

## Indicator Assessment Methodology

### Technical annex to the Report of the Review of the Quality and Outcomes Framework

#### Introduction

One of the key challenges facing incentive schemes is the question of how to refresh the content in order to achieve aspirations of continuous quality improvement. This question applies equally to which care activities should be incentivised, which incentives should be retired and when. In the past, some stakeholders have felt more detail about the rationale underpinning either indicator retirement or the inclusion of new indicators should have been shared in order to improve credibility of the resulting scheme content.

Therefore, whilst there is no single approach to indicator assessment, NHS England (NHS E) considers that there could be advantages in developing some principles and a methodology to inform negotiations on the content of QOF between NHS England and GPC England. To this end, we have undertaken discussions with the QOF Review Technical Working Group to develop proposals for such a methodology. Within these discussions we have sought to build upon earlier work undertaken by NICE<sup>1</sup> and Reeves et al.<sup>2</sup> The output of this work is presented below.

There was consensus within the Technical Working group that the data utilised in this approach is appropriate to inform the assessment of performance of existing indicators. A key reflection of the Technical Working Group was that no matter how objective the methodology, an element of judgement will always be required when considering the future of an indicator and its role in the framework. Therefore it should be noted that the outputs of this approach are not final, and are subject to further refinement.

NHS England has subsequently shared this methodology with key stakeholders including National Clinical Directors, where there is also some consensus that the approach appears reasonable.

#### Methodology

The proposed methodology aims to review a standard set of data about the performance of each indicator with the aim of then grouping indicators into one of five categories on the basis of their performance.

#### *Data for indicator assessment*

It is proposed that the following data forms a core set for the assessment of each indicator:

1. The strength of the relationship between the indicator and the underpinning NICE guidance. NICE guidance tends to make one of two recommendations: 'offer' or 'consider' based upon their evaluation of the strength of the underpinning evidence. 'Offer' recommendations are used to reflect a strong recommendation, usually where there is clear evidence of benefit. NICE use 'consider' to reflect a recommendation for which the evidence of benefit is less

---

<sup>1</sup> NICE (2016) Identifying QOF indicators for reassessment

<sup>2</sup> Reeves et al (2010) How to identify when a performance indicator has run its course. BMJ 340:c1717.

certain. Where relevant the tables presented below have drawn this assessment from a piece of indicator analysis work undertaken by NICE in 2013.

2. The strength of the relationship between the timeframe during which a care activity should be delivered which is specified in the indicator and the underpinning NICE guidance e.g. the current QOF indicator requires a cancer care review to be completed within 6 months of diagnosis.
3. Any known performance issues or unintended consequences, including activity being resourced through other funding streams. Evidence for this may be drawn from published work or softer feedback from GPs and patient groups.
4. The average number of patients in the indicator denominator drawn from the most recent figures available from NHS Digital. In the examples which follow, these figures are from 2016/17. Indicators with small denominators can be subject to random variation in achievement and therefore payment which may not accurately reflect patient care. Whilst there is some debate as to exactly what constitutes a small denominator, for the purpose of this analysis this has been defined as an average denominator of  $\leq 20$  patients.
5. Median achievement and interquartile ranges for each indicator as reported by NHS Digital for the preceding three years. In the analysis which follows, these results relate to the years 2014/15 – 2016/17. Ideally a minimum of three years of data should be available in order to assess trends in performance.
6. Median exception reporting and inter-quartile ranges for each indicator as reported by NHS Digital for the preceding three years. In the analysis which follows, these results relate to the years 2014/15 – 2016/17. As with achievement data a minimum of three years of data would ideally be observed to assess trends in performance.
7. The length of time the indicator has been incentivised.
8. The points or value of the incentive for each indicator.

Using this information an indicator may then be grouped into one of the following categories:

1. Consider for retirement with no ongoing data collection
2. Consider for retirement but continue to collect data
3. Indicator requires modification
4. Guideline congruent clinical activity but achievement has plateaued
5. Guideline congruent clinical activity with scope for continued improvement

Allocating indicators to these categories is informed by the available evidence on indicator performance but judgement is required to assess the relative weight which can be attributed to each factor and their relative importance in any given clinical and political context. These categories are described further below.

### ***Consider for retirement with no ongoing data collection***

Indicators in this group are likely to have either a weak relationship with the underpinning NICE guidance, or small denominators, or have demonstrated significant unintended consequences in terms of practice behaviour following implementation. Given this the data being generated is unlikely to be useful for monitoring or planning purposes and the costs of data collection represent poor use of resources.

