

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

QUALITY AND OUTCOMES FRAMEWORK (QOF) INDICATOR DEVELOPMENT PROGRAMME

Cost impact statement: Hypertension

QOF indicator area: Hypertension

Date: July 2013

Indicator

NM66: The percentage of patients with a new diagnosis of hypertension (diagnosed on or after 1 April 2014) which has been confirmed by ambulatory blood pressure monitoring (ABPM) or home blood pressure monitoring (HBPM) in the 3 months before entering on to the register

Introduction

This report covers 1 new indicator relating to hypertension. The indicator is part of the NICE menu of potential Quality and Outcomes Framework (QOF) indicators for 2014/15, following the recommendations of the independent QOF advisory committee in June 2013. The indicator has been piloted as part of the NICE QOF indicator development process.

This report considers the likely cost impact of incentivising the interventions associated with the proposed indicator in terms of the number of additional interventions provided and the cost of each intervention. Costs to NHS commissioners are outlined where relevant, along with the cost of additional activity at general practices.

The QOF currently incentivises GP practices to maintain a register of patients with established hypertension (HYP001, formerly BP1). The rationale for the new indicator is to achieve more accurate diagnosis of hypertension using ambulatory blood pressure monitoring (ABPM) or home blood pressure

monitoring (HBPM) rather than clinic-based blood pressure monitoring (CBPM). This indicator is aligned to recommendation 1.2.3 in clinical guideline 127: hypertension, which states that, “If the clinic blood pressure is 140/90 mmHg or higher, offer ambulatory blood pressure monitoring (ABPM) to confirm the diagnosis of hypertension.”

Cost implication

Number of people affected

The costing template for clinical guideline 127: hypertension estimates that the incidence of newly suspected hypertension for people aged 18 and over is 0.78% per annum.

Current care

The current QOF indicator CVD-PP002 (formerly PP2) incentivises lifestyle advice for people with newly diagnosed hypertension:

CVD-PP002: ‘The percentage of patients diagnosed with hypertension (diagnosed on or after 1 April 2009) who are given lifestyle advice in the preceding 12 months for: smoking cessation, safe alcohol consumption and healthy diet.’

The latest published QOF achievement data (2011/12) show that across all GP practices in England the level of achievement for PP2 (the predecessor indicator of CVD-PP002) was 81.5%.

The indicator pilot considered the use of ABPM only – HBPM was added to the indicator wording by the QOF advisory committee. The pilot shows that the majority of practices are monitoring blood pressure using ABPM, but not necessarily routinely and not for all people with newly suspected hypertension. The pilot also indicates that 78% of the 30 pilot practices have their own ABPM machines with the remainder able to refer to a local consortia commissioned service or secondary care.

Proposed care

The indicator is expected to increase the proportion of people with suspected hypertension through CBPM who have the diagnosis confirmed by either ABPM or HPBM.

ABPM costs more per test than both HBPM and CBPM because of the higher cost of the devices and the additional time needed to download results.

ABPM is more accurate in identifying hypertension than CBPM and HBPM. This means that fewer people who are not hypertensive will be incorrectly diagnosed with hypertension (false positives). This results in fewer people being offered antihypertensive drugs, and cost savings to the NHS through lower expenditure on drugs and annual monitoring appointments with GPs.

The costing template for clinical guideline 127: hypertension estimates the cost impact of recommendation 1.2.3, confirming hypertension with ABPM. Table 1 estimates cost of implementing the indicator using the assumptions in the costing template, including the savings expected through more accurate diagnosis. However as this was published in August 2011 some assumptions have been adjusted to reflect information provided in the pilot and cost of drugs currently. They include:

- current practice % of whose diagnosis was confirmed following CBPM, HBPM or ABPM,
- future practice % of whose diagnosis was confirmed following CBPM, HBPM or ABPM
- unit cost of antihypertensive drugs have been adjusted.

Table 1 presents the cost impact in year 1 after implementation; to see the cost impact each year prior to year 5 refer to the clinical guideline costing template and change the assumptions to reflect adjustments in table 1.

