

Know Diabetes mentoring programme

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Know Diabetes is a three-pronged volunteer programme of mentors, diabetes awareness champions and diabetes educators in the West London area. Launched in January 2012, the mentoring arm of the programme aims to complement the primary care diabetes pathway by offering individuals with diabetes additional support from lay people, trained as mentors, to discuss non-clinical aspects of their condition. This article describes the mentoring programme's inception and design and reports on some findings following a pilot period from January 2012 to March 2015.

As the number of people with diabetes increases across the UK and globally, primary care teams are taking the brunt of the increased workload. There are a few initiatives that are currently being considered throughout the UK to help tackle this, such as the increasing role of trained primary care nurses to individualise care (Health Education England, 2015) and the up-skilling of the primary care workforce by hospital specialist staff (Kar, 2012). A third option is to use peer support to assist in providing the foundation of diabetes education (Boothroyd and Fisher, 2010).

Peer support involves people sharing knowledge, experience or practical help with each other, and is usually conducted on a voluntary basis with community engagement. Following a literature review produced by Know Diabetes (Stothard, 2015), current research suggests that peer support can provide psycho-social support and education for people with a long-term condition. It helps patients put into practice what they have been taught by healthcare professionals, and helps "navigate" complex healthcare systems like the NHS (Baksi, 2010). In a systematic review of 25 studies, Dale et al (2012) demonstrated that peer support encouraged positive metabolic and mental health outcomes for people with diabetes. There were improvements to HbA_{1c}, cholesterol, BMI (and weight) and an increase in physical activity (Dale et al, 2012). There were also noticeable improvements in self efficacy and depression. However, positive evidence for the

role of peer support in improving HbA_{1c} is not consistent (Foster et al, 2007), which suggests further research is required or multiple factors are involved in providing a successful peer support programme.

Know Diabetes mentoring programme

In west London, Westminster City Council, Hammersmith and Fulham London Borough Council and the Kensington and Chelsea London Borough Council have combined services, including healthcare, to form the Triborough. The Triborough area has a lower estimated diagnosed diabetes prevalence rate (4.1–4.6% for the three boroughs) than the national average of England (6%; Public Health England, 2013), which is believed to be attributed to the relatively young age profile of the area and good general health. However, within the locality, there are areas with a prevalence rate similar to the national rate (approximately 5.3%), and the lower than average diabetes rate for the Triborough area could be as a result of "under diagnosis". The areas where the diabetes prevalence is higher have a large ethnic mix and are areas of deprivation. In January 2012, the Know Diabetes mentoring programme was established as a pilot programme by the Public Health Department of the local authorities in the area and in conjunction with participating general practices (seven GP surgeries and five community settings). The mentoring programme was borne out of feedback from the local Diabetes Service User Group and

Citation: Wingfield D, Ralphs J, Wood D et al (2017) Know Diabetes mentoring programme. *Diabetes & Primary Care* 19: 73–7

Article points

1. There is some evidence to suggest that peer support can have a positive effect on outcomes for people with diabetes.
2. In the Triborough area of West London, peer mentoring has been part of a three-pronged approach to increase community and voluntary engagement.
3. Although the mentoring programme is well-received, the programme will need to make adjustments to continue effectively.

Key words

- Education
- Empowerment
- Motivation
- Peer support

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1. The aim of the Know Diabetes mentoring programme is to complement the diabetes care pathway by offering patients additional one-to-one support from specially trained lay people to discuss non-clinical aspects of their condition.
2. Mentors are required to attend training in motivational interviewing and to attend education sessions on type 1 and type 2 diabetes before qualifying.
3. The topics covered in the sessions with the mentors were led by the mentee and the mentor completed monitoring forms to track progress.

is part of a three-pronged volunteer programme of mentors, diabetes awareness champions and diabetes educators. The initial 18 months of the tripartite pilot were half funded by a £100 000 grant from the Collaboration for Leadership in Applied Health Research and Care.