### ***Consider for retirement but continue to collect data***

Indicators in this group are likely to have a good relationship with the underpinning NICE guidance or wider evidence but the activity may be resourced through additional specific funding streams. Alternatively, the indicator may suffer from some weaknesses as a pay for performance metric. The difference between this category and the one above is that the data which is generated is of utility for wider planning, impact assessment and other quality improvement purposes.

### ***Indicator requires modification***

This categorisation is to be used for indicators which are not reflective of NICE guidance. Other performance characteristics will be good and the indicator may be easily changed to reflect NICE guidance. Ideally, an appropriate alternative will exist on the NICE menu.

### ***Guideline congruent clinical activity but achievement has plateaued***

Indicators in this group will demonstrate a strong relationship to the underpinning guideline and good performance characteristics as a measure, however, trend analysis of achievement will suggest that this has reached the ceiling of what is possible. In reaching this determination consideration will need to be given to whether the payment thresholds are set appropriately. In some cases further improvement may be possible through a modification to the upper payment threshold. Trend analysis of exception reporting will indicate that this is low with minimal variation between practices.

### ***Guideline congruent clinical activity with scope for continued improvement***

Indicators in this category will demonstrate a reasonable relationship with any underpinning guidance. Many will also demonstrate good measurement characteristics but either there is less than three years of available data in which to observe trends in performance or that which there is suggests further scope for improvement either through increasing the overall achievement figure or through reducing variation between practices. However, there may be a sub-set of indicators in this category which have been incentivised for a long period of time but where median achievement is modest or even falling and where trends in exception reporting might be higher than desired and potentially even rising. In these circumstances critical consideration needs to be given as to whether pay for performance represents the right approach to quality improvement.

## **Results**

A full indicator assessment is presented by clinical area in the tables which follow. Review of these suggests that there may be a small number of indicators which could be considered for retirement, both with and without ongoing data collection. Similarly, there are a small number of indicators which are not consistent with current NICE guidance but could be easily modified to address this. A small number of indicators could be considered to have reached the ceiling of performance and could either be considered for retirement or an explicit decision taken to continue with the incentive to maintain current achievement levels. The remaining indicators either demonstrate the potential for further improvement or improvement appears to have stalled. As noted above these indicators would benefit from a more detailed review of their functioning as quality measures in a pay for performance scheme.

**Next steps**

This paper has set out a potential methodology for indicator assessment which, subject to agreement with the GPC, could be used to firstly, structure indicator evaluation conversations during contract negotiations and secondly, enable final decisions to be better described to the profession and other stakeholders. As with the full Report of the QOF Review we look forward to debating its output and implications and look forward to working with the profession to improve on the findings and ideas set out here.

Comments on this document may be submitted to [england.qofreview@nhs.net](mailto:england.qofreview@nhs.net).

## Detailed indicator assessment tables by clinical area

### Atrial Fibrillation

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
AF001	The contractor establishes and maintains a register of patients with atrial fibrillation	NA	5 (£6.3)
AF006	The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHA <sub>2</sub> DS <sub>2</sub> -VAS <sub>c</sub> score risk stratification scoring system in the preceding 12 months (excluding those patients with a previous CHADS <sub>2</sub> or CHA <sub>2</sub> DS <sub>2</sub> -VAS <sub>c</sub> score of 2 or more)	40-90%	12 (£15.0)
AF007	In those patients with atrial fibrillation with a record of a CHA <sub>2</sub> DS <sub>2</sub> -VAS <sub>c</sub> score of 2 or more, the percentage of patients who are currently treated with anticoagulation drug therapy.	40-70%	12 (£15.1)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
AF001	2006/07	NA	NA	None	144						
AF006	2015/16	Strong	Moderate/weak	None	73	94.74 (90.92-97.83)	95.24 (92.0-97.96)		2.74 (0-5.45)	1.94 (0.4.13)	
AF007	2015/16	Strong	Strong	None	118	81.44 (76.67-85.92)	78.18 (72.73-83.27)		7.26 (4.21-11.36)	9.09 (5.05-14.14)	

