

Clinical Standards Board for Scotland



Clinical Standards
Diabetes

Second Edition October 2002



CSBS

Promoting
Public Confidence
in NHSScotland

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Contents

1. Introduction	3
2. Background on the Clinical Standards Board for Scotland (CSBS)	5
3. Background on Clinical Standards – Basic Principles	7
4. Development of the Clinical Standards for Diabetes	11
5. Membership of the Diabetes Project Group and the Scottish Diabetes Framework Working Group	13
6. Overarching Principles	15
7. An Introduction to Diabetes	17
8. Evidence Base for the Clinical Standards for Diabetes	21
9. Clinical Standards for Diabetes	25
10. Glossary of Terms	47

1 Introduction

This document introduces the Clinical Standards Board for Scotland (CSBS) *Clinical Standards for Diabetes*. These standards apply to specific elements of diabetes and cover the following areas:

- Organisation
- Patient Focus
- Clinical

The standards will be used by CSBS to assess performance in these areas in Trusts throughout Scotland where diabetes services are provided.

The initial sections of this document provide background information on CSBS and on the process used to develop the standards (Sections 2 and 3, respectively).

The development of the *Clinical Standards for Diabetes* is outlined in Section 4 and the membership of the Project Group undertaking this work is given in Section 5. The overarching principles underpinning the standards are provided in Section 6.

Section 7 provides basic information about the topic and the evidence underpinning the standards is presented in Section 8.

Section 9 contains the *Clinical Standards for Diabetes*.

Finally, Section 10 provides a glossary of terms used in the standards.

2 Background on the Clinical Standards Board for Scotland (CSBS)

CSBS was established as a Special Health Board in April 1999.

The remit of CSBS is to develop and run a national system of quality assurance of clinical services with the aim of promoting public confidence in NHSScotland. CSBS, in partnership with healthcare professionals and members of the public, sets standards for clinical services, assesses performance throughout NHSScotland against these standards, and publishes the findings. The standards are based on the patient's journey as they move through different parts of the health service.

CSBS develops standards to improve the quality of clinical care across Scotland. A wide range of diseases and services are at present being addressed including infection control, post-mortem and organ retention and adult renal services.

Project Groups

For each service in the work programme, CSBS appoints a project group comprising appropriate healthcare professionals and members of the public to:

- oversee the development and consultation on the standards
- recommend an external peer review process; and
- report on it's findings to the CSBS Board.

As part of their rolling programme, individual project groups ensure the standards are regularly evaluated and revised so that they remain relevant and up to date (reflecting new procedures and treatments), and that targets of achievement are raised as performance improves.

Development of Standards

The way in which standards are developed is a key element of the process. Groups working on behalf of CSBS are expected to:

- adopt an open and inclusive process involving a wide range of both members of the public and professional people through a variety of mechanisms;
- work within CSBS policies and procedures as set out in the *Quality Assurance and Accreditation Manual* (August 2000); and
- test standards through undertaking pilot reviews to ensure that they meet the principles of CSBS.

In addition to standards for specific services or conditions, CSBS has set generic clinical governance standards, which apply to all clinical services; more detail on the generic standards is provided in Section 3.

Review

The framework for the CSBS review process is as follows:

- once the standards have been finalised, each relevant Trust is asked to undertake a self-assessment of its service against the standards;
- a review team visits the Trust on behalf of CSBS and follows up this self-assessment exercise with an external peer review of performance in relation to the standards; and
- CSBS reports the findings for the Trust, based on the self-assessment exercise and on the external peer review.

Peer review teams are multidisciplinary, including both healthcare professionals and members of the public. All teams are led by an experienced clinician and are supported by staff from CSBS.

All the processes that CSBS is developing are subject to review and evaluation, and this will help CSBS improve its quality assurance system.

Further Information

Further details on the process by which CSBS will achieve its objectives can be found in its *Quality Assurance and Accreditation Manual* (August 2000). Copies of this manual are available from:

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For further information about CSBS and to obtain additional copies of the standards, please visit the CSBS website (www.clinicalstandards.org).

