45(6): 994-1001
[124] Williams et al. J Human Hypertension 2004; 18: 139-185 (specific renal advice on pages 166-7).
[125] Klahr et al. NEJM 1994; 330: 877-884; Peterson et al. Ann Int Med 1995; 123: 754-762

Chronic kidney disease (CKD) indicator 5

The percentage of patients on the CKD register with hypertension and proteinuria who are treated with an angiotensin converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded).

Chronic Kidney Disease 5.1 Rationale
ACE inhibitors 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-effective[126].

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 albumin-creatinine ratio (ACR) or protein:creatinine ratio (PCR) in the urine or to use a stick test.

SIGN guidance also recommends measuring proteinuria with ACR in patients with diabetes and TPCR in non-diabetic patients, reflecting the differing evidence base for theses two patient populations whereas recent NICE guidance has suggested that the ACR should be used in all patients.

Further information
NICE clinical guideline 73 (2008). CKD in adults in primary and secondary care.

SIGN clinical guideline 103 (2008). Diagnosis and management of CKD in adults.

Thus, patients with non-diabetic stage 3 to 5 CKD should have an annual test of proteinuria ideally using ACR, or PCR according to local guidance. People with diabetes already have an annual micro:albuminuria test.

A systematic review has shown that investigation for infection of asymptomatic people with one "+" or more of is not indicated[127]. Practitioners should only go on to send off a midstream urine or perform another test to look for infection if there are symptoms.

It is not possible to derive a simple correction 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 5).

Table 5: Approximate equivalent ACR, PCR and 24-hour urinary protein excretion

Albumin:creatinine ratio (mg/mmol)	Protein:creatinine ratio (mg/mmol)	24 hour urinary protein excretion (g/day)
30	50	0.5
70	100	1

[126] 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
[127] Carter JL et al Nephrol Dial Transplant. 2006 Nov; 21(11):3031-7

Chronic kidney disease 5.2 Reporting and verification
The practice reports the percentage of patients on its CKD register with hypertension and proteinuria whose records show they have been prescribed an ACE-I or an angiotensin receptor blocker (ARB) in the preceding six months.

Chronic kidney disease (CKD) indicator 6

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 15 months

Chronic kidney disease 6.1 Rationale
Quantitative measurement of proteinuria will enable appropriate management of patients with CKD. There is good observational evidence linking proteinuria to adverse outcome.[128]

NICE recommends the use of ACE inhibitors when there is hypertension and an ACR of ≥30mg/mmol. When ACR ≥70mg/mmol NICE recommends ACE-1 are prescribed; even in the absence of hypertension.

SIGN recommends the use of ACE-1 and/or ARBs as agents of choice in patients with proteinuria >0.5g/day (approximately equivalent to a PCR of >50mg/mmol).

As with BP there are stricter standards for those with diabetes; ACR >2.5mg/mmol in men and >3.5mg/mmol in women – with or without hypertension.

Chronic kidney disease 6.2 Reporting and verification
The practice reports the percentage of patients on its CKD register who have an ACR or PCR test recorded in the preceding 15 months.

[128] 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 Soc Nephrol. 2008; 19(9):1785-91

Atrial fibrillation

Indicator	Points	Payment stages
Records		
AF1. The practice can produce a register of patients with atrial fibrillation	5	
Initial diagnosis		
AF4. The percentage of patients with atrial fibrillation diagnosed after 1 April 2008 with ECG or specialist confirmed diagnosis	10	40–90%
Ongoing management		
AF3. The percentage of patients with atrial fibrillation who are currently treated with anti-coagulation drug therapy or an anti-platelet therapy	12	40–90%

Atrial fibrillation – rationale for inclusion of indicator set

Atrial Fibrillation (AF) is common, and an important cause of morbidity and mortality. The age specific prevalence of AF is rising, presumably due to improved survival of people with CHD (the commonest underlying cause of AF[129]. One percent of a typical practice population will be in AF; five per cent of over 65s, and nine per cent of over 75 year olds. Atrial fibrillation is associated with a five fold increase in risk of stroke.[130]

SIGN clinical guideline 94 (2007). Cardiac Arrythmias in coronary heart disease. www.sign.ac.uk/guidelines/fulltext/94/index.html

Atrial fibrillation (AF) indicator 1

The practice can produce a register of patients with atrial fibrillation.

AF 1.1 Rationale
This is good professional practice and is consistent with other clinical domains within the QOF as a building block for further evidence based interventions. A register makes it possible to call and recall patients effectively to provide systematic care and to audit care. A register should include all people with an initial event; paroxysmal; persistent and permanent AF.

AF 1.2 Reporting and verification
The practice reports the number of patients on its AF register and the number of patients with AF as a proportion of total list size.

[129] Psaty et al. Circulation 1997; 96: 2455-61
[130] Wolf et al. Stroke 1991; 22: 983-88

Atrial fibrillation (AF) indicator 4

The percentage of patients with atrial fibrillation diagnosed after 1 April 2008 with ECG or specialist confirmed diagnosis.

AF 4.1 Rationale
AF is historically too often inaccurately coded. Patients with an irregular pulse have been given an AF code even though the accuracy of AF diagnosed in this way is only approximately 30 per cent. The introduction of this indicator will enable the compilation of a more accurate register and help to ensure that treatments are targeted more appropriately. The act of referral for a specialist opinion (e.g. cardiology out patient or ECG technician report) is insufficient to achieve this indicator.

AF 4.2 Reporting and verification
The practice reports those patients with AF diagnosed after 1 April 2008 who have had an ECG or been diagnosed by a specialist within three months of being added to the register. The practice may also report patients who have been diagnosed or had an ECG up to three months before being added to the register.

Atrial fibrillation (AF) indicator 3

The percentage of patients with atrial fibrillation who are currently treated with anti-coagulant drug therapy or an anti-platelet drug therapy.

AF 3.1 Rationale
There is strong evidence that stroke risk can be substantially reduced by warfarin (approximately 66 per cent risk reduction)[131] and less so by aspirin (approximately 22 per cent risk reduction)[132]. Warfarin in particular is under used for stroke prevention in AF. A NICE costing report accompanying the recommendations for AF treatment in 2006[133] estimated that nationally 355,312 patients with AF should be on warfarin (i.e. all of those assessed as high risk, half of those at moderate risk and none of those at low risk, using the NICE stroke risk stratification algorithm and if not contraindicated), or an additional 165,946 patients who were not receiving this treatment – almost 50 per cent of those estimated as requiring warfarin. Therefore there is clearly a need to encourage the use of this treatment for AF patients at high risk of stroke. Furthermore, recent evidence from the BAFTA trial[134] and the ACTIVE-W[135] study suggests not only is warfarin much more effective than aspirin, but that it is not as unsafe – in terms of risk of serious haemorrhage – as previously thought (though it would be useful to ascertain if these findings are replicated elsewhere using an appropriate meta-analysis).

Nevertheless, a significant proportion of AF patients – depending on the particular risk stratification scheme selected this can be the majority of people with AF – are not considered to

[131] AF Investigators. Risk Factors for stroke and efficacy of antithrombotic therapy in AF: analysis of pooled data from five randomized clinical trials. *Arch Intern Med*. 1994; 154: 1949-1957.
[132] Antithrombotic Trialists' Collaboration. Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. BMJ. 2002 Jan 12;324(7329):71-86.
[133] AF. The management of AF costing report. NICE 2006.
[134] Mant J, Hobbs FDR, Fletcher K, Roalfe A, Fitzmaurice D, Lip GYH, Murray E. Warfarin versus aspirin for stroke prevention in an elderly community population with atrial fibrillation (the Birmingham AF Treatment of the Aged Study, BAFTA): a randomised controlled trial. *Lancet* 2007; 370: 493-503.
[135] Healey JS, Hart RG, Pogue J, Pfeffer MA, Hohnloser SH, De Caterina R, Flaker G, Yusuf S, Connolly SJ. Risks and Benefits of Oral Anticoagulation Compared With Clopidogrel Plus Aspirin in Patients With AF According to Stroke Risk: The AF Clopidogrel Trial with Irbesartan for prevention of Vascular Events (ACTIVE-W). *Stroke.* 2008; 39: 1482-1486.

be at high risk of stroke, though clearly this does not mean their risk of stroke is non-existent. Therefore, any treatment indicator (or set of indicators) should not focus solely on the high risk group, if that means the large group considered at moderate risk (or even those at low risk) are then excluded from their treatment being monitored. The NICE AF guidelines[136] suggest that for those at moderate risk, 'anticoagulation or antiplatelet therapy should be prescribed depending upon patient preference after discussion of risks and benefits'. This guidance therefore enables the clinician and patient to decide on the preferred regime, taking risks and benefits of both treatments (i.e. anticoagulant and antiplatelet therapy) into account, for all AF patients, whatever their category of stroke risk.

NICE Grade A evidence.
Anti-coagulation or anti-platelet therapy would not necessarily be indicated if the episode of AF was an isolated event that was not expected to re-occur (e.g. one off AF with a self-limiting cause).

For the purposes of the QOF, acceptable anti-coagulation agents are warfarin and phenindione, acceptable anti-platelet agents are aspirin, clopidogrel and dipyridamole.

AF 3.2 Reporting and verification
The practice reports the percentage of patients with AF whose records show they have been prescribed anti-coagulant or anti-platelet drug therapy in the preceding six months.

[136] Royal College of Physicians (2006). AF National Clinical Guideline for Management in Primary and Secondary Care. http://bookshop.rcplondon.ac.uk/details.aspx?e=33

Obesity

Indicator	Points	Payment stages
Records		
OB1. The practice can produce a register of patients aged 16 years and over with a BMI greater than or equal to 30 in the preceding 15 months	8	

Obesity - rationale for inclusion of indicator set

The prevalence of obesity in the United Kingdom is at least 21 per cent in men and 23.5 per cent in women and looks set to continue to rise[137].

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 commonest causes of death and disability in developed economies, most notably greater rates of diabetes mellitus[138] and accelerated onset of cardiovascular disease[139]. Obesity has therefore become a major health issue for the United Kingdom. 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.

http://www.bis.gov.uk/foresight/our-work/projects/current-projects/tackling-obesities/reports-and-publications

NICE clinical guideline 43 (2008). Prevention, identification, assessment and management of overweight and obesity in adults and children. http://www.nice.org.uk/Guidance/CG43

Tackling obesity is a high priority for the four UK health departments.

In England this is happening through the 'Healthy Weight Healthy Lives[140]' strategy and the current Change4Life campaign has a particular focus on at risk families. In Northern Ireland this is happening though the draft Obesity Prevention Framework for NI 2011-2021 – A fitter Future for All[141].

In Scotland this is happening through the Scottish Government and COSLA long term obesity strategy, published in February 2010, 'Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight.'[142]

The 'Obesity Route Map' recognises that people cannot be expected to change their behaviour alone as the environment we live in today means that for most people weight gain becomes

[137] Forecasting obesity to 2010, DH, 2006
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_4138630
[138] Sullivan et al. Diabetes Care 2005; 28 (7): 1599-603
[139] Gregg et al. JAMA 2005; 20; 293 (15): 1868-74
[140] http://www.dh.gov.uk/en/Publichealth/Healthimprovement/Obesity/index.htm
[141] http://dhsspsni.gov.uk/show/consultations?txtid=44910
[142] Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight.
http://www.scotland.gov.uk/Topics/Health/health/healthyweight

almost inevitable. Excellent work is already being done but the Scottish Government are committed to go further to make changes that will transform our living environment.

In Wales this is happening through the All Wales Obesity Pathway[143], published in June 2010. This is intended for use as a tool for Local Health Boards to map provision for the prevention and treatment of obesity, to identify gaps and to implement and manage activity across the full range of determinants which cause obesity and overweight patients in Wales.

Further information
NICE public health guidance 2 (2006). 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.
http://guidance.nice.org.uk/PH2

NICE public health guidance 6 (2007). Behaviour change at population, community and individual levels. http://guidance.nice.org.uk/PH6/Guidance/pdf/English

Obesity (OB) indicator 1

The practice can produce a register of patients aged 16 years and over with a BMI greater than or equal to 30 in the preceding 15 months.

OB 1.1 Rationale
This register is prospective. It is envisaged that it will include, all people whose body mass index (BMI) has been recorded in the practice as part of routine care. It is expected that this data will inform public health measures.

