



# Progressing diabetes nursing in Europe: the next steps

A Forbes\*

## The diabetes dilemma

It is forecast that by 2030 there will be close to 70 million people with diabetes in Europe.<sup>1</sup> While this increase is largely related to the rise in type 2 diabetes, the numbers of patients with type 1 diabetes are also increasing, particularly in the under-five population.<sup>2</sup> In addition to the rising numbers of diabetes patients there are increasing expectations from patients as to the type of care and support they receive.<sup>3</sup> There is also increasing pressure to achieve much better diabetes care, with ever tighter clinical targets.

Diabetes care is further complicated by the increasing range of technology to support diabetes care, with more pharmacological agents, telecare support and psycho-educational interventions being available. While innovations in treatment are important and can benefit patients, they also mean that health professionals now have to make much more complex decisions in choosing therapies to meet the patient's metabolic profile and needs. Finally, there is the added problem in many countries of either an aging or an under-developed diabetes workforce, reducing the capacity of the

## Summary

This paper explores the current challenges confronting diabetes care provision in Europe and outlines how diabetes nurses can help address those challenges. The paper aims to stimulate discussion between diabetes nurses, such that we begin to develop new ways of working to enhance the nursing contribution to diabetes care.

health care system in meeting the demand for diabetes care.

In recent decades there has been much progress in the way that diabetes care has been delivered. Studies have shown that the numbers of patients achieving better clinical outcomes are increasing.<sup>4</sup> However, these improvements may be difficult to sustain in the face of increasing demand. We recently compared data between 2003 and 2007 on patients with poor control ( $HbA_{1c} >9\%$  [75mmol/mol]) from a large UK diabetes data set and found that, while the proportion had reduced from 14% to 12%, the overall number of patients with poor control had increased by 2580. Therefore, there will be increased demand for managing patients who have poor diabetes control, with such patients requiring more time and resource.

It is important to recognise that diabetes is not a homogenous disease and there are variations in needs of different groups of patients: older people; adolescents; ethnic minorities; women's health; people with mental health problems; and the obese population. Each group demands a different model of care. Furthermore, while diabetes care has become very systematic and guideline orientated over recent years, there is now a trend toward the development of more individualised care based on the principles of care planning and

empowerment.<sup>5</sup> Therefore, diabetes management will demand more subtle systems that involve patients in decision making, while ensuring that patients access the clinical care they need in a timely manner.

The diabetes dilemma also impinges on patients. There is an increasing emphasis and demand placed on patients to adopt ever more complex self-management practices. Patients have to take more therapies, use more complex technologies, perform more monitoring and take on board more lifestyle advice. There is also continuing evidence to show that many patients find it difficult to adapt to life with diabetes and master their self-management routines.<sup>6</sup>

## Diabetes nurses' contribution

Nurses are one of the largest components of the diabetes workforce. Therefore, nurses must play a significant part in addressing the diabetes dilemma. There are potentially three key areas where nurses can make a significant contribution: prevention; supporting self-management; and in developing more effective care systems.

## Primary prevention

Clearly, reducing the number of patients with diabetes is a vital element in managing current demand. There is very good evidence to show that educational programmes can

## Author

Professor Angus Forbes, BSc, MSc, PhD, RGN, RHV, DNcert, CPT, FEANS

\*Correspondence to: Prof Angus Forbes, Clinical Chair in Diabetes Nursing, Department of Primary and Intermediate Care, Florence Nightingale School of Nursing and Midwifery, King's College London, James Clerk Maxwell Building, 57 Waterloo Rd, London SE1 2AW, UK; e-mail: angus.forbes@kcl.ac.uk





prevent or delay the onset of diabetes.<sup>7–11</sup> These data show that lifestyle interventions can independently reduce the incidence of diabetes by between 10 and 58%. The key educational components of these programmes include:

- Screening to target high risk individuals.
- Education on exercise and diet.
- Individual lifestyle coaching.
- Introducing clear lifestyle thresholds/limits – food units (maximum per day) and activity units (minimum per day).
- Treatment to targets (>5% weight loss).
- Food diaries.
- Free exercise classes or gym access.
- Regular feedback and ongoing follow up.

The challenge has been in translating these programmes into routine practice. A recent European project has addressed this problem and has produced a practical tool for delivering diabetes prevention, the IMAGE project (Development and Implementation of a European Guideline and Training Standards for Diabetes Prevention).<sup>12</sup> Nurses are identified in this project as being one of a number of professionals who can contribute to a multidisciplinary model of care to support lifestyle change. However, to date there is not a great deal of evidence to show how nurses contribute to diabetes prevention.<sup>13</sup> If nurses are going to make a contribution to prevention and deliver projects such as IMAGE, they will require additional skills in areas such as:

- Motivational enhancement: skills training in supporting behaviour change interventions drawing on psychological interventions such as motivational interviewing.
- Lifestyle strategies: skills in offering effective advice and treatments for patients at risk of diabetes.
- Screening: skills in both identifying high risk individuals and in

using different risk assessment tools and procedures.

