

Shaping district diabetes services: a novel performance index scoring system to successfully negotiate with Clinical Commissioning Groups

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Abstract

Aims: To establish whether a recently reported performance index scoring system developed in two diverse populations (Medway and Guildford, UK) could be used to successfully negotiate with a Clinical Commissioning Group (CCG) to shape diabetes services and set priorities.

Methods: We collated demographic details for the area's population with diabetes with diabetes scores from local primary care Quality and Outcomes Framework (QOF) records, together with exception reporting. Data from Hospital Episode Statistics and Dr Foster were used to record the Standardised Admission Rate (SAR) for a first/new referral to a secondary-care diabetes outpatient appointment or for emergency admission to hospital for diabetes. Hospital notes for patients from one GP practice were reviewed to clarify why patients were seen in secondary rather than primary care.

Results: The prevalence of diabetes was low (4%) compared with figures from the Strategic Health Authority (SHA) (4.5%) and nationally (5.6%). Total diabetes QOF points achieved (99.3) were higher than for the SHA (97.8) and nationally (95.3); 61.1% achieved HbA_{1c} <7%, which was much higher than the SHA (57.2%) or national average (54.3%). The exception-reporting rate (9.8%) was lower than the SHA (10.5%) or national average (14%). The SAR was lower than the Surrey average for a first outpatient visit (87.8 vs. 128.9) or emergency admissions (85 vs. 106.7).

Conclusions: The performance index scoring system enabled an assessment of diabetes care that transcended primary and secondary care. A successful negotiation

Abbreviations and acronyms

CCG	Clinical Commissioning Group
DSN	Diabetes Specialist Nurse
GP	General practitioner
LIT	Local Implementation Team
NHS	National Health Service
PCG	Primary Care Group
PCT	Primary Care Trust
QOF	Quality and Outcomes Framework
SAR	Standardised Admission Rate
SHA	Strategic Health Authority

took place between the local diabetes stakeholders and the CCG with a plan for improving and developing the current model of care. The scoring system is applicable to any district in the UK and may be of interest to clinicians and commissioners.

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Key words: diabetes, performance index, quality, community, services

Introduction

The rising prevalence of diabetes worldwide and its resultant chronic disease burden and economic consequences is a cause of much concern.^{1,2} New CCGs are keen to encourage the primary care sector to take an increasing role in the provision of care for chronic conditions, and the majority of patients with type 2 diabetes are expected to be managed in primary care in future. Diabetes has been highlighted for special attention, as the projected health economic burden is enormous.³

Models of integrated care between the primary and secondary healthcare sectors have been described previously. For example, the Super Six model identified six areas of diabetes care which should be provided in the hospital setting, with all other care provided in a primary care setting.⁴ Alternatively, the Derby Integrated Care model described a social enterprise formed by clinicians interested in primary and secondary diabetes care.⁵ Concerns have been raised within the primary and secondary care sectors of the south-west Surrey district that a model of care would be imposed that would be inappropriate for the local patient population. A