3 Background on Clinical Standards – Basic Principles

The standards set by CSBS are:

- focused on clinical issues and include non-clinical factors that impact on the quality of care;
- written in simple language;
- based on evidence (recognising that levels and types of evidence will vary);
- written in account of other recognised standards and clinical guidelines;
- clear and measurable;
- achievable but stretching;
- developed by healthcare professionals and members of the public;
- consulted on widely;
- published on paper and electronically (on the Internet); and
- regularly reviewed and revised to make sure they remain relevant and up-to-date.

Some standards are common to all clinical services, others specific to particular conditions.

Generic Clinical Governance Standards

In addition to condition-specific standards such as those set out in this document, CSBS has developed generic standards, which apply to clinical services generally.

These generic standards are grouped under two broad headings:

1. Patient Focus

These are designed to ensure that *"all services respond to patients' needs and preferences, and that patients are involved in decisions about their own care through effective two-way communication and information-sharing"*, and cover:

– *assessment*

The initial assessment helps staff determine what care each patient needs and prefers, and requires the collection of information and the development of a plan of care in response.

-
- *patient involvement*
Patient care outcomes are improved when patients and, as appropriate, their carers, are involved in clinical care decisions.
 - *patient information*
Information helps patients make informed choices, which can reduce anxiety and encourage participation in recommended treatment.
 - *patient/staff communication*
Good communication between patients and healthcare professionals is essential for effective individual treatment and patient well being. Poor communication can lead to less effective diagnosis or reduced compliance with treatment, and can create anxiety, distress and dissatisfaction.
 - *patient feedback*
Encouraging patients/carers to make comments, suggestions and complaints about the organisation's services allows the organisation to gain a patient's perspective to inform the review and development of services.
 - *access to services*
Patients should have access to the services of the healthcare organisation based upon identified healthcare needs and individual preferences.
 - *discharge arrangements*
Effective discharge planning begins on, or shortly after, admission and is a continual process. Communication and transfer of information among healthcare professions is essential to a seamless process.

2. Safe and Effective Clinical Care

These are designed to ensure that "*all patients receive safe and effective care and treatment based on available evidence*", and cover:

- *clinical guidelines*
Care delivered in accordance with clinical guidelines produces better outcomes for patients.
- *clinical audit*
The review of clinical practice through audit is a well-established means of promoting the quality of clinical care by identifying shortfalls in performance against standards and best practice.
- *risk management*
The management of risk results in a safer system of work, safe practices and an enhanced awareness of possible risk areas.

3 Background on Clinical Standards – Basic Principles

– *risk environment*

Healthcare organisations work to reduce and control hazards and risk, prevent injury, and generally, to maintain a safe, functional environment for all patients and staff.

– *staff*

A healthcare organisation requires appropriately qualified staff to meet the needs of the patients it serves. Review of individual competencies and continuing professional development are essential.

CSBS developed the generic standards for two key reasons:

1. To cover aspects of healthcare that are common (or generic) to all conditions and services. As a result, it is not necessary to duplicate these generic standards in every set of condition-specific standards; and
2. To support NHSScotland organisations in the development of a framework for clinical governance, by highlighting key issues that should be addressed to ensure the quality of clinical services and to respond to patients' needs and preferences.

To avoid duplication, the issues covered by the generic standards are mentioned in the condition-specific documents only when the relevant project group concludes that there is an additional dimension warranting inclusion. Trusts and hospices will be alerted in advance to any other generic issues that the review team wishes to raise during the visit.

Format of Standards and Definition of Terminology

All standards set by CSBS follow the same format:

- each standard has a **title**, which summarises the area on which that standard focuses;
- this is followed by the **standard statement**, which explains the level of performance to be achieved;
- the **rationale** section provides the reasons why the standard is considered to be important; and
- the standard statement is fleshed out in the section headed **criteria**, where it states exactly what must be achieved for the standard to be reached.

