

Diabetes care in Scotland: progress in the seven priority areas

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ARTICLE POINTS

1 The Scottish Diabetes Framework outlines seven priority areas in diabetes care.

2 Progress towards achieving these priorities has received some central support.

3 Managed clinical networks encourage structured care across NHS boundaries.

4 Collaboration promotes sharing of best practice.

5 Locally developed initiatives can be adapted and adopted by other areas.

KEY WORDS

- Diabetes care
- Scottish Diabetes Framework
- Managed clinical networks
- Local initiatives

Introduction

The Scottish Diabetes Framework (Scottish Executive Health Department, 2002), in conjunction with the Scottish Intercollegiate Guidelines Network Management of Diabetes guideline (SIGN, 2001) and the Clinical Standards: Diabetes document (NHS Quality Improvement Scotland, 2002), has formed the basis of much of the developments and progress in diabetes care in Scotland in the past two years. The Framework identified 22 building blocks of care, seven of which were considered to be priorities. This article describes progress in the seven priorities, and some of the other initiatives being implemented in Scotland.

The Scottish Diabetes Framework (Scottish Executive Health Department [SEHD], 2002) identified seven priorities for diabetes care:

1. Strategy, leadership and teamworking
2. Patient information, education and empowerment
3. Heart disease
4. Eye care
5. Professional education
6. Information management and technology
7. Implementation and monitoring.

Linked to each building block was a series of action points and milestones, aimed at ensuring that health boards reached the targets within a realistic time frame. Some finance was made available by the Scottish Executive to assist in attaining some of these targets, but most of the resources had to be found locally. Progress towards the targets has varied from health board to health board, but some national initiatives have supported local developments.

1. Strategy, leadership and teamworking

The framework advised that all 15 health boards in Scotland should move towards the establishment of managed clinical networks (MCNs) for diabetes. These have been described as:

'Linked groups of professionals and organisations from primary, secondary and tertiary care, working together in a coordinated manner, unconstrained by existing professional and health board boundaries to ensure equitable

provision of high quality and clinically effective services throughout Scotland.' (Scottish Office, 1998)

The Scottish Executive provided each health board with funding for 2 years to establish MCNs. This has resulted in a clinical lead and an MCN manager or diabetes coordinator being appointed in each of the 15 health board areas. Quality Improvement Scotland (QIS) has developed a draft accreditation document for MCNs, but to date only Tayside is fully accredited as an MCN for adult diabetes services.

Other diabetes MCNs fulfil many of the criteria but have not yet gone through the formal accreditation process, which requires the development of at least five standards encompassing:

- organisation: management arrangements and accountability
- patient information and education
- multidisciplinary working
- staff education and training
- audit and monitoring.

Other standards can be developed as required.

Table 1 summarises the MCN criteria.

2. Patient information, education and empowerment

A principal ingredient of MCN accreditation is patient and public involvement. There is a strong national group – the Patient Focus Implementation Group (PFIG) – which advises on patient-specific issues.

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The initiatives currently being considered are the implementation of Dose Adjustment for Normal Eating (DAFNE) in Scotland, and the introduction of a buddy system that will provide non-professional support to those with diabetes. Two sites in Scotland – Glasgow and West Lothian – are joining with the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed (DESMOND) randomised controlled trial, and a training module for those newly diagnosed with type 2 diabetes is being put together by a collaborative group of healthcare professionals.

A video on childhood diabetes has been produced. Also under development are standardised education materials for people with diabetes and a further two videos, one on diabetes and pregnancy and one on converting from oral hypoglycaemic agents to insulin. These materials will be available to all those who require them throughout Scotland.

MCNs are establishing their patient focus groups to inform the involvement of patients within the organisation and to address local issues. Many of the issues that arise from consultation with patients are concerned with consistency of professional knowledge and the duplication that occurs in care. Full implementation of Scottish Care Information – Diabetes Collaboration (SCI-DC) (see below), the development of educational strategies and the delivery of appropriate learning to all staff involved in diabetes care should go some way to addressing these concerns.

