# Wish you were here: A novel approach to diabetes education in care homes

Previous surveys of diabetes care provision within care homes in

Lothian, Scotland have indicated a lack of up-to-date knowledge

by staff and a rapid staff turnover. A simple educational tool was

multidisciplinary group of specialist nurses, dietitians, podiatrists,

a care home manager and people with diabetes who had a personal

interest in care homes designed four postcards to be sent out to care

homes in Lothian. Each postcard described a diabetes scenario relating

to a fictional, recently arrived care home resident, with three questions

prompting thought and discussion for staff members and suggestions

of action points and answers relating to each question. Care home

staff who evaluated these postcards considered them useful, fun

developed to improve the diabetes knowledge of these staff. A

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# Article points

- 1. In an attempt to improve diabetes knowledge of all staff working in care homes, the Lothian Managed Clinical Network Care Home Subgroup devised a simple educational tool.
- 2. Four colourful, seasonal postcards were developed. Each described a diabetes scenario, with three questions and suggested action points on the back.
- 3. Staff found the postcards simple, easy to use and enjoyable.
- 4. The easy-to-read, colourful postcards were shown to be effective in improving the diabetes knowledge of care home staff.

# Key words

- Care homes
- Education
- Older people
- Postcards

teaching aids. Some also reported improvements in diabetes care. n Lothian, Scotland, there are 118 registered care homes for older people and those with mental health problems. Care home staff in this region have difficulty in accessing non-mandatory educational initiatives. Community podiatrists who attend to care home residents provide some education, but this is not consistent across the county. There is also a rapid turnover of staff in many care homes and for some key staff English is not their first language, thus attendance at formal education sessions may be low. A simple, accessible educational initiative was therefore required to assist care home staff in improving their diabetes knowledge.

# Background

The prevalence of diabetes in older people is increasing. In 2007, 49.5% (n=103784) of the

diabetes population in Scotland were aged  $\geq$ 65 years compared with 50.4% (n=114 864) in 2009 (Scottish Diabetes Survey Monitoring Group, 2007; 2009). The overall prevalence of diabetes in Lothian in 2009 was 3.9% (Scottish Diabetes Survey Monitoring Group, 2009). The present authors conducted a search of the Lothian Diabetes Register to determine the prevalence of diabetes in care homes in this region; the data were unreliable as there is no distinct field within the register that identifies care homes. A realistic estimate is 15%, with up to 8% being undiagnosed (Aspray et al, 2006).

In Lothian, diabetes care is coordinated through the Diabetes Managed Clinical Network (MCN) - a group of healthcare professionals working across traditional boundaries to ensure equitable diabetes care

Authors' details can be found at the end of this article.

for the 32 000 people with diabetes who live in this region. The agreed work of the MCN is passed through a series of subgroups that are either uni- (e.g. the dietitians group) or multidisciplinary (e.g. the Professional Education Group). The subgroups ensure that there are patient representatives who can add the voice and experience of the service user to the ongoing work of the group.

#### Diabetes education in care homes

A pilot project (unpublished data) undertaken in 2001 by two DSNs and two dietitians from NHS Lothian concluded that in care homes there were deficiencies in the training of healthcare professionals, especially healthcare assistants, in diabetes management and that annual screening was not carried out in all residents with diabetes.

A programme of professional diabetes education is available locally through the

Lothian Diabetes MCN. It consists of academically accredited and non-accredited courses and an annual professional 1-day conference. A 2-day diabetes course for registered staff and 1-day course for nursing assistants and clinical support workers are conducted five to six times per year around the region and are available to care home staff, but attendance by the latter group is low.

# MCN care home subgroup

The Lothian Care Home Subgroup of the MCN was formed in 2006 to improve the quality of care for people with diabetes living in residential accommodation. This is a multidisciplinary group consisting of DSNs, community dietitians, community podiatrists, a care home manager, a representative from the Scottish Commission for the Regulation of Care (also called the Care Commission), initially the nurse consultant, and people with diabetes with a particular interest in

# Page points

- 1. The Managed Clinical Network (MCN) subgroups ensure that there are patient representatives who can add the voice and experience of the service user to the ongoing work of the group.
- 2. The Lothian Care
  Home Subgroup of
  the MCN was formed
  in 2006 to improve
  the quality of care for
  people with diabetes
  living in residential
  accommodation.

