Why don't patients with diagnosed diabetes attend a free 'Get Checked' annual review?

Tesa Porter; **Clem Le Lièvre** MBChB, FRNZCGP; **Ross Lawrenson** MD, FRCGP, FAFPHM

Waikato Clinical School, The University of Auckland, Hamilton, New Zealand

ABSTRACT

INTRODUCTION: A key strategy for improving the management of patients with diabetes is the provision of a free annual review 'Get Checked'. Although it is known that certain patients do not attend these free reviews, little is known about the barriers.

METHODS: A group of patients with diabetes who had not attended an annual review in the previous two years were identified and sent questionnaires asking about the barriers to attending. Non-respondents where followed up with a telephone call. Barriers were thematically analysed.

FINDINGS: 26/68 patients identified patients responded (38%). Key issues identified included difficulty with transport, conflict with work and lack of motivation. There were differences in responses between Maori and non-Maori.

CONCLUSION: Recommendations include more emphasis in recognising Maori tikanga (culture), more flexible provision of services to allow working patients to attend and increased emphasis on reminders for patients.

KEYWORDS: Diabetes mellitus; Maori; family practice; barriers

J PRIMARY HEALTH CARE 2009;1(3):222–225.

CORRESPONDENCE TO:
Ross Lawrenson
Head of the Waikato Clinical School and Professor of Primary Care, Peter Rothwell Academic Centre, Waikato Hospital, PB 3200, Hamilton 3240, New Zealand
Lawrensr@waikatodhb.govt.nz

Introduction

The New Zealand (NZ) 'Get Checked' programme was introduced in June 2000 to provide a free annual review for all patients with diabetes. The purpose of the programme is to ensure that key tests are carried out to assist in the early identification of complications. Once completed, treatment as necessary can be carried out for the following year.[1] This programme is principally administered through Primary Health Organisations and general practices. The 'Get Checked' programme is in line with the principles of organised systems which have been shown to improve health outcomes.[2] The number of people in NZ with diabetes is estimated from household surveys and other sources of data—but there are few comprehensive registers of people with diabetes. To date over 80 000 people have attended a Diabetes Annual Review (DAR) and analyses of these data suggest that ethnic minorities, particularly Maori, are under-represented.

A study of re-attendance of patients who have attended a first review suggest that young people, Maori and Pacific and those with Type 1 diabetes are less likely to attend a second review.[3] There are also disparities in the management of Maori compared with non-Maori.[4] The Rotorua General Practice Group (RGPG) provides services to 75 000 people living in and around Rotorua. These patients are registered with 14 practices and RGPG have a contract to provide a DAR to around 1700 people per year. Whilst the uptake of the DAR in Rotorua has been greater than that reported by the Auditor General,[5] we wished to ascertain the reasons why patients do not attend the free review.

Methods

A cross-sectional survey was conducted on all patients aged over 25 years and registered with any one of eight RGPG practices. The survey identified all patients with diabetes registered with the practices on 1 July 2007. This involved looking for diagnostic Read codes for diabetes, relevant prescriptions or any patient with an HbA1c greater than 6.5%. The notes of any patient with a raised HbA1c or a diabetes prescription but without a diagnostic code for diabetes were reviewed to determine whether the patient truly had diabetes.[6] The register was compared to a list of patients with diabetes who had received a free DAR in the previous two years. Patients diagnosed with diabetes between 1 July 2006 and 1 July 2007 were excluded, as were those in rest homes, with medically contradicted illnesses and other compelling reasons for not attending.

Patients diagnosed with diabetes before 1 July 2006, and who had not received a review, were assessed by the general practitioner (GP) or nurse. The remaining patients were either sent a letter with an accompanying questionnaire or invited to participate in a phone interview. The questionnaire was developed by the investigators in conjunction with the RGPG and included questions on why they had not attended the review in the last two years, whether they had used the hospital diabetes service in the last 12 months, employment status, self-reported health, their knowledge of diabetes and information about the relationship and care provided by their GP and nurse. All non-respondents to the mailed questionnaire were followed up by telephone. Responses to the telephone interviews were manually recorded not audiotaped.

Qualitative responses to questions about barriers to attendance were analysed into prevailing themes for Maori and non-Maori respondents.

Ethical approval for this study was granted by the Northern Y Regional Ethics Committee (Reference NTY/07/11/117).

Findings

One thousand eight hundred and thirty people with diabetes were identified, of whom 247 (13.5%) had not had a DAR within the last two years. After exclusion of patients recently diagnosed with diabetes or who had a reason for not attending confirmed by their GP or nurse, 68 people were designated non-attenders.

