Analysing training needs Part I: Questionnaire development

Anne Phillips, Paul Dromgoole

Introduction

With the evolution of diabetes networks, coupled with the alarming increase in the annual prevalence of diabetes (Yorkshire and Humber Public Health Observatory, 2005), diabetes care practitioners are currently facing the need for accessible and clinically relevant education and training opportunities to support their skills in clinical practice. This need has never been so paramount. This article is about how a focused subgroup of a diabetes network formulated and undertook a training needs analysis for primary care practitioners to assess education and training needs. This allowed the creation of a specific diabetes portfolio of clinically relevant educational opportunities. This article is part one of a two part series.

s part of the Selby and York Diabetes Network, a group of practitioners formed a clinical education and workforce planning subgroup (see Table 1 for group members). The group is representative of the healthcare practitioners employed within the primary care trust (PCT), and has two external general practitioners (GPs) for reference. The group meets regularly as a part of its remit in implementing standards 2-4, 7, 8 and 10-12 (Table 2) of the National Service Framework (NSF) for diabetes (Department of Health [DoH], 2001).

In response to the delivery strategy (DoH, 2004) the group undertook a workforce skills profile of all staff actually or potentially involved in the care of with diabetes. This accomplished by formulating a training needs analysis (TNA) questionnaire to capture the information required to respond effectively to practitioner needs. The TNA aimed to pinpoint areas of perceived expertise across the PCT community involved in the care of people with diabetes, and to make professional development activities more effective and efficient following a more objective assessment of need. The diabetes network clinical lead, a GP with a special interest in diabetes, externally assessed the TNA prior to its initiation.

Self-assessment of knowledge

There is evidence to suggest that health professionals' perceptions of knowledge in areas of practice, for example diabetes care, are no indication of actual knowledge (Tracey et al, 1997; Wiest et al, 2002). Therefore, the TNA needed some subtlety in design to encourage and elicit a depth and richness of information. Knowledge of healthcare professionals' different needs and/or different understanding of diabetes care is important when preparing them to be pro-active in patient education (Holmstrom et al, 2003).

Diabetes care is predominantly provided within primary care, and the disquieting prevalence of diabetes requires more practitioners to engage in effective and clinically relevant diabetes care delivery. However, diabetes care has often been 'checklist driven' and has focused on technical advice (Wikblad, 1991). Few studies have demonstrated a clear link between professional continuous development programmes and improved clinical outcomes for patients (Rosenqvist, 1995; Jordan, 2000). Therefore, with the advent of the diabetes competency framework (Skills for Health, 2004), a need now exists for a new and qualitatively different competency assessment for professionals engaged in providing care for people with diabetes. Reflecting on Skills for Health, the TNA also aimed to identify

ARTICLE POINTS

1 The accurate selfassessment of knowledge is often difficult for practitioners.

This training needs analysis reflects the aims of the National Service Framework Delivery Strategy.

3 Postal surveys can negatively impact on response rates.

4 Collaboration is the key to effective workforce skills planning.

KEY WORDS

- Workforce skills planning
- Diabetes networking
- Postal surveys
- Collaboration

Anne Phillips is Programmes Lead in Diabetes Education at the University of York. Paul Dromgoole is a Lecturer/ Practitioner in Diabetes at York Diabetes Centre and the University of York.

PAGE POINTS

1 The TNA was formulated to capture an overall picture of the need for ongoing education and training, and to highlight any specific needs that practitioners, engaged in delivering primary care for people with diabetes, feel they need.

Table 1. Members of the clinical education and workforce skills planning group for Selby and York Diabetes Network.

Group member	Role
Anne Phillips	Lecturer in Diabetes and Primary Care
Paul Dromgoole	Lecturer/Practitioner in Diabetes
Moria Carnazza	Practice Nurse
Carol Sucheski	Practice Nurse
Carey Trenchard	District Nurse
Jill O'Brien	Staff Nurse
Sarah Lomax	Diabetes Specialist Dietitian
Julie Thomas	Lead for Diabetes UK, Selby and York
Jim Khambatta	Health Planning Manager
John Reid	GP and Lead for Selby and York Diabetes Network

workforce needs, promote workforce development (Cantillon and Jones, 1999) and aim to ensure investment is made by the PCT to support practitioners in accessing 'supplied-side education and development that is driven by sector needs' (Skills for Health, 2004).

TNA preparation

The TNA was formulated to capture an overall picture of the need for ongoing education and training, and to highlight any specific needs that practitioners, engaged in delivering primary care for people with diabetes, feel they need. The TNA was piloted by two GPs, two practice nurses and one district nurse to check for usability and applicability for different professional groups. Some minor adjustments were made at this point, prior to its launch (Clifford and Clark, 2004). The TNA was

sent directly to 212 GPs, 98 practice nurses, 423 PCT community nursing staff, ten dietitians and 16 podiatrists employed across the PCT locality. The clinical education and workforce skills planning group is aware that this is a select range of practitioners, and others working, for example, in mental health or with people with learning disabilities were excluded on this exercise. This is something the group aims to encompass with the next mail-out (which will also incorporate the local acute trust) of the TNA.

