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Executive summary of the Three Borough Diabetes Mentor Evaluation

In autumn 2014, the Behaviour Change team of the Three Borough Public Health Service commissioned an evaluation of the Diabetes Mentoring Programme, which started as a pilot in 2012, in order to answer the following key questions:

1. Do diabetes mentors in this programme improve the health of their mentees?
2. Does being a mentor have positive health impacts on the mentors?
3. What are the implications for staff, programme manager and mentors?

The evaluation consists of two parts, Section 1, a qualitative evaluation commissioned to *Collaborate* and Section 2 undertaken in-house using data extracted from GP clinical records, which describes the clinical characteristics of patients from four of the Practices involved and an analysis of any changes in a range of relevant clinical measures.

The programme aims to complement the diabetes care pathway by offering patients additional support to discuss non-clinical aspects of their condition, by providing one-to-one support to people living with diabetes (mentees) to help them develop effective techniques and strategies to improve their quality of life.

A comprehensive literature review was undertaken and the key findings tell us that peer mentors can be effective at:
- providing psycho-social support and education; helping patients psychologically come to terms with what they have been told by healthcare professionals;
- helping mentees put into practice what they have been taught by healthcare professionals and helping them 'navigate' complex healthcare systems like the NHS.
One systematic review of 25 studies on the effect of peer support on diabetes patients demonstrated a range of benefits:
- the metabolic outcomes of peer support were an improvement in HbA1c, cholesterol, BMI/weight, and physical activity;
- the mental health outcomes were an improvement in self efficacy, depression, and sociability.
However several studies that measured clinical indicators, including a Cochrane review looking at the effect of peer support on Hba1c control, did not find significant effect. Thus there is conflicting evidence for clinical effectiveness and it is currently difficult to come to a conclusion.

Methodology

The evaluation involved mixed methods including surveys, extraction from monitoring data, and interviews and then data extraction from GP records.
Data was sought from:

- Seven Practices who had hosted mentors and held regular diabetes clinics;
- Five community groups which were commissioned to deliver community based mentoring;
- Thirteen mentors who have practiced over the last three years;
- Mentees who have gone through the scheme and completed surveys.

There were challenges in the collection of data:

- Permission had to be sought retrospectively to contact mentees thus 27 mentees participated in surveys out of approximately 260 providing approximately a 10% response rate.
- Lack of sufficient monitoring forms from which to gather data including pre and post mentoring empowerment forms;
- Only Four practices provided clinical data, which in some cases was incomplete.

Mentee profile;

- Average age was 50- 60 and an even mix of men and women.
- The scheme was piloted in an area where overall disease rates were low and Practices tended to be in the middle deprivation bracket, though 50% of mentees came from BME communities.
- Participants usually had at least one co-morbidity. Most common were hypertension and mental health.
- Out of those recorded; two thirds were insulin-dependent, indicating a relative complexity of disease management.
- Participants displayed a lower smoking prevalence than national rates.
- Looking at baseline data, the participants had better cholesterol levels than local profiles suggested,
- The majority were obese with a mean BMI of 31.31 Kg/m^2.
- Glycaemic and blood pressure control were highly variable with mean values similar to target values although slightly worse when compared to local borough profile data.
- Average number of mentoring sessions were 4.3 session for those who had more than one taster session.

Mentors and mentees reported the following improvements

- Healthier eating,
- Increased physical activity,
- Losing weight,
- Understanding how to manage blood glucose,

- Adhering to treatment,
- Better self-care,
- Signposting to other appropriate services,
- General education about diabetes,
- Changes have been sustained.

GPs reported the main benefits to their Practices were helping patients to;

- Be more active
- Lose weight
- Eat healthier,
- Reduce anxiety and depression around diabetes
- Improve their understanding about diabetes

Practices did not comment on glycaemic control support but were confident in the mentor's ability to discuss physical activity, healthy diets, support behaviour change and diabetes self-care. Mentoring supported their patients to be better informed and to use consultations more productively.

Statistical analysis was carried out to elicit any *significant* change.
Clinically, a small significant change was seen in systolic blood pressure throughout the duration of the scheme and not on other measures. Given a mean duration of the scheme of 18 months, this is a modest clinical outcome, however the low frequency of visits may account for the limited impact. The data must be interpreted carefully, as no measure is made of confounders such as use of a dietician, change in practitioner, external events affecting self-motivation.

