

Undertaking annual diabetes reviews in the nursing home setting: A pilot study

Ruth Patterson and Patricia Dawson

Article points

1. Patients from nursing homes have found the experience of annual reviews in a clinical setting impractical and distressing.
2. Offering an annual review by a DSN in the nursing home rather than in a hospital or GP clinic resulted in positive comments from individuals involved.
3. The service also provided an educational update for nursing home staff.

Key words

- Nursing home
- Annual diabetes review
- Education

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Diabetes affects approximately 1.8 million people in the UK and is one of the greatest health challenges that we are facing. Only by finding new and innovative ways to manage this chronic disease can we prevent it from becoming a problem of unmanageable size (Diabetes UK, 2004). This article demonstrates the benefit of a DSN conducting annual review appointments in a nursing home setting rather than in a hospital clinic and identifies the need for further research.

A report by the British Diabetic Association (BDA, 1999) identified that little was known about the incidence of diabetes or the provision of care for residents in residential or nursing homes within the UK. The report also stated 'each resident with diabetes should undergo an annual review assessment preferably conducted within the care home'. The Clinical Resource Efficacy Support Team (CREST, 2003) highlighted that all people with diabetes are entitled to an annual review 'for screening, prevention and treatment of complications' and vulnerable groups such as older people should receive targeted support services.

At present within Ulster Community and Hospitals Trust (UCHT), DSNs are a point of contact for advice for staff within the residential and nursing home setting. Twice yearly multi-disciplinary education update programmes are provided for trained staff in a centrally located area. However, untrained staff often attend as it can be difficult to allow trained staff to leave their

other responsibilities. Updates are held at individual care home settings as requested. Unfortunately, maintaining this service is proving increasingly difficult due to a lack of resources and other demands on services.

As DSNs we have often observed and identified that residents from nursing homes attending the diabetes outpatient clinics find the experience distressing. This prompted us to consider reviewing these patients annually within the care home where they are resident. Offering this service could improve communication between staff in the care homes, social services departments, diabetes care teams and other NHS teams, which the Department of Health (2001) identified as often poor. This is supported by CREST (2003) which stated that 'it is essential that diabetes services are delivered in the most appropriate place and provide consistent high quality care. This will mean close working between primary and secondary care services.'

Residents from care homes due to attend hospital clinics often have long waits for

transportation, which on occasions does not arrive, resulting in non-attendance. The BDA (1999) report highlighted transport as a contributing factor as to why residents did not attend secondary care or the GP surgery for follow-up or annual review. Those who do manage to attend even when accompanied by a carer often have little or no information or knowledge about their glycaemic control or current medication. This makes management and continued care difficult. The BDA (1999) identified that the medical responsibility for residents in care homes with diabetes lies with the GP. It recognised that some GPs regularly visit and review their patients. However, many visits to the care homes by GPs are 'reactive' and only take place after a problem arises.

Methods

In order to ascertain how best to undertake these reviews a pilot study was carried out by primary care DSNs to annually review patients who normally attend hospital clinics in the nursing home in which they reside.

Four nursing homes within Newtownards (UCHT) were approached and asked if they would agree to have the annual reviews of their residents with diabetes undertaken by a DSN in the nursing home. These homes were chosen as they were known to have patients with diabetes who currently attend hospital clinics. All residents with diabetes in the nursing homes were reviewed regardless of where their annual review took place.

Prior to the visit the home was contacted and a suitable date and time was arranged to undertake the reviews. All patients with diabetes were identified and the staff were requested to conduct appropriate blood analyses (HbA_{1c}, lipid profile, urea, electrolytes and creatinine and liver function test) 2 weeks prior to the agreed visit date. A urine sample for microalbuminuria was also requested. The GP surgery was contacted and asked for an updated list of current medication and, where available, the last Diamond (computer management system) performa from a clinic visit was

Table 1. Questionnaire to be completed by patient or relative

1. Were you given the choice regarding where you would be reviewed in relation to your diabetes i.e. at hospital or in the nursing home?
2. Do you feel the treatment and care you received when reviewed in the nursing home was as good as attending a hospital appointment?
3. Do you feel being seen in the nursing home was as beneficial as attending a hospital clinic?
4. Did you have a relative with you when you were seen in the nursing home?
5. Would you be happy to be seen annually at nursing home instead of attending a hospital clinic?
6. Are there any ways you feel the service could be improved upon or developed?
7. Overall how satisfied were you with the service provided by the DSN in the home?