TNA design

As Figure 1 demonstrates, a series of 18 questions were asked on page I of the TNA for practitioners to self-assess their training needs, and also for them to consider their level of competence along the novice-to-expert continuum (Benner, 1984; Peile, 2004). This Likert style of selfassessment is one of the most popular and is commonly used by psychologists and sociologists; the scale is also relatively quick to complete (Bowling, 2002). To add depth to the responses on the 'very poor' to 'very good' scale, we also asked respondents to highlight whether they had received their perceived level of competence from formal education, clinical practice, a combination of the two or This concept initiated the exploration of each practitioner's individual practice, and self-reflection on his or her educational needs.

Table 2. National Service Framework for diabetes standards implemented by the clinical education and workforce planning group (DoH, 2001).

Standard 2	Identification of people with diabetes
Standard 3	Empowering people with diabetes
Standard 4	Clinical care of adults with diabetes
Standard 7	Management of diabetic emergencies
Standard 8	Care of people with diabetes during admission to hospital
Standards 10–12	Detection and management of long-term complications

Diabetes Training Needs Analysis

Dear Colleague. We would be most grateful for a few minutes of your time, spent completing this training needs analysis in order for us to plan future diabetes training opportunities locally

Please indicate your present knowledge of diabetes: (please tick across each row)

	0 very	2	2 3	4 very	How has this knowledge been achieved? (please tick any that apply) Formal Clinical Neither			Would you be interested in local training on this aspect of diabetes care? (please tick)	
	poor			good	Education	Practice	Neithei	Yes	No
Overall knowledge of diabetes									
Type I diabetes - disease process									
Type 2 diabetes - disease process									
Type I - risk management strategies									
Type 2 - risk management strategies									
Acute complications (e.g. Hypo, DKA, HONK)									
Long-term (vascular, neuropathic) complications									
Oral hypoglycaemic agents									
Insulin therapy									
Insulin devices and glucose meters									
Foot assessment and foot care									
Dietary issues									
The diabetes annual review									
Developing personal care plans (Standard 3 of the NSF)									
Care of the housebound person with diabetes									
Psychosocial implications in diabetes									
Interpreting results (blood glucose, HbA _{1c} , urinalysis)									
Care of person in prison									

Figure 1. Page one of the Diabetes Training Needs Analysis document.

PAGE POINTS

1 The training needs analysis (TNA) was sent out with a covering letter which was signed by key members of the diabetes network (including the diabetes clinical lead and the leads of the planning subgroup) to inform respondents of the principles underlying the TNA philosophy.

2 The forms were colour coded for each professional group which enabled clearer analysis of the results.

3 A number of 'hot topics' were identified as key areas of educational and/or training need.

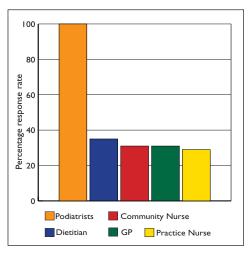


Figure 2. Training needs analysis questionnaire response rate by professional group.

Existing evidence suggests that this type of scale is very difficult to fill in accurately (Woodcock et al, 1999). We were aware of this in the design of the TNA; therefore, we aimed to elucidate a more thorough exploration of practitioners' actual or potential needs by expanding the TNA to incorporate a section which allows practitioners to highlight any specific areas they would appreciate further education or training in. In part two of this article series (to be published in the *Journal of Diabetes Nursing* volume 9 number 8), further qualitative data will be presented from pages two and three of the TNA.

The results of the TNA were collated by the members of the clinical education and workforce skills planning group and were statistically analysed by Dr Jeremy Miles,

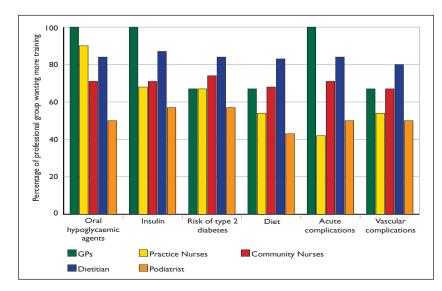


Figure 3. The six hot topics as identified by professional group.

Statistician at the University of York.

Response rate to the TNA

Evidence suggests that practitioners are flooded with questionnaires, aiming to elicit their opinions, but with no perceived action based on their responses (Morris et al, 2001; Kaner et al, 1998), so we were prepared for a poor response rate. Therefore, the questionnaire could be deemed to be of little value and a waste of valuable time to complete. Given this possible negativism, the TNA was sent out with a covering letter which was signed by key members of the diabetes network (including the diabetes clinical lead and the leads of the planning subgroup) to inform respondents of the principles underlying the TNA philosophy. This allowed the TNA to have ownership and a more strategic direction. The forms were colour coded for each professional group, which enabled clearer analysis of the results and, therefore, paid particular attention to valuing the practitioners' responses and ensuring that their opinions were to be used in the process of formulating and designing further diabetes educational opportunities pertinent to their needs. We were pleasantly surprised to find we had a somewhat better response rate than anticipated (Cummings et al, 2001; see also Figure 2).

