NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

QUALITY AND OUTCOMES FRAMEWORK (QOF) INDICATOR DEVELOPMENT PROGRAMME

Briefing paper

QOF indicator area: Serious mental illness

Potential output: Recommendations for indicator development

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Note: The content of this document is derived from the previous QOF process and the work of the NICE external contractor. It has been put into a NICE template to allow for consistency in reviewing proposed QOF indicators.

Introduction

This briefing paper presents an assessment of the suitability of five indicators developed through the previous QOF processes for inclusion in the NICE menu of QOF indicators.

The QOF indicator area is serious mental illness, and the recommendations and evidence reviews from 'Schizophrenia: core interventions in the treatment and management of schizophrenia in adults in primary and secondary care' (NICE clinical guideline 82), published in 2009, and 'Bipolar disorder: the management of bipolar disorder in adults, children and adolescents, in primary and secondary care' (NICE clinical guideline 38), published in 2006, form the basis of this paper.

The briefing paper is split into two sections:

- An overview of serious mental illness, including an epidemiological summary and its current management in primary care.
- A review of the proposed indicators and a summary of the evidence that informs the indicators.

Related existing QOF indicators from 2009/10 indicator set

Serious mental illness relates to an existing QOF clinical domain as defined in the 2009/10 GMS Contract guidance. The QOF indicators for this domain are outlined below.

QOF domain 2009/10: mental health

Indicator	Points	Payment stages
Records		
MH 8. The practice can produce a register of people with schizophrenia, bipolar disorder and other psychoses.	4	Not applicable
Ongoing management		
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.	23	40–90%
MH 4. The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 15 months.	1	40–90%
MH 5. The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range within the previous 6 months.	2	40–90%
MH 6. The percentage of patients on the register who have a comprehensive care plan	6	25–50%

documented in the records agreed between individuals, their family and/or carers as appropriate.		
MH 7. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who do not attend the practice for their annual review who are identified and followed up by the practice team within 14 days of non-attendance.	3	40–90%

1 Overview: serious mental illness

Epidemiological summary

Definitions

The following definitions were taken from ‘Schizophrenia’ (NICE clinical guideline 82) and ‘Bipolar disorder’ (NICE clinical guideline 38).

Schizophrenia is a major psychiatric disorder, or cluster of disorders, characterised by psychotic symptoms that alter a person’s perception, thoughts, affect, and behaviour.

Bipolar disorder is a serious mental illness that often has a long course and is characterised by both episodes of depressed mood and episodes of elated mood (mania or hypomania). However, for many people the predominant experience is of low mood. In its more severe forms, bipolar disorder is associated with significant impairment of personal and social functioning.

Incidence and prevalence and evidence of variation by age, sex and ethnicity

Schizophrenia affects around 400,000 people in England (NICE, 2002) and bipolar disorder about 544,631 people (NICE, 2006). Rates for men and women are similar for schizophrenia and bipolar disorder, however the age of onset tends to be lower in

men. There is an increased incidence among black and ethnic minority groups (Sharpley et al. 2001).

Estimated annual prevalence of psychosis by gender and ethnicity (Nazroo and King 2002)**.**

	Percentage of UK population					
	White	Irish	Black Caribbean	Bangladeshi	Indian	Pakistani
Men	1.0	1.0	1.6	0.6	0.9	1.4
Women	0.7	1.0	1.7	0.6	1.3	1.3
Total	0.8	1.0	1.6	0.6	1.1	1.3

Morbidity and Mortality

Patients with serious mental health problems are at considerably increased risk of physical ill-health than the general population (Marder et al. 2004) and have demonstrably poorer health and health outcomes than the rest of the population. The Office of National Statistics Survey 'Psychiatric morbidity among adults living in private households' found that 62% of people with psychosis reported a physical condition, compared to 42% of those without a psychosis (Singleton et al. 2001). Diabetes, for example, occurs far more frequently in patients with schizophrenia and bipolar affective disorder, than in the general population (Mukherjee et al. 1996). These increased comorbidity findings are echoed by QRESEARCH analysis of the health and health care of people with schizophrenia and bipolar disorder (Hippsley-Cox and Pringle 2005).