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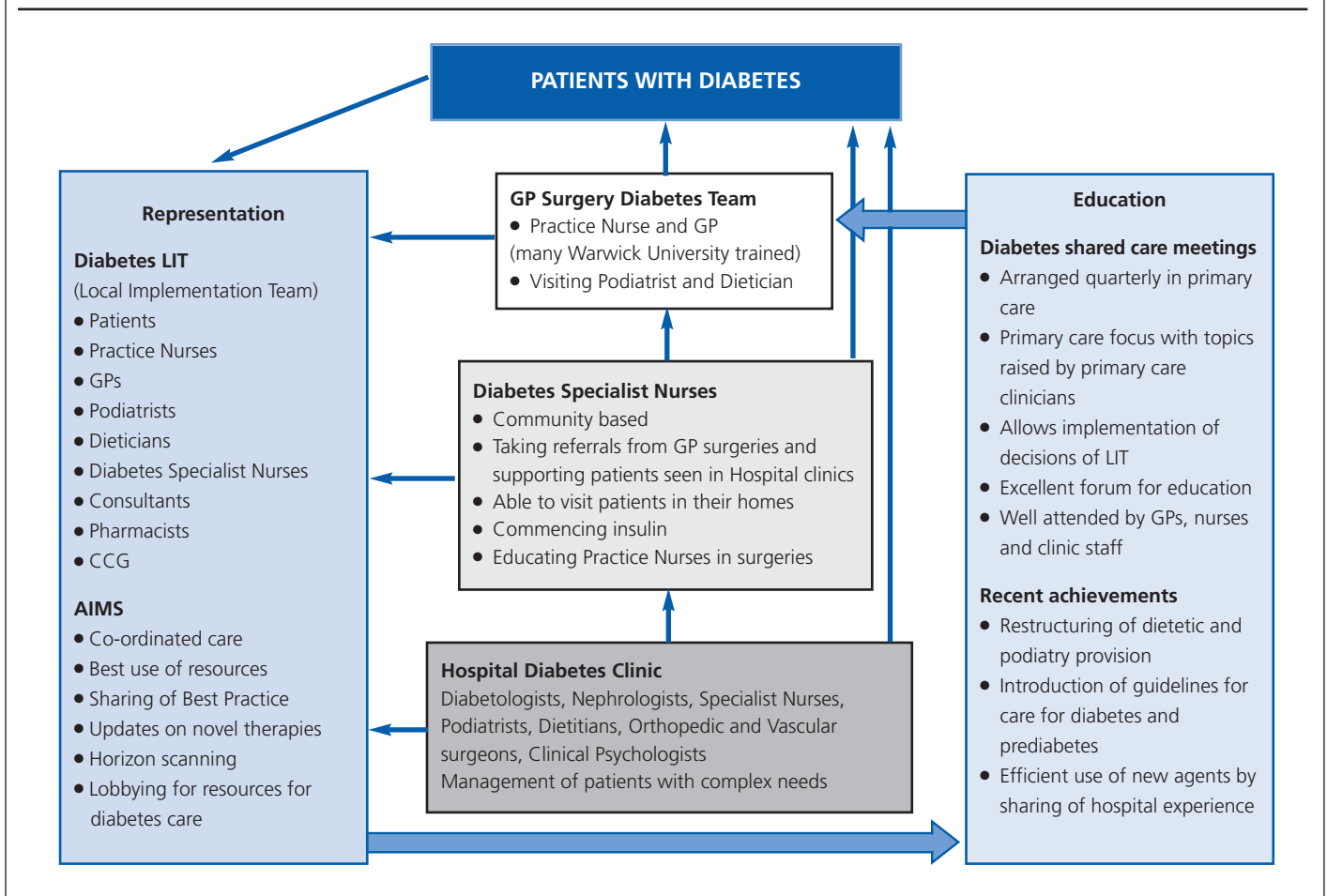
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Figure 1. Current framework of support care for people with diabetes in south-west Surrey

new performance scoring system was used by the LIT to provide evidence of current practice to the new CCG and aid negotiation of diabetes care.⁶ Here, we describe the design and utility of this new system.

Methods

Diabetes care in south-west Surrey

The diabetes integrated care model in south-west Surrey is tailored to local patient demographics. Figure 1 shows the current framework of support: there are clear lines of responsibility for the patient, with primary care playing the dominant role in a patient-focussed approach. Community DSNs employed by Virgin Care under a service specification agreement within a block contract for district nurses are central to this process; these nurses have an important role as educators to primary care practices and offer support with day-to-day patient management such as insulin initiation, treatment intensification and communication between primary and secondary care. Importantly, DSNs are based within the secondary care diabetes setting, which facilitates communication with secondary care professionals and their involvement at weekly diabetes team meetings, where difficult

and complex patients are reviewed and referred to secondary care as necessary.