OB 1.2 Reporting and verification
The practice reports the number of patients on its obesity register and the number of patients with obesity as a proportion of total list size.

[143] All Wales Obesity Pathway. http://Wales.gov.uk/topics/health/improvement/index/pathway/?lang=en

Learning disabilities

Indicator	Points	Payment stages
Records		
LD1. The practice can produce a register of patients aged 18 years and over with learning disabilities	4	
LD2. The percentage of patients on the learning disability register with Down's Syndrome aged 18 years and over who have a record of blood TSH in the preceding 15 months (excluding those who are on the thyroid disease register) *NICE menu ID: NM04*	3	40–70%

Learning disabilities - 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 3–4/1000 people 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 their practice for their primary health care needs.

Further information
Royal College of Nursing learning disabilities guidance.
http://www.rcn.org.uk/development/practice/social_inclusion/learning_disabilities/guidance

Department of Health (2009). 'Valuing People Now' a new three-year strategy for people with learning disabilities, sets out the Government's strategy for people with learning disabilities for the next three years following consultation.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_093377

'The Same as You?' Scottish Executive (2000).
http://www.scotland.gov.uk/Topics/Health/care/adult-care-and-support/learning-disability/Resources/sameasyou

NHS Health Scotland (2004). Health Needs Assessment Report. People with Learning Disabilities.
http://www.healthscotland.com/uploads/documents/LD_summary.pdf

Northern Ireland Strategy on Learning Disability. http://www.rmhldni.gov.uk/index/published-reports.htm

Welsh Assembly Government (2004). Learning Disability Strategy Section 7 Guidance on Service Principles and Service Responses.
http://www.wales.nhs.uk/sites3/Documents/480/SP_response_guide-e.pdf

Department of Health (2008). Independent Inquiry into Access to Healthcare for People with Learning

Disabilities.http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_099255

Learning disability (LD) indicator 1

The practice can produce a register of patients aged 18 years and over with learning disabilities.

Learning Disability 1.1 Rationale
The idea of a learning disability register for adults in primary care has been widely recommended by professionals and charities alike[144].

Learning disability is defined in Valuing People (and 'The Same as You') 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 (18 years), 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, should not, in isolation, be used in deciding whether someone has a learning disability.

The definition does not include all those people who have a "learning difficulty", i.e. 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 multidisciplinary specialist learning disability team may be necessary to assess the degree of disability and diagnose any underlying condition. Locality Community Learning Disability Teams, working along with PCOs, have provided expertise and data about and for people with learning disabilities. Practices should liaise with Social Services Departments, Community Learning Disability Teams and Primary Healthcare Facilitators where employed by PCOs to assist in the construction of a primary care database.[145]

Further information
British Institute of Learning Disabilities. http://www.bild.org.uk/

Public Health Institute of Scotland's Autistic Spectrum Disorder (2001). Needs Assessment Report. http://www.scotland.gov.uk/Publications/2006/02/28094616/0

The creation of a full register of patients aged 18 years and 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 1.2 Reporting and verification
The practice reports the number of patients aged 18 years and over on its learning disability register and the number of patients with learning disabilities as a proportion of total list size.

[144] See Treat Me Right, Mencap (2004). www.mencap.org.uk
[145] see Martin and Martin. Journal of Learning Disabilities, 2000; 4(1): 37-48

Learning disability (LD) indicator 2 (NICE menu NM04)

The percentage of patients on the learning disability register with Down's Syndrome aged 18 years and over who have a record of blood TSH in the preceding 15 months (excluding those who are on the thyroid disease register).

Learning Disability 2.1 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 age[146]. Poor thyroid function can impair an individual's quality of life. Earlier intervention and management can help to improve health outcomes.

Learning Disability 2.2 Reporting and verification
The practice reports the percentage of patients on the learning disability register with Down's Syndrome aged 18 years and over with a record of blood TSH (thyroid stimulating hormone) in the preceding 15 months. Patients with a diagnosis of hypothyroidism should be excluded from this indicator as these patients should be managed according to the hypothyroid indicator set.

[146] Rooney S, Walsh E (1997) Prevalence of abnormal thyroid function in a down's syndrome population. International Journal of Medical Science 166: 80–2.

Smoking

Indicator	Points	Payment stages
Ongoing management		
Smoking 3. The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 15 months	30	40–90%
Smoking 4. The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who smoke whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the preceding 15 months	30	40–90%

Smoking indicator 3

The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 15 months.

Smoking 3.1 Rationale
Coronary heart disease
Smoking is known to be associated with an increased risk of CHD.

SIGN clinical guideline 97 (2007). European Task Force European Society of Cardiology.
www.sign.ac.uk/guidelines/fulltext/97/index.html

European Society of Cardiology. European Guidelines. CVD Prevention in clinical practice.
http://www.escardio.org/guidelines-surveys/esc-guidelines/pages/cvd-prevention.aspx

Stroke/TIA
There are few randomised clinical trials of the effects of risk factor modification in the secondary prevention of ischaemic or haemorrhagic stroke. However, inferences can be drawn from the findings of primary prevention trials that cessation of cigarette smoking should be advocated. Grade C.

SIGN clinical guideline 108 (2008). Recommendation.
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. NICE clinical guideline 34[147] on hypertension recommends that people who smoke are offered advice and help to stop smoking.

Formal estimation of CHD risk should be undertaken.

A number of risk tools can be used to assess cardiovascular risk for the purpose of QOF. These include:

- Framingham
- Joint British Society 2 (JBS2)
- QRISK
- Assessing cardiovascular risk using SIGN guidelines to assign preventive treatment (ASSIGN - Scotland only)

See CVD primary prevention indicator set for full details of the above risk tools.

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 101 (2010). Management of chronic obstructive pulmonary disease in adults in primary and secondary care. http://guidance.nice.org.uk/CG101

GOLD Guidelines. Grade A Evidence. www.goldcopd.com/

Asthma
There are a surprisingly small number of studies on smoking related to 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. Grade A evidence suggests that smoking reduces the benefits of inhaled steroids and this adds further justification for recording this outcome.[148]

Chronic kidney disease
There is good evidence from observational studies that people with CKD are at increased cardiovascular risk and hence the rationale for including CKD here.

Schizophrenia, bipolar affective disorder or other psychoses
People with serious mental illness are far more likely to smoke than the general population (61 per cent of people with schizophrenia and 46 per cent of people 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 people with serious mental illness who smoke than in the general population of smokers[149].

[147] NICE clinical guideline 34 (2006). Management of hypertension in adults in primary care. http://guidance.nice.org.uk/CG34/NICEGuidance/pdf/English
[148] See Tomlinson et al. Thorax 2005; 60: 282-7. There is also epidemiological evidence that smoking is associated with poor asthma control. See Price et al. Clin Exp Allergy 2005; 35: 282-287.
[149] Seymour L. Not all in the mind: the physical health of mental health service users. Mentality 2003

Non-smokers
It is recognised that lifelong 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 15 months up to and including 25 years of age.

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 15 months. It is recognised that once a patient has been an ex-smoker for more than three years they are unlikely to restart. In recognition of this practices may choose to record ex-smoking status on an annual basis for three consecutive QOF years. Thereafter, smoking status need only be recorded if there is a change. In this instance QOF years should be interpreted as a 12 month period.

Smoking 3.2 Reporting and verification
The practice reports the percentage of patients on any or any combination of the named registers in whom smoking status has been recorded.

For patients who smoke this recording should be made in the preceding 15 months. Ex-smokers should be recorded as described above. Those who have never smoked should be recorded as such in the preceding 15 months up to and including 25 years of age.

Smoking indicator 4

The percentage of patients with any or any combination of the following conditions: CHD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar disorder or other psychoses who smoke whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the preceding 15 months.

Smoking 4.1 Rationale
Many strategies have been used to help people to stop smoking. A meta-analysis of controlled trials in patients post myocardial infarction showed that a combination of individual and group smoking cessation advice, and assistance reinforced on multiple occasions – initially during cardiac rehabilitation and reinforced by primary care teams – gave the highest success rates[150].

A number of studies have recently shown benefits from the prescription of nicotine replacement therapy or buproprion in patients who have indicated a wish to quit smoking.

In a significant number of PCOs across the UK specialist smoking cessation clinics are now available. Referral to such clinics, where they are available, can be discussed with patients. This should also be recorded as giving smoking cessation advice.

The recording of advice given does not necessarily reflect the quality of the intervention. It is therefore proposed that only smoking advice should be part of the reporting framework. Clinicians may choose to record advice given in relation to other modifiable risk factors.

Further information
NICE public health guidance 10 (2008). Smoking cessation services.
http://www.nice.org.uk/guidance/index.jsp?action=byID&o=11925

[150] SIGN Guidelines 96/97. Grade B recommendation. www.sign.ac.uk/guidelines/fulltext/96/index.html www.sign.ac.uk/guidelines/fulltext/97/index.html

NHS Health Scotland and ASH Scotland (2007). Smoking Cessation Update.
http://www.healthscotland.com/

Smoking Indicator 4.2 Reporting and verification
The practice reports the percentage of patients on any or any combination of the named registers who smoke who have a record of having been offered smoking cessation advice in the preceding 15 months.

Section 4. Organisational domain

The organisational indicators are split into six domains:

1. Records and information about patients (A)
2. Information for patients (B)
3. Education and training (C)
4. Practice management (D)
5. Medicines management (E)
6. Quality and productivity (F)

4.1. Format

Each of the indicators (X) in the first five organisational domains has four descriptions unless it is reported electronically.

X.1 Practice guidance
This section contains a number of things, dependent on the indicator, including:

- justification for the indicator
- a more detailed description of the indicator
- references which practices may find useful
- some helpful guidance on how practices may go about meeting the requirements of the indicator.

X.2 Written evidence
This specifies the written evidence which a practice would be expected to produce for an assessment visit. The evidence generally should be available in the practice and need not be submitted in advance. However, some written evidence will be required in advance and this is indicated in the document. In some instances no written evidence will be required but may be requested if there is an appeal.

In summary, written evidence is categorised as follows:

- Grade A – to be submitted in advance of a visit
- Grade B – to be available in the practice at the visit
- Grade C – optional or used in the event of an appeal

X.3 Assessment visit
This section describes how a visiting assessment team will verify the written evidence.

X.4 Assessors' guidance
This section contains more detailed guidance for assessors to use during practice assessment visits. This guidance has been produced to ensure that practices are being judged to the same standard across the UK.

Each of the indicators (X) in the quality and productivity organisational areas has two descriptions, namely practice guidance and reporting and verification:

X.1 Practice guidance
As above.

X.2 Reporting and verification
As per X.2 to X.4 above.

4.2. Equivalence – other schemes

It is recognised that a number of schemes are currently in place across the UK to encourage practice development. Other practice-based accreditation schemes may apply to the National Reference Group to be recommended as equivalent to appropriate aspects of the organisational indicators of the QOF.

These schemes must involve the practice in meeting indicators considered by the Reference Group to be equivalent to a relevant indicator in the Framework. Any scheme which is to be considered must include as part of its process a visit to the practice.

The RCGP Quality Practice Award (QPA) has been approved for the first five sub domains of the organisational indicator areas in the Framework. Practices should be prepared to provide evidence that they have achieved the QPA in order to meet the requirements of this domain.

4.3. Quality and Productivity indicator set

The Quality and Productivity (QP) indicators aim to support general practices in the review of current practice, both within the practice itself and with external peers. This review would be informed by the analysis of data specific to the practice in covering three areas , in order to understand the reasons for variation in performance and if appropriate to address any underlying reasons.

The three areas are:

- prescribing
- first outpatient referrals
- emergency admissions

Practices as a provider of primary care services and a gateway to secondary care services, should be prepared to make the most effective use of available NHS resources (including skills, premises and treatments) to deliver improvements to the population's health and social wellbeing. This is in line with the GMC's Good Medical Practice guidance[151].
To ensure that this is delivered, practices are expected to:

- avoid duplicating work through ensuring clear communication, partnership working and appropriate information sharing with all parts of the health service and where relevant social care services
- minimise waste in prescribing and ineffective treatments; and
- engage effectively in the prevention of ill health to avoid the need for costly treatments by proactively managing patients to recovery through the whole care pathway in acting as conscientious gatekeepers to services.