The aim of the mentoring programme is to complement the diabetes care pathway by offering patients additional one-to-one support from specially trained lay people to discuss non-clinical aspects of their condition, such as diet and activity, and to develop effective techniques and strategies to improve their quality of life. The programme builds on the work by Baksi et al (2008) and Baksi (2010) in the Isle of Wight, which showed that trained patients are as effective in imparting knowledge to their peers as specialist health professionals. However, lay tutors require appropriate training, specific to the education programme they would be expected to deliver.

Mentor profile, training and role

The mentors in the Know Diabetes programme are volunteers or have been paid by community groups. Some have diabetes, some are community health workers and some have diabetes in their families. During the pilot period from January 2012 to March 2015, three cohorts of mentors were trained. Potential mentors had to pass a standard mentoring course, which included role play and motivational interviewing skills. They also attended the X-Pert type 2 diabetes course, a one-off session on type 1, and a session on “red flag” issues run by a local diabetes nurse specialist to standardise their diabetes knowledge. Once trained, the mentors attended bi-monthly supervision sessions with the programme co-ordinator, who has a nursing background. The mentors did not give clinical advice but were able to assist with goal setting and to give the following general health information:

- Good practice in diet and exercise.
- The importance of adhering to medication.
- Availability of services locally and nationally for diabetes support.
- Explanation in lay terms of diabetes and its complications.
- Signposts to appropriate resources or healthcare professionals.

It was acceptable for a mentor to answer “Is burning pain a sign of neuropathy?”, but it was not appropriate to answer “I have burning pain. Do you think it is neuropathy?”. The topics of the sessions were led by the mentee, and the mentors completed monitoring forms after each appointment to record topics discussed and any goals set. Following the pilot, mentors developed local styles tailored to their own skill set and the relationship established with the GP surgery (see *Box 1* for example).

Evaluation of the Know Diabetes mentoring programme

Retrospective clinical data were used to investigate the impact of the diabetes mentoring programme. Where possible a paired *t*-test analysis was carried out to elicit any significant change in clinical outcomes. Due to the small number of participants with type 1 diabetes, data from people with type 1 and type 2 diabetes were combined.

From October 2014 to March 2015, the Behaviour Change team of the Three Borough Public Health Service conducted telephone surveys of mentors, mentees and surgery staff for feedback on the mentoring programme. A qualitative analysis of the main themes discussed was completed by Collaborate using the monitoring forms completed by the mentors. A full description of the mixed methods evaluation is available at Shah and Jayatilleke (2015).

Mentee profile

Between January 2012 and March 2015, 260 people interacted with the mentoring programme. Using retrospective data from four GP surgeries, the mean age of the 193 mentees was 58 years (range 26–91 years), and approximately half were male. A total of 69% had type 2 diabetes, 18% had type 1 diabetes and for the remaining 22%, the type of diabetes was unknown. Two-thirds were insulin dependent, and participants mostly had at least one comorbidity, most commonly hypertension or mental health issues. Data on ethnicity were recorded for 160 mentees, with half being of black or minority ethnic origin.

The mean duration of mentee and mentor

contact was 18 months (range 3.5–37 months) and was measured from the first and last clinical outcome measurement. For mentees who had more than one taster session, the average number of sessions attended was 4.3.

The smoking status of 138 mentees was known, and one person stopped smoking during the programme. At the end of the programme, 14% remained smokers, which is lower than the national rate of 19% (Health and Social Care Information Centre, 2016).

Mean baseline BMI was 31.34 kg/m² ($n=129$), mean baseline HbA_{1c} was 59.7 mmol/mol (7.6%; $n=124$) and mean baseline systolic blood pressure was 134.6 mmHg. Participants ($n=58$) had a mean cholesterol level of 4.5 mmol/L (range 2.9–7.1 mmol/L), and 10 had cholesterol above 5 mmol/L, which is better than would be expected given the Triborough profile data.

Following the programme, there were no significant changes in BMI, glycaemic control (post-programme 57.1 mmol/mol [7.4%]) or diastolic blood pressure. The post-programme systolic blood pressure was 131.4 mmHg ($n=143$), which was a significant change of -3.2 mmHg ($P=0.02$). Insufficient data were collected to determine a change in cholesterol.