As already mentioned, CSBS aims to set standards that are **achievable but stretching**. This is reflected in the criteria. Most criteria are **essential** in that it is expected that they will be met wherever a service is provided. Other criteria are **desirable**, in that they are being met in some parts of the service and demonstrate levels of quality, which other providers of a similar service should strive to achieve. Each project group is responsible for determining which criteria are essential and which are desirable.

The criteria are numbered, for the sole reason of making the document easier to work with, particularly for the assessment process. The numbering of the criteria is not a reflection of priority. The distinction between essential and desirable is the only way in which criteria have been prioritised.

4 Development of the Clinical Standards for Diabetes

Background

Meeting the needs of people with diabetes was identified as a priority area for NHSScotland with the publication of the Scottish Health Plan *Our National Health: A Plan for Action, A Plan for Change*. The potential to make a significant impact on diabetes care was recognised with the inclusion of a commitment to produce a Scottish Diabetes Framework:

"In 2001, we will launch a Scottish Diabetes Framework to draw together existing guidance and best practice in order to raise the standard of diabetes care. The Framework will include plans to establish a national screening strategy for diabetic retinopathy."

The Scottish Diabetes Framework Working Group was established in April 2001; their remit was to draw together existing guidance and best practice to address provision of diabetes care throughout the patient journey. The Group was multidisciplinary, including lay representation, and published key milestones in November 2001 followed by the full Scottish Diabetes Framework document in April 2002. The Framework sets out a proposed programme of diabetes care to be delivered over the next 5–10 years.

Working in partnership with the Diabetes Framework Working Group, CSBS set up a Diabetes Standards Subgroup to identify clinical standards for diabetes services. The remit of the CSBS Diabetes Standards Subgroup was to direct the development of a core set of clinical standards for diabetes using the quality assurance and accreditation template developed by CSBS. Healthcare professionals and members of the public are represented, and the Subgroup drew on work already undertaken such as SIGN guidelines and the *St Vincent Declaration*.

The Diabetes Standards Subgroup identified several key standards specific to diabetes, and also highlighted and incorporated applicable generic CSBS standards. These clinical standards complement and extend beyond the priorities identified in the Scottish Diabetes Framework.

Consultation

A shared consultation period, including both the Framework and the Draft Standards, was successfully completed, with valuable feedback received at open meetings and through a range of written comments. Focus groups were also held

with the support of Diabetes UK. The responses were then considered by the Subgroup and many of the points raised were incorporated in the revised standards.

Pilot Process

The standards were first published on World Diabetes Day in November 2001 to coincide with the publication of *SIGN Guideline 55: Management of Diabetes* and the key milestones of the Scottish Diabetes Framework. The November 2001 standards were then piloted across three NHS Board areas in May/June 2002, resulting in minor changes to the standards and refinement of the accompanying self-assessment tool. The October 2002 standards will be those against which performance of services around Scotland is reviewed during 2003.

Implementation of the work outlined in the Scottish Diabetes Framework is being taken forward through the Scottish Diabetes Group, chaired by Dr Andrew Morris, Reader in Medicine, University of Dundee.

5 Membership of the Diabetes Standards Subgroup and the Scottish Diabetes Framework Working Group

The membership of the Diabetes Standards Subgroup, chaired by Dr Malcolm Campbell, Director of Quality Standards, Royal College of General Practitioners, is presented below:

Name	Title	NHS Board Area/Organisation
Dr Rani Balendra	Consultant in Public Health Medicine	Forth Valley
Mr David Cline	Secretary, Scottish Diabetes Framework Working Group	Scottish Executive Health Department
Dr Leslie Cruickshank	GP	Forth Valley
Professor Karen Facey	Director	Health Technology Board for Scotland
Ms Lorna Grant	Diabetes Specialist Nurse	Highland
Ms Anne Gray	District Nurse	Tayside
Dr Stephen Greene	Consultant Paediatrician	Tayside
Mrs Delia Henry	National Manager	Diabetes UK Scotland
Ms Karen Hunter	Managed Clinical Network Co-ordinator	Tayside
Mr Ross Kerr	Service User	Fife
Mr Alastair McCann	Senior Podiatrist	Greater Glasgow
Dr John McKnight	Consultant Physician	Lothian
Dr Margaret MacLeod	Senior Statistician	Information & Statistics Division
Mr Bill Marshall	Service User	Greater Glasgow
Dr David Matthews	Consultant Physician	Lanarkshire
Dr John Olson	Consultant in Medical Ophthalmology	Grampian
Ms Susan Shandley	Chief Dietitian	Fife
Ms Helen Siddons	Observer	Centre for Healthcare Development Manchester

The CSBS Board member specifically working with the Diabetes Subgroup is Mr Tim Davison, Chief Executive, Greater Glasgow Primary Care NHS Trust.

Jan Warner (Director of Reviews), Rona Smith (Senior Project Officer) and Sushee Dunn (Project Officer), provided support from CSBS.

The membership of the Scottish Diabetes Framework Working Group, chaired by Mrs Delia Henry, National Manager, Diabetes UK Scotland is presented below:

Name	Title	NHS Board Area/Organisation
Dr David Alexander	GP	Fife
Mr George Brechin	Trust Chief Executive	Fife
Dr Malcolm Campbell	Director of Quality Standards	Royal College of General Practitioners
Ms Sushee Dunn	Project Officer	CSBS
Dr Aileen Keel	Deputy Chief Medical Officer	Scottish Executive Health Department
Mr Ross Kerr	Service User	Fife
Dr Andrew Morris	Consultant Diabetologist	Tayside
Dr Moray Nairn	Programme Manager	Scottish Intercollegiate Guidelines Network
Dr Lewis Reay	Consultant in Public Health Medicine	Argyll & Clyde NHS Board
Dr Kenneth Robertson	Consultant Paediatrician	Greater Glasgow
Ms Mary Scott	Nurse/Diabetes Facilitator	Lothian
Dr Mike Small	Consultant, General Medicine	Greater Glasgow
Ms Rona Smith	Senior Project Officer	CSBS
Ms Fiona Steven	Lead Therapist, Adult Dietetics	Lothian
Ms Jan Warner	Director of Reviews	CSBS

Mr David Cline and Ms Ruth Lockwood from the Scottish Executive Health Department provided secretariat support to the Diabetes Framework Group.

6 Overarching Principles – Diabetes

As detailed in Section 3, CSBS has already developed generic standards that underpin all clinical services provided by NHSScotland. Generic standards provide a broader context for all of CSBS' condition-specific standards.

Some issues covered in the generic standards are emphasised in the *Clinical Standards for Diabetes*, where the Standards Subgroup considered that an additional dimension warranted mentioning, eg referral guidelines and patient education. The *Clinical Standards for Diabetes* should be read in conjunction with the generic standards (www.clinicalstandards.org).

A number of key points should also be noted in order to interpret and apply the standards for diabetes, namely:

- The standards are evidence-based and have been developed and finalised in consultation with many people across Scotland. They represent what are currently considered to be the key elements of care and treatment for people with diabetes. The standards have been developed in close collaboration with Diabetes UK to ensure the concerns of people with diabetes are represented.
- The need for multidisciplinary team working across disciplines and effective referral procedures between secondary and primary care service providers is emphasised in the generic standards and reflected throughout the diabetes standards.
- The Scottish Intercollegiate Guidelines Network (SIGN) reviewed its seven diabetes guidelines to create one overall guideline for diabetes management which was published in November 2001. This includes guidance on lifestyle modification.
- In September 2000 the Working Group on IT to Support Shared Care in Diabetes was set up by the Clinical Resource and Audit Group (CRAG). It published a document which laid out an extended dataset and principles of support and promotion of integrated care for patients with diabetes.