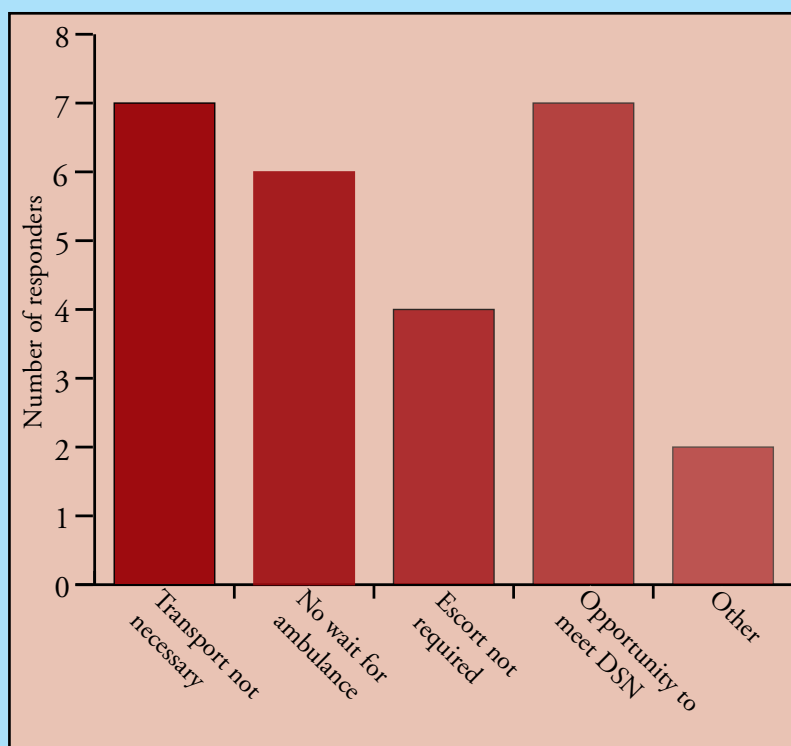


Figure 1. Benefits of nursing home review, as identified by patient responders.

obtained. On the day of the DSN visit all patients had a full annual review undertaken by the DSN which included education, review of diet and foot screening. The information was then correlated and entered on Diamond as a clinic episode and discussed by the DSN with a consultant physician who had agreed to participate in

Table 2. Questionnaire to be completed by nurse-in-charge

1. Do you feel reviewing patients in the nursing home is as beneficial for the patient as attending a hospital clinic?
2. Do you feel patients receive as good treatment and care when reviewed at the nursing home as attending for a hospital appointment?
3. Would you be happy for annual reviews to continue in the nursing home as opposed to hospital clinic appointments?
4. Which of the following do you feel are beneficial to the nursing home in relation to clients being reviewed in the home:
 - not having to arrange transport (i.e. via ambulance)
 - escort not required
 - flexibility of date/time of review
 - opportunity to liaise with the DSN face to face
 - opportunity to discuss current/future diabetes management
 - opportunity to review all patients with diabetes
 - reduce anxiety of patient
 - contact numbers provided for follow up as required
 - other (please state)
5. Are there any ways you feel the service could be improved upon or developed?
6. Overall how satisfied are you with the service provided by the DSN in the home?

Table 3. Questionnaire to be completed by nurse-in-charge regarding staff educational updates.

1. How beneficial did you feel the staff education update was?
2. Was it difficult for you to arrange for staff to attend?
3. Was the time of the update provided suitable?
4. How satisfied were you with the content of the update provided?
5. Please provide any relevant topics for future updates which you feel may be of benefit to you and your staff in relation to diabetes management.

the pilot scheme. Any changes to treatment or medication were then relayed to the nursing home and a copy of the Diamond performa was forwarded to the patients' GP, the nursing home manager and also to the patient at the nursing home.

While undertaking the annual review of the residents with diabetes we also offered educational updates for the staff. These were attended predominantly by trained staff and on occasion nursing staff who were off duty.

