NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

QUALITY AND OUTCOMES FRAMEWORK (QOF) INDICATOR DEVELOPMENT PROGRAMME

Briefing paper

QOF indicator area: Dementia

Potential output: Recommendations for indicator development

Date of Primary Care QOF Indicator Advisory Committee meeting: 16 June 2009

Introduction

This briefing paper presents an assessment of the suitability of NICE clinical guideline recommendations highly relevant to primary care to progress for QOF indicator development.

The QOF indicator area is dementia and the recommendations and underlying evidence review from 'Dementia: supporting people with dementia and their carers in health and social care' (NICE clinical guideline 42) form the basis of this paper. This guidance was issued by NICE in November 2006 and consultation on the draft guideline began in May 2006. Searches to identify evidence for NICE clinical guidelines are re-run 6–8 weeks before consultation. This paper is based on the evidence presented in NICE clinical guideline 42 and no update searches have been performed. The briefing paper is split into three sections.

- An overview of dementia, including an epidemiological summary and its current management in primary care.
- Specific recommendations highly relevant to primary care from NICE clinical guideline 42 identified for indicator development, a summary of the evidence that informs the recommendations and an initial assessment of their feasibility.
- A summary of the key considerations

Related existing QOF indicators from 2009/10 indicator set

Dementia 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: dementia

Indicator	Points	Payment stages
Records		
DEM 1. The practice can produce a register of patients diagnosed with dementia	5	Not applicable
Ongoing management		
DEM 2. The percentage of patients diagnosed with dementia whose care has been reviewed in the previous 15 months	15	25-60%

1 Overview: dementia

Epidemiological summary

Definition

Dementia is a progressive and largely irreversible clinical syndrome that is characterised by a widespread impairment of mental function.

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

Dementia is common in older people. The prevalence of dementia rises rapidly from the age of 65 years, when it affects 1.3% of the population, more than doubling every 5 years up to 32.5% of the population at the age of 95 years. There are a number of conditions that cause the symptoms of dementia. Alzheimer's disease (AD) accounts for over 50% of all cases; other

common causes in older people include cerebrovascular disease (vascular dementia [VaD]) and dementia with Lewy bodies (DLB) (accounting for 15–20% of cases each). Prevalence rates of dementia appear to vary little between countries and the condition affects all socioeconomic groups. The incidence rates of dementia vary by age and sex. The incidence is higher in men overall, but it increases at a higher rate in women as the population ages. Ethnic differences in prevalence have not been consistently reported. The prevalence of dementia is expected to more than double in the next 30–50 years.

Morbidity and mortality

Dementia is associated with complex needs and high levels of dependency and morbidity, especially in the later stages. Increases in life expectancy and ageing populations mean that the number of cases of dementia is projected to double in the UK during the next 30 years.

Impact on health services

Primary care

There is limited information on the impact on primary healthcare services presented in the guideline. There is significant under-diagnosis of dementia. In a 2007 study conducted by the National Audit Office, only five people per 1,000 were diagnosed with dementia at 65–69 years, compared with an estimated actual prevalence of 13 per 1000, while in people over 80 years, only 60 of the expected 122 were diagnosed.

Secondary care

People with dementia are estimated to make up half of the total number of people who remain in hospital unnecessarily.

Current management in primary care

General practice has an important role to play in identifying people who may have dementia and differentiating them from people who have other causes of cognitive impairment (for example, delirium, depression, side effects of medication and medical conditions such as hypothyroidism). The diagnosis of

a dementia syndrome can often be made in primary care, and there are a range of standardised screening tests for cognitive impairment that are used by GPs. If diagnosis is in doubt, referral to a specialist (such as an old age psychiatrist, neurologist, physician in healthcare of older people or specialist GP, as deemed appropriate) is generally advised. In most cases, a specialist with expertise in the differential diagnosis of the condition will be needed for subtype-specific diagnosis of the type of dementia. Once a diagnosis of dementia has been made there is an important role for primary care practitioners in relation to ongoing medical management, including prescription of relevant medication and management of physical comorbidities.

NHS priorities and timeliness for guidance

The NICE QOF Indicator Programme team examined national clinical guidelines, policy documents and national strategies across the UK to assess timeliness of indicators in this topic area. The following were found to be of relevance to dementia and indicate that dementia is deemed as an area of high priority for the NHS:

- 'National dementia strategy' (Department of Health, 2009)
- 'Improving services and support for people with dementia' (National Audit Office, 2007)
- 'Management of patients with dementia' (The Scottish Intercollegiate Guidelines Network, 2006).

2 Review of NICE guideline recommendations for 'Dementia: supporting people with dementia and their carers in health and social care' (NICE clinical guideline 42)

Summary of NICE guideline recommendations

Five recommendations from NICE clinical guideline 42 have been identified as being potentially suitable for QOF indicator development.

Recommendations were extracted and coded based on relevance to primary care and suitability for potential indicator development using agreed criteria. The identification of potentially suitable recommendations was conducted using a two-round expert panel process.

