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Research paper

The role of healthcare assistants in screening for diabetes: a qualitative study

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ABSTRACT

Background From 2003 to Autumn 2005, the National Screening Committee established a diabetes screening programme in 24 general practices across England. An independent evaluation of the pilots was carried out and provides the context for this paper.

Objective To examine the expanding role of healthcare assistants in a national evaluation of the feasibility of screening for diabetes in general practice.

Design Qualitative case studies employing semi-structured interviews.

Sample Twenty-three staff working in general practice involved with a pilot diabetes screening programme in five general practices in four regions in England. Nine pilot programme facilitators from the nine English regions were also interviewed.

Findings Pilot screening for diabetes in four case study general practices was carried out by healthcare assistants who had been trained to carry out this task according to a practice-specific protocol. Staff in these practices described this as the most cost-effective and efficient way of organising and recording screening. Healthcare assistants themselves had grown into, and enjoyed, the increased responsibility of their roles. The remaining practice employed a practice nurse to carry out screening.

Conclusions Delegating protocol-based tasks to healthcare assistants was seen as beneficial to the practice and to the job satisfaction and self-esteem of healthcare assistants, and has the potential for further developments. However, evaluation of the effectiveness of screening and health promotion delivered by healthcare assistants is required before policy recommendations can be made.

Keywords: diabetes, healthcare assistants, primary care, screening

How this fits in with quality in primary care

What do we know?
Healthcare assistants are now an established part of the workforce in general practice, and their numbers continue to grow as they are employed to carry out a range of protocol-based tasks.

What does this paper add?
This paper demonstrates how both trained nurses and healthcare assistants can benefit when training is provided to enable staff who are not medically trained to carry out a wide range of patient contact tasks, including the provision of health information, which would release highly trained nurses for more specialised work. The findings demonstrate how practices could address an increasing workload by employing healthcare assistants in patient contact situations.

Introduction

Despite a number of diabetes screening initiatives in general practice there has only recently been a national pilot programme to examine the feasibility of different ways of organising screening.[1,2] Findings from the study described here are based on information from a national evaluation of the pilot programme.

The National Screening Committee, having reviewed the evidence on screening for type 2 diabetes, developed a pilot programme of screening in primary care, described as the Diabetes, Heart Disease and Stroke (DHDS) Prevention Pilot Project. This project was set up to develop diabetes screening and cardiovascular risk reduction programmes in 27 general practices in nine teaching primary care trusts (PCTs), one in each of nine English regions. One PCT withdrew before the start of the programme, leaving 24 practices. All recruited practices, some with large minority ethnic populations, were in relatively deprived areas of England where the predicted prevalence of type 2 diabetes (and the expected prevalence of undiagnosed diabetes) was relatively high. The National Screening Committee funded a project facilitator in each PCT to support participating practices in setting up the pilots in their region. The screening procedure, which was allocated between 15 and 20 minutes, began with eligible patients who arrived at the practice undergoing a 'finger-prick' test using a glucometer. The staff member who carried out the screening explained the result to the patient, and gave them lifestyle advice with regard to, especially, diet and exercise in a one-to-one consultation. Patients with a glucometer reading of 6 mmol/l or more were asked to attend for a diagnostic test either at the practice or at the hospital.

The objective of the pilot programme was to deliver screening to high-risk individuals in the pilot practices. An evaluation of the pilots was commissioned in 2004 by the UK National Screening Committee.[3] The aim of the evaluation was to assess the feasibility of screening for diabetes in general practice as well as to identify key issues for both practices and patients. The range of participating practices and different approaches to screening enabled exploration of different ways of delivering both screening and follow-up. The aim of the qualitative element of the evaluation which forms the basis of this paper was to explore the perceptions of staff who were practically involved with the screening programme.

This paper draws on findings from qualitative interviews with facilitators and a range of practice staff, including healthcare assistants, and examines the development of the healthcare assistant role and its impact on the primary care team as a whole.

Methods

A baseline survey undertaken at the outset of the evaluation to establish the extent of screening activity prior to the start of the DHDS programme provided the context for the qualitative study. Issues to be explored in depth were indicated by results from the baseline survey. These suggested that practices were adopting various organisational methods of implementing the pilot, using different grades of staff, and formed the framework for the topic guide. Previous work had shown that patient attitudes toward a service could affect the level of take up, and staff perceptions of patient attitudes were therefore included. A case study approach comprising semi-structured interviews was selected as the most appropriate method for generating multidimensional data incorporating the views of all staff involved in developing and implementing the screening process.