Of these 68, 26 were able to be contacted (two returned questionnaires and 24 were contacted by phone), a return rate of 38%. Nine Maori/Pacific and 17 non-Maori responded. The average age of the respondents was 55, half of whom were male. Twenty-one respondents had Type 2 diabetes, two Type 1 and three with unspecified diabetes mellitus. Seven respondents had never had a DAR, whilst the remainder had not attended for at least two years. Table 1 lists the identified barriers reported by Maori/Pacific and European/other for not attending a free DAR in the last two years.

A key theme identified from the responses was that Maori were more likely to report not attending due to caring for children or sick family members and difficulty with transport. Comments included 'My babies come first' and 'My son is terminally ill, I'm baby sitting my moko's, I put myself last.' Europeans were likely to report not attending due to not finding time to attend, or having self-control of diabetes. Comments included 'I'm a good judge of my own body', 'I know what to do about diabetes and what to look out for' and 'I live my life as I want it, 99% of time I'm not a diabetic, I give my insulin and I'm okay.'

Fourteen of the 26 respondents were employed, of whom six found having a job made it difficult to attend their surgery during working hours for a diabetes check-up. Another key theme was having a poor to average knowledge of diabetes. Those who identified as being of European ethnicity were found to have self-identified better knowledge of diabetes than Maori, with 11 out of

WHAT GAP THIS FILLS

What we already know: The New Zealand 'Get Checked' programme provides a free annual review for all patients with diabetes. Ethnic minorities, particularly Maori, are under-represented in those attending for a Diabetes Annual Review.

What this study adds: Transport issues and the need to care for sick family members and children, not necessarily their own, may be factors in Maori disproportionately less likely to attend a 'Get Checked' appointment.

Table 1. Barriers to attending Diabetes Annual Review by ethnicity

Barriers identified	Maori/Pacific n=9*	European/other n=17**
Difficulty with transport	5 (50%)	0
Caring for children or family members	3 (33%)	0
I don't know much about diabetes	3 (30%)	1 (6%)
Diabetes services are not available after 5pm; job makes access difficult	2 (20%)	4 (24%)
Too much medication expected to be taken	2 (20%)	0
The diet is difficult	2 (20%)	1 (6%)
Disempowered in decision-making	1 (10%)	1 (6%)
Won't go to the doctor unless something wrong with me	1 (10%)	1 (6%)
Costs e.g. of medication	1 (10%)	1 (6%)
No community-based clinic identified as own	1 (10%)	0
Moving between Auckland, Sydney, Rotorua	1 (10%)	0
Forget/have not got round to it	0	6 (35%)
Self-control of diabetes	0	4 (24%)
Dissatisfied with diabetes services provided	0	3 (18%)
Difficulty using equipment provided	0	2 (12%)
I'm not a diabetic; diabetes not a problem	0	3 (18%)
Hospital diabetic services keep an eye on me	0	1 (6%)

* 8 Maori, 1 Pacific
** 16 European, 1 Indian

16 European respondents rating their knowledge of diabetes as either good or excellent. In comparison, most Maori reported having less accurate knowledge of diabetes. Comments included *'It's very poor* [knowledge], *I'm koretake, I know it's not good to eat chocolate but I'm naughty. It's popular* [chocolate] *with Maori.'*

Ten respondents reported their health to be average to poor while five had attended the hospital diabetes service in the last 12 months. Sixteen identified ever having a DAR, while five were unaware of the free programme (four of whom were male). In terms of care provided by their practice, 22 respondents reported that the care and relationship with their doctor was either good or excellent, 17 reported their relationship with the nurses to be good or excellent, while six had had no contact with a nurse at their practice.

Comments on the care provided by their general practitioner included *'If she's not in, then no one goes in'*, *'when he says Kia ora, kei te pehea koe* [a Maori welcome] *it makes me feel at ease'* and *'he tells it straight and it's good'.*

Discussion

Rotorua General Practice Group is unusual in that they have a very well-organised system of annual reviews, with a high uptake by both Maori and non-Maori patients. In this study they achieved over 80% uptake of 'Get Checked'. We believe that the reasons some patients do not attend are generalisable to other Primary Health Organisations. Barriers to health care and access to health care are key targets in health strategy and policies. The Ministry of Health 'Diabetes Toolkit' discusses how those at greatest risk of developing complications because of diabetes do not readily access the services available to them. Although treatment and diabetes services may be excellent, they are only effective if they reach those most in need.[1]

The findings from our study which focussed on non-attendance at the 'Get Checked' annual review are consistent with a study of barriers identified in another NZ study.[7] These included psychological factors such as lack of motivation and the priority setting. There may be ethnic differences in barriers to not attending a review. Maori were more likely to report transport to their practice as a barrier to attending a DAR. Maori also were more likely than non-Maori to report that the needs of sick family members and caring for children, not necessarily their own, prevailed over their own health. This finding is also supported by other research.[8]

Europeans were more likely to report not attending from forgetfulness and not having time to have a review. People who were employed were likely to identify that having a job makes it difficult to attend their surgery for a DAR before 5pm.

