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# Diabetes 'cycles of care' in general practice

## Do government incentives help?

### Background

In 2001 the Australian government introduced financial incentives to encourage general practitioners to improve their care of people with diabetes. This article examines the extent to which GPs are implementing the diabetes 'cycle of care' for patients, and the barriers and enablers to its uptake.

### Methods

Semistructured interviews with key informants within purposefully selected general practices in one division of general practice in southeast Melbourne, Victoria.

### Results

General practitioners and practices provide 'cycles of care' for their diabetic patients in a range of ways. A systematic approach to diabetes appears more important than government incentives.

### Discussion

There are numerous barriers to the uptake of government incentives for improved diabetes management, most of which relate to difficulties in making changes to current practice and adopting a systematic approach to the implementation of new initiatives. General practitioners and general practices need a broader support strategy than just government financial incentives if systematic chronic disease management is to be more widely adopted.

■ **Diabetes is a major cause of death, illness and disability in Australia<sup>1</sup> and was identified as a national health priority area by the Australian Government in 1996.<sup>2</sup> In November 2001 the Commonwealth Government's Practice Incentive Program (PIP) was expanded to include diabetes incentives 'to improve the prevention, earlier diagnosis and management of people with diabetes'.<sup>3</sup> This program was initiated in part on the assumption that targeted financial incentives alter GP behaviour.<sup>4-7</sup>**

The minimum requirements for the diabetic cycle of care are based on the general practice guidelines produced by The Royal Australian College of General Practitioners (RACGP) and Diabetes Australia (*Table 1*).<sup>8</sup>

Since the introduction of the diabetes PIP, uptake by eligible practices has been variable. Data for February to April 2007 indicate that in Victoria, only 42% of eligible GPs claimed the diabetes Service Incentive Payment (SIP) during that quarter, with rates varying from 26–58% across divisions of general practice.<sup>9</sup>

### Methods

#### Study design

This was a descriptive study based on semistructured face-to-face interviews with key informants in 22 practices within the Monash Division of General Practice. An interview questionnaire was pilot tested with three practices outside the division boundaries. The interview schedule covered:

- an overview of practice organisational structures and demographics
- the practice's approach to diabetes management
- questions about barriers and facilitators to the cycle of care.

Although the interviews were 'semistructured', respondents were given ample opportunity to answer the questions in their own words. The interviews were conducted 2 years after the introduction of the diabetes PIP.

Table 1. Diabetes 'cycle of care' minimum requirements

- At least 6 monthly:
  - measure weight and height and calculate body mass index
  - measure blood pressure
  - examine feet
- At least once every year:
  - assess diabetes control by measuring HbA1c
  - measure total cholesterol, triglycerides and HDL cholesterol
  - test for microalbuminuria
- At least once every 2 years:
  - ensure that a comprehensive eye examination is carried out
- Other requirements
  - review diet
  - review levels of physical activity
  - check smoking status
  - review medication

Adapted from: Medicare Benefits Schedule Book, November 2006

## Setting

The Monash Division of General Practice is located within the south eastern suburbs of metropolitan Melbourne, Victoria, varying from middle income to low socioeconomic status. Some areas of the division encompass a high culturally and linguistically diverse (CALD) population. There are 59 practices within the division's boundaries, of which 35 are registered for PIP and therefore eligible to claim the diabetes incentives.<sup>5</sup>

## Sampling

Three categories of clinic were identified for sampling based on their usage of the diabetes cycle of care (*Table 2*), with a mix of solo GPs, small group and large group practices within each category. Selection was performed using a computer generated random list of practices. The research officer then contacted practices requesting an interview. A target of nine practices per category was set (three solo, three small group and three large group practices per category). However, among practices not claiming the diabetes SIP there were insufficient practices to meet that target. Additional interviews were conducted with practices claiming the diabetes SIP to ensure that a broad range of models was identified.

## Data collection and analysis

The average length of interview was 45 minutes and all interviewees were reimbursed for their participation. General practitioners were assured that their information would remain confidential and no patient data were collected. The division is ethically bound by its own written guidelines on GPs' rights to privacy of information obtained by division staff. The notes and transcripts from the interviews were analysed by the research officer and grouped under headings according to emerging themes.

