Annual diabetes reviews for housebound patients in primary care

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ARTICLE POINTS

1 The Diabetes NSF states that all people with diabetes should have access to integrated diabetes services that meet their individual needs regardless of age.

2 In-house meetings with the practice's primary care team revealed the need to review the elderly people with diabetes and disabilities who were unable to attend annual clinics.

3 We decided to use the facilities within the day hospital so that all aspects of care could be given.

4 The multidisciplinary team found the review day worthwhile, and communication between the practice and the day hospital also improved.

5 Patients seemed to find the day helpful but a full patient evaluation was not done.

KEY WORDS

- Quality
- Standards
- Support
- Integration
- Teamworking

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Introduction

This is an account of how a practice nurse and the partners of a medical practice devised an innovative scheme to screen housebound patients with diabetes in accordance with the National Services Framework. Meticulous planning and organisation was required to coordinate and deliver specialised diabetes services to this group at one time under one roof. This scheme has demonstrated good teamwork between primary and secondary care, in addition to being a valuable learning curve. The success of this venture has led to the service being scheduled as a regular annual event.

The Avenue Surgery, Warminster is a general medical services practice serving a large rural area in Wiltshire, with eight full time partners and three supporting salaried GPs. In November 2002, the practice had a population of nearly 17000; 674 (4%) of these had diabetes. Of this group 590 (87%) had type 2 diabetes and 142 (21%) were over the age of 75 years. The nearby Community Hospital (WCH) serves Warminster and the surrounding villages. It has a minor injuries unit, a ward with 24 beds and day hospitals for the mentally ill and elderly.

Diabetes National Service Framework

The Diabetes National Service Framework (NSF; DoH, 2001) states that all people with diabetes should have access to integrated diabetes services that meet their individual needs regardless of age. The standards state that people with diabetes should receive high-quality care throughout their lifetime. This includes support to optimise control of blood glucose, blood pressure and other risk factors that result in the development of the complications of diabetes. The United Kingdom Prospective Diabetes Study (UKPDS, 1998) showed that tight control of these factors could reduce risks of complications. Foot problems are a major component of diabetes care (Williams and Pickup, 2000), however, Ashton and Dean (2002) have suggested that diabetic foot screening for the elderly in residential or day care centres is below the recommended level. The aim of diabetes care is to maximise the quality of life of all people with diabetes.

Identifying the need for annual reviews

During a series of in-house meetings the practice's primary care team explored the recommendations of the NSF. These meetings highlighted a need to review the elderly people with diabetes and disabilities who were unable to attend the practice's annual clinics or specialist clinics at the hospital.

Planning the annual review day

We considered the use of individual home visits but decided that it would be very difficult to have inputs from the whole healthcare professional team and to manage retinal screening in this way.

The facilities at the day hospital for the elderly within WCH were proposed as a suitable venue for annual diabetes review services for elderly patients. This would enable all aspects of care to be given, making the optimal use of specialist resources in appropriate surroundings.

In our planning we addressed the following issues:

- *Transport*. In addition to providing transport for relatively immobile people, facilities are required for those in wheelchairs. The WCH transport vehicle was used for this purpose.
- *Blood tests*. Ideally blood tests need to be done prior to the annual review in order for the results to be available on the day and assessed alongside the patient. District nurses were approached to ask them to take samples for HbA_{1c}, creatinine, electrolytes, liver function tests and lipids.
- *Urinalysis*. This is necessary to help identify overt proteinurea and exclude infection. District nurses gave patients containers at the time of venpuncture so that the patient could bring a fresh sample with them to the annual review.
- *Dietary advice*. There is no definable age limit above which dietary advice becomes worthless (Nutrition Subcomittee of the British Diabetic Association, 1992). Many elderly patients with diabetes are overweight and keen to make dietary changes on medical advice. Realistic targets should be agreed with patients as appropriate.
- *Chiropody*. The report on the findings of a joint working party of the BDA and Society of Chiropodists (1991) states that an important part of the educational role of the chiropodist is to alert patients to signs of danger because most neuropathies and other disorders of the feet begin slowly. Elderly people with diabetes may have poor vision, reduced mobility and cognitive impairment, which individually or cumulatively exposes them to increased risk of lesions/diseases of the feet (Baker et al, 1994).
- *Retinal screening*. NICE guidelines on retinopathy (2002) discuss the importance of regular screening. The practice is fortunate to be supported by an excellent screening service, which is coordinated by the Bath Diabetes care team. Their resources include a portable digital camera for photographing the retina.
- *Blood pressure* – we agreed on a target of 140/80 mmHg or less (as recommended by the UKPDS, 1998) to help reduce risks of complications.
- *Influenza and pneumonia vaccination*. The DoH guidance on immunisation (2002) recommends influenza and pneumonia vaccines. It was felt it would be good practice to offer these vaccines to those in whom it was indicated.
- *Medical overview*. A review of all aspects of each patient's care was undertaken by the local GP.

It was decided that further planning was necessary to finalise the details and ensure the day ran as smoothly as possible. A second planning meeting took place in September 2002. We decided to provide lunch for the patients and their carers to support the education on the importance of healthy eating and to reiterate the information given by the dietician.

A letter was drafted and sent to the district nurses asking for their support and cooperation with the preparation for the day, in particular the taking of blood samples in advance and advising patients about providing urine samples.

Members of the wider diabetes team were contacted and asked for their specialist support; all agreed to attend. The practice's social link worker volunteered her services as she thought it would be a good opportunity to holistically review the social needs of this group of patients.

Invitations

A computer search identified twelve housebound patients with diabetes whose GPs confirmed that they would normally be unable to attend the usual annual diabetes clinic at the surgery. Letters were sent to these people and their carer(s) including an invitation to lunch with reply slips attached.

Five people accepted and six declined. One man initially declined for fear of being without oxygen treatment for his chronic obstructive airways disease. A home visit was made to this patient to reassure him that portable oxygen would be available but unfortunately he died before the annual review day. Another lady feared she would be taken off the list of the consultant diabetologist if she accepted. It was felt, however, that if she was mobile enough to be able to regularly attend the consultant diabetes clinic, this day was not aimed at her needs. One lady was in Spain and taken off the list as she was not considered to be

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1 Blood tests should be done before the annual review so that the results are available on the day.

2 Urinalysis is necessary to help identify overt proteinurea and exclude infection.

3 Dietary advice is still useful in the elderly and many elderly people are keen to make dietary changes.

4 Older people are at increased risk of lesions to the feet because they may have poor vision and reduced mobility.

5 Five patients accepted the invitation to attend the clinic.

PAGE POINTS

1 The dietitian gave a group talk on healthy eating.

2 The podiatrist gave individual educational advice and treatments where appropriate.

3 The GP consulted with patients individually and reviewed test results and medications with them at the end of the morning.

4 The initial response of everyone involved was that this had been a successful day.

housebound. It was thought that those who were too ill to attend could have home visits.

The diabetes annual review day

The hospital transport service collected five people from their homes on November 5 2002, arriving at the day hospital at about 10.30 am.

The technician from Royal United Hospital (Bath) retinal screening service used a small side room with the large portable camera placed on a table. Visual acuity was measured first and then tropicamide drops were instilled into the patients' eyes to enable photos to be taken with the pupils dilated.

The dietitian gave a group talk on healthy eating, including a question and answer session. The podiatrist was able to give individual educational advice and treatments where appropriate. The link worker carried out individual social care assessments. Ward nurses recorded weight, blood pressure and tested the urine samples. Influenza and pneumonia vaccinations were given to those in whom it was indicated. The patients appeared to appreciate the benefits of the holistic approach through teamworking.

The GP consulted with patients individually and reviewed test results and medications with them at the end of the morning. An adjustment was made to the blood pressure medication for one lady to try to achieve her target levels. Arrangements were to be made for another lady to have a mental state assessment.