After all patients within the four specific nursing homes had been reviewed, a retrospective audit was undertaken to

assess the benefit of a DSN completing annual review appointments in the nursing home rather than in a hospital or GP clinic setting. Three retrospective questionnaires were designed:

- two to ascertain the overall effectiveness and satisfaction of the service being delivered to the patients in the nursing home
- one regarding staff training.

The first questionnaire was completed by the patient or relative (*Table 1*) and the other two questionnaires were completed by the sister-in-charge (*Tables 2 and 3*).

Results

Residents with diabetes questionnaire

In total nine residents with diabetes were reviewed and subsequently sent questionnaires to complete. Seven responded – the remaining two questionnaires were not returned due to patient death.

Just over half of the patients who completed the questionnaire were given a choice as to where they would like their annual review appointment to take place, three indicated that they were not given a choice.

All of the patients stated that the treatment received in the nursing home was equally as good and beneficial as that in the hospital.

The main benefits indicated of being reviewed in the nursing home are reported in *Figure 1*.

All responders stated that they would prefer to be seen in the nursing home rather than the hospital and were satisfied with the service.

Responders were also asked if they felt the service could be improved upon or developed: five responders felt there was no improvement needed; one responder felt the service could be developed and suggested 6-monthly reviews rather than yearly; one respondent commented that they became very anxious attending a hospital appointment and would prefer to be seen in the nursing home.

Nurse-in-charge questionnaire

All four sisters of the nursing homes replied. All stated that reviewing the patients in the nursing home was as beneficial for the patient