[151] GMC's Good Medical Practice guidance.
http://www.gmc-uk.org/guidance/good_medical_practice.asp

For the purpose of the quality and productivity indicators a care pathway is a defined process of diagnosis, treatment and care for a defined group of patients during a defined period.

The quality and productivity indicators will remain in force until 31 March 2012.

In line with other indicators within the organisational domain, exception reporting will not apply.

Records and information

	Indicator	Points
Records 3	The practice has a system for transferring and acting on information about patients seen by other doctors out of hours	1
Records 8	There is a designated place for the recording of drug allergies and adverse reactions in the notes and these are clearly recorded	1
Records 9	For repeat medicines, an indication for the drug can be identified in the records (for drugs added to the repeat prescription with effect from 1 April 2004) Minimum Standard 80%	4
Records 11	The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 65% of patients	10
Records 13	There is a system to alert the out of hours service or duty doctor to patients dying at home	2
Records 15	The practice has up to date clinical summaries in at least 60% of patient records	25
Records 17	The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 80% of patients	5
Records 18	The practice has up to date clinical summaries in at least 80% of patient records	8
Records 19	80% of newly registered patients have had their notes summarised within 8 weeks of receipt by the practice	7
Records 20	The practice has up to date clinical summaries in at least 70% of patient records	12
Records 23	The percentage of patients aged 15 years and over whose notes record smoking status in the preceding 27 months (Payment stages 40–90%)	11

Records indicator 3

The practice has a system for transferring and acting on information about patients seen by other doctors out of hours.

Records 3.1 Practice guidance
Good Medical Practice for General Practitioners (GMP for GPs) 2008 states that the excellent GP "can demonstrate an effective system for transferring and acting on information from other doctors about patients". Out of hours reviews in England and Scotland have emphasised the importance of the effective transfer of information.

If the practice undertakes its own out of hours cover, there needs to be a system to ensure that out of hours contacts are entered in the patient's clinical record.

If out of hours cover is provided by another organisation, for example a cooperative, deputising service, PCO provided service or shared rota there needs to be a system for:

- transferring information to the practice
- transferring that information into the clinical record
- identifying and actioning any required follow-up.

Records 3.2 Written evidence
There must be a written procedure for the transfer of information (Grade B).

Records 3.3 Assessment visit
Inspection of the procedure for the transfer of information may be carried out on an assessment visit.

Records 3.4 Assessors' guidance
Receptionists and doctors will be questioned on the system for the transfer of information.

Records indicator 8

There is a designated place for the recording of drug allergies and adverse reactions in the notes and these are clearly recorded.

Records 8.1 Practice guidance
It is important that a clinician avoids prescribing a drug to which the patient is known to be allergic. Not all patients can recall this information and hence records of allergies are important.

All prescribing clinicians should know where such information is recorded. Ideally the place where this information is recorded should be limited to one place and not more than two places.

Records 8.2 Written evidence
There should be a statement as to where drug allergies are recorded (Grade C).

Records 8.3 Assessment visit
The practice should be able to demonstrate where drug allergies are recorded.

Records 8.4 Assessors' guidance
The place where drug allergies are recorded can be on the computer or in the paper records. This information should be easily available to the prescribing clinician at the time of consultation.

Records indicator 9

For repeat medicines, an indication for the drug can be identified in the records (for drugs added to the repeat prescription with effect from 1 April 2004).

Minimum standard 80 per cent.

Records 9.1 Practice guidance
When reviewing medication, it is important to know why a drug was started. This information in the past has often been difficult to identify in practice records, particularly if a patient has been on a medication for a long time or has transferred between practices. It is proposed that this information needs to be recorded clearly in the clinical records.

It is recognised that most practices utilise computer systems for repeat prescriptions and it is intended that an IT solution will be available to assist practices in meeting this indicator.

In practices where the computer is not utilised for repeat prescriptions, the clinician should write clearly in the patient record the diagnosis relating to the prescription. This need only be done once when the medication is initiated.

The survey to show compliance should be a minimum of 50 patients who have been commenced on a new repeat prescription from 1 April 2004.

Records 9.2 Written evidence
A survey of the drugs used should be carried out. The survey should show an indication can be identified for at least 80 per cent of repeat medications commenced after 1 April 2004 (Grade A).

Records 9.3 Assessment visit
The records should be inspected.

Records 9.4 Assessors' guidance
As part of the inspection of records those drugs which have been added to the repeat prescription from 1 April 2004 should be identified and an indication for starting them should be clear. The help of practice staff may be required to achieve this. The records of 20 patients for whom repeat medication has been started since that date should be surveyed. If the standard is not achieved then a further 20 clinical records should be surveyed and the cumulative total should be used.

The minimum standard is that 80 per cent of the indications for repeat medication drugs can be identified.

Records indicator 11

The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 65 per cent of patients.

Records 11.1 Practice guidance
Detecting elevated blood pressure and treating it is known to be an effective health intervention. The limit to patients aged 45 years and over has been pragmatically chosen as the vast majority of patients develop hypertension after this age. It is anticipated that practices will opportunistically check blood pressures in all adult patients.

Depending on whether practices record blood pressure in the computer or manual record, the survey can be undertaken by computer search or a survey of the written records.

A similar indicator is Records Indicator 17 but a higher standard must be achieved.

Records 11.2 Written evidence
A survey of the records of patients 45 years of age and over (a minimum of 50 records) or a report from a computer search should be carried out, showing that blood pressure has been recorded in the preceding five years (Grade A).

Records 11.3 Assessment visit
A random sample of 20 notes or computerised records of patients 45 years of age and over should be inspected, to confirm that blood pressure has been recorded in the preceding five years.

Records 11.4 Assessors' guidance
The practice's own survey may be verified by inspecting 20 clinical records of patients aged 45 years and over at the visit. If the result differs from the practice survey, then a further 20 records need to be checked.

Note: A logical query and dataset (business rule) is available to support this indicator.

Records indicator 13

There is a system to alert the out of hours service or duty doctor to patients dying at home.

Records 13.1 Practice guidance
Good Medical Practice (2008) states that when off duty the doctor ensures there are arrangements which "include effective handover procedures and clear communication between doctors". It is especially important for patients who are terminally ill and likely to die in the near future at home or where clinical management is proving difficult or challenging.

The practice should have developed a system with their out of hours care provider to transfer information from the practice to that provider about patients that the attending doctor anticipates may die from a terminal illness in the next few days and hence may require medical services in the out of hours period. If a practice performs its own on call duties then a system should ensure that all doctors in the practice are aware of these patients. A single handed doctor who usually covers his or her own patients out of hours should have a similar system in place when he or she is absent from the practice e.g. on holiday.

Records 13.2 Written evidence
The system for alerting the out of hours service or duty doctor to patients dying at home should be described (Grade C).

Records 13.3 Assessment visit
The doctors in the practice should be questioned on the system that is in place.

Records 13.4 Assessors' guidance
The team should be questioned on their system by asking for recent examples of patients who have been terminally ill and/or dying at home and what information was passed to the out of hours service or duty doctor.

Records indicator 15

The practice has up to date clinical summaries in at least 60 per cent of patient records.

Records 15.1 Practice guidance
GMP for GPs (2008) states "Important information in records should be easily accessible, for example, as part of a summary".

If a system for producing summaries is not in place then this will involve a great deal of work. The practice will need to decide which conditions it will include in the summary. The practice would be expected to have a policy on what is included in the summary. All significant past and continuing problems should be included.

If a computer is used, the practice will need to decide which Read codes to use for common conditions. It is best to use a set of codes that has been agreed within a PCO or nationally to allow comparison and exchange of data. Practices should adhere to the joint RCGP/GPC guidance on record keeping.

Similar indicators are Records 18 and Records 20 but higher standards must be achieved.

Records 15.2 Written evidence
A survey of patient records (minimum 50) should be carried out, recording the percentage that have clinical summaries and the percentage which are up to date (Grade A).

Records 15.3 Assessment visit
A random sample of 20 patient records should be examined to confirm the percentage that have clinical summaries and the percentage which are up to date.

Records 15.4 Assessors' guidance
The practice's own survey is verified by inspecting 20 clinical records. If the result differs from the practice survey then a further 20 records need to be checked. Assessors may need to clarify with the practice what information they would normally include in a clinical summary ensuring that they do not assess this indicator based on their own experience and beliefs.

Note: A logical query and dataset (business rule) is available to support this indicator.

In Scotland, manual submission of achievement continues and is reviewed by the Scottish Government and Scottish General Practitioners Committee of the BMA annually. Please refer to your PCO for current information.

Records indicator 17

The blood pressure of patients aged 45 years and over is recorded in the preceding 5 years for at least 80% of patients.

Records 17.1 Practice guidance
See Records 11.1.

Records 17.2 Written evidence
See Records 11.2. (Grade A)

Records 17.3 Assessment visit
See Records 11.3.

Records 17.4 Assessors' guidance
See Records 11.4.

Records indicator 18

The practice has up to date clinical summaries in at least 80% of patient records.

Records 18.1 Practice guidance
See Records 15.1.

Records 18.2 Written evidence
See Records 15.2. (Grade A)

Records 18.3 Assessment visit
See Records 15.3.

Records 18.4 Assessors' guidance
See Records 15.4.

Records indicator 19

Eighty per cent of newly registered patients have had their notes summarised within 8 weeks of receipt by the practice.

Records 19.1 Practice guidance
The criterion refers to the time the notes have been received by the practice and not the time of registration. For some practices that take on many patients at a set time of year achievement of the indicator will require some forward planning.

Read codes may be utilised to record this information and can then be searched for on the practice computer system.

Records 19.2 Written evidence
A survey should be carried out of the records of newly registered patients whose notes have been received between eight and 26 weeks previously (either a sample of 30 or all patients if there have been fewer than 30 such registrations), noting if the records have been received and summarised.

Alternatively a computer print-out should be examined, showing the patients registered where the records have been received between eight and 26 weeks previously, to confirm whether the computer record contains a clinical summary (Grade A).

Records 19.3 Assessment visit
A sample of 20 records of patients whose records were sent to the practice between nine and 26 weeks ago should be examined, to ascertain if the records have arrived and have been summarised.

Records 19.4 Assessors' guidance
A list of patients registered in the past 12 months and whose records have been forwarded between nine and 26 weeks ago to the practice will be obtained from the PCO. A sample of 20 records, or all if there have been fewer of these patients, will be checked. If the result differs significantly (at least 10 per cent) from the practice survey a further 20 records will be checked if appropriate.

Records indicator 20

The practice has up to date clinical summaries in at least 70% of patient records.

Records 20.1 Practice guidance
See Records 15.1.

Records 20.2 Written evidence
See Records 15.2. (Grade A)

Records 20.3 Assessment visit
See Records 15.3.

Records 20.4 Assessors guidance
See Records 15.4.

Records indicator 23

The percentage of patients aged 15 years and over whose notes record smoking status in the preceding 27 months.

Records 23.1 Practice guidance
There is evidence that when doctors and other health professionals advise patients to stop smoking, this is effective. This indicator examines whether smoking status is recorded in the clinical record. Current smokers should be recorded as such in the preceding 27 months. Non-smokers should be recorded as such in the preceding 27 months up to and including 25 years of age. New patients aged 26 years and over should be recorded as non-smokers at least once.

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 27 months.

It is recognised that once a patient has been an ex-smoker for more than three years they are unlikely to restart. In recognition of this practices may choose to record ex-smoking status on an annual basis for three consecutive QOF years. Thereafter, smoking status need only be recorded if there is a change. In this instance QOF years should be interpreted as a 12 month period.

Records 23.2 Written evidence
A survey of written records or a computer search of patients aged 15 years and over should be carried out (surveying a minimum of 50 records), to determine the percentage where smoking habit is recorded. For current smokers this record should be in the preceding 27 months. Ex-smokers should be recorded as described above. Those who have never smoked should be recorded as such in the preceding 27 months up to and including 25 years of age (Grade A).

Records 23.3 Assessment visit
A random sample of 20 notes or computerised records of patients aged 15 years and over should be inspected, to confirm that smoking status is recorded as detailed above.

Records 23.4 Assessors' guidance
The practice's own survey is verified by inspecting 20 patient records at the visit. If the result differs from the practice survey then a further 20 patient records should be checked.

Note: A logical query and dataset (business rule) is available to support this indicator.