## Secondary Prevention of Cardiovascular Disease

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
CHD001	The contractor establishes and maintains a register of patients with coronary heart disease	NA	4 (£4.8)
CHD002	The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90mmHg or less	53-93%	17 (£19.7)
CHD005	The percentage of patients with coronary heart disease with a record in the preceding 12 months that aspirin, an alternative anti-platelet agent, or an anticoagulant is being taken.	56-96%	7 (£8.3)
CHD007	The percentage of patients with coronary heart disease who have had influenza immunisation in the preceding 1 August to 31 March.	56-96%	7 (£8.1)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
CHD001	2004/05	NA	NA	None	247						
CHD002	2004/05	Weak	Moderate	Inappropriate target for those aged <80 years based on NICE Guidance	247	90.16 (86.54-92.78)	89.58 (85.64-92.52)	89.74 (85.92-92.63)	2.92 (1.46-5.33)	2.86 (1.39-5.24)	2.81 (1.38-5.06)
CHD005	2004/05	Strong	Strong	None	247	92.70 (90.06-94.77)	92.51 (89.80-94.74)	92.48 (89.90-94.66)	3.90 (1.92-6.19)	3.61 (1.67-5.93)	3.65 (1.79-5.91)
CHD007	2004/05	NA	NA	None, although achievement has fallen and exception reporting has risen over the last 3 years Flu vaccination is also funded through the influenza vaccination DES	247	79.27 (74.60-83.16)	80.00 (75.51-83.85)	81.65 (77.42-85.45)	17.29 (13.05-21.94)	16.17 (12.04-20.81)	14.29 (10.26-18.75)

## Heart Failure

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
HF001	The contractor establishes and maintains a register of patients with heart failure	NA	4 (£4.9)
HF002	The percentage of patients with a diagnosis of heart failure (diagnosed on or after 1 April 2006) which has been confirmed by an echocardiogram or specialist assessment 3 months before or 12 months after entering on to the register	50-90%	6 (£7.3)
HF003	In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction, the percentage of patients who are currently treated with an ACE-I or ARB	60-100%	10 (£12.2)
HF004	In those patients with a current diagnosis of heart failure due to left ventricular systolic dysfunction who are currently treated with an ACE-I or ARB, the percentage of patients who are additionally currently treated with a beta-blocker licensed for use in heart failure.	40-65%	9 (£11.1)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
HF001	2006/07	NA	NA	None	61						
HF002	2006/07	Strong	Weak	None	49	92.00 (88.23-95.83)	91.89 (87.76-95.83)	92.11 (87.76-96.22)	3.19 (0.0-6.35)	3.27 (0.0-6.67)	3.28 (0.00-6.90)
HF003	2006/07	Strong	Strong	Small numbers at practice level	21	85.71 (78.13-100)	87.50 (79.17-100)	89.68 (80.00-100)	13.04 (0.0-21.21)	11.76 (0.0-20.0)	9.30 (0.00-18.57)
HF004	2009/10	Strong	Strong	Small numbers at practice level	17	81.25 (71.82-92.50)	80.00 (70.0-94.74)	80.00 (66.67-100)	12.5 (0.0-20.83)	12.5 (0.0-23.47)	14.29 (0.00-25.00)



## Hypertension

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
HYP001	The contractor establishes and maintains a register of patients with established hypertension	NA	6 (£7.3)
HYP006	The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less	54-80%	20 (£23.6)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
HYP001	2004/05	NA	NA	None	1086						
HYP006	2004/05-2012/13  2014/15 - present	Weak	Weak – consensus recommendation	Concern has been expressed by relevant NCDs that this is not in line with NICE Guidance which may lead to under treatment of younger age groups	1085	80.72 (77.10-83.97)	80.35 (76.44-83.78)	80.99 (77.25-84.35)	3.01 (2.00-4.81)	2.98 (1.93-4.77)	2.95 (1.89-4.69)

## Peripheral arterial disease

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
PAD001	The contractor establishes and maintains a register of patients with peripheral arterial disease	NA	2 (£2.4)
PAD002	The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less	40-90%	2 (£2.3)
PAD004	The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken	40-90%	2 (£2.4)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
PAD001	2012/13	NA	NA	None	47						
PAD002	2012/13	Weak	Weak	None	47	88.24 (82.65-92.59)	87.50 (81.58-92.31)	87.50 (81.82-92.46)	3.45 (0.00-7.14)	3.23 (0.0-7.14)	3.03 (0.00-6.82)
PAD004	2012/13	Strong	Strong	None	39	88.90 (83.33-93.33)	88.64 (82.94-93.33)	88.46 (82.54-93.33)	5.00 (0.00-10.00)	4.76 (0.0-10.0)	4.76 (0.00-10.00)