The Health Technology Board for Scotland (HTBS) published a Health Technology Assessment Report on *Organisation of Services for Diabetic Retinopathy Screening*, in April 2002. The findings of this report are being used to direct the development of a separate set of standards, specifically focussing on diabetic retinopathy screening. As such, these general diabetes standards do not contain detailed reference to eye screening.

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- The Scottish Ambulance Service has developed standards on service performance for acute diabetic emergencies. Once these are finalised and distributed they should be included in local protocols.
 - The CSBS Renal Services Project Group were consulted on these standards, and have addressed the care of people with diabetes with renal failure in their standards (published February 2002).
 - Many areas have 'diabetes registers' which are used to collect information on the number of people with the condition and their treatment. The CSBS Diabetes Subgroup considered that these registers have now been extended to fulfil a wider role and have described them as **clinical management systems** throughout this document.
 - NHSScotland is currently considering the development and introduction of clear guidelines for the service on informed consent and confidentiality that comply with current EU legislation. In the meantime, existing guidance should be observed.

7 An Introduction to Diabetes

Basic Facts About Diabetes

Diabetes - or to give it its full name, diabetes mellitus - is a common condition in which the amount of glucose (sugar) in the blood is too high because the body is unable to use it properly. This is because the body's method of converting glucose into energy is not working as it should.

Normally, a hormone called insulin carefully controls the amount of glucose in our blood. Insulin is made by a gland called the pancreas, which lies just behind the stomach. It helps the glucose to enter the cells where it is used as fuel by the body.

We obtain glucose from the food that we eat, either from sweet foods or from the digestion of starchy foods such as bread or potatoes. The liver can also make glucose.

After food, the blood glucose level rises and insulin is released into the blood. When the blood glucose level falls (eg during physical activity), the level of insulin falls. Insulin, therefore, plays a vital role in regulating the level of blood glucose and, in particular, in stopping the blood glucose from rising too high.

The Two Main Types of Diabetes

Type 1 diabetes (also known as insulin-dependent diabetes) develops when there is a severe lack of insulin in the body because most or all of the cells in the pancreas that produce it have been destroyed. This type of diabetes usually appears in people under the age of 40, often in childhood.

Type 2 diabetes (also known as non-insulin-dependent diabetes) develops when the body can still produce some insulin, though not enough for its needs, or when the insulin that the body produces does not work properly. This type of diabetes usually appears in people over the age of 40, although can be seen in younger people.

The Symptoms of Diabetes

The main symptoms of diabetes are: increased thirst; going to the toilet a lot - especially at night; extreme tiredness; weight loss; genital itching or regular episodes of thrush; blurred vision.

Type 2 diabetes develops slowly and the symptoms are usually less severe. Some people may not notice any symptoms at all, and their diabetes is only picked up in a routine medical check-up. Some people may put the symptoms down to 'getting older' or 'overwork'.

Type 1 diabetes develops much more quickly, usually over a few weeks, and symptoms are normally very obvious.

In both types of diabetes, the symptoms are quickly relieved once the diabetes is treated. Early treatment will also reduce the chances of developing serious health problems.

Who Gets Diabetes and What Causes It?

Although the condition can occur at any age, it is rare in infants and becomes more common as people get older.

Type 1 diabetes develops when the insulin-producing cells in the pancreas have been destroyed. Nobody knows for sure why these cells have been damaged but the most likely cause is an abnormal reaction of the body to the cells. This may be triggered by a viral or other infection. This type of diabetes generally affects younger people. Both men and women are affected equally.

Type 2 diabetes used to be called 'maturity onset' diabetes because it generally appears in middle-aged or elderly people, although it does occasionally appear in younger people. The main causes are that the body no longer responds normally to its own insulin, and/or that the body does not produce enough insulin. People who are overweight are particularly likely to develop Type 2 diabetes. It tends to run in families and is more common in Asian and African-Caribbean communities.

Other causes of diabetes. There are some other causes of diabetes, including certain diseases of the pancreas, but they are very rare. Diabetes is not caused by an accident or an illness, however it can be revealed by either.

How is Diabetes Treated?