Information for patients

	Indicator	Points
Information 5	The practice supports smokers in stopping smoking by a strategy which includes providing literature and offering appropriate therapy	2

Information indicator 5

The practice supports smokers in stopping smoking by a strategy which includes providing literature and offering appropriate therapy.

Information 5.1 Practice guidance
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 or buproprion 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 practice and implemented. The provision of dedicated smoking cessation services remains the responsibility of the PCO.

Information 5.2 Written evidence
There should be a practice protocol concerning smoking cessation (Grade A).

Information 5.3 Assessment visit
Prescribing data should be reviewed, and literature available for patients who wish to quit should be examined.

Information 5.4 Assessors' guidance
The strategy should take into account current evidence in this area. Signs of implementation may be evident in the practice's prescribing data or in the patient leaflets that are used by the practice.

Education and training

	Indicator	Points
Education 1	There is a record of all practice-employed clinical staff having attended training/updating in basic life support skills in the preceding 18 months	4
Education 5	There is a record of all practice-employed staff having attended training/updating in basic life support skills in the preceding 36 months	3
Education 6	The practice conducts an annual review of patient complaints and suggestions to ascertain general learning points which are shared with the team	3
Education 7	The practice has undertaken a minimum of 12 significant event reviews in the past 3 years which could include: • Any death occurring in the practice premises • New cancer diagnoses • Deaths where terminal care has taken place at home • Any suicides • Admissions under the Mental Health Act • Child protection cases • Medication errors • A significant event occurring when a patient may have been subjected to harm, had the circumstance/outcome been different (near miss)	4
Education 8	All practice employed nurses have personal learning plans which have been reviewed at annual appraisal	5
Education 9	All practice-employed non-clinical team members have an annual appraisal	3
Education 10	The practice has undertaken a minimum of 3 significant event reviews within the last year	6

Education indicator 1

There is a record of all practice-employed clinical staff having attended training/updating in basic life support skills in the preceding 18 months.

Education 1.1 Practice guidance
The primary care team members, including GPs deal with cardio-pulmonary collapse relatively rarely, but require up to date skills to deal with an emergency. This is best undertaken at regular intervals through practical skills-based training sessions, as it is known that these skills

diminish after a relatively short time. The timescale has been set pragmatically at 18 months, although many practices offer training on a more frequent basis.

This training may be available from a variety of providers including your local Accident and Emergency Department, BASICS, the PCO, out of hours cooperative, Red Cross, St John's Ambulance or equivalent. It may be sufficient for one individual in the team to attend for external training and then cascade this within the team.

Further information
Cardiopulmonary Resuscitation Guidance for Clinical Practice and Training in Primary Care (2001). www.resus.org.uk/pages/cpatpc.htm#contents

Resuscitation Council UK (2005). Resuscitation guidelines.
http://www.resus.org.uk/pages/guide.htm

Education 1.2 Written evidence
Attendance at Basic Life Savings (BLS) training should be listed (Grade B).

Education 1.3 Assessment visit
Staff should be questioned on the date of their last basic life support skills (BLS) training.

Education 1.4 Assessors' guidance
Assessors should confirm by checking the BLS attendance list that practice-employed clinical staff have attended.

Education indicator 5

There is a record of all practice-employed staff having attended training/updating in basic life support skills in the preceding 36 months.

Education 5.1 Practice guidance
Although it is rare for practice non-clinical staff to have to deal with a cardio-pulmonary collapse, the situation may arise within or outwith the practice premises.

See Education 1.

The interval for training is pragmatically set at three years although many practices offer training on a more frequent basis.

Education 5.2 Written evidence
Attendance at BLS training should be listed. (Grade B)

Education 5.3 Assessment visit
Staff should be questioned on the date of their last BLS training.

Education 5.4 Assessors' guidance
Confirmation that practice non-clinical staff have attended training should be obtained by checking the BLS attendance list.

Education indicator 6

The practice conducts an annual review of patient complaints and suggestions to ascertain general learning points which are shared with the team.

Education 6.1 Practice guidance
Practices and clinicians generally find complaints stressful. It is important that the practice view complaints as a potential source for learning and for change and development.

Reports should include a summary of each complaint or suggestion and an identification of any learning points which came out of the review. It may be useful to agree at the time of each review how the learning points or areas for change will be communicated to the team; it is likely that not all team members will be involved in every review meeting for various reasons. It may also be useful to identify an individual responsible for implementing the change and monitoring its progress.

These reports may form part of the written evidence for the indicators on significant event analysis (indicators Education 7 and Education 10).

Education 6.2 Written evidence
Reports/minutes of team meetings where learning points have been discussed should be made, with a note of the changes made as a result. (Grade A)

Education 6.3 Assessment visit
The issue of learning from complaints should be discussed with staff and GPs.

Education 6.4 Assessors' guidance
Assessors should discuss with team members their involvement in reviews of patient complaints and suggestions and how the learning points are shared with the team.

Education indicator 7

The practice has undertaken a minimum of 12 significant event reviews in the past 3 years which could include:

- any death occurring in the practice premises
- new cancer diagnoses
- deaths where terminal care has taken place at home
- any suicides
- admissions under the Mental Health Act
- child protection cases
- medication errors
- a significant event, occurring when a patient may have been subjected to harm, had the circumstance/outcome been different (near miss).

Education 7.1 Practice guidance
Detail of methodology on significant event analysis is given in indicator Education 10.

This indicator is more prescriptive in the requirement to report on specific occurrences in the practice. Clearly if certain of these events have not occurred, e.g. patient suicide, then this should be stated in the evidence.

Education 7.2 Written evidence
Each review case report must consist of a short commentary setting out the relevant history, the circumstances of the episode and an analysis of the conclusions to be drawn.

Evidence should be presented of any clinical and organisational changes resulting from the analysis of these cases. (Grade A)

Education 7.3 Assessment visit
The reviews should be discussed.

Education 7.4 Assessors' guidance
The practice should report on its analyses in a form consistent with either of the two methods described in indicator Education 10.

Education indicator 8

All practice employed nurses have personal learning plans which have been reviewed at annual appraisal.

Education 8.1 Practice guidance
The production of a personal learning plan should be one of the outcomes of the appraisal system and the points allocated to this indicator have been allocated to reflect this. The plan should record the agreement between appraiser(s) and appraisee on areas for further learning, how they will be achieved, who is responsible for organising them, within what timescale and how progress will be reviewed. It may also include learning areas which have been identified as an organisational need but which have been agreed at the appraisal as an individual development area for the appraisee to take forward. This information should be recorded.

An annual appraisal can reasonably be extended to employed members of the nursing team e.g. Health Care Assistants (HCAs) who have direct patient contact. This supports good practice arrangements.

Education 8.2 Written evidence
The staff appraisal system should be described. (Grade C)

Education 8.3 Assessment visit
A discussion should be held with practice employed nursing staff (including employed members of the nursing team e.g. HCAs who have direct patient contact) about their personal learning plans and the appraisal system.

Education 8.4 Assessors' guidance
Personal learning plans and the appraisal system should be discussed with practice employed nursing staff (including employed members of the nursing team e.g. HCAs who have direct patient contact) and the person responsible for managing the appraisal system.

Education indicator 9

All practice employed non-clinical team members have an annual appraisal.

Education 9.1 Practice guidance
Appraisal is a constructive opportunity to review performance objectives, progress and skills and identify learning needs in a protected environment. The learning needs identified may be personal to the appraisee and/or organisational learning needs which the appraisee has agreed to fulfil. The outcome of the appraisal should be a written action plan agreed between appraiser and appraisee which could include a personal learning plan for the appraisee. In addition the opportunity could be taken to review and update the appraisee's job description.

Education 9.2 Written evidence
The staff appraisal system should be described. (Grade C)

Education 9.3 Assessment visit
A discussion should be held with practice employed non-clinical staff about their experience of appraisal.

Education 9.4 Assessors' guidance
It may be useful to discuss the appraisal system with the non-clinical staff themselves, the practice manager and the GPs.

Education indicator 10

The practice has undertaken a minimum of 3 significant event reviews within the preceding year.

Education 10.1 Practice guidance
Significant event review is a recognised methodology for reflecting on important events within a practice and is an accepted process as evidence for GMC revalidation.

Significant event analysis is not new, although its terminology may have changed. It was first known as critical event monitoring. It provides structure to an activity which anyway happens informally between health care professionals. It is the discussion of cases and events and the learning obtained through reflection and is an extension of audit activity. Discussion of specific events can provoke emotions that can be harnessed to achieve change. For it to be effective, it needs to be practised in a culture that avoids allocating blame and involves all disciplines within the practice.

The following steps are useful in introducing significant event analysis to a practice:

1. A multidisciplinary meeting to explain the concept.
2. Consideration of events which should be important to the practice but need not imply criticism of the practice or of individuals. The practice can construct a core list as a basis to stimulate discussion or it can use the one published in the RCGP Occasional Paper. Some of the examples from this are below.

Preventative care:	Measles Unplanned pregnancy Non-accidental injury Squint diagnosed by an ophthalmologist
Acute care:	Sudden unexpected death Death occurring on the practice premises Suicide or suicide attempt All new cancer diagnoses Myocardial Infarction Terminal care death at home Section under Mental Health Act

Chronic disease:	Diabetic hypoglycaemia Leg ulcer or amputation Asthma - hospitalisation Epilepsy – status epilepticus
Organisation:	Investigation received but not acted upon Breach of confidentiality Any patient complaints Upsetting of staff

3. Mechanism for identification of events. A logbook kept at reception may be helpful or an electronic logbook held on the practice computer system. Any mechanism should allow all team members to contribute.
4. Significant events meetings. These are generally multidisciplinary but need not be so and need to be sensitively chaired. Notes should be taken but should not include patient identification. Each attendee should be encouraged to take along at least one significant event. The meeting can choose which to discuss first and anybody can have the right to veto if that area is considered too sensitive.

The events are then discussed, first highlighting the aspects of high standard and then those standards that can be improved. A decision about the case needs to be reached. This could be:

- celebration of excellent care
- no change
- audit required
- immediate change required

Follow-up of these decisions should be arranged and this may occur at the next significant event analysis meeting.

These reports should be laid out in a form consistent with either of the two following suggested formats:

A.

- Description of event. This should be brief and can be in note form.
- Learning outcome. This should describe the aspects which were of high standard and those which could be improved. Where appropriate it should include why the event occurred.
- Action plan. The decision(s) taken need to be contained in the report. The reasons for these decisions should be described together with any other lessons learned from the discussion.

B.

- What happened?
- Why did it happen?
- Was insight demonstrated?
- Was change implemented?

Further information
A description of significant event audit is also available in: Robinson et al. How to Do It: Use facilitated case discussions for significant event auditing.[152]

NPSA/RCGP (2008). SEA guidance for Primary Care Teams.
http://www.npsa.nhs.uk/nrls/improvingpatientsafety/primarycare/significant-event-audit/

Education 10.2 Written evidence
Each case report should consist of a short commentary setting out the relevant history, the circumstances of the episode and an analysis of the conclusions to be drawn.

Evidence should be presented of any clinical and organisational changes resulting from the analysis of these cases. (Grade A)

Education 10.3 Assessment visit
The reviews should be discussed.

Education 10.4 Assessors guidance
The practice should report their analyses in a form consistent with either of the two following methods:

A. statement of the problem or event, learning outcome and action plan;

OR

B. What happened? Why did it happen? Was insight demonstrated? Was change implemented?

The practice should involve, if possible, all team members who were stakeholders in the event in the case discussion.

[152] BMJ 1995; 311: 315-318

Practice management

	Indicator	Points
Management 1	Individual healthcare professionals have access to information on local procedures relating to Child Protection	1
Management 2	There are clearly defined arrangements for backing up computer data, back-up verification, safe storage of back-up tapes and authorisation for loading programmes where a computer is used	1
Management 3	The Hepatitis B status of all doctors and relevant practice-employed staff is recorded and immunisation recommended if required in accordance with national guidance	0.5
Management 5	The practice offers a range of appointment times to patients, which as a minimum should include morning and afternoon appointments 5 mornings and 5 afternoons per week, except where agreed with the PCO	3
Management 7	The practice has systems in place to ensure regular and appropriate inspection, calibration, maintenance and replacement of equipment including: • A defined responsible person • Clear recording • Systematic pre-planned schedules • Reporting of faults	3
Management 9	The practice has a protocol for the identification of carers and a mechanism for the referral of carers for social services assessment	3
Management 10	There is a written procedures manual that includes staff employment policies including equal opportunities, bullying and harassment and sickness absence (including illegal drugs, alcohol and stress), to which staff have access	2

Management indicator 1

Individual healthcare professionals have access to information on local procedures relating to child protection.