Sampling and recruitment

Case study practices were drawn from four English regions. Results from the baseline survey and consultation with PCT facilitators informed the selection of

five practices for case studies to ensure representation of a range of characteristics. Criteria for selection included geographical location, size of practice and urban centre, the proportion of minority ethnic patients, and the diversity of the minority ethnic population. Staff involved with the pilot in each case study practice were invited for interview, ensuring that those most involved in screening were invited. PCT facilitators from the nine English regions were interviewed.

Data collection

Staff were interviewed in private at their general practice. The interviewer (JC) used a schedule (see Box 1) to ensure that all appropriate topics were discussed while allowing any novel emergent lines of investigation to be pursued. These interviews enabled in-depth study of complex phenomena and captured the day-to-day experiences of screening in general practice. Interviews were audio-recorded and transcribed.

Box 1 Topics explored with staff

Topic included:

1 the way in which the screening programme was set up in each practice and the staff involved
2 the effectiveness of using various staff grades in terms of time and cost efficiency
3 any organisational issues and impacts on staff generally
4 staff perceptions of patient attitudes towards diabetes screening

Analysis

The framework system, appropriate for applied policy research, was used to analyse the data.[4] Categories and sub-categories were coded as the framework for assessing the range of issues relevant to the pilot developed. The data within subcategories were analysed for agreement and variation and developed into the themes described in the Results. Four members of the research team coded transcripts. Each transcript was coded by at least two people to strengthen consistency in coding and the identification of emergent themes.

Results

All 23 practice staff who were approached agreed to be interviewed as shown in Table 1. Nine PCT facilitators were interviewed.

Staff described the ways in which screening was implemented, and how the role of healthcare assistants had developed where these were employed.

> 'I think the healthcare assistants are good at this ... because their repertoire of tasks in general practice is quite limited and so it's been something that they could develop and quite enjoy ... giving the lifestyle advice and information about smoking and exercise and so on.' (Facilitator 1)

The healthcare assistants' training, and how their roles had evolved over the course of the screening pilots, were explored. Benefits and disadvantages for the practices and for the healthcare assistants emerged as some of the key issues.

Organisation of screening in practices

More than half of the 24 practices employed healthcare assistants to assist with screening. At the time of the interviews all staff carrying out screening had been established in their particular role for several months and were able to discuss relevant issues from a base of practical experience. While facilitators had explained to practice staff how to organise the screening, practice managers and practice nurses were generally leaders in

Table 1 Roles of staff interviewed in each case study

	GP	Practice nurse	Practice manager	Healthcare assistant	Administration assistant	Total
Case study 1	2	1	1	1	–	5
Case study 2	2	1	1	1	–	5
Case study 3	1	1	1	1	–	4
Case study 4	1	2	1	–	1	5
Case study 5	1	1	1	1	–	4
Total	7	6	5	4	1	23

setting up the systems for screening, with the practice manager taking responsibility for recruiting extra staff.

> '[Screening was organised by] a combination of me and the nurse ... the GP doesn't get involved because GPs are busy seeing patients ... and it does take organisation to set it up ...' (Practice manager 1)

At the time the interviews were carried out, four practices employed a healthcare assistant to carry out screening, while the fifth paid for a PCT-employed practice nurse.

Screening was perceived to be carried out more systematically, that is with more patients screened in each session, where staff were taken on specifically for DHDS:

> '... we've actually recruited our healthcare assistants specifically because of DHDS because we were very keen to get on board with it and we know the resource we started with wasn't big enough to support this programme, so we recruited two healthcare assistants and had them trained in phlebotomy.' (Practice manager 2)

Administrative and reception staff had key roles in identifying and inviting eligible patients. Practice nurses were initially closely involved, and several had taken on screening themselves at the start of the programme. Two case study practices had initially attempted to carry out the entire screening programme using practice nurses already in post, supported by administrative staff or practice managers, and another had considered that a practice nurse might do the screening:

> '... but then there was no practice nurse to do it.' (Practice nurse 1)

> '[At the start of the project] it was the practice nurses who were totally responsible for the calling and seeing. And we were trying to do them outside our hours, but a lot of the time it ended up being part of our clinics, patients would ring not saying what they were coming for, and then they would say ''I got a letter'', so a lot of it was done in our time.' (Practice nurse 2)

None of the practice nurses in the case studies had continued with screening because of time pressure. Practice nurses described how they had instilled in healthcare assistants the importance of referring patients to a nurse whenever they were uncertain of patient needs from their limited training. After initial misgivings, especially by GPs, on the ability of healthcare assistants to carry out screening, all staff who were interviewed had concluded that a healthcare assistant was the most appropriate level of staff for this task:

> 'I've worked with a lot with healthcare assistants and it depends on your healthcare assistant. So we made the job spec, you know, exactly what we wanted, and we knew we should get the right candidate.' (Practice nurse 3)