Although diabetes cannot be cured, it can be treated very successfully. Knowing why people with diabetes develop high blood glucose levels helps to understand how some of the treatments work.

Blood glucose levels. When sugar and starchy foods have been digested, they turn into glucose. If somebody has diabetes, the glucose in their body is not turned into energy, either because there is not enough insulin in their body, or because the insulin that the body produces is not working properly. This causes the liver to make more glucose than usual but the body still cannot turn the glucose into energy. The body then breaks down its stores of fat and protein to try to release more glucose but still this glucose cannot be turned into energy. This is why people with untreated diabetes often feel tired and lose weight. The unused glucose passes into the urine, which is why people with untreated diabetes pass large amounts of urine and are extremely thirsty.

Type 1 diabetes is treated by injections of insulin and a healthy diet. Type 2 diabetes is treated by a healthy diet or by a combination of a healthy diet and tablets. Sometimes people with Type 2 diabetes also have insulin injections, although they are not totally 'dependent' on the insulin.

Treatments for Type 1 diabetes: People with Type 1 diabetes need injections of insulin for the rest of their lives and also need to eat a healthy diet that contains the right balance of foods. Insulin cannot be taken by mouth because it is destroyed by the digestive juices in the stomach. People with this type of diabetes commonly take either two or four injections of insulin each day.

Treatments for Type 2 diabetes. People with Type 2 diabetes need to eat a healthy diet that contains the right balance of foods. If diet alone is not enough to keep blood glucose levels normal, tablets may also be needed. There are several kinds of tablets for people with Type 2 diabetes. Some help the pancreas to produce more insulin. Others help the body to make better use of the insulin that the pancreas does produce. Another type of tablet slows down the speed at which the body absorbs glucose from the intestine. Through time insulin may be required.

Reducing the Risk of Serious Health Problems

People with diabetes have a higher chance of developing certain serious health problems, including heart disease, stroke, high blood pressure, circulation problems, nerve damage, and damage to the kidneys and eyes. *The risk is particularly high for people with diabetes who are also very overweight, who smoke or who are not physically active.* The risk of developing any of these complications is greatly reduced by controlling blood glucose and blood pressure levels, and by eating healthily and doing regular physical activity.

Regular medical check-ups: In the last 10-20 years, the care for people with diabetes has improved dramatically. One of the most important developments has been improved methods of screening which help healthcare professionals to pick up any health problems at an early stage so they can be treated more successfully. This is why, for those with diabetes mellitus, having regular medical check-ups at least annually, is so important.

Adapted from a Diabetes UK publication: Understanding Diabetes: Your Key to Better Health. London: Diabetes UK (2000). Reproduced with permission.

Diabetes in Scotland

Approximately 120,000 people in Scotland have been diagnosed with diabetes and there may be as many as 90,000 more who are, as yet, undiagnosed. Contrary to popular belief, diabetes is both progressive and life-threatening with potentially serious consequences for health. The complications of diabetes include a higher risk of heart disease, stroke, kidney failure, eye disease that can lead to blindness (diabetic retinopathy), and foot ulceration, which can lead to amputation. However, there is a great deal that can be done to prevent diabetes and to improve outcomes for people with diabetes.

Diabetes care requires the co-ordination and co-operation of many people working across a wide range of professions and organisations. Ensuring that high-quality services are available to everyone with diabetes will require a sustained effort over many years. While there are many examples of very good care in different parts of Scotland, there remains much to do and many issues to resolve.

8 Evidence Base for the Clinical Standards for Diabetes

The evidence base for the *Clinical Standards for Diabetes* was principally drawn from the following sources:

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- World Health Organisation (WHO). Diabetes Care and Research in Europe - The St Vincent Declaration. (1989).

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www.show.scot.nhs.uk/crag/topics/diabetes/vincent.htm url cited 03/09/2002.