### Stroke and transient ischaemic attack

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
STIA001	The contractor establishes and maintains a register of patients with stroke or TIA	NA	2 (£2.5)
STIA008	The percentage of patients with stroke or TIA (diagnosed on or after 1 April 2014) who have a record of a referral for further investigation between 3 months before or 1 month after the date of the latest recorded stroke or first TIA	45-80%	2 (£6.2)
STIA003	The percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 or less	40-75%	5 (£4.8)
STIA007	The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent or an anticoagulant is being taken.	57-97%	4 (£2.4)
STIA009	The percentage of patients with stroke or TIA who have had influenza immunisation in the preceding 1 August to 31 March	55-95%	2 (£2.3)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
STIA001	2004/05	NA	NA	None	137						
STIA008	2004/05	Strong	Weak	Indicator timescale not consistent with NICE guideline. Unlikely to be able to modify within current QOF measurement constraints.	34	84.62 (78.57-90.91)	83.67 (76.47-91.30)	80.00 (66.67-91.67)	4.76 (0.00-9.09)	5.88 (0.0-12.0)	10.00 (0.00-20.00)
STIA003	2004/05	Weak	Weak	Target inappropriate for patients aged less than 80 years based upon NICE Guidance	137	85.22 (80.94-88.98)	84.75 (80.36-88.73)	85.27 (80.83-89.23)	3.34 (1.75-5.63)	3.42 (1.75-5.68)	3.42 (1.73-5.71)
STIA007	2004/05	Strong	Strong	None	90	92.62 (89.47-95.39)	92.47 (89.04-95.45)	92.43 (89.13-95.52)	4.88 (2.13-7.98)	4.60 (1.75-7.88)	4.71 (1.85-7.96)
STIA009	2004/05	NA	NA	None, although achievement is falling and exception reporting has risen over the last 3 years  Additionally, flu vaccination is also funded through the influenza vaccination DES	137	75.61 (70.14-80.51)	76.47 (70.97-81.12)	78.05 (72.73-82.69)	20.00 (14.89-25.91)	18.85 (13.83-24.56)	16.90 (11.90-22.56)

## Diabetes mellitus

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
DM017	The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed	NA	6 (£7.1)
DM002	The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less	53-93%	8 (£9.0)
DM003	The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mmHg or less	38-78%	10 (£10.9)
DM004	The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured in the preceding 12 months) is 5 mmol/l or less	40-75%	6 (£6.9)
DM006	The percentage of patients with diabetes, on the register, with a diagnosis of nephropathy (clinical proteinuria) or micro-albuminuria who are currently treated with an ACE-I (or ARBs)	57-97%	3 (£3.2)
DM007	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59mmol/mol or less in the preceding 12 months	35-75%	17 (£17.8)
DM008	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64 mmol/mol or less in the preceding 12 months	43-83%	8 (8.4)
DM009	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 75 mmol/mol or less in the preceding 12 months	52-92%	10 (£10.6)
DM012	The percentage of patients with diabetes on the register, with a record of a foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 12 months.	50-90%	4 (£4.4)
DM014	The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have had a record of being referred to a structured education programme within 9 months after entry onto the diabetes register	40-90%	11 (£12.5)

DM018	The percentage of patients with diabetes, on the register, who have had influenza immunisation in the preceding 1 August to 31 March	55-95%	3 (£3.4)
-------	--	--------	----------

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
DM001	2004/05	NA	NA	None	421						
DM002	2011/12	Weak	Strong (T2)	None	421	87.77 (84.03-90.96)	87.30 (83.38-90.57)	87.65 (83.75-90.91)	4.43 (2.40-7.16)	4.34 (2.41-7.14)	4.07 (2.22-6.78)
DM003	2011/12	Strong	Strong (T2)	None	421	72.20 (65.07-78.46)	71.68 (64.24-77.88)	72.49 (65.03-78.58)	7.51 (4.60-11.72)	7.49 (4.63-11.74)	7.01 (4.27-11.00)
DM004	2004/05	Weak	Weak	None	421	69.90 (65.71-73.82)	70.34 (66.02-74.58)	71.25 (66.81-75.46)	12.08 (8.13-16.46)	11.48 (7.80-15.92)	10.79 (7.14-14.94)
DM006	2013/14	Strong	Strong	None	48	81.82 (75.0-88.80)	82.76 (75.56-89.42)	83.33 (76.19-90.25)	12.50 (5.62-20.0)	10.87 (4.00-18.18)	10.29 (3.92-17.71)
DM007	2011/12	Weak	Weak	None	421	62.02 (57.40-66.47)	60.11 (55.14-64.93)	60.48 (55.49-65.19)	12.20 (6.57-19.40)	11.92 (6.25-19.93)	11.05 (5.90-18.46)
DM008	2011/12	Weak	Weak	None	421	70.00 (65.55-74.13)	68.48 (63.66-72.92)	68.67 (63.85-73.04)	10.68 (5.68-16.70)	10.38 (5.42-17.24)	9.69 (5.07-15.94)
DM009	2011/12	Weak	weak	None	421	80.84 (76.73-84.39)	79.81 (75.32-83.56)	79.70 (75.35-83.43)	7.97 (4.29-12.39)	7.89 (4.10-12.82)	7.44 (3.91-12.05)
DM012	2011/12	Strong	Moderate	None	421	84.67 (78.30-89.18)	83.73 (77.04-88.48)	83.86 (77.12-88.76)	6.13 (3.28-10.47)	6.02 (3.20-10.37)	5.63 (3.08-9.62)
DM014	2013/14	Strong	Strong	None	28	75.68 (55.88-88.46)	76.92 (57.69-89.36)	72.72 (50.00-87.50)	17.64 (6.25-38.46)	15.63 (5.00-35.29)	18.18 (5.88-40.00)

