

## **Quality and Outcomes Framework Programme**

### **NICE cost impact statement**

July 2011

## **Indicator area: Diabetes mellitus**

### ***Indicator***

**NM41:** The practice can produce a register of all patients aged 17 years and over with diabetes mellitus which specifies the type of diabetes where a diagnosis has been confirmed

### **Introduction**

This report provides a high level cost-impact assessment for one indicator relating to the diabetes register in the QOF diabetes domain for inclusion on the 2012/13 NICE menu for QOF. This indicator is intended to replace the 2011/12 QOF diabetes register indicator DM19, which requires practices to produce a register of patients aged 17 and older with diabetes mellitus that specifies whether the patient has type 1 or type 2 diabetes. The proposed indicator will extend the register to include other types of diabetes mellitus, such as 'diabetes unspecified' or other types of diabetes.

### **Cost implication**

#### ***Patient numbers affected***

The 2011/12 QOF indicator DM19 requires practices to produce a register of patients with type 1 or type 2 diabetes. These are the most common types of diabetes. Approximately 90% of diabetes cases worldwide are type 2 diabetes (World Health Organization 2011) and estimates for type 1 range from 5 to 15%. Other types of diabetes would therefore account for approximately 1 to 2% of all diagnosed cases, so the effect of expanding the register, and associated costs, is not expected to be significant.

### **Current care**

Before 2006 the QOF diabetes register covered all patients (17 years and older) with diabetes. In 2006 this was amended to include only people who were coded with type 1 or type 2 diabetes (this was to allow QOF indicators to be more closely aligned to NICE guidance that distinguishes type 1 and 2 diabetes). Published literature reports a 22% reduction in the number of people on the register as a result of this change.

However, published national QOF data by the NHS Information Centre illustrate a 3.6% rise in the number of people on the diabetes register following this change. Nevertheless, the data indicate this rise is significantly lower than the average yearly incremental rise in the register size (5.5%).

**Table 1 Average incremental rise in the QOF diabetes register (NHS Information Centre 2010)**

<b>QOF Year</b>	<b>QOF Indicator</b>	<b>Denominator</b>	<b>Denominator increase from previous year</b>	<b>% increase from previous year</b>
2009/10	DM19	2,338,813	125,675	5.4
2008/09	DM19	2,213,138	124,803	5.6
2007/08	DM19	2,088,335	126,359	6.1
<b>2006/07</b>	<b>DM19</b>	<b>1,961,976</b>	<b>71,313</b>	<b>3.6</b>
2005/06	DM1	1,890,663	124,272	6.6
2004/05	DM1	1,766,391	N/A	N/A
<b>Average</b>		<b>2,043,219</b>	<b>114,484</b>	<b>5.5</b>

The data also illustrate a larger than average rise (6.1%) in diabetes incidence in the year after the register was amended.

It is difficult to know to what extent the reduction in the incremental rise of the diabetes register the year after this indicator was changed, or the larger than average rise the following year (2007/08), is attributable to a change in the coding requirements. However, it is reasonable to assume that it was in part related to changes in the QOF requirements, and to possible consequent effects on GPs coding behaviour (for example, to ensure people that GPs considered would benefit from the care incentivised in the diabetes QOF were included on the register). This suggests that these patients are already

receiving the care incentivised in the diabetes domain, so costs would not be significantly altered by extending the register.

A report by the Royal College of General Practitioners (RCGP) into the coding, classification and diagnosis of diabetes in primary care in England (2011) states that because of the complexity involved in diagnosing diabetes there is an absence of clinically based guidelines for classifying diabetes. In addition, the 2011/12 QOF guidance supporting DM19 states:

‘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 or requires insulin within 1 year of diagnosis, and otherwise, the code for type 2 should be used.’

The RCGP report also presents an analysis of routinely collected clinical data, which shows 2.2% of people with diabetes are misdiagnosed, 2.1% misclassified and 0.9% miscoded. The 2004 National Diabetes Audit report also stated that 43% of records did not specify the type of diabetes.

This reinforces the notion that GPs may have classified patients in line with codes allowing entry onto the QOF diabetes register, or re-classified patients to allow them to stay on the register, to ensure people were not unfairly disadvantaged by the change in the coding requirements if there may have been diagnostic uncertainty. This suggests that changes to the business rules would not alter the care offered to people with diabetes, or the cost of care.

### ***Proposed care***

Because people with other types of diabetes mellitus are excluded from the current QOF diabetes register, they may not be eligible for recall or the care processes incentivised by the diabetes domain of the QOF. Amending the register to include other types of diabetes may identify people not included on the current register, making them eligible for the care processes within the diabetes domain.

The 2005/06 diabetes register indicator DM1 included other types of diabetes. Using the figures from this, and assuming that people with other types of diabetes account for 1.5% of the total diabetes population, this would equate to 28,360 people on the register. Applying the average yearly incremental rise in the QOF diabetes register (5.5%) to this figure would result in an annual incidence of 1546 new cases of 'other types' of diabetes nationally. Based on an average GP list size of 6297 people, this would be 0.25 patients per practice. Taking into account register inflation would give a slightly higher figure but even using the 2009/10 QOF register (which includes only type 1 and type 2) this would still give an annual incidence of only 0.3 new cases per practice. This would not be expected to be associated with significant additional costs.

### ***Resource impact***

In practice, people with diabetes will still receive care regardless of the intricacies of the QOF register. We cannot assume that amending the coding requirements of the QOF diabetes register will have an affect on an unmet clinical need in this population. It is therefore reasonable to assume that the resource implication of this change will not be significant.

### **Conclusions**

The 2011/12 QOF indicator DM19 requires practices to produce a register of people with type 1 or type 2 diabetes. Type 1 and type 2 diabetes account for more than 90% of all cases of diabetes, so the majority of people with diabetes will already be on the register.

Evidence suggests there is some complexity in diagnosing diabetes, and the constraints of the current QOF diabetes register may have altered GPs coding behaviours to ensure that if there is diagnostic uncertainty people are coded to ensure they are eligible for inclusion on the register and thus the care incentivised in the diabetes QOF. This is reinforced by data showing a reduction in the incremental increase of the number of people on the diabetes register the year after the business rules for this indicator were changed in 2006, followed by a larger than average increase the year after that.

The actual incidence of diabetes is uncorrelated to the coding requirements of the QOF diabetes register. Although there may be some changes in the register size as a result of changes to the classification requirements of the new indicator NM36, in practice people with diabetes will still be receiving care for their diabetes.

Because we cannot assume that there is unmet clinical need in this population, it is reasonable to assume that changes to this indicator will not be associated with significant additional costs.

### ***Related QOF indicators***

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

<b>Current QOF indicator</b>	<b>Denominator</b>
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	2,338,813

### **References**

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