Management 1.1 Practice guidance
Awareness of the existence of local child protection procedures is mandatory and all healthcare professionals should be able to access a copy.

Management 1.2 Written evidence
There should be a description of how local procedures are accessed. (Grade C).

Management 1.3 Assessment visit
Access to local procedures should be demonstrated.

Management 1.4 Assessors' guidance
The assessors should check with team members what action they would take if they had reason to suspect that a child might be being abused, including which local procedures they would refer to and how.

Management indicator 2

There are clearly defined arrangements for backing up computer data, back-up verification, safe storage of back-up tapes and authorisation for loading programmes where a computer is used.

Management 2.1 Practice guidance
The practice should have a written policy which defines who is responsible for backing up data, how it is done and how often it is done. It is good practice to keep weekly and monthly backups as well as daily backups using a rotation of back-up tapes or their equivalent. It is good practice to keep a log. Tapes should be renewed at specified intervals. Verification of backups should also be carried out at regular specified intervals, especially in paper-light or paperless practices. Tapes should be stored in a fireproof safe, with a procedure in place for back-up tapes being stored off site in order to ensure confidentiality. The policy should also define the individuals who are authorised to load new software programmes.

Management 2.2 Written evidence
There should be written policy regarding:

- backing up data and verification, including the frequency of that back-up
- storage on and off site
- authorisation to load programmes. (Grade A)

Management 2.3 Assessment visit
The back-up and loading arrangements should be demonstrated.

Management 2.4 Assessors' guidance
The arrangements for back-up, verification and storage procedures should be checked with the responsible staff member. It is important to ascertain that staff are aware of the procedure for authorisation for loading new software.

Management indicator 3

The Hepatitis B status of all doctors and relevant practice employed staff is recorded and immunisation recommended if required in accordance with national guidance.

Management 3.1 Practice guidance
Useful guidance on Hepatitis B risks and immunisation is contained in the UK Health Departments' publication Guidance for Clinical Health Care Workers: protection against infection with blood borne viruses - recommendations of the Expert Advisory Group on AIDS and the Advisory Group on Hepatitis (www.dh.gov.uk/assetRoot/04/01/44/74/04014474.pdf).

Under the Health and Safety at Work etc Act (1974) (HSWA), GPs are legally obliged to make sure that all employees receive appropriate training and know the procedures for working safely. They must also carry out risk assessments and these could include assessing procedures under the Control of Substances Hazardous to Health Regulations 1994 (COSHH). These regulations would cover employees who have direct contact with patients' blood, other potentially infectious bodily fluids or tissues. Immunisation of doctors and staff that have direct contact with these substances is recommended in the above regulations.

The Department of Health guidance Protecting Health Care Workers and Patients from Hepatitis B and the 1996 and 2004 addenda (see above reference to the website, Annex 1) states that all health care workers who perform exposure prone procedures (EPPs) should be immunised. They should have their response to the vaccine checked and non-responders to vaccination should be investigated for infection in order to minimise risk to patients. This guidance also states that workers whose Hepatitis B status is unknown should be tested before carrying out EPPs.

Immunisation provides protection in up to 90 per cent of patients vaccinated, but is not a substitute for good infection control procedures.

The BMA website provides a specimen Hepatitis B immunisation policy in the general practice staff (non-medical) specimen handbook. Advice on suitable immunisation policies can also be obtained from the Occupational Health Service, which works with reference to guidelines published in Immunisation against Infectious Disease (see Annex 1 in the above website).

In relation to confidentiality, the BMA Website offers the following guidance: "It is extremely important that Hepatitis B infected health care workers have the same right of confidentiality as any patient seeking or receiving medical care.

Occupational health notes are separate from other hospital notes and occupational health physicians are ethically and professionally obliged not to release information without the consent of the individual. There are occasions when an employer may need to be advised that a change of duties should take place, but Hepatitis B status itself will not normally be disclosed without the health care worker's consent. However, where patients are, or have been, at risk of exposure to Hepatitis B from an infected healthcare worker, it may be necessary in the public interest for the employer to have access to confidential information".

Management 3.2 Written evidence
There should be evidence that the Hepatitis B status of all staff is known. (Grade C)

Management 3.3 Assessment visit
Questioning should take place on the system to check Hepatitis B status.

Management 3.4 Assessors' guidance
It should be confirmed that evidence is available that the Hepatitis B status of all doctors and relevant practice-employed staff has been recorded and that there is a mechanism for recommending (and recording any recommendation) regarding vaccination to the doctor or staff member, including checking response to vaccination.

Management indicator 5

The practice offers a range of appointment times to patients, which as a minimum should include morning and afternoon appointments 5 mornings and 4 afternoons per week, except where agreed by the PCO.

Management 5.1 Practice guidance
In practices which operate with open surgeries, this would mean that the practice should have a range of times of availability equivalent to the appointment range in the indicator. Patients should be offered a reasonable range of appointment times, which are advertised to them. The practice's appointment system should normally offer as a minimum the range of appointments described in the practice leaflet. In remote and rural areas, for example, or in some single-handed practices, the range of appointment availability described in the indicator will not be appropriate. In these circumstances, the practice should agree its availability with the PCO and this should be advertised in the practice leaflet. Evidence that this has been agreed should be made available to the assessor.

Management 5.2 Written evidence
The practice leaflet should be scrutinised for evidence of appointment times. (Grade A)

Management 5.3 Assessment visit
The practice leaflet and appointment book should be checked.

Management 5.4 Assessors' guidance
The assessor should check that the practice advertises in the practice leaflet a range of appointment times which corresponds to the indicator. The availability of such appointments should be confirmed by looking at a randomly selected week in the appointment book/appointment system. In practices offering a more limited range of appointment availability, the practice should provide evidence that the PCO has agreed the range on offer.

Management indicator 7

The practice has systems in place to ensure regular and appropriate inspection, calibration, maintenance and replacement of equipment including:

- a defined responsible person
- clear recording
- systematic pre-planned schedules
- reporting of faults.

Management 7.1 Practice guidance
The evidence for this criterion may form part of the statutory risk assessment activity which takes place under the Health and Safety at Work Regulations 1999 (Management Regulations). Comprehensive guidance on risk assessment can be found in the Health and Safety Executive's website on www.hse.gov.uk. The website provides a free booklet "Five Steps to Risk Assessment".

This website also contains a free leaflet "Maintaining portable electrical equipment in offices and other low risk environments". This contains guidance on the appropriate person to inspect and maintain equipment in relation to the equipment's associated risks as well as suggested intervals between inspections and maintenance. For example, a printer may be inspected and maintained by a "competent" person with enough knowledge and training, who need not be an electrician. This is only one of several free leaflets available on the website, others may also be relevant to the individual practice's circumstances.

The schedule should clearly identify who has overall responsibility, who is the appropriate individual to inspect/maintain/calibrate each piece of equipment, the intervals between inspections and the system for reporting faults.

Management 7.2 Written evidence
Details should be given of the system to ensure regular and appropriate inspection, calibration, maintenance and replacement of equipment meeting the stated criteria. (Grade B)

Management 7.3 Assessment visit
Assessors should undertake a review of equipment requiring maintenance, and the log of inspection and maintenance.

Management 7.4 Assessors' guidance
The practice should have in place a system which includes risk assessment of equipment and a schedule of inspection, calibration and maintenance. This should include electrical equipment.

The responsible person will not always be the person actually carrying out the inspection; this should be specified in the schedule. The intervals between inspection, calibration and maintenance will be different for various types of equipment dependent on their associated level of risk. Inspection, calibration and maintenance should be recorded.

There should be a clear system for reporting faults.

The practice should be able to provide a written record of inspection, calibration and maintenance for some randomly selected pieces of equipment. It would be useful to consider a range of equipment from small items (e.g. printer) up to larger items such as a steriliser or defibrillator.

Management indicator 9

The practice has a protocol for the identification of carers and a mechanism for the referral of carers for social services assessment.

Management 9.1 Practice guidance
The practice should have a procedure for how carers are identified and a referral protocol to social services for assessment of carers support needs or to other local support such as carers centre.

A carer is defined as, someone who, without payment, provides help and support to a partner, relative, friend or neighbour, who could not manage to stay at home without their help due to age, sickness, addiction or disability.

The practice should remember to include any young carers who are particularly vulnerable.

Further information
Focus on Carers and the NHS-identifying and supporting hidden carers. Good Practice.
http://www.carers.org/publications,185,GP.html

NHS Carer Information Strategies guidance – HDL22 (2006) (sections 3.3 and 3.10).
www.sehd.scot.nhs.uk/mels/HDL2006_22.pdf

Carers Scotland: Resource Pack for General Practice and Primary Care.
http://www.carerscotland.org/Information/Takingcareofyourself/Resourcepackforgeneralpracticeandprimarycare

Management 9.2 Written evidence
The protocol is available. (Grade A)

Management 9.3 Assessment visit
The policy is discussed.

Management 9.4 Assessors' guidance
The assessors should enquire of various team members what action they would take when they identify that a carer may benefit from social services involvement.

Management indicator 10

There is a written procedures manual that includes staff employment policies including equal opportunities, bullying and harassment and sickness absence (including illegal drugs, alcohol and stress), to which staff have access.

Management 10.1 Practice guidance
It is good employment practice to have established written procedures, which are available to staff, so that both staff and employer are clear about the steps to be taken if a problem arises. As well as the policies mentioned, the manual could include the Disciplinary and Grievance Procedure.

Useful guidance on writing these policies can be found as follows:

- Equal Opportunities Policy: The Equal Opportunities Commission – Guidelines for Equal Opportunities Employers on www.eoc.org.uk/. Guidance can also be found on the ACAS web site on www.acas.org.uk. The Department for Education and Skills also publishes an Equal Opportunities Ten Point Plan for Employers giving practical advice on implementing equal opportunities policies.
- Bullying and Harassment: ACAS as above.
- IHM Healthcare Management Code at www.ihm.org.uk
- IHM Diversity Group recommendations for recruitment and selection.
- Sickness Absence: ACAS as above, including their booklet entitled Absence and Labour Turnover.
- BMA guidance on managing absence at www.bma.org.uk

Management 10.2 Written evidence
Employment policies should be recorded (Grade B). Policies should be consistent with current legislation and indicate a date when the policy has been reviewed.

Management 10.3 Assessment visit
The procedures manual should be inspected.

Management 10.4 Assessors' guidance
The procedures manual should contain dated copies which are made available to staff of the policies relating to their employment. It should be confirmed with employed staff that they are aware of the content of the procedures manual and its whereabouts.

Medicines management

	Indicator	Points
Medicines 2	The practice possesses the equipment and in-date emergency drugs to treat anaphylaxis	2
Medicines 3	There is a system for checking the expiry dates of emergency drugs on at least an annual basis	2
Medicines 4	The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays)	3
Medicines 6	The practice meets the PCO prescribing adviser at least annually and agrees up to 3 actions related to prescribing	4
Medicines 8	The number of hours from requesting a prescription to availability for collection by the patient is 48 hours or less (excluding weekends and bank/local holidays)	6
Medicines 10	The practice meets the PCO prescribing adviser at least annually, has agreed up to three actions related to prescribing and subsequently provided evidence of change	4
Medicines 11	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed 4 or more repeat medicines Standard 80%	7
Medicines 12	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed repeat medicines Standard 80%	8

Medicines indicator 2

The practice possesses the equipment and in-date emergency drugs to treat anaphylaxis.

Medicines 2.1 Practice guidance
GMP for GPs (2008) states that the excellent doctor "has up to date emergency equipment and drugs" and anaphylaxis is one condition that may constitute an emergency in the practice premises.

Medicines 2.2 Written evidence
There is a list of equipment and drugs that the practice has available to deal with an anaphylactic emergency. (Grade C)

Medicines 2.3 Assessment visit
The appropriate equipment and drugs are inspected.

Medicines 2.4 Assessors' guidance
The dates of emergency drugs should be checked.

Medicines indicator 3

There is a system for checking the expiry dates of emergency drugs on at least an annual basis.