DM018	2004/05	NA	NA	<p>None, although performance has been static with rising exception reporting over the last 3 years</p> <p>Additionally, flu vaccination is funded through the influenza vaccination DES</p>	421	75.69 (71.0-79.84)	76.45 (71.94-80.59)	78.14 (73.78-82.31)	20.52 (16.03-25.12)	19.23 (15.01-23.91)	17.09 (12.84-21.75)
-------	---------	----	----	--	-----	-----------------------	------------------------	------------------------	------------------------	------------------------	------------------------



## Asthma

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
AST001	The contractor establishes and maintains a register of all patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months	NA	4 (£4.9)
AST002	The percentage of patients aged 8 or over with asthma (diagnosed on or after 1 April 2006), on the register, with measures of variability or reversibility recorded between 3 months before or at any time after diagnosis.	45-80%	15 (£18.4)
AST003	The percentage of patients with asthma, on the register, who have had an asthma review in the preceding 12 months that includes an assessment of asthma control using the 3 RCP questions	45-70%	20 (£23.9)
AST004	The percentage of patients with asthma aged 14 or over and who have not attained the age of 20, on the register, in whom there is a record of smoking status in the preceding 12 months.	45-80%	6 (£7.3)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
AST001	2004/05	NA	NA	None	465						
AST002	2004/05	Under 17yrs – weak 17 years and over - Strong	Weak	Potential issues with spirometry at a practice level in light of the new standards for spirometry	138	85.56 (80.37-90.63)	85.38 (80.19-90.72)	85.21 (80.00-90.59)	2.94 (1.46-5.37)	3.11 (1.47-5.68)	3.24 (1.47-5.94)
AST003	2004/05	Moderate	Strong	None	465	72.87 (67.70-77.66)	71.82 (66.33-76.85)	71.88 (66.52-76.72)	2.98 (1.57-8.70)	2.30 (1.53-8.85)	2.95 (1.46-8.24)
AST004	2004/05	Strong	Moderate	None	30	86.84 (80.65-93.33)	86.36 (80.00-93.33)	86.67 (80.77-93.33)	0.00 (0.00-0.00)	0.00 (0.00-5.79)	0.00 (0.00-5.00)