# Page points

- 1. A training needs analysis of the 118 care homes in Lothian was undertaken at the start of 2007. A total of 53 responses were received, revealing a perceived lack of knowledge across all areas of diabetes management among care home staff.
- 2. The Managed Clinical
  Network Care Home
  Subgroup devised a
  simple educational tool.
  The project consisted
  of producing and
  distributing of a series of
  educational postcards,
  involving a case study that
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health care within residential or nursing homes. The group meets three to four times per year and is chaired by the MCN manager.

A training needs analysis of the 118 care homes in the region was undertaken at the start of 2007. A total of 53 responses were received, revealing a perceived lack of knowledge across all areas of diabetes management among care home staff, with particular reference to risk factors for developing diabetes, making a diagnosis, drug actions and cardiovascular and renal complications.

# Aims of the project

In an attempt to improve diabetes knowledge of all staff working in care homes, the MCN Care Home Subgroup devised a simple educational tool. The original concept was provided by the Care Commission nurse consultant. The project consisted of producing and distributing a series of educational postcards, involving a case study that was introduced on the first postcard and progressed on subsequent ones.

# Box 1. Example of postcard with diabetes scenario and related questions.

# Case

Betty Johnston is an 85-year-old widow. She was admitted to the care home 4 months ago as she was no longer able to manage on her own at home. She had settled well, but recently she has become incontinent at night and has complained of difficulty in reading small print, even with her glasses. She has five children who live locally and visit her regularly, often bringing her treats to eat. Lately, she has been asking for them to bring in more juice. The care home staff noticed that she is sleeping more in the afternoons.

## Questions

- 1. What investigations would have to be done?
- 2. What might be wrong with her?
- 3. What would be the initial steps in her management?

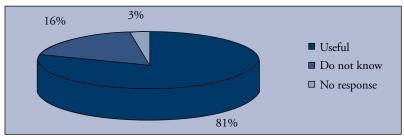


Figure 1. Responses to the question "Were the postcards useful?".

The nurse consultant reported a similar project relating to incontinence materials, indicating that it had been very successful. The postcards had been used to encourage staff from care homes to discuss the issues and were helpful in supporting learning sessions.

# Method

Four colourful, seasonal postcards were developed with specific reference to care homes. Each described a diabetes scenario relating to "Betty" (Box 1), from diagnosis through initial management and commencement of metformin therapy to foot and eye care. Each postcard listed three questions to prompt thought and discussion for staff members and, on the back, included suggested action points and answers relating to each question. The subgroup agreed that the action points and answers need not be comprehensive, but were designed rather to raise awareness and promote discussion. The address for the Diabetes UK website was also included as a helpful resource.

The MCN regularly receives updated lists of the Lothian care homes from the Care Commission, with contact details of the managers. Therefore, it was possible to send the postcards regularly over a 1-year period to each of the 118 care homes. Three postcards, covering diagnosis and diet, metformin therapy and foot care, were distributed between October 2008 and April 2009.

A simple one-page questionnaire to measure the usefulness of the project was designed. It aimed to identify the type and size of the care homes and to explore how the postcards were used and how useful they had been. The questionnaire was sent out with the third postcard to assess the benefits before further postcards were developed.

As a result of the questionnaire, a fourth postcard relating to diabetic eye disease was circulated in September 2009. Copies of the NHS Lothian Diabetes Handbook, the Scottish Diabetes Group-funded DVD "No nonsense guide to type 2 diabetes", a resource booklet for diabetic foot screening and a variety of patient educational leaflets were sent with this postcard as educational support materials for the homes.

# Results

Of the 118 questionnaires sent out, 37 (31%) were returned: 12 (32%) from residential homes, 24 (65%) from nursing homes and one (3%) from what was described as "other". The number of residents in these care homes ranged from eight to 120. Twenty-nine (78%) care homes reported that they received the postcards, six (16%) did not receive, one (3%) did not know and one (3%) did not respond to the question.

Thirty care homes (81%) found the postcard initiative to be useful (*Figure 1*). Of these, 24 (80%) felt that staff awareness and knowledge of diabetes had been increased (*Figure 2*).