3. Heart disease

The close association between diabetes and heart disease has encouraged the linking of diabetes MCNs with MCNs for stroke and cardiovascular disease. This is promoting networking and sharing of best practice, and many of the disease protocols can be shared.

A new initiative in some health board areas is the establishment of cardiovascular risk clinics, run by pharmacists. These are designed to ensure that those with diabetes at a high risk of heart disease or stroke are seen on a regular basis and advised on appropriate medication adjustment. These clinics are being held in both primary and

Table 1. Principles of a managed clinical network

Each MCN must have:

- Clear management arrangements
- A defined structure
- A clear statement of the specific clinical and service improvements that patients can expect
- A documented evidence base
- A multidisciplinary focus
- A clear policy on dissemination of information to patients
- Agreement from all involved professionals to work within the principles of the MCN
- A quality assurance programme acceptable to Quality Improvement Scotland
- A commitment to exploiting educational potential to the full
- A commitment to ongoing audit
- Appropriate continuing professional development programmes for all members of staff
- A commitment to pursuing value for money

secondary care centres.

4. Eye care

The national screening service for diabetes retinopathy is due to be fully implemented by March 2006, and the health boards in Scotland are working towards this target. This service will offer all those with diabetes the opportunity to undergo annual digital retinal photography. The photographs will be graded by trained graders and will be able to be viewed on the SCI-DC network, which will also be instrumental in undertaking call and recall.

The service is being developed to suit local needs, but will consist of a combination of fixed and mobile cameras to ensure that all patients, whether in urban or remote and rural settings, have access to the service. Many nurses have been recruited as retinal screeners and will also undertake first-level grading of the photographs.

5. Professional education

Many professional education courses are available throughout Scotland, and it was recognised by the professional education subgroup of the Scottish Diabetes Group that they offered a wide variety of

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1 A Masters level course for training DSNs, which has academic recognition from the University of Dundee, has been developed.

2 The first course was delivered in Stirling in mid-September 2004. An annual intake is planned.

3 The Scottish Care Information – Diabetes Collaboration (SCI-DC) products allow an electronic patient record to be shared between primary and secondary care clinics.

4 A team of DSNs has been convened to develop screens for diabetes nursing, which will interface with the SCI-DC network.

5 This presents a unique opportunity for the development of an information system that will enable diabetes nurses to record their clinical care and education, and to audit their care without resorting to complicated queries or cumbersome paperwork.

educational standards and course content. Working with NHS Education, Scotland (NES), the subgroup has produced a planning resource for professional education (NES, 2004), which was published at the end of August 2004. It incorporates the *Competency Framework for the Care of a Person with Diabetes* (NES, 2003) and provides the means by which an MCN can undertake a training needs analysis, identifying the core curriculum for diabetes education for non-specialist staff. Each MCN will be able to develop an educational strategy for diabetes, which can be part of an overall health board strategy for continuing professional development.

The document will be used by education providers to inform course development in diabetes, based on clinicians' needs rather than educationalists' needs. Until the full course NES accreditation process is completed, which can take up to 18 months, there will be the opportunity for education providers to achieve course approval if they show that they can deliver the course curriculum.

A Masters level course for training diabetes specialist nurses (DSNs) has been developed. This has academic recognition from the University of Dundee, and the first course was delivered in Stirling in the middle of September 2004. It is proposed to have an annual intake. Glasgow Caledonian University has also developed a Masters level module aimed at the multidisciplinary team. Other academic institutions are also using the competency framework (NES, 2003) to develop advanced level diabetes courses, many using distance or e-learning media.

6. Information management and technology

The work done by the Diabetes Audit and Research in Tayside (DARTS) team has been widely reported, and the technology developed by the team is now part of the SCI-DC products being rolled out across Scotland.

The products comprise two main systems:

- *SCI-DC Clinical* is an access-based system that is available to all secondary care clinics and provides a comprehensive clinical management system, with good

audit facilities.

- *SCI-DC Network* is the web-based system into which a variety of other systems can feed and which forms the basis of a shared, electronic patient record.