Self-control of diabetes was a comment that featured highly for Europeans and that was not featured in responses by Maori. It is most likely that increased knowledge of diabetes empowers the person to make better decisions for their own health and thus makes them better able to self-monitor signs and symptoms of diabetes. In

comparison, a decreased level of knowledge of diabetes was reported by Maori. This can lead to disempowerment in health decision-making. This may be a factor why the risks of developing diabetes complications are increased for Maori.

Seven of the 26 respondents had never accessed a free DAR. However, for the 17 respondents who had, evidence suggests that obstacles exist that lead to future non-attendance. Barriers such as difficulty in diet adherence, cost of medication and difficulty adhering to the amount of medication, and ongoing other costs after attending a review suggest that more work needs to be done in identifying patient needs. Furthermore, five respondents were unaware that free annual reviews were available.

Most (22/26) of the respondents reported that the care and relationship with their doctor was good or excellent. Trust in the physician has been shown to be important in improving patient engagement with health services.[9] Seventeen reported a good or excellent relationship with the nurses at the practice; however six had had no contact with a nurse. If the patient has never had a DAR, they are unlikely to have any contact with the practice nurse who undertakes many of the tests for a review. Furthermore, patients who live in rural parts of Rotorua may not have access to a practice nurse.

A strength of this research is that it is patient-focussed. Although barriers to care are well documented especially among Maori, it is important to bear in mind that barriers vary between iwi (tribal groups) and are continually changing for Maori. This study is original in that it has identified that transport and caring for family are prime barriers for not attending a DAR amongst Maori who live in the Rotorua region.

A weakness is that only 26 of 68 of persons who had not attended a DAR in the last two years were interviewed. How the non-responders might have varied from those who were able to be contacted is unknown. There is also an issue of bias when conducting telephone interviews, and then interpreting and organising the data into themes. Although all comments were transcribed as accurately as possible from what the interviewee said, the interviews were not recorded, and therefore there is the danger of bias in deciding which comments were important.

Ways to increase uptake of the DAR need to be considered. Based on the conversations with Maori interviewees, tikanga (Maori customs, beliefs and values) are deeply embedded in the concept that a person is viewed not as an individual but as part of a greater group or whanau, which goes beyond immediate family members. This concept is difficult for some non-Maori to understand, and at times forces many Maori to adopt an individualist approach especially in health. The disparities in health that currently exist between Maori and non-Maori are well-known. If serious improvements to health for Maori are to be made, such as increasing the uptake of a free DAR, Maori tikanga needs to be incorporated at all levels.

A Diabetic Annual Review Centre or after-hours clinic may assist by conducting DARs after working hours or on the weekend. Given the rapid rate of diagnosis of new diabetic patients within NZ, this will become crucial if the uptake of the DAR programme is to be improved for people who find working and attending a review difficult. In addition, more reminders to patients may be helpful in increasing uptake.

References

1. Ministry of Health. The New Zealand Health Strategy, DHB Toolkit. Diabetes Wellington: Ministry of Health; October 2001.
2. Singh D. Transforming chronic care: Evidence about improving care for people with LTC. University of Birmingham; 2005.
3. Joshy G, Lawrenson RA, Simmons D. Retention of patients in the Get Checked free annual diabetes review programme in New Zealand. N Z Med J 2008, Mar 14;121(1270):35–44.
4. Robinson T, Simmons D, Scott D, et al. Ethnic differences in Type 2 diabetes care and outcomes in Auckland: A multiethnic community in New Zealand. N Z Med J 2006 Jun 2;119(1235):U1997.
5. Ministry of Health and District Health Boards: Effectiveness of the 'Get Checked' diabetes programme. Performance Audit Report. Wellington: Office of the Auditor-General; 2007.
6. Joshy G, Porter T, Le Lievre C, Lane J, Williams M, Lawrenson R. Prevalence of diabetes in New Zealand general practice - the influence of ethnicity and social deprivation. J Epidemiol Community Health 2009; Feb 11.
7. Simmons D, Lillis S, Swan J, Haar J. Discordance in perceptions of barriers to diabetes care between patients and primary care and secondary care. Diabetes Care 2007 Mar;30(3):490–5.
8. Simmons D, Weblemoe T, Voyle J, Prichard A, Leackehe L, Gatland B. Personal barriers to diabetes care: Lessons from a multi-ethnic community in New Zealand. Diabetic Medicine 1998;15(11):958–64.
9. Becker ER. Roblin DW. Translating primary care practice climate into patient activation: the role of patient trust in physician. Medical Care 46(8):795–805, 2008 Aug.

ACKNOWLEDGEMENTS
This study was carried out thanks to a grant as a summer studentship funded by the RNZCGP. We thank the general practitioners and staff of the practices involved, the patients that took part in the study and Jane Lane and Dr Mike Williams from the RGPG.

COMPETING INTERESTS
None declared.