Outcomes of the day

The initial response of everyone involved was that this had been a successful day. However, certain areas proved to be problematic, and much was learnt about how we could improve on these areas should we decide to make this an annual event.

Transport

Transportation of patients proved to be

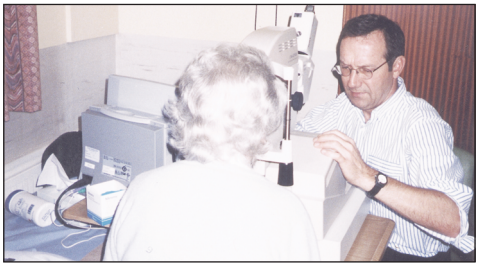

Figure 1. Retinal screening of patients at the annual review day

more time consuming than anticipated for patients and staff. It was decided that it would have been better for the more able to be brought to the day hospital first and to ensure that anyone requiring oxygen knows that it can be provided.

Medical records

Not all the patient notes were available to the doctor and this made assessments, especially of mental health, more difficult.

Retinal screening

It was quite difficult and time consuming to adjust the height of the camera for some patients (*Figure 1*). On reflection it may have been more beneficial to have the doctor assess the eyes after drops had been instilled. This is not the preferred choice because digital screening is recommended in the NSF, but on reflection it may have been more beneficial for the doctor to use an ophthalmoscope (after instillation of mydriatic drops) to screen for retinopathy in those with severe mobility problems. According to the retinal screening technician 'the quality of time given to each patient is greater than the average patient we see and this would affect our routine screening and require consideration at timetable.'

In some cases, an assistant to aid the patient whilst being photographed and a specialist camera table might help. It might also be useful to obtain a history of eye problems. The technician may need extra training to assess if the patient is willing or able for follow-up at the eye department.

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Figure 2. Care by the podiatrist at the annual review

Dietary advice

The dietitian believed that the patients and carers found her session interesting and benefited from being in a group. She felt that it would have been better if the patients had arrived earlier to enable her to have more individual input. Follow-up appointments were arranged with two of the patients.

Podiatrist

A very positive morning was reported by the podiatrist (*Figure 2*). She was able to update the education of patients and give individual treatments. One person required a pressure-relieving boot due to ulceration and was sent a follow-up appointment.

Link worker

The social link worker carried out care reviews and regular arrangements were made for a bathing service for two patients. She considered that the day had been an extremely helpful opportunity to highlight areas of need in this high-risk group. Interestingly the carer from a nursing home was unaware that her patient had diabetes, which highlighted the need for further education for nursing home staff.

Patient questionnaires

Questionnaires were sent with stamped addressed envelopes the following week in order to evaluate the day. Unfortunately only one was returned, which made evaluation of patients responses very limited.

Another time we will consider asking for feedback before patients return home, by handing out the questionnaires at the time, to encourage a better response.

The man who replied reported that he had been given sufficient useful information prior to the attendance and on the day. He scored the transport arrangements an average 3 (in a range from 1–5). He found the staff to be friendly and helpful and had particularly appreciated the attention of the chiropodist.

Conclusion

It was thought by all of the multidisciplinary team that the morning was worthwhile and that it should be a regular annual event. Communication and teamworking between the practice and the day hospital had also improved, facilitating a high standard of care from both primary and secondary sectors. Holding the morning in the hospital enabled patients to have individual attention from each person in the multidisciplinary team, which would have been very difficult if visits had to be made to individual homes.

It was felt that the patients had found the day helpful, but the lack of replies to the questionnaire was disappointing. Patients had not been involved in the planning as the annual review was such a new concept, but it is hoped that they and their carers will be involved in the arrangements in the future, incorporating the ideas and lessons learnt from the inaugural event. ■

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1 All of the multidisciplinary team thought that the morning was worthwhile and that it should be a regular annual event.

2 Communication and teamworking between the practice and the day hospital also improved, facilitating a high standard of care from both primary and secondary sectors.

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