Initial results of the TNA

The results of the TNA were interesting and informative as they elicited some common themes. A number of 'hot topics' (i.e. areas that scored very low with a number of practitioners) were identified as key areas of educational and/or training need (Figure 3). This, perhaps, not only reflects the metamorphosing role of the diabetes care practitioner in primary care but also highlights current clinical interest.

Although support has generally been acknowledged as a critical factor in adapting and coping with a multi-faceted condition such as diabetes for patients receiving care and for the practitioners providing the care (Thorne and Paterson, 2001), the evidence from the results of the TNA demonstrates that if educational opportunities are to be accessed and have

a meaningful application in practice, then programmes will be more effective if they are based on their participants' learning needs (Davis et al, 1995).

The collaborative approach adopted by the network subgroup in the formulation of TNA, and the analysis and interpretation of its results is an essential element in valuing practitioners and working synergistically, thus supporting their ongoing development, and responding to their educational needs by providing clinically relevant, effective and evidencebased educational opportunities to support the primary care team in practising effective diabetes care. This foundation also contributes to the DoHclinical governance framework, and the NSF for diabetes. Part two of this series will present the results of the TNA in more detail and will represent more qualitative data. The representation of this in the process of workforce skills planning will also be presented.

- Audit Commission (2001) Diagnostic Primary Care Self Assessment Tool. Audit Commission, London. Available at http://www.diabetes.audit-commission. gov.uk/pcatcomment.htm (accessed 10.08.2005)
- Benner P (1984) From novice to expert: Excellence and power in clinical nursing practice. Addison-Wesley, California
- Bowling A (2002) Research methods in health: investigating health and health services. 2nd ed. Oxford University Press, Buckingham
- Cantillon P, Jones R (1999) Does continuing medical education in general practice make a difference? British Medical Journal 318(7193): 1276–9
- Clifford C, Clark JE (2004) Getting research into practice. Churchill Livingstone, Edinburgh
- Cummings SM, Savitz LA, Konrad TR (2001) Reported response rates to mailed physician questionnaires. Health Services Research 35(6): 1347–55
- Davis DA, Thomson MA, Oxman AD, Haynes RB (1995) Changing physician performance. A systematic review of the effect of continuing medical education strategies. *Journal of the American Medical Association* **274**(9): 700–5
- Department of Health (DoH; 2001) National service framework: Standards. DoH, London

- DoH (2004) National service framework for diabetes: One year on. DoH, London
- Holmstrom I, Halford C, Rosenqvist U (2003) Swedish health care professionals' diverse understandings of diabetes care. *Patient Education and Counseling* **51**(1): 53–8
- Jordan S (2000) Educational input and patient outcomes: Exploring the gap. *Journal of Advanced Nursing* **321**(2): 461–71
- Kaner EF, Haighton CA, McAvoy BR (1998) 'So much post, so busy with practice—so, no time!': A telephone survey of general practitioners' reasons for not participating in postal questionnaire surveys. British Journal of General Practice 48(428): 1067–9
- Morris CJ, Cantrill JA, Weiss MC (2001) GP survey response rate: A miscellary of influencing factors. Family Practice 18(4): 454–6
- Peile E (2004) How can experts and novices learn together? British Medical Journal 329: 902
- Rosenqvist U (1995) Diabetes service management training and the need for a patient perspective: A 10-year evolution of training strategies and goals. Patient Education and Counseling 26(1-3): 209-13
- Skills for Health (2004) Diabetes national workforce competence framework guide. Skills for Health, Bristol. Available at http://www.skillsforhealth.org.uk/files/630-Guide.pdf (accessed 10.08.2005)
- Thorne SE, Paterson BL (2001) Health care professional support for self-care management in chronic illness: Insights from diabetes research. Patient Education and Counseling 42(1): 81–90
- Tracey JM, Arroll B, Richmond DE, Barham PM (1997)
 The validity of general practitioners' self assessment
 of knowledge: Cross sectional study. *British Medical Journal* **315**(7120): 1426–8
- Wiest FC, Ferris TG, Gokhale M, Campbell EG, Weissman JS, Blumenthal D (2002) Preparedness of internal medicine and family practice residents for treating common conditions. *Journal of the American Medical Association* **288**(20): 2609–14
- Wikblad KF (1991) Patient perspectives of diabetes care and education. *Journal of Advanced Nursing* 16(7): 837–44
- Woodcock AJ, Kinmonth AL, Campbell MJ, Griffin SJ, Spiegal NM (1999) Diabetes care from diagnosis: effects of training in patient-centred care on beliefs, attitudes and behaviour of primary care professionals. *Patient Education and Counseling* **37**(1): 65–79
- Yorkshire and Humber Public Health Observatory (2005) Diabetes Population Prevalence Model. University of York, York. Available at http://www.york.ac.uk/yhpho/resources_diabetes.htm (accessed 10.08.2005)

PAGE POINTS

The collaborative approach adopted by the network subgroup in the formulation of the TNA, and the analysis and interpretation of its results is an essential element in valuing practitioners.

Diabetes care is predominantly provided within primary care, and the disquieting prevalence of diabetes requires more practitioners to engage in effective and clinically relevant diabetes care delivery.