Are you diabetes aware? A collaborative campaign to raise awareness of type 2 diabetes

Davinder Nagra, Sandie Nicholson, Bernie Stribling, Rod Moore

In 2008, NHS Leicester City and Pfizer Ltd collaborated in the development and delivery of an awareness and educational campaign for people with type 2 diabetes and those at risk of developing the condition. This article shares the experience of NHS–pharmaceutical industry joint working and knowledge gained about the development, delivery and evaluation of patient awareness campaigns.

he incidence of type 2 diabetes is increasing in the UK, and is of great concern in Leicester, which has both a high incidence and a high prevalence of the condition. This is having an increasingly deleterious effect on the health of the population and it is therefore vital to increase diabetesrelated primary and secondary preventative knowledge and awareness. This key health need triggered a project between a PCT and an international pharmaceutical company, which sought, in part, to assess the benefits of collaborative working.

Background

Leicester is ethnically diverse, with a significant south Asian population. Prevalence of type 2 diabetes in the south Asian population is approximately four times greater than in the white population (Moore and Watson, 2008). While genetic predisposition does add to the chances of developing type 2 diabetes, lifestyle factors such as poor diet and low levels of physical activity impact heavily on the risk.

Pfizer Ltd, an international pharmaceutical company, approached NHS Leicester City in 2008, indicating that it intended to undertake some local marketing linked to type 2 diabetes and cholesterol awareness. Given the high local incidence and prevalence of the condition, NHS Leicester City requested that the activities focus on the wider issues of type 2 diabetes.

Following discussion, the pharmaceutical company and NHS Leicester City formally agreed to collaborate on a bespoke, targeted awareness campaign that included a range of diabetes-related issues and was tailored to the needs of the local population. Development and distribution of the campaign materials was funded by the pharmaceutical company.

Working together

A cross-functional project team was established, including members of the public health team,

Article points

- Patient awareness and education in type 2 diabetes aims to help prevent the long-term complications associated with the condition.
- 2. NHS Leicester City worked together with a pharmaceutical company to develop a bespoke public awareness campaign.
- There is some indication of a positive impact as a result of the campaign but a conclusive impact cannot be demonstrated.
- Collaborative working was a positive experience and identified a range of learning opportunities and challenges, which have been used to shape future campaigns.

Key words

- CampaignCollaboration and
- partnership working - Education
- Patient awareness

Authors' details are given at the end of the article.



Figure 1. The two-sided patient leaflet designed to raise awareness of type 2 diabetes.

Figure 2. Bus shelter advertising – example of "out-of-home" media used in the campaign.



the diabetes strategy lead and colleagues from the pharmaceutical company. This team developed a project plan to include tasks and milestones, and a contract was put in place between NHS Leicester City and the pharmaceutical company, clearly outlining roles and responsibilities. It was agreed at the outset that the intellectual property (IP) of the campaign would sit with NHS Leicester City, as the foreground IP was being provided by them.

The collaboration

The project aims were:

- To encourage people with diagnosed type 2 diabetes to self-manage their condition to prevent complications.
- To raise awareness of the symptoms of, and risk factors for developing, type 2 diabetes, so that people can take steps to prevent or delay onset and, through earlier diagnosis, minimise the risk of long-term complications.

The pharmaceutical company's expertise in social marketing, in conjunction with the public health expertise in social marketing, led to the development of a stratified awareness campaign on diabetes.

Patient awareness – targeted at areas of highest need

A patient leaflet was devised by the project team, with input and feedback from a range of stakeholders including local colleagues, senior management, GPs, pharmacists and people with diabetes. The leaflet was double-sided with one side targeted at those who may be at risk of developing type 2 diabetes, and the other at those diagnosed with the condition (*Figure 1*).

The leaflet was mail-dropped to approximately 70 000 Leicester households in a designated area of the city, as informed from the social marketing data. It signposted people with diabetes to local pharmacies, GPs, practice nurses and specialist nurses for further information, advice and clinical support.

The Leicestershire website (www.leicestershire diabetes.org.uk) was also highlighted as a resource, as was the *Personal Diabetes Handbook*, produced by the University Hospitals of Leicester's diabetes team. The handbook was developed in conjunction with people with diabetes and healthcare professionals as a valuable resource for engaging discussion with people about managing their diabetes. Those without a handbook were asked to contact a local member of the public health team and were posted a copy.

The leaflet message was reinforced using "outof-home" media at bus shelters (*Figure 2*) and on the sides of buses in target areas of the city.

Engaging healthcare professionals and other key stakeholders

A pharmacy-based public health campaign was agreed with the Leicestershire Pharmaceutical Committee, creating an opportunity for pharmacists to promote the campaign messages and, where appropriate, signpost patients to the pharmacy-based cardiovascular (CV) disease screening pilot underway in the city.