A number of initiatives have taken place to support the framework over the last 10 years. The PCT funded over 200 GPs and practice nurses to complete the Warwick Diploma in Diabetes. Pharmaceutical companies have provided financial support, but have no input into the educational content of quarterly shared care meetings, which update primary care professionals on recent advances in diabetes care and on local diabetes initiatives (these meetings have been described by the Department of Health as an example of best practice). In addition, the PCG and PCT have introduced a number of financial incentive schemes to enable rapid and safe discharge of patients from secondary care clinics. The LIT, chaired by a primary care professional, consists of lay representatives, DSNs, GPs and diabetologists, aims to coordinate care, optimise use of resources, share best practice, update on latest therapies and lobby for resources for diabetes care.

Developing a performance index for diabetes services in south-west Surrey

The LIT compiled a list of relevant primary care practices, designated the 'cluster'. The performance indicator system was

derived using routinely collected and freely available data from local diabetes QOF records,⁷ Hospital Episode Statistics⁸ and Dr Foster.⁹ QOF provides a series of clinical performance indicators that are used to determine financial rewards for primary care practices when certain thresholds or targets are achieved. It is important to examine practice exemption rates as well as achievement rates for any of the named indicators when evaluating data from QOF.⁷ Dr Foster data comprise information gained for hospital trusts and primary care and are based around activity that was invoiced and paid for by PCTs. Many believe these data to be the most accurate measure of hospital activity.⁹ Information on the referral rate (SAR) for a first visit to diabetes secondary care, or to emergency care for diabetes, were obtained for the practices over a 12 month period.

One GP practice was selected for further investigation. This practice had a lower than expected referral rate to secondary care diabetes services and also a low emergency admission rate (although these referral rates were neither the highest nor lowest in the cluster of local practices). Notes were reviewed for all patients from that practice who were referred to a secondary care

specialist diabetes clinic in order to establish the reason for referral and the nature of clinics attended.

Results

The prevalence of diabetes in south-west Surrey was low at 4%, compared with the local SHA (Kent, Surrey & Sussex) average of 4.5% and the national average of 5.6%. Total diabetes QOF points achieved were higher (99.3%) than the SHA average (97.8%) or the national average (95.3%). HbA_{1c} <7% was achieved by 61.1% of patients, which was higher than the SHA average (57.2%) or the national average (54.3%). There was a lower exception reporting rate of 9.8% compared with the average for the SHA (10.5%) or nationally (14%).

The average SAR for referral for first visit diabetes outpatients was low at 87.8% (percentage of observed/expected referrals; Surrey average 128.9%) although there was variability between practices (Table 1). The SAR for an emergency diabetes-related admission was lower than expected (85%), compared with the Surrey average of 106.7%, once again with variation between practices (Table 1).

Table 1 SARs for first diabetes outpatient appointment in secondary care and for emergency admissions for diabetes for each practice. The expected SAR value was based on deprivation, prevalence and needs of practice.

Practice ID	SAR for first diabetes outpatient appointment			SAR for emergency admission for diabetes		
	Observed	Expected	%	Observed	Expected	%
H81044	24	49.26	48.7	3	3	100
H81043	69	134.75	51.2	3	5.63	53.3
H81031	57	107.56	53	3	3	100
H81077	45	83.71	53.8	3	3	100
H81085	74	115.68	64	3	3	100
H81029	97	145.78	66.5	3	6.33	47.4
H81052	125	184.07	67.9	3	7.82	38.3
H81021	123	178.42	68.9	6	7.57	79.3
H81113	72	101.53	70.9	3	3	100
H81062	158	220.53	71.6	3	9.26	32.4
H81132	22	27.95	78.7	3	3	100
H81053	69	84.86	81.3			
H81006	71	84.9	83.6	6	3	200
H81041	87	103.39	84.1	3	3	100
H81026	155	134	85.8	3	5.67	52.9
H81076	143	155.3	92.1	3	6.44	46.6
H81022	48	51.2	93.7	3	3	100
H81035	122	115.84	111.4	3	3	100
H81090	196	138.77	141.2	3	5.97	50.2
H81655	48	28.49	168.5	3	3	100
H81647	53	25.3	209.5	3	3	100
NHS Surrey	17,769	13,787.96	128.9	586	549.24	106.7

Table 2 Reasons for attendance at a secondary care diabetes clinic for patients from one GP practice.