Concrete reductions in numbers of people above threshold levels for BMI, blood pressure and glycaemic control were seen throughout the duration of the scheme:

1 person stopped smoking.
2 people achieved healthy weight.
2 people achieved target glycaemic control (from paired analysis).
22 people achieved target systolic blood pressure.
21 people achieved target diastolic blood pressure.

Impact of the scheme on Practices and mentors;

Practices reported that having diabetes mentors as part of the team;

- Improved quality of overall patient offer and experience;
- Made for healthier more active patients;
- Enabled GPs to focus on clinical management during appointments;
- Led to greater self-management;
- Improved patient engagement;
- Did not increase workload;

- 100% of participating GP's would recommend the scheme;
- There was high satisfaction about the scheme from mentees, mentors and General Practice.
- GPs valued their mentors who offered good communication skills, knowledge of local community services, cultural awareness and time to spend with their patients.

Mentors reported

- High enjoyment and satisfaction from the role;
- Roles offered good work experience; (4 mentors found work)
- It supported their own wellbeing and self-management;
- They were more active, confident, positive and happier;
- They enjoyed the training and felt supported.

Costs of the scheme;

The budget needed for the mentor programme will vary depending on the project stage ie set up and development, then moving on to the delivery stage. Budget costs on average for the three Borough area per year are; £87,600 including Public Health staff time, but excluding this cost on average have been £72,000 per year. See appendix A.

Conclusions:

The scheme has been well received by people with diabetes, general practice, and mentors. The evaluation highlights a positive impact of the Diabetes Mentoring Programme, both in terms of self-reported outcomes and some clinical outcomes, on its beneficiaries. High levels of obesity indicate that the high frequency of discussion surrounding weight management and diet and health education during mentor sessions were appropriate. The scheme has also demonstrated favourable engagement with ethnically diverse groups, and those with poorer glycaemic control and BMI and with mental health problems indicating that the programme targeted those with higher need.

This evaluation finds that mentoring does improve self-reported psychosocial measures such as self-management and behaviour changes including increased activity and healthier diets. Mentoring did seem to support wellbeing and perhaps contributed to mental health though this was not measured.

A significant reduction in blood pressure was seen. If we accept that this drop is attributed to participation in the scheme, this is an encouraging addition to the body of existing evidence around diabetes peer mentoring. The improvement in blood pressure but not BMI or glycaemic control may reflect a greater impact of mentoring on medication adherence rather than diet.

Mentoring's impact on clinical measures is harder to measure than psycho/social issues. Other studies have shown it can be challenging to gather or capture clinically

meaningful changes. In hindsight this should have been built in at the beginning of the pilot.

Less mentor activity was done in the community; mentors seem to either prefer or find it easier to find mentees in primary care. There is not enough evidence to continue community based mentoring.

Mentoring works best when there is a blend of enthusiastic Primary Care staff and resourceful, confident mentors with a skill set which includes:

- 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.

In summary

There is growing enthusiasm for the mentoring scheme and recognition of the added value mentors provide in supporting self-care and wellbeing of people with diabetes. However the scheme does need to make a number of adjustments if it is to continue to greater effect.

Next steps:

Using data from this evaluation an options appraisal for the mentor scheme has been developed which considers the future direction for the service.

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Appendix A

Activity	**time**	**cost**
Project management and support of programme based on 2-3 days a week start up for a few months then 1 day a week	recurrent	£15,000
Room hire	Recurrent if in house meeting space unavailable	£3000
Design and developing of resources	One off	£6000
Printing and re printing of posters/leaflets	recurrent	£1000
New mentor training course and accreditation	Recurrent once a year	£5000
Joint Supervision by Diabetes Nurse Specialist and Project Coordinator - 6 sessions	recurrent	£500
Refresher training e.g. MI training	recurrent	£1000
Expenses to volunteers	recurrent	£500
Service level agreement to provide support to mentors who work within local community groups and to pay their mentors for their mentor work. £10k per organisation to provide a day a week at a GP practice plus community outreach and data entry.	recurrent	£40,000
Miscellaneous resources/costs	recurrent	£1000
subtotal		£73,000
20% Management on-costs, processing of expenses, office space, senior management time, salary on-costs.		£14,600
total		**£87,600**