## Chronic obstructive pulmonary disease

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
COPD001	The contractor establishes and maintains a register of patients with COPD	NA	3 (£3.6)
COPD002	The percentage of patients with COPD (diagnosed on or after 1 April 2011) in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register	45-80%	5 (£5.8)
COPD003	The percentage of patients with COPD who have had a review, undertaken by a healthcare professional, including an assessment of breathlessness using the Medical Research Council dyspnoea scale in the preceding 12 months	50-90%	9 (£10.1)
COPD004	The percentage of patients with COPD with a record of an FEV1 in the preceding 12 months	40-75%	7 (£8.1)
COPD005	The percentage of patients with COPD and Medical Research Council dyspnoea grade $\geq 3$ at any time in the preceding 12 months, with a record of oxygen saturation value within the preceding 12 months	40-90%	5 (£5.9)
COPD007	The percentage of patients with COPD who have had influenza immunisation in the preceding 1 August to 31 March	57-97%	6 (£6.9)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
COPD001	2004/05	NA	NA	None	147						
COPD002	2004/05	Strong	Weak	Potential issues with spirometry in light of the new standards for spirometry	72	81.82 (75.71-87.72)	81.81 (75.00-88.00)	81.81 (75.00-88.41)	7.69 (4.00-12.40)	7.81 (3.92-13.11)	8.62 (4.17-14.29)
COPD003	2009/10	Strong	Moderate	None	147	83.18 (76.00-88.89)	82.26 (74.43-88.20)	82.89 (75.31-88.42)	8.75 (4.17-15.22)	8.79 (4.05-15.46)	8.51 (4.11-14.87)
COPD004	2006/07	Strong	Moderate	Potential issues with spirometry in light of the new standards for spirometry	147	75.41 (66.67-83.13)	74.89 (65.47-82.58)	76.36 (67.06-83.67)	13.51 (6.82-21.79)	12.63 (6.42-21.35)	12.00 (5.81-19.77)
COPD005	2013/14	Weak	Weak	None	56	96.55 (93.26-100)	96.23 (92.75-100)	95.69 (92.00-100)	0.00 (0.00-1.58)	0.00 (0.00-1.75)	0.00 (0.00-2.08)
COPD007	2004/05	NA	NA	None, although achievement has fallen and exception reporting has risen in the last 3 years  Additionally, flu vaccination is also funded through the influenza vaccination DES	147	80.08 (75.35-84.46)	80.77 (75.93-84-97)	82.35 (77.78-86.49)	17.58 (13.37-22.45)	16.78 (12.50-21.40)	15.00 (10.73-19.36)

## Dementia

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
DEM001	The contractor establishes and maintains a register of patients with dementia	NA	3 (£6.1)
DEM004	The percentage of patients diagnosed with dementia whose care plan has been reviewed in a face-to-face review in the preceding 12 months	35-70%	39 (£46.8)
DEM005	The percentage of patients with a new diagnosis of dementia recorded in the preceding 1 April to 31 March with a record of FBC, calcium, glucose, renal and liver function, thyroid function tests, serum vitamin B12 and folate levels recorded between 12 months before or 6 months after entering on to the register.	45-80%	6 (£6.9)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
DEM001	2006/07	NA	NA	None	60						
DEM004	2006/07	Weak	Weak	Informal feedback from stakeholders suggests variability in the quality of reviews.	60	80.00 (72.88-87.33)	80.00 (72.73-87.50)	78.71 (71.43-86.42)	5.56 (2.35-9.09)	5.41 (2.26-9.19)	6.67 (2.78-11.24)
DEM005	2015/16	Strong	Weak	Small numbers at practice level	15	67.86 (55.56-81.30)	57.14 (46.15-68.18)		21.43 (7.69-33.33)	32.26 (20.45-44.44)	

## Depression

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
DEP003	The percentage of patients aged 18 years or over with a new diagnosis of depression in the preceding 1 April to 31 March, who have been reviewed not earlier than 10 days after and not later than 56 days after the date of diagnosis.	45-80%	10 (£11.8)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
DEP003	2013/14	Strong	Moderate	Poor coding of depression diagnoses with some evidence that this has been exacerbated with incentivisation.	94	66.67 (58.49-73.85)	66.96 (58.33-74.61)		21.57 (15.0-29.26)	20.58 (14.03-28.57)	

## Mental Health

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
MH001	The contractor establishes and maintains a register of patients with schizophrenia, bipolar affective disorder and other psychoses and other patients on lithium therapy	NA	4 (£4.7)
MH002	The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan documented in the record, in the preceding 12 months, agreed with individuals, their family and/or carers as appropriate.	40-90%	6 (£6.7)
MH003	The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 12 months	50-90%	4 (£4.4)
MH007	The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of alcohol consumption in the preceding 12 months	50-90%	4 (£4.4)
MH008	The percentage of women aged 25 or over and who have not attained the age of 65 with schizophrenia, bipolar affective disorder and other psychoses whose notes record that a cervical screening test has been performed in the preceding 5 years.	45-80%	5 (£5.8)
MH009	The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 9 months	50-90%	1 (£1.1)
MH010	The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range in the preceding 4 months	50-90%	2 (£2.0)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
MH001	2006/07	NA	NA	None	72						
MH002	2006/07	Weak	Weak	Informal feedback from stakeholders suggests variability in the quality of the care plan	60	83.53 (74.07-89.47)	82.22 (71.60-88.89)	81.82 (71.43-88.62)	8.57 (3.57-16.67)	8.51 (3.39-17.07)	8.57 (3.56-16.67)
MH003	2011/12	Strong	Moderate	None	60	84.44 (78.00-90.0)	83.33 (76.47-89.29)	83.87 (76.92-89.66)	6.81 (2.50-12.73)	6.73 (2.27-12.96)	6.45 (2.04-12.50)
MH007	2011/12	Strong	Moderate	None	60	85.71 (76.92-91.38)	84.03 (75.00-90.74)	84.38 (75.00-90.91)	6.77 (2.44-13.80)	6.90 (2.22-14.29)	6.59 (2.13-13.64)
MH008	2011/12	NA	NA	Small numbers at a practice level	18	71.42 (62.5-80.0)	72.41 (63.16-81.25)	72.97 (63.89-82.35)	20.0 (10.53-28.57)	18.75 (10.00-28.57)	18.18 (9.09-28.57)
MH009	2004/05	Strong	Strong	Small numbers at a practice level	6	100 (94.12-100)	100 (91.67-100)	100 (91.67-100)	0.0 (0.0-0.0)	0.00 (0.00-0.00)	0.00 (0.00-0.00)
MH010	2004/05	Strong	Strong	Small numbers at a practice level	6	89.56 (75.0-100)	87.50 (70.00-100)	88.89 (72.73-100)	0.0 (0.0-14.29)	0.00 (0.00-14.29)	0.00 (0.00-14.29)



