NHS
National Institute for
Health and Clinical Excellence

Quality and Outcomes Framework Programme

NICE cost impact statement

July 2010

Indicator area: Mental health

Indicators:

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

NM 16. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of BMI in the preceding 15 months

NM 17. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood pressure in the preceding 15 months

NM 18. The percentage of patients aged 40 and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of total cholesterol: hdl ratio in the preceding 15 months

NM 19. The percentage of patients aged 40 and over with schizophrenia, bipolar affective disorder and other psychoses who have a record of blood glucose level or HbA1c in the preceding 15 months

NM 20. The percentage of women aged 24–64 (in Scotland from 21 to 60) with schizophrenia, bipolar affective disorder and other psychoses who have a record of cervical screening within the last 5 years

Introduction

This statement provides a high-level budget impact discussion for six indicators relating to mental health piloted for the 2011/12 NICE menu of indicators for QOF. These indicators are intended to replace the 2009/10 QOF indicator MH 9, which incentivises annual review for patients with schizophrenia, bipolar affective disorder and other psychoses:

> *MH 9. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses with a review recorded in the preceding 15 months. In the review there should be evidence that the patient has been offered routine health promotion and prevention advice appropriate to their age, gender and health status*

Estimates around future costs have been made using published data and the results of piloting for these indicators.

Cost implication

Patient numbers affected

Based on the denominator for QOF indicator MH 9 in 2008/09 (NHS Information Centre 2009), the number of eligible patients for the three indicators relating to alcohol recording (NM 15), body mass index (BMI) (NM 16) and blood pressure (NM 17) was estimated at 332,837.

The indicators relating to total cholesterol: high-density lipoprotein (HDL) cholesterol ratio (NM 18) and blood glucose level or HbA_{1c} (NM 19) apply to all patients aged 40 and over. The cost calculations for these indicators used an age-adjusted denominator for QOF indicator MH 9 in 2008/09, which gave the number of eligible patients for this indicator as 207,379.

The indicator relating to cervical screening (NM 20) applies to women aged from 25 to 64 (and in Scotland to women aged from 21 to 60). The cost calculations for this indicator used an age-adjusted denominator for QOF indicator MH 9 in 2008/09, based on the 2009 female England GP registered

population, which gave the number of eligible patients for this indicator as 109,836. The prevalence of schizophrenia and bipolar affective disorder are assumed to be approximately equally in men and women.

Current care

GPs have been incentivised to perform a physical health check for people with a diagnosis of a serious mental illness since the introduction of the QOF in April 2004 and this is now part of routine care provided by primary care teams.

The underlying achievement for current QOF indicator MH9 shows that 93% of patients eligible for a mental health review received a review in the preceding 15 months during 2008/09 (NHS Information Centre 2009). Incentivising the individual components of the review should improve and standardise the care delivered as part of the physical health check for the QOF 2009/10 indicator MH 9.

Achievement data for QOF indicator CS 1 ('The percentage of patients aged from 25 to 64 (in Scotland from 21 to 60) whose notes record that a cervical smear has been performed in the last five years') reports a national achievement of 84%. However, a report by the Disability Rights Commission based on the primary care records of 1.7 million primary care patients found that women with schizophrenia were less likely to have had a cervical sample in the previous 5 years (Hippisley-Cox and Pringle, 2005)

Table 1 identifies the current baseline achievement as reported in the pilot of the 6 indicators. For indicators 1-5 the minimum estimates for future achievement are derived from the post pilot baseline with upper achievement set at the recorded level of achievement in the national QOF for current indicator MH 9. For the cervical screening indicator, future achievement has been estimated at increments between pilot baseline achievement and the national QOF for current indicator CS 1. The pilot data identify variation in the current provision among the different indicators that should form part of the current annual review.

Table 1 Estimated current achievement and indicative future achievement based on data collected from indicator piloting

Indicator	Current baseline achievement	Future achievement		
		Min	Mid-point	Max
Alcohol	41%	50%	72%	93%
BMI	51%	65%	79%	93%
Blood pressure	67%	79%	86%	93%
Total cholesterol:HDL ratio*	42%	55%	74%	93%
Blood glucose level or HBA$_{1c}$	42%	55%	74%	93%
Cervical screening	74%	81%	83%	84%

*Data quality issues were suspected in the baseline position for cholesterol resulting in very low numbers. In this instance, the data for blood glucose has been used as a proxy.

Proposed care

It is assumed that for most of the target population it will be possible to complete the new indicators without the need for additional GP attendances. Unpublished data provided by the NHS Information Centre indicates that approximately 80% of individuals with a diagnosis of psychosis, schizophrenia or bipolar affective disorder in their record registered with a GP attended their GP practice for a consultation on at least four occasions in a given year. It may be necessary to spend time contacting those patients that are not in regular contact with their GP, and individual practices may incur costs through sending out letters and contacting patients by telephone.

Resource impact

Table 2 provides unit costs and estimated target populations for the three indicators relating to laboratory tests (cholesterol testing, blood glucose testing and cervical screening).