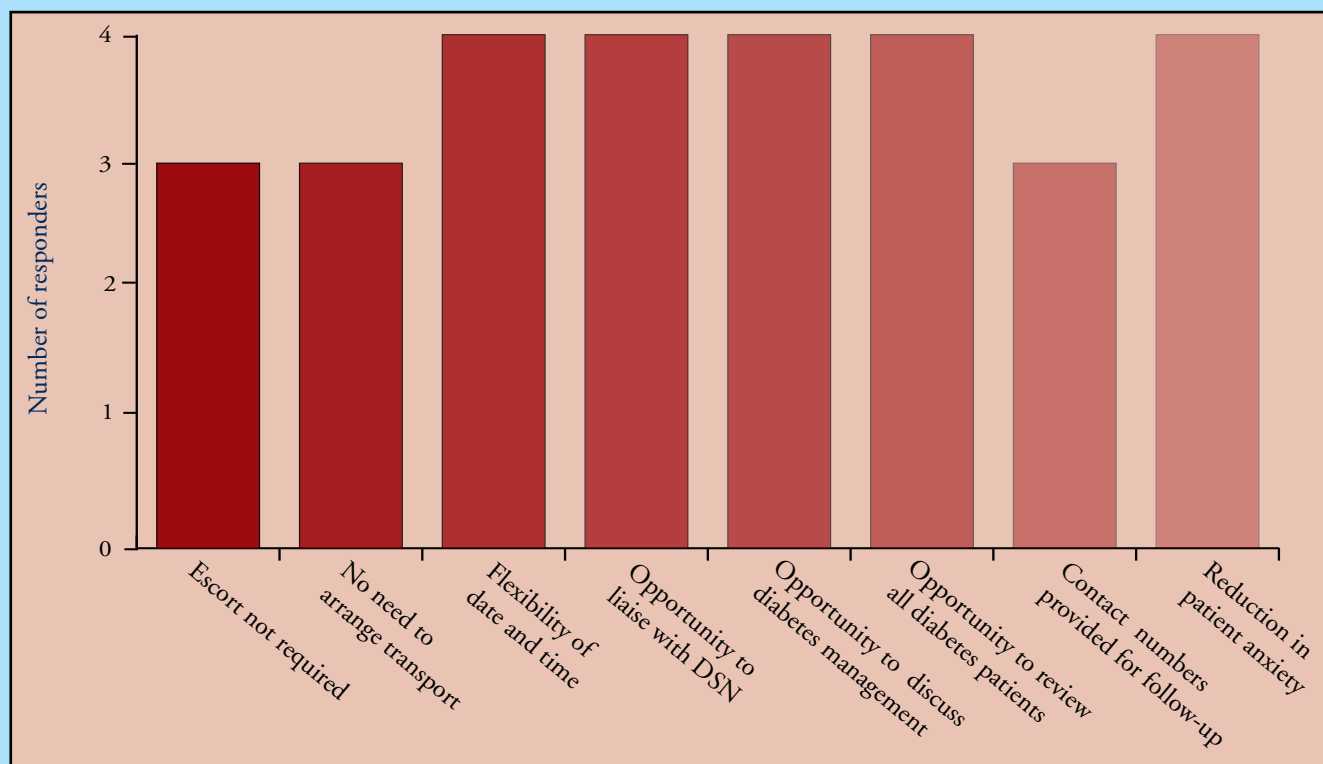


Figure 2. Benefits of nursing home review, as identified by the nurse-in-charge

as attending the hospital clinic and they would be happy for these annual reviews to continue to take place in the nursing home.

The main benefits of the patient being reviewed in the nursing home, as indicated by all of the respondents were (Figure 2):

- flexibility of date and time of review
- opportunity to liaise with DSN face to face
- opportunity to discuss current/future diabetes management
- reduced anxiety of patient.

Again all respondents were very satisfied with the service provided by the DSN.

Responders were again asked if they felt the service could be improved upon or developed and all said that no improvement was required. One respondent commented that they were very impressed with the service and would very much welcome its continuance.

Staff training questionnaire

The third questionnaire, completed by each sister, provided feedback on the additional staff education updates facilitated by the DSN. The results were positive.

The education updates were undertaken using the UCHT *District Diabetes Network Integrated Care Handbook* (2004). Each nursing home has a copy of this and staff were taken through it to highlight where to find relevant information on medications, sick day rules and for treatment of hypoglycaemia, for example. This was to encourage staff to know where the handbook was kept and how to utilise it to their benefit.

Discussion

While a larger number of nursing homes would have given a better indication as to the benefits of this service, this small sample demonstrates the benefits to patients of the DSN being involved in reviews in the nursing homes. While the sample size was very small, from the trend of positive responses it can be surmised that these data will be a good indicator for positive outcomes in future studies trust-wide.

All four sisters in the nursing homes indicated that they were happy with the quality of service provided and felt it was

Page points

1. By conducting the review in the nursing home setting there was less disruption to patients and staff.
2. Improving care for older people with diabetes in nursing home settings is a challenge, which cannot be resolved by one simple method.
3. Further audits and research are required to ensure that patient-centred care is available to people with diabetes who live in a nursing home.

less stressful to the patient. There was less disruption to patients and staff in not having to organise early breakfast and transport. The staff felt that the resident with diabetes gets the opportunity to see and discuss any concerns with the DSN in their own environment and also nursing staff can be consulted at the time and changes in treatment communicated directly. There was also the opportunity to identify gaps in knowledge and training needs among the staff.

Improving care for older people with diabetes in nursing home settings is a challenge, which cannot be resolved by one simple method. However, if training is addressed and delivered in a variety of ways accessible to all staff then the level of diabetes care can be improved and the risks for this vulnerable population decreased (Deakin and Littley, 2001).

There are several resources being developed to help a scheme such as the one described in this study in being implemented trust-wide. At present there are hopes to link the annual assessment with podiatry visits; to request that the nursing staff in the care home complete blood pressure and weight measurements before the DSN arrives; and to ensure that all homes have access to a dietitian and optometrist. Within the authors' trust a Link Nurse training and education programme has been implemented, which is available to staff in nursing homes.

In order to assess the feasibility of delivering a service such as this throughout the local trust, audit is to be undertaken within North Down and Ards to establish the number of residents within nursing homes who have diabetes. One of the main aims of the audit will be to ascertain if residents have had an annual review, and where and by whom this was undertaken. This would help for plans for funding for future developments.

From work already published it has been suggested that 'diabetes care for elderly people is substandard and this clearly

needs to be addressed with some urgency' (Richmond, 2004). We feel we have a duty of care to ensure that this vulnerable group are not forgotten. Audit and research of the care provided for this group is important to ensure that they receive the patient-centred care that all individuals with diabetes should expect to receive. ■

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