Investigation

NICE recommendation 1.4.2.1

A basic dementia screen should be performed at the time of presentation, usually within primary care. It should include:

- routine haematology
- biochemistry tests (including electrolytes, calcium, glucose, and renal and liver function)
- thyroid function tests
- serum vitamin B12 and folate levels.

NICE recommendation 1.4.2.3

A midstream urine test should always be carried out if delirium is a possibility.

Pharmacological interventions for non-cognitive symptoms and behaviour that challenges

NICE recommendation 1.7.2.2

People with Alzheimer's disease, vascular dementia or mixed dementias with mild-to-moderate non-cognitive symptoms should not be prescribed antipsychotic drugs because of the possible increased risk of cerebrovascular adverse events and death.

NICE recommendation 1.7.2.3

People with DLB with mild-to-moderate non-cognitive symptoms, should not be prescribed antipsychotic drugs, because those with DLB are at particular risk of severe adverse reactions.

NICE recommendation 1.7.2.4

People with Alzheimer's disease, vascular dementia, mixed dementias or DLB with severe non-cognitive symptoms (psychosis and/or agitated behaviour

causing significant distress) may be offered treatment with an antipsychotic drug after the following conditions have been met.

- There should be a full discussion with the person with dementia and/or carers about the possible benefits and risks of treatment. In particular, cerebrovascular risk factors should be assessed and the possible increased risk of stroke/transient ischaemic attack and possible adverse effects on cognition discussed.
- Changes in cognition should be assessed and recorded at regular intervals. Alternative medication should be considered if necessary.
- Target symptoms should be identified, quantified and documented.
- Changes in target symptoms should be assessed and recorded at regular intervals.
- The effect of comorbid conditions, such as depression, should be considered.
- The choice of antipsychotic should be made after an individual risk–benefit analysis.
- The dose should be low initially and then titrated upwards.
- Treatment should be time limited and regularly reviewed (every 3 months or according to clinical need)

For people with DLB, healthcare professionals should monitor carefully for the emergence of severe untoward reactions, particularly neuroleptic sensitivity reactions (which manifest as the development or worsening of severe extrapyramidal features after treatment in the accepted dose range or acute and severe physical deterioration following prescription of antipsychotic drugs for which there is no other apparent cause).

Evidence summary

This is a summary of the evidence supporting the proposed NICE recommendations presented above in ‘Summary of NICE guideline recommendations’. This section relates to the evidence summary table in appendix A of this briefing paper.

Clinical effectiveness

The Guideline Development Group (GDG) noted that there is no universal consensus on which diagnostic tests should be used to identify other causes of cognitive impairment in people with suspected dementia. A review of 14 guidelines and consensus statements found considerable similarity to support the interventions in recommendations 1.4.2.1 and 1.4.2.3.

The GDG felt that there was insufficient evidence from trials (level 1 evidence) across a range of relevant outcomes to support the use of antipsychotics in people with AD or VaD, the GDG thus recommended against their use in recommendation 1.7.2.2.

No evidence was found from clinical trials regarding the benefits of antipsychotic drugs in people with DLB. There was some observational data to suggest a detrimental effect (increase in mortality) for the population observed. The GDG thus recommended against their use in recommendation 1.7.2.3.

Cost effectiveness

No health economic evaluations were presented in the guideline for these recommendations.

Assessment of recommendations against current practice

Reduction of health inequalities

There is no evidence presented in the guideline that directly shows that the recommendations outlined in this briefing paper can reduce health inequalities.

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

The recommendations on which tests should be used to identify other causes of cognitive impairment are based on professional consensus. The GDG did not state the extent to which the tests proposed are currently used in primary

care and so it is not possible to state the extent to which they represent a shift from current practice.

There has been concern about the appropriateness of long-term therapy with antipsychotic drugs for dementia because of the possible increased risk of cerebrovascular adverse events and death in these patients. Inappropriate prescribing of antipsychotic drugs for this population by GPs is widely reported and has been linked to an increased risk of falls, hospital admissions and mortality. The GDG did not state the extent to which the antipsychotic drugs for dementia are currently used in primary care and so it is not possible to state the extent to which they represent a shift from current practice.

Feasibility assessment

A summary of the initial feasibility assessment incorporating advice and expert opinion is provided below. This includes comments from the National Primary Care Research and Development Centre (NPCRDC) and NICE.

The initial feasibility assessment suggests that the main issues with supporting these recommendations relate to definitions and unclear denominators, in particular, the 'time of presentation' for screening is unclear and the terms 'delirium' and 'mild-to-moderate non-cognitive symptoms' are undefined. There is also concern about the potential for duplication of screening in primary and secondary care, resulting in tests being repeated. This is a particular problem because a large proportion of care is out of GP control.

3 Key considerations

Consideration could be given to incentivising appropriate testing for other causes of cognitive impairment in people who present with suspected dementia, in line with the guidance, as the majority of patients are likely to present in primary care. Another issue for consideration is the inappropriate prescribing of antipsychotics. It should be noted that dementia is an existing QOF domain and any additional indicators will build on the current indicators for keeping a register and regular review.