An unhealthy lifestyle (including poor diet, low physical activity and smoking) and the presence of obesity and drug side effects all contribute to poor health outcomes (Connolly and Kelly 2005). Brown et al. prospectively surveyed the lifestyles of 140 people with schizophrenia, and found that their diet was unhealthy (higher in fat and lower in fibre than the reference population), they took less exercise than the reference population, and also had significantly higher levels of cigarette smoking(Brown et al. 2000).

There is also literature extending back more than 70 years demonstrating that people with serious mental illness die younger than the general population, primarily

due to natural causes rather than accidents or suicide (Maltzberg 1934). A meta-analysis by Harris and Barraclough (1998) looked at mortality rates in people with serious mental illness. They analysed 20 papers, covering a population of 36,000 people from nine countries that related specifically to schizophrenia. Using these data, they calculated the standardised mortality rate (SMR) for this group as a whole and for specific causes of death. The SMR for males with schizophrenia for all causes of death was 156 (95% confidence interval [CI] 151 to 162) and for females with schizophrenia was 141 (95% CI 136 to 146). The SMR for infectious diseases as a cause of death in people with schizophrenia was 455 for males and 490 for females. The SMR for respiratory diseases causing death was 214 for males and 249 for females. However, these SMRs are based on data from the early 1990s, and do not take into account the increase in obesity rates caused by the use of atypical anti-psychotic medication (in addition to an overall rise in obesity levels in the general population) (American Diabetes Association 2004). People with bipolar spectrum disorders are also at increased risk of premature death from general medical conditions (Roshanaei-Moghaddam and Katon 2009). This recent review found that a higher mortality from natural causes among patients with bipolar spectrum disorders ranged from 35% higher than a comparison group to a two-fold higher mortality rate. Among all causes of death, cardiovascular disease seemed to cause the majority of excess deaths. People with serious mental illness are also far more likely to smoke than the general population (61% of people with schizophrenia and 46% of people with bipolar disorder smoke compared with 33% of the general population). Premature death and smoking-related diseases, such as respiratory disorders and heart disease, are more common among people with serious mental illness who smoke, than in the general population of smokers (Seymour 2003).

Impact on health services

Primary care

In the UK, people with a serious mental illness consult primary care practitioners more frequently (Nazareth et al. 1993) and are in contact with primary care services for a longer cumulative time than people without mental health problems (Lang et al.1997). Approximately 30% of people with a serious mental illness in the UK are now seen only in the primary care setting, although this figure varies considerably

depending on the period during which data was collected and the methodology used (Kendrick et al. 1994, Rodgers et al. 2003). 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 2004/6 and this is now routine for primary care teams. Incentivising specific issues should improve the care within the current physical health check indicator MH9.

Secondary Care

NICE guidance, both for people with bipolar disorder and schizophrenia, recommends that an annual physical health check is part of the role of primary care.

Current management in primary care

The majority of GPs regard themselves as involved in the monitoring and treatment of physical illness and prescribing for mental illness (Bindman et al. 1997, Kendrick et al. 1991, Lester et al. 2005).

NHS priorities and timeliness for guidance

The 'National service framework for mental health' (Department of Health 1999) recommended that primary care has the skills and the necessary organisational systems to provide the physical health care and other primary care support needed by people with severe mental illness. The White Paper 'Choosing Health' (Department of health 2006) noted that people with poor mental health tend to experience worse physical health than the rest of the population. The QOF has included an indicator focused on an annual health check since 2004.

2 Review of proposed indicators for serious mental illness

Proposed indicator 1

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses whose records include an enquiry about alcohol misuse in the preceding 15 months.

Evidence summary

This is a summary of the evidence supporting the proposed indicator.