> 'We don't really want to use anyone more expensive than we can manage with.' (GP 1)

A healthcare assistant, already skilled in phlebotomy, and an administrative clerk comprised a dedicated team in one practice, working closely together while each became more expert and faster at their own task. Training in communication techniques completed the healthcare assistant's preparation:

> '... we got our psychologist to come and do one [session] on behaviour change for them [healthcare assistants] on how to deliver the information, how to deliver the advice.' (Facilitator 2)

This complementary team, led by the healthcare assistant, took responsibility for the DHDS programme, including providing health-promotion advice and keeping a record of all eligible patients and their outcomes.

Practices employing healthcare assistants who had been trained to provide screening were more likely to provide in-house oral glucose tolerance testing. This was perceived to benefit patients, who would otherwise have been obliged to attend hospital for the diagnostic test.

Healthcare assistant roles

The remit of healthcare assistants varied across the practices, as screening developed from its early concept of simply testing with the glucometer to include the provision of health-promotion information. Nurses in the study perceived that healthcare assistants increasingly took on tasks previously reserved to qualified nurses:

> '... she's actually a healthcare assistant now [carrying out screening] ... they wanted a qualified nurse I believe at one point in time. But I think a lot of it, they're not very sure [GPs] what a healthcare assistant, the role is, because we don't use them in the surgery. So when we explained that a healthcare assistant was perfectly adequate to do the screening ...' (Practice nurse 3)

Practice nurses were pleased that healthcare assistants relieved them of some mundane tasks, at the same time meeting patient expectations of ongoing health monitoring:

> 'They [patients] do love to have their health checks, they love their blood pressure checked, they think I'm walking around here just with a blood pressure machine. ''Oh please check my blood pressure nurse'' ... well most of them anyway.' (Practice nurse 4)

Some practice nurses, however, differed in their views on the requirement for a qualified nurse to carry out health promotion with patients. Some arranged for healthcare assistants to receive training in providing health advice, while others saw them as appropriate only to carry out screening:

> 'A healthcare assistant is the ideal person to actually do it [screening] because you would basically just screen and do their blood pressure, height, weight, working out a

BMI [body mass index] and filling a form in.' (Practice nurse 4)

This practice nurse apparently perceived a restricted role for healthcare assistants, and possible reasons for this view are discussed below.

Diabetes screening in four case study practices had been allocated to healthcare assistants as a dedicated task by the time of the interviews. Some had moved from other posts within the practice, sometimes a receptionist, after receiving training:

'I've got a link worker who helps with me for translation ... the link worker became the healthcare assistant.' (Practice nurse 4)

Benefits and disadvantages for healthcare assistants

Both healthcare assistants and other staff members, especially practice nurses and practice managers, perceived that extended responsibility had increased the healthcare assistants' confidence, commitment to patients and job satisfaction:

'I think our HCAs [healthcare assistants], it has helped their practice development, they've learnt something different. I'm trying to get them involved in the diabetes management because if they've screened the patient, done the GTT [glucose tolerance test], then they don't see the patient again, they will think, ''Well what happened to Mr so-and-so?'', so once we do the clinics I'm going to get the healthcare assistants to still see the patient and do their blood pressure and do some sort of education, and I think this way would work better.' (Practice nurse 1)

All healthcare assistants in the study were positive about the benefits of screening and tended to the view that discovering a pre-symptomatic diabetic patient would prevent further problems as a result of diabetes. Healthcare assistants who delivered lifestyle advice explained to patients that changes to diet and increased exercise would have major effects on future health and impede the advance of diabetes, so that complications would be less likely to develop. The responsibility, 'owning' the programme, and being important to the health of patients appeared to increase healthcare assistants' self-esteem:

'It's increased my workload which I love, really love, because if I was an ordinary receptionist, it would be boring. This is really great ... and I like measuring their waist and saying they have to go on a diet ...' (Healthcare assistant 1)

'I was most impressed with the ... not the voluntary uptake, but the people that came up and said ''Yeah, I want to be part of that'', instead of us asking.' (Healthcare assistant 2)

Healthcare assistants were pleased with having the opportunity to take part in the pilot, and demonstrated how their understanding of the benefits of screening was growing:

'It has been worthwhile because I think we have saved quite a lot of patients. Well saved them from ... not saved them, I should say helped them, to change their lifestyles because we are doing preventative medicine, so hopefully we are not going to see so many patients being admitted to hospital with a heart attack or being admitted to hospital with blindness. I think it's really trying to prevent complications ... we've done a good thing.' (Healthcare assistant 3)

Some healthcare assistants had poor information technology (IT) skills compared with practice nurses, and so in some cases records were not maintained adequately. These shortcomings were addressed by the practice manager in consultation with the GP. The main concern was expressed not by healthcare assistants, who saw their roles as permanently enhanced as a result of their success in carrying diabetes screening, but by managers and facilitators:

'... because the contract ends the end of September, so I've got to get them into the job market'. (Facilitator 2)

Senior practice staff were concerned that the patient contact role would cease when the pilots ended, and that healthcare assistants would then lose their commitment and enthusiasm.