Medicines 3.1 Practice guidance
GMP for GPs (2008) states that the unacceptable GP "has drugs which are out of date" and a system is required to prevent this. The system should include all emergency drugs held in the practice premises and in the doctors' bags.

Medicines 3.2 Written evidence
The system is described. (Grade C)

Medicines 3.3 Assessment visit
A random sample of doctors' bags and other emergency drugs is checked.

Medicines 3.4 Assessors' guidance
All drugs should be in date and the doctors should be questioned on the system for keeping them up to date.

Medicines indicator 4

The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays).

Medicines 4.1 Practice guidance
Practices should provide a reasonably fast service for their repeat prescriptions. Details of how the practice's system works should be contained in the practice leaflet. If the practice can deliver the service in 48 hours, another indicator is also achieved (indicator Medicines 8).

Medicines 4.2 Written evidence
The practice leaflet or policy is available (Grade A). The receptionists are questioned on the policy.

Medicines 4.4 Assessors' guidance
The assessors should check that the system for issuing repeat prescriptions can be described by the receptionists and should observe it in action.

Medicines indicator 6

The practice meets the PCO prescribing adviser at least annually and agrees up to 3 actions related to prescribing.

Medicines 6.1 Practice guidance
If the PCO prescribing adviser is unable to visit within the year and there has been no contact with another PCO recognised source of prescribing advice within the year, then the practice is exempt from this indicator. In that circumstance, the practice should provide written confirmation from the PCO prescribing adviser that he or she has been unable to visit within the relevant year.

Three actions agreed with the PCO prescribing adviser should be produced, or written confirmation from the PCO prescribing adviser that he or she has been unable to visit within the relevant year. (Grade A)

Medicines 6.3 Assessment visit
The actions should be discussed.

Medicines 6.4 Assessors' guidance
This indicator will be considered to have been met if the prescribing advisor and the practice have reached agreement on the action points.

Medicines indicator 8

The number of hours from requesting a prescription to availability for collection by the patient is 48 hours or less (excluding weekends and bank/local holidays).

Medicines 8.1 Practice guidance
Patients tend to prefer a reasonably fast service for their repeat prescriptions. Details of how the practice's system works should be contained in the practice leaflet. If the practice can achieve this in 72 hours, then another indicator is achieved (indicator Medicines 4).

Medicines 8.2 Written evidence
The practice leaflet or policy is available (Grade A). The receptionists are questioned on the policy.

Medicines 8.4 Assessors' guidance
The assessors should check that the system for issuing repeat prescriptions can be described by the receptionists and should observe it in action.

Medicines indicator 10

The practice meets the PCO prescribing adviser at least annually, has agreed up to 3 actions related to prescribing and subsequently provided evidence of change.

Medicines 10.1 Practice guidance
Normally, improvements should be demonstrated in all three areas. However, if good reasons can be presented by the practice for not having achieved improvements, then the practice can still achieve this indicator. The practice should be able to provide written support from the PCO prescribing adviser for its reasons for not achieving the areas in question.

If the PCO prescribing adviser is unable to visit within the year, then the practice is exempt. The practice should provide written confirmation from the PCO prescribing adviser that he or she has been unable to visit within the relevant year.

Medicines 10.2 Written evidence
Three actions agreed with the PCO prescribing adviser and evidence of change should be produced, and/or written support from the prescribing adviser for the reasons for not achieving change, or written confirmation from the PCO prescribing advisor that he or she has been unable to visit within the relevant year.

Medicines 10.3 Assessment visit
Actions and improvements should be discussed.

Medicines 10.4 Assessors' guidance
Normally, improvements should be demonstrated in all three areas. However, if good reasons can be presented by the practice for not having achieved improvements, then the practice can still achieve this indicator. The practice should be able to provide written support from the PCO prescribing adviser for its reasons for not achieving the areas in question.

Medicines indicator 11

A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed 4 or more repeat medicines.

Medicines 11.1 Practice guidance
Medication is by far the most common form of medical intervention. Four out of five people aged over 75 years take a prescription medicine and 36 per cent are taking four or more[153]. However, we also know that up to 50 per cent of drugs are not taken as prescribed, many drugs in common use can cause problems and that adverse reactions to medicines are implicated in 5 - 17 per cent of hospital admissions.

Involving patients in prescribing decisions and supporting them in taking their medicines is a key part of improving patient safety, health outcomes and satisfaction with care. Medication review is increasingly recognised as a cornerstone of medicines management. It is expected that at least a Level 2 medication review will occur, as described in the briefing paper linked below:

http://www.npc.co.uk/med_partnership/medication-review/room-for-review/downloads.html

The underlying principles of any medication review, whether using the patient's full notes or face to face are:

1. All patients should have the chance to raise questions and highlight problems about their medicines.
2. Medication review seeks to improve or optimise impact of treatment for an individual patient.
3. The review is undertaken in a systematic way by a competent person.
4. Any changes resulting from the review are agreed with the patient.
5. The review is documented in the patient's notes.
6. The impact of any change is monitored.

Medicines DO NOT include dressings and emollients but would include topical preparations with an active ingredient such as steroid creams and ointments and hormone preparations.

Medicines 11.2 Written information
A survey of medication review should be undertaken (Grade A). This could be a computerised search and print out or a survey of 50 records of patients on four or more medications.

Medicines 11.3 Assessment visit
Inspection of records should be carried out.

Medicines 11.4 Assessors' guidance
The assessors should ask the staff to demonstrate how the system works and in particular how an annual review is ensured.

[153] Medicines and Older People – Supplement to the NSF for Older People, 2001

Medicines indicator 12

A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed repeat medicines.

Medicines 12.1 Practice guidance
See Medicines 11.1

Medicines 12.2 Written information
See Medicines 11.2

Medicines 12.3 Assessment visit
See Medicines 11.3

Medicines 12.4 Assessors' guidance
See Medicines 11.4

Quality and productivity

	Indicator	Points
QP1	The practice conducts an internal review of their prescribing to assess whether it is clinically appropriate and cost effective, agrees with the PCO 3 areas for improvement and produces a draft plan for each area no later than 30 June 2011	6
QP2	The practice participates in an external peer review of prescribing with a group of practices and agrees plans for 3 prescribing areas for improvement firstly with the group and then with the PCO no later than 30 September 2011	7
QP3	The percentage of prescriptions complying with the agreed plan for the first improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP4	The percentage of prescriptions complying with the agreed plan for the second improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP5	The percentage of prescriptions complying with the agreed plan for the third improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 (Payment stages to be determined locally according to the method set out in the indicator guidance below with 20 percentage points between upper and lower thresholds)	5
QP6	The practice meets internally to review the data on secondary care outpatient referrals provided by the PCO	5
QP7	The practice participates in an external peer review with a group of practices to compare its secondary care outpatient referral data either with practices in the group of practices or with practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO	5

QP8	The practice engages with the development of and follows 3 agreed care pathways 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 and produces a report of the action taken to the PCO no later than 31 March 2012	11
QP9	The practice meets internally to review the data on emergency admissions provided by the PCO	5
QP10	The practice participates in an external peer review with a group of practices to compare its data on emergency admissions either with practices in the group of practices or practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO	15
QP11	The practice engages with the development of and follows 3 agreed care pathways (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 and produces a report of the action taken to the PCO no later than 31 March 2012	27.5

Quality and productivity (QP) indicator 1

The practice conducts an internal review of their prescribing to assess whether it is clinically appropriate and cost effective, agrees with the PCO 3 areas for improvement and produces a draft plan for each area no later than 30 June 2011.

Quality and productivity 1.1 Practice guidance
The PCO must provide practices with data on their prescribing and comparisons with other practices in the PCO area and nationally to enable practices to review the clinical appropriateness and cost effectiveness of their prescribing. The data may include levels of prescribing of drugs available generically and information about the costs of drugs actually prescribed and clinically suitable lower cost alternatives. All prescribers in the practice will meet to review and reflect on the practice's prescribing performance with regard to clinical appropriateness and cost effectiveness, taking account of the information supplied by the PCO.

Using this data, practices will identify three areas of prescribing for improvement in order to bring about more clinically appropriate and cost effective prescribing. The areas must not be the same as those agreed for the Medicines 6 and Medicines 10 indicators. Having identified the three improvement areas the practice will identify plans for improvement which respond to their local circumstances, focusing on those individual areas of expenditure which are significant throughout the year and which offer the greatest opportunity for improved clinical effectiveness or productivity savings or both when compared with similar practices.

The internal review must be completed as early in the year as possible but no later than 30 June 2011.

Quality and productivity 1.2 Reporting and verification
The practice produces a report detailing that an internal review has taken place involving all the prescribers in the practice. The report must include a summary of the discussions that have taken place and which three improvement areas have been identified.

The three areas must be agreed with the PCO in writing no later than 30 June 2011.

Quality and productivity (QP) indicator 2

The practice participates in an external peer review of prescribing with a group of practices and agrees its proposed plans for 3 prescribing areas for improvement firstly with the group and then with the PCO no later than 30 September 2011.

Quality and productivity 2.1 Practice guidance
The practice will identify a group of practices with which it will carry out external review of their prescribing. The group must contain a minimum of six practices, unless the PCO otherwise agrees having due regard to local geography and the historical groupings of practices.

The external peer review must consist of a comparison of prescribing behaviour against other practices that have been identified within the group.

In developing the improvement plans, practices in the group must define a numerator and denominator to measure achievement for QP3 - QP5 respectively. The group must also agree the minimum and maximum percentages for payment according to the methodology for QP3 - QP5 described below.

Each practice within the group will present a plan for improvement in each of the three improvement areas which will be reviewed and either agreed or amended by the group. The plans will then be submitted to the PCO for consideration and decision on whether to agree them. The plans will describe how achievement for each of the three areas will be measured.

In order for practices to be given as much time as possible to work on achieving their agreed plans, the group of practices and PCO sign off must be completed as early in the year as possible but no later than 30 September 2011.

Quality and productivity 2.2 Reporting and verification
The practice produces a report detailing that an external review has taken place involving the practices in the group. The report must include a summary of the discussions that have taken place during the review meetings, which practices have been involved and the three improvement plans that have been agreed with the group of practices.

The three areas and plans for improvement must be agreed with the PCO in writing no later than 30 September 2011.

Quality and productivity (QP) indicator 3

The percentage of prescriptions complying with the agreed plan for the first improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 .

Quality and productivity 3.1 Practice guidance
Achievement will be assessed at practice level and based on individual practice performance against the agreed plan, and will not be affected by the results of other practices in the group. In each improvement area there will be an intention to change prescribing behaviour so that the percentage of prescriptions which comply with the plan increases as a percentage of all prescriptions in that area.

Quality and productivity 3.2 Reporting and verification
The definition of the denominator and the numerator for the assessment must be agreed by the PCO with the practice as part of the plan for that improvement area agreed no later than 30 September 2011. As with other parts of the Organisational Domain, exception reporting will not apply.

Achievement will be measured in the final quarter of the 2011/12 year (1 January to 31 March 2012) using ePACT[154] data and the number of prescriptions means the number of prescription items.

Achievement will be measured against a sliding scale between minimum and maximum percentages.

The maximum percentage will be set locally and should normally be set at the 75th centile of achievement nationally for the quarter ending on 31 December 2010 measured on ePACT against the same definitions of numerator and denominator. The maximum threshold may not be set higher than this but the PCO may agree to set it lower in the light of local circumstances (for example relevant characteristics of the practice population such as a high proportion of patients with intolerance to certain products). The minimum percentage will be set at 20 percentage points lower than the upper threshold.

The minimum percentage represents the start of the scale and has a value of zero points. The maximum percentage is the lowest percentage in order to qualify for all of the points in respect of that indicator. If a contractor has achieved a percentage score that is between the minimum and maximum set, it achieves a proportion of the points available in relation to the indicator. The proportion is calculated as follows.

Once the percentage the contractor has scored has been calculated (A), subtract from this the minimum percentage set for the indicator (B), then divide the result by the maximum (C) and minimum (B) percentage scores for the indicator, and multiply the result of that calculation by the total number of points available in relation to the indicator (D). This can be expressed as:

$$\frac{(A-B)}{(C-B)} \times D$$

The PCO will provide the practice with data on achievement against the plan from 1 October 2011 on a monthly basis if possible broken down to individual prescriber.

Quality and productivity (QP) indicator 4

The percentage of prescriptions complying with the agreed plan for the second improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012 .