## Results

### Implementing the diabetes cycle of care

All category 1 and 2 interviewees were aware of the components of the diabetes cycle of care, but only one of the category 3 practices was aware of its specific components.

Of the 10 GPs in categories 2 and 3, only one (category 2 GP) was completing all components of care with the frequency required to claim the diabetes cycle of care SIP. Foot checks and the microalbuminuria test were completed less frequently than specified. Every category 1 practice was found to be using a different system for implementing the diabetes SIPs. Practices varied in the extent to which they were:

- computer rather than paper based
- enlisting patients opportunistically rather than proactively
- using a practice nurse rather than a GP to complete components of the cycle of care.

For category 1 practices the proportion of diabetic patients for whom they were claiming SIPs varied widely. One GP implemented the cycle only for patients who agreed to comply with the GP's requirement of quarterly visits. Two GPs stated that they would only claim the SIPs for their 'loyal' or 'faithful' patients, ie. those seeing only one GP. Both of these GPs were in an area where patients commonly visit multiple practices.

Only one category 1 GP had a fully computerised system for the cycle of care and felt that the computer's diabetes assessment tool met his requirements. However, that system was not being used by other GPs in the practice. All the remaining practices had at least some component that was paper based. For some it was a paper based register, for others it was a summary record sheet held in paper based patient files.

Attitudes varied across all categories regarding the value of recall systems for the cycle of care. Some felt that their diabetic patients came in regularly without a recall, while others felt a recall process was essential.

Five of the practices in category 1 (all group practices) had a practice nurse. In three of the practices the nurse was being used to coordinate the cycle of care and/or complete varying components of the cycle. In one group practice the practice manager was identified as having a key role in establishing and maintaining the system. Two of the category 2 practices had practice nurses with none in the category 3 practices.

### Barriers and facilitators to the uptake of diabetes SIP

Category 3 practices are ineligible for the diabetes PIP as they are not accredited. Questions about barriers and facilitators to the uptake of the incentives were therefore confined to category 1 and 2 practices.

### Paperwork and documentation

Four of the six interviewees in category 2 stated that the paperwork required in claiming the SIPs was a major barrier. By contrast, none of the 12 category 1 interviewees mentioned this.

Table 2. Practice categories and numbers interviewed

Practice category	Total
Category 1 PIP registered, signed on for diabetes incentives and claiming diabetes SIPs	12
Category 2 PIP registered, signed on for diabetes incentive but not claiming diabetes SIPs	6
Category 3 Not PIP registered (ie. not eligible to claim diabetes PIP incentives)	4
Total	22

### Time

'Lack of time' to implement the SIPs was also mentioned by four of the six category 2 interviewees but only two out of 12 for category 1.

### Medicare claims and payments

Two of the category 2 GPs mentioned their previous experience with having claims questioned by Medicare as making them reluctant to implement the new incentives. Some were uncertain about continuation of the PIP incentives and this acted as a disincentive.

### Lack of support services

The lack of access to appropriate clinical services was identified as a problem for some practices across each category, particularly those with a large CALD population.

### Practice size

Being a solo GP was seen as a barrier by some category 1 GPs, whereas others felt it made it easier to implement the cycle of care. A common problem mentioned by category 1 group practices was the difficulty of getting all GPs within the practice to support the cycle of care.

### Patient attitudes

Some category 2 GPs were concerned about possible negative patient attitudes toward the cycle of care such as patients seeing it as over servicing. In contrast, category 1 practices identified positive feedback from diabetic patients on the level of care provided under the cycle of care as encouraging their ongoing use of the SIPs. However, category 1 interviewees did raise patient compliance as an issue, particularly in some CALD groups. The tendency in some areas for patients to visit multiple practices also made it difficult for a GP to manage patient care and ran the risk of several GPs attempting to claim the diabetes SIP for the same patient.

### GP attitudes

Category 2 interviewees were less positive about the benefits of the diabetes incentives than the category 1 interviewees. Only two of the six GPs in category 2 felt that the diabetes SIPs would promote better clinical management of patients with diabetes; another felt that

separate incentives for diabetes did not sit well with the practice's holistic approach to patient care.

Among category 1 interviewees, 10 of the 12 felt that the diabetes PIP incentives did promote better clinical management. The financial benefits of the diabetes incentives were mentioned but these were less important than the benefits of improved patient care.