The SCI-DC products allow an electronic patient record to be shared between primary and secondary care clinics, and also reduce the need for double data entry. Currently, three health boards are live with the system and a fourth will be live within the next two months or so. The other health boards are all committed to using the system, and local implementation depends on the support and enthusiasm of local clinicians and information management and technology services.

There is still much work to be done. There is currently only one primary care system – General Practice Administration System for Scotland (GPASS) – with an interface to the SCI-DC network, but other primary care system providers are being encouraged to develop interfaces.

Data screens are being developed for allied health professionals, to facilitate data entry for process and outcome measures. The podiatry and dietetic screens are well on in development, and the paediatric screens have been agreed by the Scottish Study Group for the Care of Diabetes in the Young.

A team of DSNs has been convened to develop appropriate screens for diabetes nursing. This group has a unique chance to develop an information system that will be custom made for diabetes nurses to record their clinical care and patient education, and will also provide a user-friendly tool for them to audit their care without resorting to complicated queries or cumbersome paperwork.

The current system is based on a unique patient identifier linked to a national database, so that demographic information is automatically updated nightly as required, and the record moves with the patient. A challenge for the future will be to make it readily available to patients themselves.

7. Implementation and monitoring

In 2003, diabetes care in each health board in Scotland was assessed against the *Clinical Standards for Diabetes* (NHS QIS,

2002) by submission of a self-assessment form supported by documentation, which was followed up by a peer review visit to clarify the submission.

The 10 standards focused on the key elements of diabetes care:

- organisation of care
- patient focus
- clinical management and review.

The main country-wide strengths were the development of the national clinical management system (SCI-DC), the extensive range of patient information material available, the committed specialist diabetes services and the availability of good glycaemic control guidelines.

The main challenges faced were:

- local implementation of SCI-DC
- the need for standardised patient information and for ensuring good patient involvement in service planning
- improving coordination of service delivery
- ensuring the availability of guidelines for the management of associated conditions, i.e. those involving the eyes, feet and kidneys, and cardiovascular disease.

Each health board also received specific feedback on their strengths and challenges, and all the reports are in the public domain (NHS QIS, 2003).

Other areas of development

Minority ethnic groups

Although the Scottish Diabetes Framework highlighted seven priority areas, diabetes care does not stop at these priorities: another area where there has been national development in Scotland is ethnic minority groups.

A multidisciplinary, multi-ethnic working group has been established and has been charged with the task of advising on the development of culturally sensitive diabetes services, including raising the profile of diabetes in minority ethnic groups among healthcare professionals and in the community.

Scottish Diabetes Group conference

The Scottish Diabetes Group in collaboration with Diabetes UK's Scottish Branch has arranged a second national conference, to be held in Glasgow in

November 2004. It is to be held every two years and will address the strengths of, and challenges facing, diabetes care in Scotland. More than 40 workshops have been arranged, covering clinical, organisational and research topics. The conference will give anyone with an interest in diabetes the opportunity to meet together and to share best practice.

Short-term projects

The Scottish Diabetes Group has provided funding for a variety of short-term projects over the next three years. Submitted bids have to fit with the aims of the Scottish Diabetes Framework and show that they can be of benefit to the care of diabetes in Scotland as a whole.

Conclusion

The Scottish Diabetes Framework is due for revision, and a multidisciplinary team, under the chairmanship of Professor Ray Newton, has been convened to undertake this task. Those involved in diabetes care in Scotland are being invited to submit their suggestions for the revised document, and these will all be considered in the consultation process. The revised document is due for publication in May 2005.

Although encompassing widely differing geographical locations, Scotland has a manageable population and fosters a culture of close collaboration and sharing. This, together with support from the Scottish Executive, encourages the development of care initiatives, which can then be adapted to suit local needs. ■

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2 Each health board received specific feedback on their strengths and challenges, and all the reports are in the public domain (NHS QIS, 2003).

3 Diabetes care does not stop at the seven priorities identified by the Scottish Diabetes Framework: there are other areas of development too.

4 A multidisciplinary, multi-ethnic working group has been set up to advise on the development of culturally sensitive diabetes services.

5 A national conference, which will address the strengths of, and challenges facing, diabetes care in Scotland, is to be held in Glasgow in November 2004.