Quality and productivity 4.1 Practice guidance
See quality and productivity 3.1.

Quality and productivity 4.2 Reporting and verification
See quality and productivity 3.2.

[154] ePACT is a service provided by the NHS Business Services Authority which enables on line analysis of NHS prescribing date http://www.nhsbsa.nhs.uk/815.aspx

Quality and productivity (QP) indicator 5

The percentage of prescriptions complying with the agreed plan for the third improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012.

Quality and productivity 5.1 Practice guidance
See quality and productivity 3.1.

Quality and productivity 5.2 Reporting and verification
See quality and productivity 3.2.

Quality and productivity (QP) indicator 6

The practice meets internally to review the data on secondary care outpatient referrals provided by the PCO.

Quality and productivity 6.1 Practice guidance
The PCO must provide practices with data on secondary care referrals which the practice reasonably requires to conduct the review. Practices should discuss with their PCO what data is required for the practice meeting and when.

Clinicians in the practice will meet at least once during the year to carry out the internal review. This meeting should involve the range of clinicians working within the practice.

At the meeting the practice identifies any apparent anomalies in referral patterns and discuss the reasons why this might be the case. Practices should compare the referral patterns with reference to existing care pathways in order to identify areas where improvement might be made to decision making on referrals. The output of this review must be made available to the group of practices taking part in the external peer review.

Quality and productivity 6.2 Reporting and verification
The practice produces a report summarising the discussions that have taken place at the meeting.

This report should be submitted to the PCO no later than 31 March 2012.

Quality and productivity (QP) indicator 7

The practice participates in an external peer review with a group of practices to compare its secondary care outpatient referral data either with practices in the group of practices or with practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO.

Quality and productivity 7.1 Practice guidance
The practice will identify a group of practices with which it will carry out an external review of their secondary care outpatient referrals. The group must contain a minimum of six practices that share similar referral routes (e.g. refer patients to a similar set of services).

The external review must consist of a comparison of the practice data with comparable data from the practices in the group or from all practices in the PCO area to determine why there are any variances and where it may be appropriate for the practice to amend current arrangements for the management of hospital referrals. The focus of review will 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 practice should propose areas for commissioning or service design improvement to the PCO.

Quality and productivity 7.2 Reporting and verification
The practice produces a report detailing that an external review has taken place involving the practices in the group. The report must include a summary of the discussions that have taken place during the review meetings, which practices have been involved and what areas have been proposed for commissioning or service design improvement.

The report must be submitted to the PCO no later than 31 March 2012.

Quality and productivity (QP) indicator 8

The practice engages with the development of and follows 3 agreed care pathways 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 referrals and produces a report of the action taken to the PCO no later than 31 March 2012.

Quality and productivity 8.1 Practice guidance
It is expected that PCOs will lead the development of care pathways as defined above, working with practice groups. The PCO may, if the contractor consents, seek the views of the LMC if any for its area on the development of the care pathway.

GPs in the practice must actively respond to the care pathway development process for the purpose of this indicator. This may, for example, involve attending meetings with other health professionals concerned with the care pathway or commenting to the pathway group electronically. The three care pathways cannot be the same as those identified for indicator QP11. Where possible, the focus of the care pathways should be on long term conditions.

Practices must then follow the agreed care pathways in the treatment of their patients, unless in individual cases they can justify clinical reasons for not doing this.

Quality and productivity 8.2 Reporting and verification
The practice produces a report summarising the action taken, information about which care pathways were followed and changes in the patterns of referral that have resulted.

This report should be submitted to the PCO by 31 March 2012.

Achievement will be awarded on the basis that practices have both engaged in the development of care pathways and delivered care along the agreed care pathways.

It is expected that a practice 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 report should show that the practice has considered following the care pathway in treating these patients and has documented reasons why it is not clinically appropriate in those individual circumstances.

Quality and productivity (QP) indicator 9

The practice meets internally to review the data on emergency admissions provided by the PCO.

Quality and productivity 9.1 Practice guidance
The PCO must provide practices with data on emergency admissions which the practice reasonably requires to conduct the review. Practices should discuss with their PCO what data are required for the practice meeting and when.

Clinicians in the practice will meet at least once during the year to carry out the internal review. This meeting should involve the range of clinicians working within the practice. Emergency admissions are defined as admissions that are unpredictable and at short notice because of clinical need[155].

Practices should explore the reasons for emergency admissions with reference to available pathways in order to identify areas where improvement might be made.

The output of this review must be made available to the group of practices taking part in the external peer review.

Quality and productivity 9.2 Reporting and verification
The practice produces a report summarising the discussions that have taken place at the meeting. This report should be submitted to the PCO no later than 31 March 2012.

Quality and productivity (QP) indicator 10

The practice participates in an external peer review with a group of practices to compare its data on emergency admissions either with practices in the group of practices or practices in the PCO area and proposes areas for commissioning or service design improvements to the PCO.

Quality and productivity 10.1 Practice guidance
The steps outlined in indicator QP7 apply to QP10, with references to "secondary outpatient referrals" replaced with references to "emergency admissions".

Quality and productivity 10.2 Reporting and verification
The practice produces a report detailing that an external review has taken place involving the practices in the group. The report must include a summary of the discussions that have taken place during the review meetings, which practices have been involved and what areas have been proposed for commissioning or service design improvement.

The report must be submitted to the PCO no later than 31 March 2012.

Quality and productivity (QP) indicator 11

The practice engages with the development of and follows 3 agreed care pathways (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 and produces a report of the action taken to the PCO no later than 31 March 2012.

[155] NHS Data Dictionary – Admission method codes 21, 22, 23, 24 and 28. http://www.datadictionary.nhs.uk/data_dictionary/attributes/a/add/admission_method_de.asp?shownav=1

Quality and productivity 11.1 Practice guidance
The steps outlined in indicator QP8 apply to indicators QP11, with references to "secondary outpatient referrals" replaced with references to "emergency admissions".

Quality and productivity 11.2 Reporting and verification
The practice produces a report summarising the action taken, information about which care pathways were followed and changes in the rates of emergency admissions that have resulted.

This report should be submitted to the PCO by 31 March 2012.

Achievement will be awarded on the basis that practices have both engaged in the development and delivered care along the agreed pathways.

It is expected that a practice 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 report should show that the practice has considered following the care pathway in treating these patients and has documented reasons why it is not clinically appropriate in those individual circumstances.

Section 4. Patient experience domain

Indicator	Points
PE 1. Length of consultations The length of routine booked appointments with the doctors in the practice is not less than 10 minutes. (If the practice routinely sees extras during booked surgeries, then the average booked consultation length should allow for the average number of extras seen in a surgery session. If the extras are seen at the end, then it is not necessary to make this adjustment). For practices with only an open surgery system, the average face to face time spent by the GP with the patient is at least 8 minutes. Practices that routinely operate a mixed economy of booked and open surgeries should report on both criteria.	33

PE 1 Length of consultations

The length of routine booked appointments with the doctors in the practice is not less than 10 minutes. If the practice routinely sees extras during booked surgeries, then the average booked consultation length should allow for the average number of extras seen in a surgery session. If the extras are seen at the end, then it is not necessary to make this adjustment.

For practices with only an open surgery system, the average face to face time spent by the GP with the patient is at least 8 minutes.

Practices that routinely operate a mixed economy of booked and open surgeries should report on both criteria.

PE 1.1 Practice guidance
The contract includes an incentive for practices 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.

Practices can claim this payment if their normal booking interval is ten minutes or more. 'Normal' means that three quarters or more of their appointments should be ten minutes or longer. Deciding whether a practice meets this requirement depends on the booking system.

Practices with appointment systems
For practices where three quarters of patients are seen in booked appointments of ten minutes or more, and surgery sessions are not normally interrupted by 'extras', the contract requirement is met. Extras seen at the end of surgeries and patients seen in emergency surgeries should then not amount to more than a quarter of patients seen.

If extras 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 extras are routinely added in, then the average time for patients will be 120/18 equals 6.7 minutes and these slots would not meet the ten minute requirement. Practices will

generally find it easier to decide whether they meet the 'three quarters' requirement if extras are seen at the end of routine surgeries, rather than fitted in during them.

Some practices use booking systems which contain a mixture of slots booked at different lengths within a single surgery. In these practices, the overall number of slots which are ten minutes or more in length should be three quarters of the total.

Practices without appointment systems or with mixed systems
Some practices do not run an appointment system. In this case, or where some surgeries are regularly 'open', practices should measure the actual time of consultations in two separate sample weeks during each year. It is not necessary to do this if fewer than a quarter of patients are seen in open surgeries and the rest of the surgeries are booked at intervals of ten minutes or more, as the 'three quarters' requirement will already be met.

For practices using computerised clinical systems, the length of consultations can be recorded automatically from the computer, providing the doctors know that it is being used for this purpose during the week. Where actual consultation length is measured, the average time with patients should be at least 7.25 minutes. This assumes that the face to face time has been eight minutes in three quarters of consultations (equivalent to the face to face time in a ten minute booked slot) and five minutes in the remainder.

Unusual systems
Practices organise consulting in a wide variety of different ways. This guidance covers the majority of systems. However, if the practice believes that the spirit of the indicator is met but that the evidence it can provide is different, it should have discussions with the PCO at an early stage.

PE 1.2 Written evidence
For practices where three quarters of patients are seen in booked appointments of ten minutes or more and surgery sessions are not normally interrupted by 'extras' the contract requirement is met. Practices should submit a statement to this effect (Grade A).

For other practices, claiming against this indicator, a survey carried out on two separate weeks of consultation length or a computer printout which details the average consultation length should be available. (Grade A)

PE 1.3 Assessment visit
If the practice operates an appointment system, inspection of the appointments book (whether paper or computerised) should be carried out, looking at a sample of days over the preceding year. If the practice has submitted a survey of consultation length, this should be reviewed.

PE 1.4 Assessors' guidance
The assessors may need to look at a number of sample days to confirm that 75 per cent of consultations have been booked at least at ten minute intervals.

If a manual survey of average consultation time has been submitted the assessors should question the clinical and administrative staff on how and when this was carried out.

Additional services

For practices providing additional services the following organisational markers will apply.

Cervical screening (CS)

	Indicator	Points
CS 1	The percentage of patients (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) whose notes record that a cervical smear has been performed in the preceding 5 years (Payment stages 40–80%)	11
CS 5	The practice has a system for informing all women of the results of cervical smears	2
CS 6	The practice has a policy for auditing its cervical screening service, and performs an audit of inadequate cervical smears in relation to individual smear-takers at least every 2 years	2
CS 7	The practice has a protocol that is in line with national guidance and practice for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate smear rates	7

Child health surveillance (CHS)

	Indicator	Points
CHS 1	Child development checks are offered at intervals that are consistent with national guidelines and policy	6

Maternity services (MAT)

	Indicator	Points
MAT 1	Ante-natal care and screening are offered according to current local guidelines	6

Contraception (SH)

	Indicator	Points
SH 1	The practice can produce a register of women who have been prescribed any method of contraception at least once in the last year, or other appropriate interval e.g. last 5 years for an IUS.	4
SH 2	The percentage of women prescribed an oral or patch contraceptive method who have also received information from the practice about long acting reversible methods of contraception in the preceding 15 months (Payment stages 40–90%)	3
SH 3	The percentage of women prescribed emergency hormonal contraception at least once in the year by the practice who have received information from the practice about long acting reversible methods of contraception at the time of, or within 1 month of, the prescription (Payment stages 40–90%)	3

Cervical screening (CS)

CS indicator 1

The percentage of patients (aged from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales) whose notes record that a cervical smear has been performed in the preceding 5 years.

CS 1.1 Practice guidance
This indicator reflects the previous target payment system for cervical screening and is designed to encourage and incentivise practices to continue to achieve high levels of uptake in cervical screening.

The practice should provide evidence of the number of eligible women aged, from 25 to 64 in England and Northern Ireland, from 20 to 60 in Scotland and from 20 to 64 in Wales, who have had a cervical smear performed in the last 60 months.

This indicator differs from all the other additional service indicators in that a sliding scale will apply between 40 per cent and 80 per cent, in a similar fashion to the clinical indicators.

Exception reporting (as detailed in the clinical section) will apply and specifically includes women who have had a hysterectomy involving the complete removal of the cervix.