Having one or more GPs with a strong interest in and commitment to diabetes care was a facilitator to uptake of the diabetes SIPs by category 1 practices, especially if it fitted in with the practice's existing approach to diabetes management.

### Driver for implementation

Having one person in the practice 'driving' the cycle of care system was a key facilitator for each of the category 1 practices in implementing the SIPs. The 'driver' varied between practices, being either a GP, practice nurse or practice manager. In two cases it was a combination of a GP and a practice staff member.

### Practice systems

Being able to establish a systematic approach to diabetes management that worked within their own practice setting was a key factor in successful implementation of the SIPs for the category 1 interviewees, even though setting up such a system was time consuming. Four of the GPs in category 2 identified their lack of a simple system for claiming the SIPs as a barrier.

### Practice nurse

Having a practice nurse to assist with components of the cycle of care was an important facilitator for three of the four large group practices.

### Computerisation

Practices saw the benefits of using computer systems for diabetes management. For some it was the recall system and for one practice it was a diabetes assessment tool. Two category 1 practices identified their lack of computers as a disadvantage. Several computerised practices felt that their software programs did not meet GP needs.

### Training opportunities and resources

In a number of cases practices had initiated their own systems and resources for the diabetes cycle of care. Other interviewees mentioned the training and resources provided by divisions of general practice or other agencies.

### Discussion

Although an analysis of Medicare data has suggested that the management of diabetes is less than optimal in general practice<sup>10</sup> the results of this study indicate that GPs are generally implementing components of the diabetes cycle of care. Those not claiming the SIPs are less likely to be completing all components of care within the time frame required by the annual cycle of care. As SIP requirements are based on the RACGP and Diabetes Australia guidelines, this suggests

that SIPs are encouraging a more rigorous approach to diabetes management among GPs claiming the incentive. The study found the majority of GPs implementing the diabetes SIPs felt the incentives do promote better clinical management of patients with diabetes.

International experience suggests that although methods of payment, including targeted payment for specific outcomes, do influence the behaviour of medical practitioners, the effect is not always clearcut.<sup>11–16</sup> There are many factors that influence decision making within a consultation and, more broadly, how medical practices organise themselves to manage patients with chronic diseases on a long term and proactive basis. Monetary reward is one influence, but so are practical considerations, the desire to 'do the right thing' and having resources available. The evidence therefore suggests that to encourage GPs to complete 'cycles of care' for most of their patients with diabetes, several supporting factors need to be in place.

While no single 'best practice' model emerged, the study did identify key factors that facilitate the implementation of the cycle of care within a practice. These include: having a GP or other 'driver' within a practice promoting uptake of the cycle of care, having a systematic approach to clinical care, the availability of a practice nurse, and being computerised.

Although GPs may already be implementing most of the components of the diabetes cycle of care, being able to claim SIPs requires changes to practice systems often seen as difficult to achieve among the pressures of patient workload. This study found that eligible practices not implementing the diabetes SIPs frequently mentioned 'lack of time' and 'paperwork' as major barriers to claiming SIPs. Other practices face problems in implementation such as the tendency for some patients to visit multiple practices making it harder to claim SIPs.

The small sample size and its restriction to one division of general practice might limit the generalisability of this study. In addition, the study did not independently verify each informant's self reported approach to diabetes management. All GPs interviewed were practice principals so issues facing nonprincipal GPs in chronic disease management are not represented.

Nevertheless there is evidence that more than one model for chronic disease care can be successful.<sup>17–19</sup> Having a systematic approach is a critical factor but this can be achieved in many ways.<sup>20–24</sup> The lessons from this study would suggest that there needs to be a flexible approach to encouraging systematic management of chronic diseases such as diabetes. Prescriptive incentives 'from the top down' may have limited impact unless a more comprehensive approach to chronic disease management is developed in the Australian general practice setting.

## Implications for general practice

- The diabetes SIPs can assist GPs to adopt a more rigorous approach to diabetes management.
- Having a systematic approach is a critical factor in implementing the diabetes SIPs. This can be facilitated by:
  - having a 'driver' within the practice
  - having a practice nurse, and
  - being computerised.

- Divisions of general practice can assist practices with uptake of initiatives such as the diabetes annual cycle of care by providing support to individual practices to address their specific barriers to implementation.

Conflict of interest: none declared.

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