Mentee feedback

According to the monitoring forms, the topics most often discussed were healthy eating and weight management (62%) and coping with diabetes/general education (38%). Of the mentees who participated in the telephone survey, all ($n=27$) reported that the sessions had a positive impact on their diet, and 19 said they helped with managing blood glucose levels to target.

Mentor feedback

On a scale of 1–10, the 10 responding mentors experienced enjoyment (average 9.3) and overall helpfulness (average 9.1) as a result of mentoring. Four mentors found employment as a result of the work experience the role offered. They also felt being a mentor supported their own wellbeing and self-management, and, as a result, they were more active, confident, positive and happy.

GP feedback

From a prompted list of potential advantages, GPs ($n=6$) said that diabetes mentors were beneficial to mentees by encouraging increased activity, weight loss and healthier eating habits. They felt that the mentors reduced anxiety around diabetes and improved the mentees' understanding about diabetes. GPs valued the mentors who had good communication skills, knowledge of local community services and were culturally aware. The surveyed GPs were confident in the mentors' ability to discuss physical activity and healthy eating habits, and to support behaviour change and diabetes self-care. They would recommend the mentoring programme to suitable patients.

Challenges faced

Throughout the programme, a challenge faced has been the high drop-out of mentors. Only 50% of mentors recruited for training have practiced as a mentor. Some participants did not develop appropriate mentoring skills and, therefore, did not pass the mentoring course, while others left the programme because of full-time employment, life events or a need to have paid work. Additionally, there was often a time lag in matching new GP practices to mentors, which caused disengagement and further contributed to the high drop-out rate.

Initially, it was difficult to engage GP practices in the pilot scheme; however, word-of-mouth recommendations about the potential benefits of the project seemed to increase GP practices engaging with the mentors and providing referrals. We found that for the scheme to be successful, at least one or two practice members needed to engage with the mentor and make referrals. When this did not happen, the mentor was left disappointed and mentoring at that practice was discontinued. Also, we only worked with practices with a diabetes clinic, so the mentoring programme did not reach those who may have benefitted the most from extra peer support.

While mentors enjoyed the face-to-face interaction with mentees, they were less keen to complete the monitoring forms, making data collection and accurate analysis difficult. Incentivisation in the form of shop vouchers

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1. There was no significant change in BMI, glycaemic control or diastolic blood pressure when comparing clinical measures before and after the programme. There was, however, a significant improvement in systolic blood pressure.
2. Feedback from mentees, mentors and participating GP practices was largely positive.
3. There was a high drop-out rate of mentors due to some not passing the training, other work or life commitments and delays in matching mentors to GP practices.

“The mentoring programme will need to continue to evolve and make adjustments to continue to be effective.”

was introduced to increase recording of sessions, but this did not work. However, when mentors were able to record progress on GP systems, compliance was better.

Only four practices out of seven provided clinical data, which in some cases was incomplete. Permission to use mentee clinical data had to be sought retrospectively, so only 27 were surveyed, providing an approximate 10% response rate. Caution must be given as confounding variables were not controlled (e.g. dietitian interactions, change in practitioner or external events affecting self-motivation) and a lack of control group also limits our ability to make conclusions. Furthermore, there is a selection bias in all those who agreed to be surveyed, mentees, mentors and clinicians. Those who participated were the most engaged with the programme.

Take-home messages

The mentoring programme appears to have some positive effect on self-reported psychosocial measures, such as self-management and behaviour changes (e.g. increased activity and maintaining healthier diets). However, the impact of mentoring on clinical measures is more difficult to determine (Smith et al, 2011).

Most mentor activity was done in primary care rather than in the community, and we suggest that mentoring works best when there is a blend of enthusiastic primary care staff and a resourceful mentor. We conclude that the skill set required by mentors includes the following:

- Personal experience of diabetes.
- High level of communication skills.
- Ability to engage with diverse groups of hesitant mentees.
- Time and persistence.
- Behaviour-change skills.
- Cultural awareness and community knowledge.

