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Article

Have Quality and Outcomes Framework Depression Indicators changed referrals from primary care to a dedicated memory clinic?

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ABSTRACT

The proportion of patients referred from primary care to dedicated dementia clinics who receive a final diagnosis of dementia is low. Many of these non-demented patients may have depressive disorders, since depression is the most common differential diagnosis of dementia. The UK general practitioner (GP) General Medical Services contract, introduced in April 2006, included a Quality and Outcomes Framework (QOF) with indicators related to depression. We investigated whether introduction of the QOF Depression Indicators changed the pattern of referrals from primary care to a dedicated dementia clinic. The results indicated that the null hypothesis could not be rejected.

Keywords: dementia, depression, referral patterns

Introduction

Depression and dementia are probably the most common adult mental health problems encountered in family medicine. These conditions may on occasion be difficult to differentiate, since memory complaints are common in depression, and the onset of dementia may be attended with depressive symptoms.[1] Hence, patients with a primary depressive disorder may be referred to dedicated memory clinics rather than to psychiatric services if their complaint is predominantly of memory difficulties. National and specialist society guidelines on the management of dementia[2–5] universally acknowledge that depression may be comorbid with dementia and recommend assessment for depressive symptoms in dementia patients, but few note that memory complaints may be associated with depression *per se*.[4]

The Cognitive Function Clinic (CFC) is a dedicated secondary care dementia clinic, based at a regional neurosciences centre with a large catchment area covering a population of over three million. Previous studies of non-overlapping cohorts of patients seen at CFC have shown that the percentage of patients referred to the clinic from primary care who receive a diagnosis of dementia is between 37% and 40% (relative risk of dementia in primary care referrals = 0.55–0.69),[6,7] a lower frequency of dementia diagnosis than in referrals to CFC from psychiatrists and other neurologists.[6,8] It is possible that some of the non-demented patients referred from primary care may have had depression rather than dementia as a cause for their symptoms. Improvements in the diagnosis of depression in primary

care might therefore be anticipated to reduce these non-dementia referrals to CFC.

In the UK the General Medical Services contract for GPs introduced in April 2006 was based around a QOF which listed various indicators, including depression and dementia, compliance with which earned financial remuneration.[9] Principles underpinning the selection of indicators included a basis in best available evidence, utility to patient care, management based in primary care and likelihood of patient benefits in improved primary care.[9] Dementia indicators acknowledged that dementia might be associated with psychiatric symptoms such as depressive disorder.

Included amongst the 2006 QOF provisions was Depression Indicator 2:

> In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the outset of treatment using an assessment tool validated for use in primary care.[9]

Three measures of depression severity were suggested: the Patient Health Questionnaire depression module, PHQ-9; the Hospital Anxiety and Depression Scale (HADS); and the Beck Depression Inventory, Second Edition (BDI-II).[9]

We sought to test the hypothesis that improved diagnosis of depression in primary care following introduction of the QOF Depression Indicator would reduce the number of non-demented patients referred from primary care to CFC. A study was undertaken to examine whether any change occurred in the frequency of non-dementia diagnoses in patients referred to CFC from primary care before and after QOF introduction.

Methods

We examined all referrals from primary care physicians seen in the CFC for the 18-month period immediately preceding (November 2004–April 2006) and following (May 2006–October 2007) introduction of the QOF in April 2006. Patient assessment was based on semi-structured interview, informant history (where available), neuropsychological assessment and structural brain imaging, with the diagnosis of dementia based on standard clinical diagnostic criteria (DSM-IV), as used previously in CFC for over more than a decade.[6–8,10] As this was an audit of existing practice, institutional ethical review and specific consent procedures were not indicated.

Results

The percentage of all referrals to CFC originating from primary care was about half in both time periods (Table 1), and did not differ significantly between the two time periods ($\chi^2 = 0.88$, df = 1, $P > 0.1$; Z = 0.77, $P > 0.05$).

Of the referrals from primary care, about one-third referred in both time periods had dementia (Table 1), similar to previous studies.[6,7] The relative risk of a diagnosis of dementia in a primary care referral pre- and post-QOF was 0.55 (95% confidence interval (CI) 0.40–0.74) and 0.66 (95% CI 0.49–0.89) respectively.

The null hypothesis tested was that the proportion of patients referred from primary care with dementia was the same in cohorts seen both before and after introduction of the QOF Depression Indicator (equivalence hypothesis). The result of the χ^2 test did not permit rejection of the null hypothesis ($\chi^2 = 0.54$, df = 1, $P > 0.05$), a finding corroborated by the Z test (Z = 0.60, $P > 0.05$).

Discussion

The diagnosis of dementia can sometimes be difficult, not only for primary care physicians, who report a lack of confidence and inadequate training to make the diagnosis,[11] but also for neurologists

Table 1 Audit of CFC practice before and after introduction of QOF Depression Indicator

	Pre-QOF (November 2004–April 2006)	Post-QOF (May 2006–October 2007)
N = number of new referrals seen in CFC	186	186
Referrals from primary care (%)	96 (51.6)	105 (56.5)
Referrals from primary care diagnosed with dementia (%)	34 (35.4)	32 (30.5)

and psychiatrists,[6,8] even those with a special interest in dementia.[12,13] Methods to improve dementia diagnosis would therefore be welcome, most particularly now that there is an increasing emphasis on the utility of early diagnosis and intervention, as enshrined in the UK National Dementia Strategy.[14]

This observational survey found no change in the frequency of patients referred from primary care to a dedicated dementia clinic receiving a 'not demented' diagnosis following the introduction of the QOF Depression Indicator recommending use of validated scales to measure the severity of depression in primary care. The findings with respect to the relative risk of dementia in primary care referrals were similar to those in previously reported cohorts from this clinic.[6,7]

Clearly the findings are subject to the caveats applicable to any single-centre study with relatively small patient cohorts. However, if true, the findings may have a number of possible explanations. First, it might be that the QOF Depression Indicator has not been widely adopted in this region: very few referral letters specifically mentioned the use of either depression or cognitive scales in primary care assessment.[7] Second, the recommended depression severity scales may lack efficacy in differentiating depression from dementia: for example, PHQ-9 was found to be of only modest diagnostic utility for the differentiation of depression and dementia in a clinic-based cohort.[15] Although other studies have suggested that PHQ-9 may be useful for detecting depression in the primary care setting,[16] a study of screening for depression based on the QOF indicator did not show any new diagnoses of depression.[17] Depression was one of the suggested areas for future further QOF development.[18] Third, methodological variables, such as sample size or the use of a surrogate measure of test efficacy (referrals to a dementia clinic as a measure for change in practice) may have caused a failure to find an effect that does in fact exist (i.e. a type II error). Fourth, increased awareness of memory problems and of case finding in primary care may have confounded any reduction in the number of non-dementia referrals despite the efficacy of the QOF Depression Indicator in case identification.

Depression is a frequent differential diagnosis of dementia in family medicine, yet neither the QOF Depression nor Dementia Indicators indicated the need to exclude depression when considering a diagnosis of dementia. This omission is also true of some,[2,3,5] but not all,[4] national and specialist society guidelines on dementia, although the comorbidity of the two conditions is ubiquitously noted. In the era of practice-based commissioning, routine screening for depression as part of the primary care assessment for suspected dementia might reduce unnecessary referrals and hence save money.

Education programmes may improve adherence to dementia guidelines.[19] Benefits which might accrue to dementia sufferers and their families from improved primary care dementia services include earlier provision of appropriate information and support, and referral to secondary care services for access to symptomatic and, in due course, disease modifying drugs.

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CONFLICTS OF INTEREST

None.

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