Table 2 Unit costs associated with tests

Indicator	Unit cost (£)	Source	Target population (England)	Frequency of test
Total cholesterol: HDL ratio	2.97	2008/09 Reference Costs[1] – DAP823	207,379	Annual
Blood glucose level or HBA_{1c}	2.97	2008/09 Reference Costs[1] – DAP823	207,379	Annual
Cervical screening	21.67	Health Technology Assessment[2]	109,836	5-year

[1] Department of Health 2010; [2] Karnon 2004.

Table 3 Estimated annual incremental costs associated with implementing indicators for cholesterol, blood glucose and cervical screening (£000s) (England)

Indicator	Min (£000s)	Mid-point (£000s)	Max (£000s)
Total cholesterol: HDL ratio	86	203	320
Blood glucose level or HBA_{1c}	86	203	320
Cervical screening	33	40	48
Total	**203**	**443**	**684**

The estimated incremental cost associated with testing for cholesterol and blood glucose and for cervical screening ranges from £0.2 million to £0.7 million.

Unquantifiable costs/savings

Implementation of these indicators may result in other additional related costs and potential savings that are not possible to quantify, for example:

* Increased enquiries around alcohol intake may identify additional harmful or hazardous drinkers, which may result in an increase in brief interventions for alcohol misuse or referrals to alcohol dependency services. However, evidence suggests that offering brief advice to harmful or hazardous drinkers will reduce alcohol intake and may result in savings to the NHS and the wider society.

* Increased monitoring of BMI measurements may identify additional patients who are outside of their ideal weight, which may result in an

increase in structured education around healthy living and weight management or referrals to dieticians. However, there may be some future savings associated with in indentifying individuals with a BMI above 25 (normal range 18.5-24.9) by preventing the development of co-morbidities associated with obesity such as coronary heart disease (CHD) and diabetes, especially given that approximately 40% of people with schizophrenia are obese (Hennekens et al. 2005), and obesity is also common in people with bipolar disorders (Elmsie et al. 2000) and psychosis, where patients have been found to lead more sedentary lives, eat less fruit and vegetables (McCreadie R et al., 1998). This assumes that least a proportion of people with SMI and a BMI over 25 receive an effective intervention to reduce their weight as a consequence of identification.

- Measurement of blood pressure may identify additional patients with hypertension, which may result in an increase in structured education around healthy living or prescriptions for blood pressure lowering drugs. Conversely, evidence suggests that reducing the blood pressure of people with hypertension will reduce the risk of serious health conditions, such as strokes or heart attacks, and may result in savings to the NHS and the wider society. This is especially important when considering that hypertension in people with schizophrenia is estimated at 19% compared with 15% in the general population (Hennekens et al. 2005).

- Measuring total cholesterol: HDL ratio may identify additional patients with cholesterol levels outside the normal range, which may result in an increase in structured education around cardiovascular risk factors especially as people with schizophrenia have a much higher risk of raised cholesterol than the general population (Oud et al., 2009). However, identifying these patients might reduce the risk of serious health conditions such as metabolic syndrome and may result in savings to the NHS.

- Measuring blood glucose may identify additional patients with disturbance of glucose regulation, which may result in an increase in referrals to secondary care services for tests for diabetes. However, identifying these

patients might reduce the risk of serious complications associated with diabetes. The relative risk of developing diabetes mellitus is two to three times higher in people with schizophrenia than in the general population (Oud et al. 2009) and identification of diabetes may result in savings to the NHS and the wider society. These two points are especially important given that 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 coronary heart disease (Mackin et al. 2007). Measurement of HBA1c in people who have diabetes may promote better glycaemic control.

Conclusions

Undertaking a physical health check for people with a diagnosis of a serious mental illness is part of routine care provided by primary care teams and enquiry into alcohol consumption, measurement of BMI, blood pressure, total cholesterol and blood glucose and cervical screening (where appropriate) are part of the 2009/10 QOF indicator MH 9. Patients within this group attend their GP practice frequently and it is assumed that for most of the target population it will be possible to complete the new indicators without the need for additional GP attendances.

The estimated direct cost of implementation of those indicators which would require laboratory tests (those relating to blood glucose, cholesterol and cervical screening) is estimated to be £0.7 million (upper estimate). Overall, implementation of the proposed mental health indicators is not expected to result in significant costs and could result in possible cost saving to the NHS.

Related QOF indicators

National level results for 2008/09 for the current QOF indicator (NHS Information Centre 2009)

Current indicator	Numerator	Denominator	Underlying achievement
CS 1. The percentage of patients aged from 25 to 64 (in 11 Scotland from 21 to 60) whose notes record that a cervical smear has been performed in the last five years	10,467,884	12,525,113	84%
MH 9. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses with a review recorded in the preceding 15 months. In the review there should be evidence that the patient has been offered routine health promotion and prevention advice appropriate to their age, gender and health status	308,007	332,837	93%

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