Thirty (81%) thought the postcard initiative was an effective method of communication to care homes, one (3%) did not, one (3%) was unsure and five (13%) did not respond. Ten homes (27%) responded that they had changed their current practice, 18 (49%) had not and three (8%) were unsure, but indicated that they

Figure 2. Responses to the question "Did the postcards increase knowledge?".

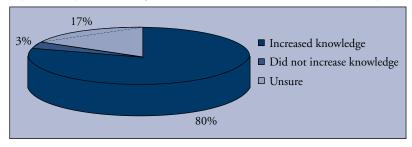
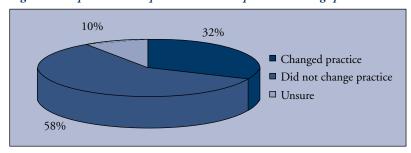


Figure 3. Responses to the question "Did the postcards change practice?".



had no residents with diagnosed diabetes at the time (*Figure 3*), and six (16%) did not respond.

"Improving the knowledge of care home staff will enhance their confidence in managing diabetes. This should also improve the standard of care provided to the residents, reduce unnecessary admissions to, or attendance at, secondary care or specialist centres, encourage early diagnosis, initiate appropriate treatment and ensure systems are in place for providing regular screening for diabetes and its complications."

Aspray T, Nesbit K, Cassidy T et al (2006) Diabetes in British nursing and residential homes: a pragmatic screening study. Diabetes Care 29: 707–8

Joseph Rowntree Foundation (2008) Improving Care in Residential Homes: A Literature Review. Joseph Rowntree Foundation, York. Available at: http://bit.ly/ eT3vCc (accessed 21.03.11)

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21.03.11)

# Box 2. Staff's thoughts on the initiative.

- Easy to read and understandable.
- Simple and cost effective.
- Makes you think.
- Gets people thinking and talking.
- Memorable.
- Fun and informative.
- Different.
- Not a lot of paperwork.
- Encourages reflection on specific issues.
- Simple, straight to the point and practical.

The postcards were used in a variety of ways as teaching aids. They were displayed on notice boards where they could be used by registered and non-registered staff, and to help those for whom English was not their first language. One care home completed them for each resident, and they were used during handover to promote discussion in several homes. They were mainly used during staff meetings or training sessions, but one care home reported using them when supervising individual members of staff.

Staff were asked what they liked about the initiative and their responses are listed in *Box 2*.

The questionnaire also asked what could be done to improve the initiative, but other than having all the cards in one pack or having the cards personalised, the staff generally thought that they were a helpful resource in the form they were published.

#### Discussion

With the increasing incidence of diabetes and the aging population in Scotland, there is an ever increasing number of people with diabetes who are unable to manage on their own at home, and who are looked after in care homes.

Older people living in care homes have substantial and complex healthcare needs, which require the full range of healthcare services. However, there is considerable evidence that older people in care homes are not receiving the healthcare services that they require. They are becoming more frail and in need of care and are being admitted to hospital, unnecessarily, for conditions that could be treated more appropriately in care homes.

Others are being admitted to hospital with acute conditions, which earlier intervention could have prevented the level of deterioration.

Appropriate, sustainable education and training of staff is required in this sector to improve the health of older people, including those with diabetes. Factors that affect the ability of care home staff to undertake regular and appropriate educational initiatives include:

- Difficulty in accessing training.
- Difficulty in maintaining competence.
- Difficulty releasing staff for long periods of time (i.e. half or whole days).
- Staff retention issues.
- Difficulty in accessing simulated learning experiences.

Improving the knowledge of staff will enhance their confidence in managing diabetes. This should also improve the standard of care provided to the residents, reduce unnecessary admissions to, attendance at, secondary care or specialist centres, encourage early diagnosis, initiate appropriate treatment and ensure systems are in place for providing regular screening for diabetes and its complications. A report by a team from the University of Warwick (Joseph Rowntree Foundation, 2008), for example, noted that diabetes care in residential homes is improved by staff training.

### Conclusion

Short bursts of simple, consistent education sent to care homes in the form of easy-to-read, colourful postcards were shown to be effective in improving the diabetes knowledge of care home staff. The postcards provide an up-to-date teaching tool for staff, increase diabetes awareness among staff and can be used to augment regular refresher training.

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