We have created a local diabetes website www.knowdiabetes.org.uk that is hosted by our Diabetes UK Education and Support Groups. It contains additional resources for our volunteers and also details of local NHS diabetes services, structured group education and where exercise classes are available.

Conclusion

There is growing enthusiasm for the mentoring scheme in the local area and there is recognition of the added value mentors provide in supporting self-care and wellbeing for people with diabetes. However, the programme will need a number of adjustments if it is to continue effectively, and it is envisaged that the programme will become part of the Out of Hospital Care Package funded by the local Clinical Commissioning Groups. ■

Acknowledgments

The authors would like to thank Penny Stothard from Collaborate for her insightful evaluation and Neha Shah and Eszter Vamos, Public Health Registrars, for helping develop the surveys, interpreting the clinical data, summarising its findings and linking them with the qualitative evaluation. The authors would also like to thank all the mentors who have worked so enthusiastically on this project.

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Box 1: Brook Green Medical Centre case study.

At Brook Green Medical Centre (BGMC), the model of mentoring has evolved. The mentor at the BGMC is known as the Diabetes Self-Management Advisor and was initially recruited as a volunteer mentor, but has since undergone additional training. The Advisor has an honorary NHS contract with BGMC and works as a member of the diabetes team 1 day a week.

The practice runs a weekly diabetes clinic, attended by a GP Diabetes Specialist and/or Associate/Registrar, a Practice Nurse and the Advisor. Patients are reviewed on a 6-monthly basis. Referrals to the Advisor are made where there is scope to improve motivation, skills, behaviours, and diabetes knowledge, or when patients simply need more support.

The Advisor has seen roughly 250 patients on the BGMC diabetes register; half have had one session. The appointments are either direct referrals from the clinical team or the Advisor's own follow-up appointments. The clinician outlines the reason for the referral in the patient's consultation notes on SystmOne. The Advisor records his consultation notes on SystmOne underneath the GP's clinical assessment.

Consultations with the Advisor are normally 30 minutes, though extended consultations and subsequent consultations are agreed between the Advisor and the patient. The typical pattern of appointments is a series of weekly sessions followed by a less frequent schedule. The Advisor reports to other members of the diabetes team, with patients referred back to clinicians for further medical interventions as and when required.

Preliminary data on glycaemic control and weight loss for those who have seen the Advisor are positive. However, it is important to bear in mind that any changes recorded can not be attributed to the Advisor alone as there has not been a control group and we have so far not controlled for confounding factors.

BGMC case study

Patient A is a 74-year-old man of African–Caribbean origin and was diagnosed with type 2 diabetes in 1998. His glycaemic control since diagnosis has generally been very poor, with recorded HbA_{1c} ranging from 85–134 mmol/mol (9.9–14.4%). Following oral medication intensification, he began once-daily insulin-based therapy in 2008, then trying basal/bolus regimens, before settling on twice-daily bi-phasic insulin therapy in 2009. For a short time, his HbA_{1c} improved to 75 mmol/mol (9%); however, his prescribed daily dose of insulin increased from 40 units to 64 units in 2013 as his HbA_{1c} remained high. His BMI was 35 kg/m².

In 2014, he began having sessions with the Advisor. He became engaged, setting himself weekly target blood glucose goals and maintaining records. At each session he would attempt to explain and understand the reasons for any glycaemic variations. He then began to explore the impact that different foods had on post-prandial blood glucose levels. His HbA_{1c} improved to 62 mmol/mol (7.8%) in 2015 and his insulin requirement decreased to 28 units of insulin a day.

Currently, he has sessions with the Advisor less frequently and his latest HbA_{1c} was 53 mmol/mol (7%). He attends a weight loss programme – with the same level of engagement and energy as before. Most importantly, he regards these achievements as his own, and has now discussed further changes in oral therapies designed to help him achieve his weight loss goals.

Future work

The aim of BGMC and the local GP Federation is to recruit mentors to work in all practices through cross-practice referral to supplement the core medical and nursing NHS provision. This fits the stated local and national commissioning objectives to integrate all NHS, social care and voluntary sector services around the patient within new models of care by 2018.

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