Discussion

Summary of main findings

The roles of staff involved in screening delivery changed as the project progressed. Healthcare assistants were successfully recruited and trained for both a screening and a health-promotion role. They enjoyed the responsibility and professional respect they perceived as part of their crucial role in the early detection of diabetes and so in preventing patients from developing complications. Practice nurses were happy that healthcare assistants relieved them of mundane tasks, which allowed them more time for higher level interventions.

Strengths and limitations of this study

The growing literature on the developing role of healthcare assistants emerging mainly in nursing journals is largely anecdotal, and no report of research into their effectiveness or competency has been identified.[5–7]

Results from the practice activity element of the DHDS pilot's evaluation demonstrate extensive use of healthcare assistants to carry out the screening intervention.[3] This study reports findings gathered from across a number of different types of practice in different regions of England. They are therefore systematic rather than anecdotal as with previous work in this area.[8,9]

Findings from this study may not be generalisable to general practice on a national basis because of bias in the sample which specifically set out to recruit practices in areas of high deprivation, with relatively large minority ethnic populations.

Comparison with existing literature

The findings support previous literature recording anecdotal evidence of the benefits of employing healthcare assistants to enhance skill-mix. Across the case study practices it was reported that healthcare assistants were successfully recruited and trained to provide screening and health-promotion advice to healthy people. Employing healthcare assistants where appropriate lessens the time pressure for practice nurses, enabling highly trained staff to carry out procedures requiring special skills for which they have received training. Despite a lack of evidence supporting the cost-effectiveness of screening for patients,[10] an increasing range of health 'MOTs' continue to be introduced and are popular with staff and patients.[10,11] Evidence does, however, suggest that regular health checks performed by primary care nurses yielded small benefits in promoting improvements in patient diet and cholesterol levels.[10–12] The checks typically comprise protocol-based tasks which could be carried out by healthcare assistants, who have been employed in increasing numbers over the past decade for routine tasks that require no clinical training.[5,8,13] They are trained to perform protocol-based tasks such as phlebotomy, electrocardiograms, patient recall, recording results and monitoring of healthy patients.[8,9] Despite their performing an apparently growing number of tasks, the need for national regulation of the competency of healthcare assistants has been recognised, but is not expected to be formalised before 2007.[9,14]

In the same way that nurses have taken on some tasks previously reserved to GPs,[15] it has been suggested that maximising the skill-mix by using healthcare assistants to carry out routine tasks, and releasing highly trained nurses to duties more appropriate to their level of training, benefits both practice staff and patients. Findings generally supported previous literature, including the important benefit of providing increased patient contact time using healthcare assistants.[5–7]

Extending the role of healthcare assistants was also seen to incorporate further benefits of savings on wages, increased accessibility by patients as a result of greater numbers of staff, and more appropriate use of staff with medical training and qualifications, confirming anecdotal reports of these benefits.[5,9] Healthcare assistants and practice nurses perceived that patients preferred contact with a healthcare assistant because many reported enjoying the lack of time pressure compared with feeling rushed when seeing the GP or practice nurse, as reported by others.[9]

Conclusions and implications for practice and research

There is great enthusiasm from general practice teams with experience of healthcare assistants, to make more use of their skills. An extension of healthcare assistants' tasks could lead to potentially more efficient allocation of resources if findings described here were generalised to other areas within general practice. Findings from this study indicate that healthcare assistants could, with appropriate training, be utilised by practices to provide services such as screening and on-site blood testing.

A practice nurse indicated that her peers may feel threatened by healthcare assistants performing roles and competencies that were previously the domain of qualified nurses. Perceptions of the practice nurse role being usurped may represent a potential for conflict within the primary care team. However, staff in general practice might learn from past experience when some doctors perceived nurse practitioners to be a threat as their roles developed.[15] In conclusion, further work is required to assess the effectiveness of health-promotion/risk-reduction interventions offered to individuals by healthcare assistants, prior to making recommendations for policy.

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ETHICS COMMITTEE

The Trent Multi-Centre Research Ethics Committee approved the application (04/MRE04/52).

CONFLICTS OF INTERESTS

None.

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