Pharmacists were sent guidance on the campaign, copies of the leaflet and the handbook for reference purposes. All city-based general practices were notified of the campaign and provided with copies of the leaflet and further supplies of the handbook. NHS Leicester City communications staff were involved to raise media awareness of the campaign. Leicester libraries were notified of the campaign and given leaflets for display in their 18 branches.

The campaign was run in Leicester from 20 October to 16 November 2008.

Results

Thirty-six of the 76 local pharmacies provided feedback on the campaign, reporting the activity shown in *Table 1*. Responses were received from 29 of the 63 GPs asked to provide feedback on the campaign's impact (*Table 2*).

Public/patient awareness

Ten randomly selected GP practices were sent questionnaires in stamped envelopes and asked to send them to 10 randomly selected patients on their lists. Only 13 of the 100 questionnaires were returned. The findings from these are shown in *Figure 3*.

Evidence of action

Feedback on perceived action cannot be verified, but other action that can be measured more accurately included telephone calls and website visits.

Telephone calls

The Community Health Development Coordinator received 17 telephone calls from the public – all requested a *Personal Diabetes Handbook* and four also sought lifestyle advice.

In addition, the Ujala Translation Service received three telephone calls.

Website visits

The pharmaceutical company's experience of patient education campaigns suggests that for each telephone or postal enquiry, between 10 and 13 website responses will be received. However, in this campaign, this could not be shown from the data available to us.

NHS Leicester City health metrics

Quality and Outcomes Framework information The disease register for people with diabetes in Leicester City, as measured by Quality and Outcomes Framework (QOF) DM19, showed a higher increase in both numbers and percentage of total population than in the previous year (NHIS Investigator) (*Table 3*).

This pattern was not seen in the data for other East Midlands City PCTs (used as a benchmark) or in the national average figures (*Table 4*).

Table 1. Activity reported by 36 local pharmacies.

Activity reported by pharmacist	Total no. of patients/public
Clients browsing/taking leaflets	480
Clients asking for further information and/or guidance	154
Clients advised to contact GP	54
Clients referred to CVD screening pilot	25

Table 2. Feedback from 29 GPs on the impact of the campaign.

GPs' perception of campaign impact	No. of GPs reporting
Significantly more people asked me about diabetes management or their risk of	
developing diabetes	1 (3.4%)
There was a slight increase in the number of people who asked about diabetes management	
or their risk of developing diabetes	6 (20.7%)
Did not notice any impact of the campaign	22 (75.9%)

The relative success in identifying more people with diabetes in Leicester City cannot be conclusively attributed to the impact of the campaign, notably because of the pharmacy-led CV disease screening pilot in the city. However, these findings are encouraging, with an increase of 162 people recorded on the diabetes disease register over and above the expected increase.

It is too early to assess the impact on the management of people with diabetes in Leicester City, owing to the time needed to assess, monitor and review these individuals. However, if one assumes that these 162 people were treated in accordance with local diabetes guidance, the modelled impact on the health of Leicester City (compared with these 162 remaining undiagnosed) would be a reduction in 10-year CV disease risk of 19%, with 30 fewer CV events and eight fewer strokes over 10 years. This would produce a £104000 reduction in event costs (D'Agostino et al, 2000).

Discussion and lessons learnt Working together can add value

Collaboration between NHS Leicester City and the pharmaceutical company has brought shared expertise and contacts. The pharmaceutical company has offered new

Page points

- There was an increase of 162 people recorded on the diabetes disease register over and above the expected increase, although it cannot be conclusively attributed to the impact of the campaign.
- 2. If one assumes that these 162 patients were treated in accordance with local diabetes guidance, the modelled impact on the health of Leicester City (compared with these 162 remaining undiagnosed) would be a reduction in 10-year cardiovascular (CV) disease risk of 19%, with 30 fewer CV events and 8 fewer strokes over 10 years. This would produce a £104000 reduction in event costs.

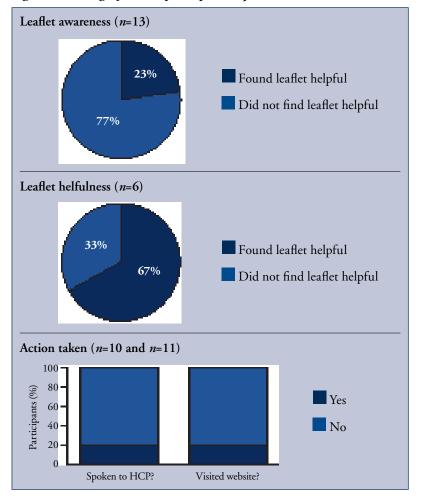


Figure 3. Findings of the completed patient questionnaires (n=13).

Table 3. NHS Leicester City Diabetes Disease Register.