**Cancer**

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
CAN001	The contractor establishes and maintains a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers diagnosed on or after 1 April 2003.	NA	5 (£6.3)
CAN003	The percentage of patients with cancer, diagnosed within the preceding 15 months, who have had a patient review recorded as occurring within 6 months of the date of diagnosis.	50-90%	6 (£7.3)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
CAN001	2004/05	NA	NA	None	202						
CAN003	2004/05	NA	NA	Feedback from relevant charities suggests variability in review content and implementation in practice	33	72.73 (61.29-82.61)	73.68 (61.29-83.33)	81.81 (73.68-90.00)	23.33 (13.89-34.31)	22.72 (12.50-34.85)	14.00 (6.90-21.74)

**Osteoporosis: secondary prevention of fragility fractures**

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
OST004	The contractor establishes and maintains a register of patients: 1. Aged 50 or over and who have not attained the age of 75 with a record of fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan, and 2. Aged 75 or over with a record of fragility fracture on or after 1 April 2014 and a diagnosis of osteoporosis	NA	5 (£3.9)
OST002	The percentage of patients aged 50 or over and who have not attained the age of 75, with a record of a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent	30-60%	3 (£3.8)
OST005	The percentage of patients aged 75 or over with a record of a fragility fracture on or after 1 April 2014 and a diagnosis of osteoporosis, who are currently treated with an appropriate bone-sparing agent	30-60%	3 (£3.8)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
OST004	2012/13	NA	NA	Complex construction	13						
OST002	2012/13	Weak	Weak	Small numbers at a practice level GPC have previously raised concern that this indicator can lead to over treatment	4	100 (66.67-100)	100 (66.67-100)	100 (80.00-100)	0.0 (0.0-14.29)	0.00 (0.00-6.67)	0.00 (0.00-0.00)
OST005	2012/13	Weak	Weak	Small numbers at a practice level GPC have previously raised concern that this indicator can lead to over-treatment	10	75.0 (57.14-100)	85.71 (62.50-100)	100 (75.00-100)	4.35 (0.0-27.27)	0.00 (0.00-23.08)	0.00 (0.00-8.33)

## Rheumatoid arthritis

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
RA001	The contractor establishes and maintains a register of patients aged 16 or over with rheumatoid arthritis	NA	1 (£1.2)
RA002	The percentage of patients with rheumatoid arthritis, on the register, who have had a face to face review in the preceding 12 months	40-90%	5 (£5.9)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
RA001	2013/14	NA	NA	None	47						
RA002	2013/14	Strong	Strong	In common with other review type indicators there can be variation in content between practices	47	90.00 (83.33-93.94)	89.29 (82.26-93.64)	89.23 (82.00-93.48)	3.70 (0.0-9.09)	3.70 (0.00-9.09)	3.57 (0.00-93.48)

## Palliative care

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
PC001	The contractor establishes and maintains a register of all patients in need of palliative care/ support irrespective of age	NA	3 (£3.6)
PC002	The contractor has regular (at least 3 monthly) multi-disciplinary case review meetings where all patients on the palliative care register are discussed	NA	3 (£3.6)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement	Exception reporting
PC001	2007/08	NA	NA	None	29		
PC002	2006/07	NA	NA	Assurance of the indicator	NA	NA	NA