9 Clinical Standards for Diabetes

STANDARD 1 – Organisation: IM&T, Clinical Management Systems, Audit and Monitoring

STANDARD 2 – Organisation: Pathway of Care, Teamworking and Integration of Services

STANDARD 3 – Patient Focus

STANDARD 4 – Clinical Review

STANDARD 5 – Clinical Management: Eyes

STANDARD 6 – Clinical Management: Cardiovascular Status

STANDARD 7 – Clinical Management: Feet

STANDARD 8 – Clinical Management: Glycaemia

STANDARD 9 – Clinical Management: Renal

STANDARD 10 – Clinical Management: Acute Management

STANDARD 1 - Organisation: IM&T, Clinical Management Systems, Audit and Monitoring

Standard Statement	Rationale
<p>All people with diabetes, with appropriate consent, are placed on a clinical management system which contains core information about their care and allows ongoing useful clinical information to be recorded for use in direct patient care and service audit.</p>	<p>Information is at the core of diabetes care for individuals, for service planning and for assessing patient compliance.</p> <p>Clinical management systems underpin initiatives such as eye screening.</p> <p>Data collection and audit facilitate effective healthcare since outcomes can be monitored and lead, where necessary, to improvements in the quality of treatment and care.</p> <ul style="list-style-type: none"> • SPICE Programme for Improving Clinical Effectiveness in Primary Care (SPICE PC). Royal College of General Practitioners (Scotland) (RCGP) (1999). • Working Group on IT to Support Shared Care in Diabetes, (September 2000). • Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).

Criteria

Essential

1. There is an up-to-date population-based electronic clinical management system of all people with a recorded diagnosis of diabetes in the area which covers:
 - initial diabetes diagnosis;
 - development of significant diabetes micro- and macrovascular co-morbidities;
 - year of onset of co-morbidities;
 - measurement of ongoing modifiable risk factors; and
 - long-term medication for diabetes and other chronic conditions.
2. Data interfaces are in place between primary and acute care such that a single data entry covers all recording needs.
3. The Board participates in the Scottish Diabetes Survey.
4. Data are collected using the clinical management system on a continuous basis to facilitate regular audit and quality assurance. The quality of the data is also regularly audited.

Desirable

5. The computerised clinical management system is Board-wide and incorporates call and recall systems for screening/review of complications.

STANDARD 2 - Organisation: Pathway of Care, Teamworking and Integration of Services

Standard Statement	Rationale
<p>There is an agreed area-wide structured programme of care which clearly defines:</p> <ul style="list-style-type: none"> • reporting arrangements and accountability; • the care that people with diabetes should expect to receive; • the processes of care that will be followed after diagnosis (including pre- and peri-operative management); • the protocols and guidelines that determine which clinician is responsible for the delivery of specific aspects of care; • criteria for referral. 	<p>Effective care involves partnerships between patients and all healthcare professionals who contribute to diabetes care in a local area.</p> <p>Multiprofessional access to agreed individualised plans of care facilitates greater team involvement in provision of ongoing care and consistent advice.</p> <ul style="list-style-type: none"> • Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).

Criteria

Essential

1. There is a local strategy and implementation plan for diabetes services that covers diagnosis, screening for complications, treatment and care.
2. There is an effective, well-organised strategic planning group including stakeholders: a Local Diabetes Service Advisory Group (LDSAG), or equivalent, which is accountable to the NHS Board.
3. There are agreed guidelines for shared care and referral and discharge between primary care teams and diabetes specialist care teams, which are regularly and jointly reviewed. These include protocols for the management of diabetes during other illnesses and procedures.
4. All people with diabetes have an individualised plan of care including mutually agreed targets based on Clinical Standards and the Scottish Diabetes Framework.
5. There are identified lead clinicians for diabetes in acute and primary care.
6. There are robust fail-safe arrangements for identifying and following up people with diabetes who default from clinics, which take into account patient choice and responsibility for their care.