Table 1 Estimated cost of implementing indicator NM66 after year 1 of implementation

People aged between 18 and over					44,014,857
Annual Incidence of suspected hypertension					0.78%
Number of people per annum with suspected hypertension					342,054
			Current Practice		Future Practice
% whose diagnosis was confirmed following (CBPM)			75%		5%
% whose diagnosis was confirmed following (HBPM)			5%		5%
% whose diagnosis was confirmed following (ABPM)			20%		90%
% who (ABPM) is not tolerated and have to use (HBPM) as a secondary diagnosis			5%		5%
Total Number of people diagnosed as hypertensive			203,273		170,371
Number of newly diagnosed hypertensive people on antihypertensive drugs per annum (81.58%)			165,827		138,985
	Unit Cost (£)	Units	Current cost (£)	Units	Future cost (£)
Cost of clinical blood pressure monitoring (CBPM)	38.00	256,541	9,748,558	17,103	649,914
Cost of home blood pressure monitoring (HBPM)	39.13	17,103	669,240	17,103	669,240
Cost of ambulatory blood pressure monitoring (ABPM)	53.40	68,411	3,653,147	307,849	16,439,137
Cost of home blood pressure monitoring (HBPM) after (ABPM) was not tolerated	39.13	3,421	133,864	15,392	602,289
Cost of monitoring appointment with GP	28.00	220,450	6,172,600	170,371	4,770,388
Cost of antihypertensive drugs - year of diagnosis	4.30	179,839	773,308	138,985	597,636
Cost of antihypertensive drugs - years following diagnosis	8.61	-	-	-	-
Total Cost - year 1			21,150,717		23,728,603
Change in diagnosis cost -year 1					4,155,770
Change in treatment cost - year 1					- 1,577,884
Net Resource impact - year 1					2,577,886

Resource impact

The resource impact of the implementation of indicator NM66 is estimated to be £2.58 million cost in year 1 using adjusted assumptions from the [costing template](#) for clinical guideline 127: hypertension and assuming that the recommendations in the guideline are not fully implemented currently. However, using the [costing template](#) it is estimated that diagnosing hypertension with ABPM will mean future savings due to the cumulative effect of accurate testing and the savings of prescribing more accurately antihypertensive drugs.

Sensitivity analysis

If we vary current practice assumptions on the percentage of people whose diagnosis was confirmed by the alternative methods to CBPM (65%), HBPM (5%) and ABPM (30%) the cost impact would be £2.21 million cost in year 1 after implementation.

Assuming CBPM (85%), HBPM (5%) and ABPM (10%) the cost impact would be £2.95 million cost in year 1 after implementation.

If we vary future practice assumptions on the percentage of people whose diagnosis was confirmed by the alternative methods to CBPM (10%), HBPM (5%) and ABPM (85%) the cost impact would be £2.39 million cost in year 1 after implementation.

Assuming CBPM (1%), HBPM (5%) and ABPM (94%) the cost impact would be £2.71 million cost in year 1 after implementation.

Conclusions

The estimated initial cost impact of indicator NM66 is £2.58 million cost in year 1 after implementation. Using the [costing template](#) for clinical guideline 127: hypertension, it is estimated that diagnosing hypertension with ABPM will mean future savings due to the cumulative effect of accurate testing and the savings of prescribing more accurately antihypertensive drugs.

Related QOF indicators

Current QOF indicator	Numerator	Denominator	Underlying achievement (2011/12)
PP2 (reworded as CVD-PP002 for 2013/14). The percentage of patients diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for: smoking cessation, safe alcohol consumption and healthy diet	730,857	896,616	81.5%
CVD-PP002: The percentage of patients diagnosed with hypertension (diagnosed on or after 1 April 2009) who are given lifestyle advice in the preceding 12 months for: smoking cessation, safe alcohol consumption and healthy diet	Not in QOF in 2011/12	Not in QOF in 2011/12	Not in QOF in 2011/12

References

Health and Social Care Information Centre (2012) [QOF 2011/12 data](#) [online].

University of Birmingham (NICE External Contractor), Development feedback report on piloted indicator, 2013.

University of Birmingham and University of York Health Economics Consortium (NICE External Contractor), Health economic report on piloted indicator, 2013

NICE [costing template](#) for clinical guideline 127: hypertension