Exception reporting
From April 2011, the exception reporting rules regarding 'did not attend' (DNA) letters for the additional services cervical screening indicators in the QOF have changed. The first two letters from the central cancer screening services inviting a patient to attend for a screening will now count towards the three letters required to code a patient as DNA.

Practices will be responsible for sending out the third letter before a DNA code may be used.

This revised exception reporting criteria is not applicable to practices that have opted to run their own call/recall system. These practices will still be required to issue the all three reminder letters directly in order to meet the DNA criteria. Copies of the letters sent by the practice may be required for assessment purposes.

England. NHS Cancer Screening Programme.
http://www.cancerscreening.nhs.uk/cervical/index.html

Scotland. Scottish Cervical Call/Recall system (SCCRS). (available (through NHS net only).
www.sccrs.scot.nhs.uk

Wales. Cervical Screening Wales. http://www.screeningservices.org.uk/csw/

Northern Ireland. The Public Health Agency (PHA) has the lead role in screening in NI. Screening services are jointly commissioned with the Health and Social Care Board (HSCB). The general practice role in screening is through the HSCB.

CS 1.2 Written evidence
There should be a computer print-out showing the number of eligible women on the practice list, the number exception reported and the number who have had a cervical smear performed in the last five years (Grade A). In many areas the PCO may provide these data although, other than patients with hysterectomy, they will be unaware of exceptions, for example patients who have been invited on three occasions but failed to attend or those who have opted out of the screening programme. Practices should remove patients from the denominator in the same way as with the clinical indicators.

CS 1.3 Assessment visit
The print-out should be inspected.

CS 1.4 Assessors' guidance
The assessors should enquire on how patients who are exception reported are identified and recorded.

CS indicator 5

The practice has a system for informing all women of the results of cervical smears.

CS 5.1 Practice guidance
It is generally accepted as good practice for all women who have had a cervical smear performed to be actively informed of the result. Responsibility for the system may be outwith the practice.

CS 5.2 Written evidence
There should be a description of the system and examples of letters sent to patients. (Grade C)

CS 5.3 Assessment visit
The team should be questioned on how women are informed of the way they will obtain the result of their smear.

CS 5.4 Assessors' guidance
A letter sent to the patient containing and explaining the result is ideal.

CS indicator 6

The practice has a policy for auditing its cervical screening service, and performs an audit of inadequate cervical smears in relation to individual smear takers at least every 2 years.

CS 6.1 Practice guidance
In this audit the criteria, the results, analysis of 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 smear takers who are obvious outliers in relation to the reading laboratory's average for inadequate smears.

CS 6.2 Written evidence
An audit of inadequate smears should be recorded. (Grade A)

CS 6.3 Assessment visit
A discussion with smear takers should take place, dealing with the audit and any educational needs which arose and how these were met.

CS 6.4 Assessors' guidance
All the elements for an audit stated in the practice guidance need to be present.

CS indicator 7

The practice has a protocol that is in line with national guidance and practice for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate smear rates.

CS 7.1 Practice guidance
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 outwith the practice and should be in line with national guidance.

See guidance on DNA letters in section CS1.1 practice guidance.

CS 7.2 Written evidence
There should be a written policy covering the issues outlined above. (Grade A)

CS 7.3 Assessment visit
The policy should be discussed with relevant staff and the practice should demonstrate how the systems operate.

CS 7.4 Assessors guidance
It may be necessary to ask the practice to demonstrate how its policy operates.

Child health surveillance (CHS)

CHS indicator 1

Child development checks are offered at intervals that are consistent with national guidelines and policy.

CHS 1.1 Practice guidance
The child health surveillance programme should be based on national guidelines[156]. It is important that the practice has a system to ensure follow-up of any identified concern and that referrals are made as appropriate.[157]

Guidance on Implementation in Scotland. Health for All Children 4 (Hall 4):
http://www.scotland.gov.uk/Publications/2005/04/15161325/13269

CHS 1.2 Written evidence
There should be a description of the child health surveillance programme and how concerns are followed up. (Grade C)

CHS 1.3 Assessment visit
The practice team is asked for details of child health surveillance in the practice and how concerns are followed up.

CHS 1.4 Assessors' guidance
The practice should be aware of which guidelines it has adopted. The assessors should be content that there is a process to ensure concerns are followed up.

Maternity services (MAT)

MAT indicator 1

Ante-natal care and screening are offered according to current local guidelines.

MAT 1.1 Practice guidance
Most local areas have produced guidelines, which should be adopted within the practice.

MAT 1.2 Written evidence
There should be written guidelines on ante-natal care and screening. (Grade A)

MAT 1.3 Assessment visit
The assessment should involve a description of ante-natal care, using the illustration of one case.

MAT 1.4 Assessors' guidance
The case should show that the guidance is known and is being used.

Contraception (SH)

Around 80 per cent of (prescribed) contraception in the UK is provided in general practice.

The vast majority of practices are providing the additional service for contraception and many are also providing enhanced services including long acting reversible contraception (LARC) methods. All practices providing any level of contraception need to be able to advise women about all methods to ensure they can make an informed choice. Clinical staff in practices which are not providing all methods also need enough knowledge of these to refer appropriately

[156] Healthy Child Programme (2009). Pregnancy and the first five years of life. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107563
[157] Hall,D. and EllimanD.(2003) eds Health for all children (fourth ed) Oxford University Press

those women who have chosen a method which they do not supply. Practices also should be aware of local services and local referral pathways.

Sexual Health Strategy for Scotland. Respect & Responsibility.
http://www.scotland.gov.uk/Resource/Doc/35596/0012575.pdf

NHS Quality Improvement Scotland Sexual Health Services (2008). Standards.
http://www.nhshealthquality.org/nhsqis/files/SEXHEALTHSERV_STANF_MAR08.pdf

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 methods[158].

Contraception (SH) indicator 1

The practice can produce a register of women who have been prescribed any method of contraception at least once in the last year, or other appropriate interval e.g. last 5 years for an IUS.

SH 1.1 Rationale
General practices 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 practice:

- Emergency hormonal contraception
- Combined oral contraception
- Progestogen only oral contraception
- Contraceptive patch
- Contraceptive diaphragm
- Intrauterine device (IUD)
- Intrauterine system (IUS)
- Contraceptive implant

Any woman who has been prescribed any method at least once in the last year (or the appropriate prescribing interval for method of choice) should be included on the register.

This indicator is prospective from 1 April 2009.

SH 1.2 Reporting and verification
The practice reports the number of women prescribed any method of contraception in the preceding 1 April to 31 March (or longer if appropriate for the method of choice).

Contraception (SH) indicator 2

The percentage of women prescribed an oral or patch contraceptive method who have also received information from the practice about long acting reversible methods of contraception in the preceding 15 months.

[158] See also J Fam Plann Reprod Health Care 2008; 34(4): 000–000 "Attitudes of women in Scotland to contraception: a qualitative study to explore acceptability of long-acting methods" Anna Glasier, Jane Scorer, Alison Bigrigg.

SH 2.1 Rationale
A woman's contraceptive needs can change over her reproductive lifespan. Women requiring contraception should be given detailed information about and offered a choice of all methods, including LARC. This indicator seeks to encourage practices to review these needs on a regular basis and ensure that women are informed of advances in contraceptive choices.

All currently available long acting reversible contraception methods (LARC) are more cost-effective than the combined oral contraceptive even at one year of use. LARC methods include intrauterine devices, the intrauterine system, 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.

NICE clinical guideline 30 (2005). Guidance on LARCs. http://www.nice.org.uk/Guidance/CG30

Information from the practice should be written and verbal. Leaflets can be obtained from a number of sources including the fpa, a UK-wide sexual health charity, which produces an excellent range of contraception leaflets including 'Your Guide to Contraception', which, among other things, indicates LARC and non-LARC methods clearly through the use of shading.

See http://www.fpa.org.uk/Information/Readourinformationbooklets/guide

Faculty of Sexual & Reproductive Healthcare guidelines on contraceptive methods are available at www.ffprhc.org.uk.

SH 2.2 Reporting and verification
The practice reports the percentage of those women prescribed oral or transdermal contraception who have a record of having been given advice on LARC methods in the preceding 15 months.

Verification - practices should be prepared to demonstrate how patients are given such advice, examples of leaflets and any specific practice protocols.

Contraception (SH) indicator 3

The percentage of women prescribed emergency hormonal contraception at least once in the last year by the practice, who have received information from the practice about long-acting reversible methods of contraception at the time of, or within 1 month of the prescription.

SH 3.1 Rationale
Women requiring emergency hormonal contraception should be 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 emergency hormonal contraception is given.

Some women seeking emergency contraception 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 practice should be written and verbal. 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, indicates LARC and non-LARC methods clearly through the use of shading.

SH 3.2 Reporting and verification
The practice reports the percentage of those women prescribed emergency hormonal contraception who are recorded as having received advice on LARC methods at the time of, or within one month of the most recent script for emergency hormonal contraception.

Section 5. Glossary of terms

Abbreviation	Definition
ACCORD	Action to Control Cardiovascular Risk in Diabetes
ACE	Angiotensin-Converting Enzyme
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
APHO	Association of Public Health Observatories
ARB	Angiotensin Receptor Blocker
BAFTA	Birmingham Atrial Fibrillation Treatment of the Aged
BDI-II	Beck Depression Inventory, second edition
BHSOC	British Hypertension Society
BLS	Basic Life Support
BMI	Body Mass Index
BMA	British Medial Association
BNF	British National Formulary
BP	Blood Pressure
BTS	British Thoracic Society
CABG	Coronary Artery Bypass Grafting
CAD	Coronary Artery Disease
CBT	Cognitive Behavioural Therapy
CHD	Coronary Heart Disease

CKD	Chronic Kidney Disease
COPD	Chronic Obstructive Pulmonary Disease
COSHH	Control of Substances Hazardous to Health
CPA	Care Programme Approach
CT	Computerised Tomography
CVD	Cardiovascular Disease
DAs	Devolved Administrations
DBP	Diastolic Blood Pressure
DH	Department of Health
DM	Diabetes Mellitus
DNA	Did Not Attend
DRS	Diabetic Retinopathy Screening
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, fourth edition
EC	Emergency Contraception
ECG	Electrocardiogram
eGFR	Estimated Glomerular Filtration Rate
EOLC	End of Life Care
EPIC	European Prospective Investigation into Cancer
EPP	Exposure Prone Procedures
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
GPRD	General Practice Research Database
GPwSI	GP with a Special Interest
GSF	Gold Standards Framework
HAD-D	Hospital Anxiety and Depression Scale Depression Sub-Scale
HADS	Hospital Anxiety and Depression Scale
HbA1c	Glycated Hemoglobin
HCA	Healthcare Assistant
HF	Heart Failure
HSWA	Health and Safety at Work Act
IC	NHS Health and Social Care Information Centre
IGT	Impaired Glucose Tolerance
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 Disability
LVD	Left Ventricular Dysfunction
MCM	Major Congenital Malformation
MH	Mental Health
MI	Myocardial Infarction
MR	Modified Release
MRC	Medical Research Council
MRI	Magnetic Resonance Imaging
NAO	National Audit Office

NHANES	National Health and Nutrition Examination Survey
NHS	National Health Service
NHSE	NHS Employers
NICE	National Institute for Health and Clinical Excellence
NPSA	National Patient Safety Agency
NPV	Negative Predictive Value
NSAIDS	Non-Steroidal Anti-Inflammatory Drugs
NSF	National Service Framework
ONS	Office for National Statistics
OTC	Over The Counter
PCO	Primary Care Organisation
PCR	Protein:Creatinine Ratio
PCT	Primary Care Trust
PEF	Peak Expiratory Flow
PHQ-9	Nine Item Patient Health Questionnaire
PP	Primary Prevention
QMAS	Quality Management and Analysis System
QOF	Quality and Outcomes Framework
QPA	Quality Practice Award
RCGP	Royal College of General Practitioners
RCTs	Randomised Controlled Trials
SCR	Supportive Care Register
SEA	Significant Event Auditing
SIGN	Scottish Intercollegiate Guidelines Network
SIMD	Scottish Index of Multiple Deprivation
SMI	Serious Mental Illness
SSRI	Selective Serotonin Reuptake Inhibitors

TIA	Transient Ischemic Attack
TPCR	Total Protein: Creatinine Ratio
TSH	Thyroid Stimulating Hormone
UK	United Kingdom
WHO	World Health Organisation

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