References

Department of Health (2009) National dementia strategy. London: Department of Health

National Audit Office (2007) Improving services and support for people with dementia. London: The Stationery Office

Appendix A: evidence summary

Evidence summary of NICE clinical guideline 42 selected recommendations

NICE recommendation	Recommendation	Level of evidence	Key outcomes considered (for interventions)	Specific considerations highlighted by guideline developers (Guideline Development Group/National Collaborating Centre)	Cost-effectiveness evidence
Investigation					
1.4.2.1	A basic dementia screen should be performed at the time of presentation, usually within primary care. It should include: • routine haematology • biochemistry tests (including electrolytes, calcium, glucose, and renal and liver function) • thyroid function tests • serum vitamin B12 and folate levels.	Evidence based on review of clinical guidelines and consensus statements.	n/a	The GDG/NCC noted that there is no universal consensus on the diagnostic battery for people with suspected dementia. A review of 14 guidelines and consensus statements found considerable similarity. Note: The GDG/NCC noted that the primary reason for testing in a person with suspected dementia is to exclude a potentially reversible cause for the dementia. However, in recent studies, potentially reversible causes were found in 9% of cases and less than 1% of cases actually reversed.	None presented.
1.4.2.3	A midstream urine test should always be carried out if delirium is a possibility.	As above	n/a	As above	None presented.

NICE recommendation	Recommendation	Level of evidence	Key outcomes considered (for interventions)	Specific considerations highlighted by guideline developers (Guideline Development Group/National Collaborating Centre)	Cost-effectiveness evidence
Pharmacological interventions for non-cognitive symptoms and behaviour that challenges					
1.7.2.2	People with Alzheimer's disease, vascular dementia or mixed dementias with mild-to-moderate non-cognitive symptoms should not be prescribed antipsychotic drugs because of the possible increased risk of cerebrovascular adverse events and death.	Based on evidence from randomised controlled trials (RCTs).	Neuropsychiatric symptoms, psychotic symptoms, aggressive behaviour and agitation.	In the studies identified, in people with AD or VaD, there is moderate- to high-quality evidence that atypical antipsychotic drugs when compared with placebo produce small benefits in terms of reduced neuropsychiatric symptoms as measured by the total score on the NPI or BEHAVE-AD. However, there was insufficient evidence to establish the effect on psychotic symptoms, aggressive behaviour or agitation when measured separately, except for risperidone, which may reduce aggression. Safety All antipsychotics studied appeared to increase the risk of death when compared with a placebo.	None presented.

NICE recommendation	Recommendation	Level of evidence	Key outcomes considered (for interventions)	Specific considerations highlighted by guideline developers (Guideline Development Group/National Collaborating Centre)	Cost-effectiveness evidence
1.7.2.3	People with DLB with mild-to-moderate non-cognitive symptoms, should not be prescribed antipsychotic drugs, because those with DLB are at particular risk of severe adverse reactions.	Based on evidence from RCTs and observational studies.	Neuropsychiatric symptoms, psychotic symptoms, aggressive behaviour and agitation.	In the studies reviewed, in people with DLB, no evidence was found from RCTs regarding the benefits of antipsychotics. Several observational studies have suggested that up to 50% of people with DLB may show marked sensitivity to both newer and older antipsychotics with a two to three times increase in mortality.	None presented.
1.7.2.4	People with Alzheimer's disease, vascular dementia, mixed dementias or DLB with severe non-cognitive symptoms (psychosis and/or agitated behaviour causing significant distress) may be offered treatment with an antipsychotic drug after the following conditions have been met. • There should be a full discussion with the person with dementia and/or carers about the possible benefits and risks of treatment. In particular, cerebrovascular risk factors should be assessed and the possible increased risk of stroke/transient ischaemic attack and possible adverse effects on cognition discussed.	Consensus	n/a	As above	None presented.

NICE recommendation	Recommendation	Level of evidence	Key outcomes considered (for interventions)	Specific considerations highlighted by guideline developers (Guideline Development Group/National Collaborating Centre)	Cost-effectiveness evidence
	• Changes in cognition should be assessed and recorded at regular intervals. Alternative medication should be considered if necessary. • Target symptoms should be identified, quantified and documented. • Changes in target symptoms should be assessed and recorded at regular intervals. • The effect of comorbid conditions, such as depression, should be considered. • The choice of antipsychotic should be made after an individual risk–benefit analysis. • The dose should be low initially and then titrated upwards. • Treatment should be time limited and regularly reviewed (every 3 months or according to clinical need). For people with DLB, healthcare professionals should monitor carefully for the emergence of severe untoward reactions, particularly neuroleptic sensitivity reactions (which manifest as the development or worsening of severe extrapyramidal features after treatment in the accepted dose range or acute and severe physical deterioration following				

NICE recommendation	Recommendation	Level of evidence	Key outcomes considered (for interventions)	Specific considerations highlighted by guideline developers (Guideline Development Group/National Collaborating Centre)	Cost-effectiveness evidence
	prescription of antipsychotic drugs for which there is no other apparent cause).				