### Cardiovascular disease primary prevention

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
CVD-PP001	In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using a tool agreed with the NHS CB) of ≥20% in the preceding 12 months: the percentage who are currently treated with statins	40-90%	10 (£11.4)

Indicator ID	Year in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
CVD-PP001	2013/14	Moderate	Strong	Indicators relating to statin therapy have been controversial since their introduction and GPs have expressed concerns about them promoting over treatment Performance has been stable but modest over the last three years with high and variable exception reporting	51	75.00 (50.00-100)	75.00 (50.0-100)	75.00 (50.00-100)	25.00 (0.00-50.0)	20.00 (0.0-50.0)	20.00 (0.00-50.0)

## Blood pressure

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
BP002	The percentage of patients aged 45 or over who have had a record of blood pressure in the preceding 5 years	50-90%	15 (£17.9)

Indicator ID	Years in QOF	Type of indicator	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
							16/17	15/16	14/15	16/17	15/16	14/15
BP002	2004/05	PI	NA	NA	None	3364	91.19 (89.55-92.95)	91.23 (89.44-93.02)	91.33 (89.34-93.17)	0.23 (0.11-0.43)	0.29 (0.14-0.51)	0.28 (0.14-0.50)

## Smoking

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
SMOK002	The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months	50-90%	25 (£30.4)
SMOK003	The contractor supports patients who smoke in stopping smoking by a strategy which includes providing literature and offering appropriate therapy	NA	2 (£2.4)
SMOK004	The percentage of patients aged 15 or over who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 24 months	40-90%	12 (£13.6)
SMOK005	The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses who are recorded as current smokers who have a record of an offer of support and treatment within the preceding 12 months	56-96%	25 (£29.5)



Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
SMOK002	2006/07	Strong	Strong	Masks differential performance between disease groups	1781	95.24 (93.33-96.80)	94.91 (92.95-96.52)	93.87 (91.67-95.80)	0.55 (0.34-0.87)	0.59 (0.36-0.90)	0.73 (0.48-1.09)
SMOK003	2004/05	NA	NA	None	NA						
SMOK004	2012/13	Strong	Strong	None	1139	90.90 (87.23-96.57)	86.91	89.76 (78.08-94.20)	0.60 (0.24-1.15)	1.05	0.64 (0.26-1.26)
SMOK005	2006/07	Strong	Strong	Masks differential performance between disease groups	268	97.14 (95.03-98.66)	96.79 (93.96-98.55)	96.58 (93.20-98.40)	0.71 (0.00-1.54)	0.71 (0.00-1.58)	0.76 (0.14-1.63)

## Cervical screening

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
CS001	The contractor has a protocol that is in line with national guidance agreed with NHS CB for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate sample rates	NA	7 (£8.1)
CS002	The percentage of women aged 25 or over and who have not attained the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years	45-80%	11 (£12.2)
CS004	The contractor has a policy for auditing its cervical screening service and performs an audit of inadequate cervical screening tests in relation to individual sample-takers at least every 2 years	NA	2 (£2.3)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%) Median (IQR)			Exception reporting (%) Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
CS001	2006/07	NA	NA	None							
CS002	2004/05	NA	NA	Not in line with current screening intervals	1958	76.57 (72.22- 79.62)	77.01 (72.99- 80.06)	77.50 (73.53- 80.39)	4.32 (2.65- 8.47)	4.34 (2.70- 8.19)	4.15 (2.62- 7.81)
CS004	2004/05	NA	NA	None							

## Contraception

Indicator ID	Indicator wording	Payment thresholds	Points (estimated spend per annum £m)
CON001	The contractor establishes and maintains a register of women aged 54 and under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS	NA	4 (£4.6)
CON003	The percentage of women, on the register, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor who have received information from the contractor about long acting reversible methods of contraception at the time or within 1 month of the prescription.	50-90%	3 (£3.2)

Indicator ID	Years in QOF	Relationship to the guideline: activity	Relationship to guideline: timescale	Known performance issues & context that could limit impact	Mean number of patients per practice	Underlying achievement (%)			Exception reporting (%)		
						Median (IQR)			Median (IQR)		
						16/17	15/16	14/15	16/17	15/16	14/15
CON001	2009/10	NA	NA	None	NA						
CON003	2009/10	Strong	Weak	Small numbers at a practice level	15	100 (90.91-100)	95.45 (88.57-100)	96.00 (87.50-100)	0.00 (0.00-0.00)	0.00 (0.00-2.08)	0.00 (0.00-1.84)