

# The use of diabetes registers in an urban division of general practice



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**D**iabetes is best managed by a systematic approach with a register, recall system, and audit data to enable clinicians to improve their quality of care.<sup>1,2</sup> General practitioners using shared care registers in southwest Sydney (New South Wales) review their patients more frequently and are more likely to follow evidence based guidelines than those that do not.<sup>3</sup>

We aim to describe the patterns of use of diabetes registers by GPs to assess the impact of the Practice Incentive Program (PIP) and any difficulties experienced by practices.

## Methods

The survey was conducted in Fairfield Division of General Practice (FDGP) which has 52.7% of its population in the most disadvantaged socioeconomic status decile, with a high degree of ethnic diversity (53.5% born overseas in 111 different countries).<sup>4</sup> Computerised clinical records were used by 72% of the 129 general practices in the FDGP.<sup>5</sup>

There are 210 GPs recorded as members of the FDGP. From these, 140 were randomly selected for this study; 27 were excluded because their phone was disconnected, they had moved from the area, were retired, or were on extended leave. In October 2002, the remaining 113 GPs were mailed an information sheet and a questionnaire that included questions about the use of computers for practice functions, use of a register for diabetes, what the register is used for and barriers to the use of a register for recall or quality improvement. There was telephone follow up to obtain a response.

Data were analysed by comparing groups using chi-square and analysis of variance.

The project was approved by the University of New South Wales Human Ethics Committee and the FDGP supported the survey.

## Results

Seventy-eight GPs completed the questionnaire (69% response rate). Fifty-two percent of respondents worked in solo practice; 96%, 46% and 32% respectively worked in practices that employed a receptionist, practice manager and a practice nurse; 54% worked in an accredited practice.

Computerised practice functions (scheduling appointments, prescribing, clinical records, disease registers, referrals, patient education resources) were assessed: 32% of practices had computerised all six functions, while only 19% had none. Twenty-seven (34%) of respondents reported not currently using a diabetes register, of which 14 reported intending to set one up in the near future. Reasons that prevented practices from ever setting up a register included:

- lack of time (6)
- lack of knowledge of how to set up a register (3)
- not ready (3)
- lack of suitable computer equipment or software (2)
- extra paper work (for PIP) (2)
- not vocationally registered (1)
- insufficient patients with diabetes (1), and
- lack of perceived benefit (1).

Current use of a diabetes register was

reported by 51 (65%) of respondents, 14 (27%) used practice registers only, 14 (27%) used division registers only, 22 (43%) used both practice and division registers, and 3% used a pathology company's register. Fourteen of these 51 GPs had experienced difficulties in setting up the register; insufficient time being the main difficulty.

Those using a register were more likely to be accredited than those not, (63% vs 30%,  $p=0.02$ ). The size of the practice, the number of patients with diabetes, and the availability of practice nurse/manager were not factors associated with register use. Ninety-eight percent of GPs reported that their registers incorporated patient identification and 94% reported they incorporated diagnosis. Less frequently they reported that risk factors for diabetes and cardiovascular disease were recorded. Most of the National Health Data Dictionary Minimum Clinical Data Set for Diabetes (a standardised clinical data set developed for general practice) was recorded in registers (*Table 1*).<sup>6</sup> Most GPs reported they maintained the register for quality improvement activities and recall of patients to the practice. Only 55% of the practices that maintain a register claimed the PIP for diabetes.

Most of those who reported currently using a register found it useful or very useful for patient recall (78%) and for quality assurance (82%). The reported difficulties in using a diabetes register for patient recall included: patients not attending for recall, too time consuming, difficulties with recording data, and late recall notices from the division. Patients returning without recall, patient inability to read English, lack of a system to monitor if patients

**Table 1. Minimum clinical data set for diabetes recorded in register**

Test/examination dates Indicator/assessment	n (%)			
	Quality of care measure (was the assessment conducted within the guideline recommended interval?)		Health outcome measure (was the result of the assessment within guideline target levels?)	
Blood pressure	44	(86)	47	(92)
Weight	44	(86)	47	(92)
HbA1c	43	(84)	45	(88)
Lipids	43	(84)	47	(92)
Urinary microalbumin	42	(82)	45	(88)
Eye examination/referral	42	(82)	47	(92)
Foot examination	39	(76)	44	(86)
Referrals to diabetes educator, podiatrist or endocrinologists	35	(69)	36	(71)

did not respond, and some patients recalled unnecessarily. Thirty-two respondents planned to continue using the division register, 21 their practice register, five planned to change from practice to division registers, and three planned to discontinue using the division register.

### Discussion

The participation rate was comparable with others.<sup>7</sup> The high use of computers for at least some clinical or administrative practice functions is broadly comparable with previous surveys carried out in Australia.<sup>8</sup>

The rewards associated with the PIP may have been an important factor for the adoption of practice registers. However, only half the GPs using registers were claiming an incentive payment. Presumably other benefits such as improved patient care are important motivators.

That practices with diabetes registers did not differ significantly from those without – with respect to the number of diabetes patients, practice size or practice staff – may be because of the availability of the division register to small practices. Time was the most frequent problem encountered by GPs in setting up and using a diabetes register, suggesting that practice staff could play a greater role in their management. The registers generally contained information that was consistent with the NDOQRIN minimum data

set that allows comparison between practices. Divisions have an important role in supporting practices in their use of registers and in electronic data transfer between practice and division.

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### Implications of this study for general practice

- Registers and recall systems are important in improving the quality of care for patients with diabetes in general practice.
- Most practices used a practice or division register which met standards such as the NDOQRIN data set. This was regardless of size of practice or the number of patients with diabetes in their practice and many using registers did so even if they were not eligible to claim PIP payments.
- The main difficulty encountered by GPs was lack of time to run the register. However, this could be overcome by practice staff taking a greater role in running the register.

Conflict of interest: none declared.

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