Quality and Outcomes Framework Programme

NICE cost impact statement

July 2011

Indicator area: Cardiovascular disease – primary prevention

Indicator

NM26: In those patients with a new diagnosis of hypertension aged 30-74 years, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an agreed risk assessment tool) of ≥20% in the preceding 15 months: the percentage who are currently treated with statins (unless there is a contraindication)

Introduction

This report provides a high-level cost impact assessment for one indicator relating to primary prevention of cardiovascular disease (CVD) in the QOF CVD primary prevention domain for inclusion in the 2012/13 NICE menu of indicators for QOF. The intent of this indicator is to extend and replace the 2011/12 QOF indicator PP1, which incentivises a cardiovascular risk assessment in people aged 30 to 74 years with a new diagnosis of hypertension. The proposed indicator would extend the current indicator by adding the requirement to treat people with a recorded CVD risk of 20% or more with statins.

Cost implication

Patient numbers affected

The 2011/12 QOF indicator PP1 provides a register of people aged 30 to 74 years with a new diagnosis of hypertension who were eligible for a cardiovascular risk assessment in the preceding 15 months. National level QOF results suggest 237,670 people were eligible for a cardiovascular risk assessment in 2009/10. The new indicator NM26 would replace and build on this indicator, so this is assumed to be the estimated eligible population for analysis.

Current care

The 2011/12 Primary prevention of CVD QOF indicator PP1 states that patients at risk of CVD should be identified before disease has become established.

Risk assessment is undertaken in those likely to be at high risk of CVD (with a new diagnosis of hypertension) using a validated assessment tool that scores a range of modifiable and non-modifiable risk factors. It is therefore reasonable to assume that a cardiovascular risk assessment in people with a new diagnosis of hypertension is already being undertaken under current QOF indicator PP1, and no additional resources would arise from this action under the new indicator.

QOF Pilot data collected from a representative sample of GP practices in England, Scotland, Wales and Northern Ireland suggest approximately 56% of people were recorded as having a statin.

The costing report for NICE clinical guideline 67 on lipid modification estimates that in adults identified as high risk, the average 10-year risk of CVD is 27%. This is based on expert opinion and may be higher for a subgroup with hypertension.

Assuming that statins are indicated for 27% of people assessed using a full cardiovascular risk assessment, approximately 32,342 people will be treated under the new indicator NM26.

Table 1 Estimated number of people currently treated with statins

Detail	Units
Eligible population for CVD risk assessment (PP1)	237,670
% indicated for statin therapy	27%
Estimated number needing statin treatment	64,171
Potential uptake	90%
Eligible population for statin therapy	57,754
Current baseline for statin therapy	56%
Currently being treated with statins	**32,342**

Proposed care

Indicator NM26 incentivises treatment with statins in people with a recorded CVD risk of 20% or more.

Cost-effectiveness analysis for 'Lipid modification: Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease' (NICE clinical guideline 67, 2008) indicates that simvastatin (40 mg) and pravastatin (40 mg) are both cost-effective options for the primary prevention of CVD, and the GDG considered that they were the most effective preparations at the lowest acquisition cost. Cost-effectiveness analysis showed that other statins such as atorvastatin were also cost effective in the primary prevention of CVD.

Resource impact

NICE clinical guideline 67 on lipid modification recommends that treatment for the primary prevention of CVD should be initiated with simvastatin 40 mg, or a lower dose or an alternative such as pravastatin if is there are contraindications to simvastatin.

The cost of implementing this indicator is based on assumptions about current baseline treatment and expected future levels of treatment and is set out in table 2.

Table 2 Estimated resource impact of treating people with statins

Detail	Units
Estimated population for statin therapy	57,754
Currently being treated with statins (27%)	32,342
Population needing statin therapy	25,412
Annual cost of statin therapy	£18.20[a]
Total annual cost of implementation	**£462,493**
[a] The annual cost of statin therapy is based on the cost of simvastatin 40 mg in 'British national formulary' edition 61.	

Sensitivity analysis

If the uptake is varied from 70% up to a maximum of 100% the estimated costs are outlined in table 3.

Table 3 Estimated resource impact of treating people with statins at different thresholds

Uptake	70%	80%	90%	100%
Cost	£359,716	£411,104	£462,493	£513,881

Potential savings

CVD has significant cost implications for the NHS and is estimated to cost the overall economy around £30 billion a year (Luengo-Fernandez et al. 2006).

Trials show that statin therapy is associated with a reduction in the risk of all-cause mortality, fatal and non-fatal myocardial infarction (MI) and the composite outcomes of CHD; death, non-fatal MI, fatal or nonfatal stroke and coronary revascularisation.

Treating people at high risk of CVD is likely to reduce serious cardiovascular events such as MI and stroke and therefore reduce the costs associated with

these events. Implementing these indicators is therefore likely to be cost effective, resulting in financial savings to the wider NHS.

See the national costing report for NICE clinical guideline 67 for further details of potential savings.

Conclusions

Annual assessment of cardiovascular risk using a validated assessment tool is already incentivsed in the 2011/12 Primary prevention of CVD QOF indicator PP1, so it is reasonable to assume no additional resources will arise from this activity under the new indicator.

It is estimated that 26% of people identified as being at high risk of CVD need statin therapy, and pilot data suggest that approximately 56% of these are already receiving treatment.

The cost of implementing indicator NM26, assuming an uptake of 90%, is estimated to be £462,493.

Implementing these indicators has the potential to result in financial savings to the wider NHS by reducing serious cardiovascular events such as MI and stroke.

Related QOF indicators

National level results for 2009/10 for the current QOF indicator (NHS Information Centre 2010)

Current QOF indicator	Numerator	Denominator	Underlying achievement
PP 1. 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 who have had a face to face cardiovascular risk assessment at the outset of diagnosis (within three months of the initial diagnosis) using an agreed risk assessment tool.	194,077	237,670	81.7%

References

NHS Information Centre (2010) QOF 2009/10 results: England level QOF tables 2009/10 – clinical tables 2009/10 [online]. Available from www.qof.ic.nhs.uk

Lipid modification. NICE clinical guideline 67 (2008, reissued March 2010). Available from www.nice.org.uk/guidance/CG67

Lipid modification costing report (2008). Available from www.nice.org.uk/guidance/CG67

Luengo-Fernandez R, Leal J, Gray A et al. (2006) Cost of cardiovascular diseases in the United Kingdom. Heart 92: 1384–9

Statins for the prevention of cardiovascular events. NICE technology appraisal guidance 94 (2006). Available from www.nice.org.uk/guidance/TA94