Changing pattern of referral to a diabetes clinic following implementation of the new UK GP contract

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ABSTRACT

Background

The aim of this study was to determine the impact of the new GMS contract on referral patterns to a secondary care diabetes clinic. All new patient referrals received from primary care to a hospital diabetes service were surveyed. No significant change in referrals was seen 6 months after implementation of the GMS contract. There was, however, an increase in referrals for poor glycaemic control after implementation of the new GMS contract, and the glycaemic threshold for referral with poor glycaemic control has reduced (9.7% versus 10.6%, $P = 0.006$, mean difference = 0.9% [95% confidence interval = 0.4 to 1.3%]).

Keywords

diabetes mellitus; primary health care; referral and consultation.

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Submitted: 9 September 2005; **Editor's response:** 12 January 2006; **final acceptance:** 31 January 2006.

©*British Journal of General Practice* 2006; **56:** 624–626.

INTRODUCTION

In the UK, the focus for diabetes care has shifted from secondary to primary care.[1] This has been augmented by implementation of the Quality and Outcome Framework (QOF) of the new General Medical Services (GMS) contract for primary care, which provides financial reward for achieving diabetes-related quality indicators.[2] This came into effect into April 2004. The aim of this survey was to determine whether implementation of the new GMS contract has led to changes in referrals to a secondary care diabetes clinic.

METHOD

Tower Hamlets is a deprived inner London borough, with 30% of its population of Bangladeshi origin. Secondary care services are based at Barts and The London NHS Trust, where all referrals for specialist diabetes care are sent. Referrals for consultant-led diabetes clinics received between November 2003 and November 2004 (6 months before and after implementation) were reviewed. Referrals for nursing or educational input, or antenatal diabetes were not included. The Tower Hamlets Diabetes Service Directory contains instructions on which patients are appropriate to refer, and what data to include in the referral. Appropriate reasons for referral to a consultant-led diabetes clinic have been agreed as: type 1 diabetes; proteinuria or creatinine >150μmol/l; poor glycaemic control (glycated haemoglobin [HbA1c] >8.0% [normal range = 4.0–6.0%]) on maximum oral hypoglycaemic medication; painful neuropathy; or foot ulceration. Information to be stated in the referral letter includes type of diabetes, medication, other medical problems, blood pressure, weight, recent HbA1c, creatinine, lipids and reason for referral.

Data are presented as medians (range). To compare the prevalence of clinical or demographic indices between the two groups, a χ^2-test was

performed for discrete variables, and a Mann–Whitney test was performed for non-normally distributed variables. Statistical methods were carried out using the statistical package Minitab (Minitab Inc, PA, US).

RESULTS

A total of 774 referral letters were received, of which, 647 (83.6%) were from primary care (Table 1). There was no significant change in numbers of referrals received pre and post contract, and there was no difference in age, sex, ethnicity, type and duration of diabetes, or treatment at referral, pre and post contract.

Patients referred post contract had significantly lower glycated haemoglobin compared to those received pre contract. There was a significant increase in referrals for poor glycaemic control post contract (54% versus 77%, $P = 0.001$). In patients referred for poor glycaemic control, HbA1c was significantly lower among the post-contract referrals compared to the pre-contract referrals (9.7% versus 10.6%, $P = 0.006$, mean difference = 0.9% [95% confidence interval = 0.4 to 1.3%]), although numbers of patients with HbA1c >7.4% were somewhat greater post contract. There was no other significant change in reason for referral.

Table 1. Comparison of referrals to a secondary care diabetes clinic prior to and after implementation of the new GP contract.

	Pre contract	Post contract	*P*-value
Referrals from primary care (*n*)	328	319	
Median age in years (range)	51 (18–82)	53 (18–88)	0.810
Sex *n* (%)			
Male	177 (54)	170 (53)	0.770
Female	149 (45)	144 (45)	
Not stated	1 (0.6)	5 (1.5)	
Ethnicity *n* (%)			
White European	122 (37)	114 (36)	0.420
Bangladeshi	197 (60)	199 (62)	
Other	9 (2.7)	5 (2)	
Not stated	0 (0)	1 (0)	
Type of diabetes *n* (%)			
Type I	29	34	0.350
Type II	294	277	
IGT/IFG	3	0	
Not stated	5	8	
Duration of diabetes (years)			
Unknown *n* (%)	18 (6)	12 (4)	0.46
Median (range)	10 (0–42)	8 (0–35)	
Treatment *n* (%)			
Diet only	28 (89)	36 (11)	0.670
Tablets	156 (48)	154 (48)	
Insulin (+/- tablets)	124 (38)	113 (35)	
Unknown	20 (6)	16 (5)	
Glycated haemoglobin (%)			
Unknown *n* (%)	25 (7)	26 (8)	
Median (range)	10.6 (6.2–15.1)	9.7 (5.9–17.9)	0.006
Number with HbA1c >7.4% (%)	189 (5)	229 (72)	0.031
Reasons for referral *n* (%)			
Newly diagnosed	46 (14)	33 (10)	0.450
Type 1 diabetes	26 (8)	35 (11)	0.520
Poor glycaemic control	177 (54)	245 (77)	0.001
Renal disease	26 (8)	14 (4)	0.330
Foot problems	25 (8)	24 (8)	0.780
Lost to follow up	65 (20)	27 (9)	0.680

IFG = impaired fasting glycaemia. IGT = impaired glucose tolerance.

DISCUSSION

The new GP contract rewards primary care for improving diabetes care. Our survey suggests that there has been no significant impact on numbers of referrals to secondary care 6 months after the implementation of the new contract. The predominant reason for referral to our secondary care diabetes clinic has been poor diabetes control. This has become more pronounced since the new GP contract, and glycaemic threshold for referral has decreased. This suggests that primary care health professionals are acting upon poor glycaemic control more vigorously than pre contract. One would assume that this approach would lead to a significant increase in the number of referrals. It is possible that 6 months post contract is too early to see such changes, and that oral hypoglycaemic therapy is being optimised in patients with poor control prior to being referred. It is also possible that not all patients with poor control are being referred for insulin commencement to secondary care: a number of practices are commencing insulin as part of a local enhanced service in the area.

Significant improvements in diabetes care in primary have been observed in the UK over the last decade, even before implementation of the new GP contract.[3] Over the period 1998–2003, significant improvements in blood pressure and lipid control in patients with diabetes have been achieved, although this study suggested that only a minor

How this fits in

In the UK, the new GP contract aims to reward practices for high quality diabetes care. Little is known about the impact of the contract on referral rates to secondary care. This study suggests that the new contract has had little impact on referrals rates soon after the implementation, but the threshold for referral for poor glycaemic control has gone down, suggesting that better quality diabetes care is being delivered in primary care.

increase in the number of patients with HbA1c <7.4% was seen over this time period. Thus, it is likely that the GMS contract may have enhanced this effect, with a greater focus on improvement in glycaemic control in patients with poorly controlled diabetes. Improved glycaemic control in patients with diabetes reduces microvascular complications.[4]

Our data suggests the new GMS contract has led to an increase in referrals for patients with unacceptable glycaemic control along with a lower threshold for referral.

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