Clinical effectiveness

The National Psychiatric Morbidity Survey in England (Meltzer et al. 1996, Farrell et al. 1998) found that 16% of people with schizophrenia were drinking over the recommended limits of 21 units for men /14 units for women a week. Most other studies have concentrated on co-morbidity in specialist settings, which will not reflect primary care patients. Bipolar disorder is highly comorbid with alcohol and other substance abuse (Kessler et al. 1997).

Proposed indicator 2

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses whose body mass index has been recorded in the preceding 15 months.

Evidence summary

This is a summary of the evidence supporting the proposed indicator.

Of people with schizophrenia, 42% are obese (Hennekens et al. 2005). Obesity is also common in people with bipolar disorders (Elmsie et al. 2000). Phenothiazines and the newer atypical anti-psychotics have been shown to increase central obesity (Sernyak et al. 2002). A combination of drug side effects and adverse health behaviours therefore lead to elevated risk factors, such as obesity (McEvoy et al. 2005).

Proposed indicator 3

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses whose blood pressure has been recorded in the preceding 15 months.

Evidence summary

This is a summary of the evidence supporting the proposed indicator.

Clinical effectiveness

Hypertensive risk factors are prevalent among people with schizophrenia. Hypertension in this population is estimated at 19% compared with 15% in the general population (Hennekens et al. 2005). They are, however, considerably less likely to be diagnosed with and treated for hypertension. The National Institute of Mental Health's Clinical Antipsychotic Trials of Intervention Efficacy (CATIE) reported hypertension treatment rates for Hispanic patients with schizophrenia of 21.4% and non-Hispanic patients of 39.2% (Nasrallah et al. 2006).

Proposed indicator 4

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses aged over 40 whose blood cholesterol level has been recorded in the preceding 15 months.

Evidence summary

This is a summary of the evidence supporting the proposed indicator.

Clinical effectiveness

Some antipsychotics (especially olanzapine and clozapine), adversely affect lipid profiles, increasing low-density lipoproteins and triglycerides, and decreasing high-density lipoproteins, largely as an outcome of weight gain. A combination of drug side effects and adverse health behaviours lead to elevated risk factors such as obesity, hypercholesterolaemia and metabolic syndrome (McEvoy et al. 2005).

Proposed indicator 5

The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses whose blood glucose level has been recorded in the preceding 15 months.

Evidence summary

This is a summary of the evidence supporting the proposed indicator.

Clinical effectiveness supporting proposed new indicators

Diabetes is a growing problem in the Western world, which is associated with obesity and early death. Diabetes is highly prevalent among people with schizophrenia, but most remain undiagnosed in the community (Holt 2005), with prevalence at least two to three times higher than that of the background population (Lamberti et al. 2004). Phenothiazines and the newer atypical anti-psychotics have also been shown to be associated with diabetes (Sernyak et al. 2002). A 5 year follow-up of people starting clozapine, found that 37% developed diabetes and most showed significant weight gain, particularly in the first 12 months (Henderson and Cagliero 2000). Similarly a nested case-control study of the UK General Practice Research Database found that olanzapine users were significantly more likely to develop diabetes than those not taking anti-psychotics (odds ratio 5.8, 95% CI 2 to 16.7) (Koro et al. 2002). Diabetes can be present even where there is a low mean BMI (Emsley et al. 2005). Therefore, people with schizophrenia and bipolar disorder should be screened for diabetes regardless of BMI, which is sometimes used as a predictor of diabetes in the background population.

Assessment of indicators against current practice

Reduction of health inequalities

People with a severe mental illness experience extreme health inequalities. Black and minority ethnic communities are more at risk of many of the conditions screened for in the current health check, most notably diabetes for which the prevalence for the UK population of Pakistani and Bangladeshi family origin is five times higher than for the general population, for the UK population of Indian family origin it is almost three times higher and for the UK population of African-Caribbean family origin it is between two and four times higher (Erens et al. 2001).

Will implementation of these recommendations lead to cost-effective improvements in the delivery of primary care?

No evidence was identified to directly show that the recommendations may lead to cost effective improvements in the delivery of primary health care.

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