- Community and public health work: skills in building community resources and managing public health interventions for diabetes prevention.

#### *Self-management support*

Self-management support is an essential element of diabetes care. Diabetes nurses have played a significant role in developing self-management for people with diabetes.<sup>14</sup> This role involves interpreting the meaning of events and medical instructions for patients, monitoring treatment effects, modulating therapy and referring to or conferring with other professionals and services. Recent years have seen significant developments in self-management support. In a recent scoping review of self-management support we identified a number of different innovations in such support, in particular the expansion of structured education and empowerment models. There was also evidence of hybrid models that integrate an educational and psychological approach.<sup>3</sup>

Care planning models are also being used by diabetes nurses. Care planning has been defined as a process which offers people with diabetes active involvement in deciding, agreeing and owning how their diabetes is managed.<sup>5</sup> Key principles for care planning include: negotiation and joint decision making; patient centredness; developing a partnership with the patient, balancing the clinician's knowledge on disease pathology with the patient's individual experience; developing an ongoing two way communication; and being transparent and explicit about the process. Care planning is part of patient education and self-care support, and involves the application of adult learning principles (learning by doing, learning from mistakes and building self-efficacy). Therefore, effective care planning demands a

high level of consultation skills from nurses in eliciting care needs and in building patient confidence and competence.

However, despite these developments the self-management support provided by nurses needs further development and research. Presently, patient education is not well integrated within the care system and can be somewhat *ad hoc*, with variations between areas as to what is provided.<sup>3</sup> There are also variations across Europe as to the extent to which nurses are involved in delivering programmes of self-management support.<sup>15</sup> The scoping report we undertook suggested a number of areas for improvement; these included:

- The need for a diabetes education pathway: this pathway should define and integrate self-management support from diagnosis to end-stage care with regular follow-up sessions to support and extend self-care mastery.
- The need to integrate self-management support and clinical care: ensuring that self-management is linked to the adoption of effective treatments.
- The need to develop more inclusive models for delivering diabetes self-management support: if care resources are to be used efficiently there is a need to clearly identify the target population and ensure that the support provided addresses the needs of that population as a whole.

#### *Care system design and management*

Given the high volume of patient numbers and the complex range of care technology now being used in diabetes, the way that the health care system is organised is increasingly important. Historically, nurses have played an important role in shaping the way care is organised and have helped champion innovative ways of managing diabetes care.<sup>14</sup> Diabetes nurses, therefore, need to consider how best to enhance the care system to manage the current diabetes



dilemma and improve patient care experiences and outcomes. In our recent scoping report on diabetes care we identified some areas for care organisation that nurses might consider; these included:

- Access: ensuring that patients can access good quality care when they need it.
- Integration: the need to have greater integration between primary care and specialist diabetes services.
- Continuity: ensuring that there is consistency in care between professionals and across care settings.
- Inequalities: the need to tackle inequalities in care provision with more systematic models for monitoring and profiling care outcomes to highlight inequalities locally, nationally and internationally.
- Efficiency: at present many patients are locked into care models that consume resources, but which do not achieve any benefit for the patient.
- Patient involvement: involving patients in developing care systems and services may improve the way in which care is delivered and increases its responsiveness to the local patient population.
- Workforce development and deployment: the need to develop optimal skill sets for professionals working in diabetes (at different levels).
- Informatics: better informatic systems to enhance patient engagement and provide feedback, improve the flow of information, improve performance monitoring and quality assurance, and inform service redesign.

**Extending the contribution of nurses (education and research)**

If diabetes nurses are going to deliver on their potential in addressing the diabetes dilemma, they must develop and share effective models of care. This requires mechanisms for generating new knowledge (research) and mechanisms for transferring that knowledge into

clinical care (education). Therefore, diabetes nurses in Europe need to develop a coherent strategy for both research and education.

In terms of research, we need to develop collaborative programmes of research focusing on a wide range of clinical topics, including diabetes prevention, self-management interventions and care systems development. Such research needs to develop and test care models and interventions that will make a difference to the lives of people with diabetes.

In terms of education, we need to develop transferable models of professional education that have an impact not only on the professional but also on the care they deliver. It has been identified that nurses will require new skills in addressing the current diabetes dilemma. It is also important that we develop mechanisms to assess the impact of training and education on clinical performance and care outcomes.

**Conclusion**

The rising demand for diabetes care could destabilise diabetes care across Europe, undermining recent improvements and impeding further developments in care provision. Therefore, a key challenge for diabetes nurses in Europe is to develop and disseminate models of care that will meet this demand. This paper has highlighted three key areas in which diabetes nurses could have a significant effect in ameliorating some of the difficulties confronting diabetes care. However, this potential can only be realised through the development of a robust knowledge base together with effective methods for knowledge transfer, to ensure maximum patient benefit. Therefore, if diabetes nursing in Europe is going to continue to progress, the next steps must be to develop a strong platform of collaborative research, together with an integrated framework for professional education and development.

The author would be delighted to hear from any diabetes nurses who might be interested in further developing such an agenda.

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