- Poor glycaemic control
- Severe microvascular complications (including blindness)
- Severe macrovascular complications
- Long duration with complications
- Coeliac and other autoimmune problems
- Unrecognised hypoglycaemia
- Malignancy
- Psychology input
- Gastroparesis
- Foot ulceration
- Severe obesity
- Cognitive impairment
- Alcohol excess

Fifty-two patients from the identified GP practice were seen in secondary care. The reasons for attendance at secondary care are shown in Table 2. Patients frequently seen in secondary care included antenatal and preconception care, patients requiring multidisciplinary foot care, joint renal diabetes support, patients with type 1 diabetes using insulin pump therapy and surgically-induced diabetes. The LIT deemed that the scope of attendance at the specialist clinics was appropriate, without unnecessary referrals.

Discussion

The performance index scoring system demonstrated that the prevalence of diabetes is relatively low in south-west Surrey. The performance of primary care diabetes services was good in terms of meeting agreed targets and process measures, referral to secondary care was low and the hospital admission rate was low, suggesting a cost-effective approach.

Health authorities are seeking to develop successful strategies to cope with the large financial burden of chronic diabetes care.¹ The 2014–2015 NHS England CCG outcome indicator set a direction for the priorities of a new diabetes service, characterised by:

1. Supporting people in the management of their condition
2. Improving the functional ability of people who have received all of the nine care processes and structured education within 1 year of diagnosis
3. Reducing unplanned hospitalisation for problems related to diabetes including emergency admissions for diabetic ketoacidosis and amputations
4. Reducing the incidence of myocardial infarction and stage 5 renal failure in people with diabetes.

Any model must also resonate with the NHS priorities of:

- Patient focus and empowering
- Reduction in variation
- Improved outcomes
- Improved experience
- Financial sustainability

The UK has been the first country that has incentivised



Key messages

- The performance index scoring system described here illustrates the performance of a district diabetes service that transcends primary and secondary care
- It uses only data already collected routinely and is thus applicable to any district in the UK
- The output from the performance index scoring system has been used successfully to negotiate diabetes services and priorities with the CCG

primary care physicians to improve diabetes care in the community with the implementation of the QOF indicators and local enhanced services.^{5,8} The LIT in south-west Surrey was able to use the performance index scoring system in diabetes to demonstrate the effectiveness of the district's diabetes services to new commissioners and managers in the CCG. It was also acknowledged that secondary care is needed to supplement primary care diabetes clinics and few patients were being seen unnecessarily in secondary care. CCG funding for the continuation of GP and practice nurse education programmes to increase the skill mix in primary care and continued access to the community DSNs were identified as key priorities to ensure the diabetes framework continues to work effectively. As a result of using this analytical approach, the CCG and commissioners were reassured by the performance of the current model of care and it was decided to evolve rather than redesign the service.

Community DSNs offer an open and equal service to all practices within the 'cluster' and are central to the model. DSNs accept referrals from GPs, practice nurses, district nurses, and inpatient specialist diabetes nurses, or patients can self-refer. Referrals are monitored and educational support is offered to healthcare professionals if there is a disproportionate amount of support directed to individual practices.

The limitations of the performance indicator index relate mainly to its simplicity and use of relatively crude measures. Follow-up activity has not been included and is probably not relevant as non-complex patients are managed in primary care. It is therefore expected that more complex chronic patients will be referred to secondary care and require longer follow-up with multidisciplinary input. However, a unique strength of the model is its applicability to any area of the UK as all data parameters are already being collected routinely. We have demonstrated that the performance index provides a number of important measures of service delivery. Individual districts could develop it further by weighting some of the individual parameters in terms of a pre-specified outcomes: for example, the avoidance of admission might be considered to be a more important outcome than the achievement of a reduced rate of outpatient referrals.

Conclusion

Combining QOF data, Hospital Episode Statistics and Dr Foster and using a scoring system combined with a simple audit of hospital notes, it has been possible to illustrate the performance of a district diabetes service that transcends primary and secondary care. The data are very easy to access and freely available, and helped the CCG and commissioners to make informed decisions on service development.⁴

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