	Number on disease register	Percent of total registered population	Increase over previous years
2006/2007	16 507	4.8	-
2007/2008	17 152	4.9	645
2008/2009	17 959	5.1	807

Table 4. National Average Diabetes Disease Register.

	Average number on disease register	Percent of total registered population	Increase over previous years
2006/2007	12908	3.7	-
2007/2008	13739	3.9	831
2008/2009	14 560	4.1	821

marketing and design routes, support in the form of general project and meeting facilitation and minutes, contract development, population stratification and funding.

NHS Leicester City has offered local press and healthcare professional contacts and communications, materials testing, evaluation, data collection and analysis, telephone support to enquirers, both the general public and healthcare professionals, and article and internal report production. More was possible because of the collaboration, with absolute honesty of intentions and transparency of process underpinning the work.

The call to action was understood and showed results

The inclusion of a telephone number in addition to the website address on the resource seemed to help. Calls were received from both the public and healthcare professionals. Campaign and pre-campaign communication to healthcare professionals seemed to result in renewed interest in the *Personal Diabetes Handbook* (preventing the "left in drawer" situation). The call to action in the form of "request a handbook to find out more" seemed to be understood, and was activated by both the public and healthcare professionals.

The mail drop, and display of the resource in other locations, such as GP practices and pharmacies, seemed to be noticed more than the bus shelter and bus advertising materials. This suggests that allocation of funds to the various campaign elements may warrant reconsideration in any future campaigns.

Feedback requests could be better targeted

Randomised selection of 10 of 63 GP practices for patient evaluation purposes may have reduced the number of positive replies received. Furthermore, both the GP and patient questionnaires were sent to GP practices across the city, whereas the awareness campaign was more focused in specific areas. In hindsight, perhaps a clearer picture could have been gained if the questionnaire had been sent to GPs and patients in the areas where the campaign was most focused. Although there was heavy advertising in areas such as Belgrave, there was no bus shelter or bus advertising in other areas, and no leaflet drops in a small part of the city. If GPs in areas with the most significant advertising had been targeted, greater patient and GP awareness may have been declared.

Greater GP communication and engagement could help

Few GPs reported awareness of the campaign, or increased impact of the campaign on patient enquiries. In some communications with surgeries, it was apparent that the campaign had not been adequately internally communicated to other practice staff. An event to promote any future campaigns to healthcare professionals pre-rollout may warrant consideration.

In addition, flagging the incentive of QOF improvements (which result in increased payments to practices) could be considered. Including practice managers in engagement activities may help to ensure that more GP staff are aware of the campaign. Consideration of a link to a prescribing incentive scheme or the NHS Leicester City Vascular Group may increase GP involvement.

More can always be done

Although all materials were tested, during the campaign the Equality and Human Rights Manager identified certain accessibility issues.

Some things take more time than thought

Engagement with Diabetes UK may have added benefits for people with diabetes, enabling linking to their local activity, offering endorsement possibilities and facilitating use of their translated resources. For any future campaigns, sufficient time to fully investigate the potential for engagement will be allowed.

Impact of patient awareness campaigns on health outcomes has not been proven

It is the professional view of a local public health epidemiologist that the available CV disease data reveal nothing about either health impact or outcomes. The data offer no information about what occurs when someone is referred to a GP, whether they attend an appointment or, if they do, whether they are diagnosed or prescribed treatment. Hence it is impossible to prove the health impact of this or any standalone patient awareness campaign.

It may be that resources (both staff time and finances) would be better allocated to interventions that have the capacity, in both design and depth, to produce quantifiable outcomes.

Conclusions

The campaign has shown a small impact on health outcomes, but the authors are unable to demonstrate a conclusive impact. However, it is clear from the interest shown that there is a need for accessible information and resources for people with, or at risk of developing, type 2 diabetes.

The collaboration between NHS Leicester City and the pharmaceutical company was positive and enabled more to be delivered. It was made possible by absolute honesty of intentions and transparency of process. Further work is proposed for 2010, taking on board the lessons learnt.

Authors

Davinder Nagra is Community Development Coordinator and Sandie Nicholson is Knowledge Management Coordinator/Public Health Information and Resources Manager, Directorate of Public Health and Health Improvement, NHS Leicester City, St John's House; Bernie Stribling is National DESMOND Manager, Leicester Royal Infirmary; Rod Moore is Associate Director of Public Health, NHS Leicester City, St John's House, Leicester.

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Page points

- 1. If GPs in areas with the most significant advertising had been targeted, greater patient and GP awareness may have been declared.
- In some communications with surgeries, it was clear that the campaign had not been adequately internally communicated to other practice staff.
- 3. An event to promote any future campaigns to healthcare professionals pre-rollout may warrant consideration.
- 4. Flagging the incentive of QOF improvements (which result in increased payments to practices) could also be considered.
- 5. It is clear from the interest shown that there is a need for accessible information and resources for people with diabetes and/or at risk of developing diabetes.