STANDARD 3 - Patient Focus

Standard Statement	Rationale
<p>All people with diabetes have equitable access to information and multidisciplinary programmes of education, which are tailored to individual needs and specific client groups.</p>	<p>The provision of consistent information to people with diabetes and, where appropriate, their carers, enables them to make informed choices, which can reduce anxiety and encourage participation in recommended treatment, thereby improving outcomes.</p> <ul style="list-style-type: none">• Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).• Clinical Standards: Generic. Clinical Standards Board for Scotland (2002).

Criteria

Essential

1. All people newly diagnosed with diabetes are offered at least one appropriately tailored formal educational session about their condition and are provided with written material to reinforce that education.
2. Educational programmes continue after diagnosis and include diet, foot care and eye care, as well as day-to-day management of diabetes.
3. There are specific care programmes for different client groups in the population including children, adolescents, adults, elderly, preconceptional and pregnant women with diabetes, women with gestational diabetes, ethnic and vulnerable groups.
4. People with diabetes are involved in consultation on service development.

Desirable

5. People with diabetes have appropriate access to identified key health professionals including state registered podiatry and dietetic, nursing and psychology services.
6. Members of the diabetes team who are involved in patient education, have access to a training programme.

STANDARD 4 - Clinical Review

Standard Statement	Rationale
<p>All people with diabetes are offered annual or more frequent examination, where clinically indicated, to monitor the management and progression of their condition. There is intervention as required, and support for the modification of lifestyle risk factors.</p>	<p>Regular review of key indicators allows identification of high-risk patients who may need further intervention to improve their outcome. Observational and randomised clinical trial evidence demonstrates that control of risk factors can prevent long-term complications such as coronary heart disease and renal disease.</p> <p>There is clear evidence that early detection of diabetic eye conditions (retinopathy) using regular screening is important to improve outcomes, particularly as sight-threatening retinopathy may be symptomless. To prevent onset, good glycaemic and blood pressure control must be maintained.</p> <ul style="list-style-type: none">• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).• Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).• HTBS Health Technology Assessment Report 1: Organisation of services for diabetic retinopathy screening (HTBS) (2002).• SPICE Programme for Improving Clinical Effectiveness in Primary Care (SPICE PC). Royal College of General Practitioners (Scotland) (RCGP) (1999).• Proposed Clinical Audit Standards for Adult Medicine: Diabetes. Royal College of Physicians of Edinburgh (2001).

Criteria

There is a protocol to ensure that all people with diabetes are offered review of the following indicators on an annual basis, or more frequently where clinically indicated, from diagnosis.

Essential

Clinical

1. Glycated haemoglobin (HbA1c).
2. Blood pressure.
3. Random total cholesterol.
4. Eye examination for diabetic retinopathy according to HTBS recommendations.
5. Urinalysis for microalbuminuria and proteinuria.
6. Serum creatinine.
7. Foot examination for ischaemia, neuropathy, and general foot care.
8. Review of medication.

Lifestyle/Well-being

9. Body Mass Index (BMI).
10. Dietary intake.
11. Physical activity.
12. Tobacco consumption (smoking habit).
13. Perception and understanding of condition.
14. Psychological well-being.
15. Sexual health.

General

16. Patients are informed of their results and offered support to manage lifestyle risk factor changes.

Desirable

17. Referring practitioners (including optometrists, with patient consent) are given feedback regarding the outcome of their referrals.

STANDARD 5 - Clinical Management: Eyes

Standard Statement	Rationale
<p>All people with diabetes who have identified signs of developing diabetes-related, sight-threatening retinopathy, according to HTBS grading recommendations are referred to an ophthalmologist for assessment, and, if necessary, treatment.</p>	<p>Diabetic eye disease is the commonest cause of visual loss in adults of working age in the UK.</p> <p>Progression is reduced by good glycaemic and blood pressure control.</p> <p>Laser therapy is effective in saving vision.</p> <ul style="list-style-type: none">• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).• Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).• HTBS Health Technology Assessment Report 1: Organisation of services for diabetic retinopathy screening (HTBS) (2002).

Criteria

Essential

1. There is a referral process to a consultant ophthalmologist-led service for people with diabetes with identified signs of developing diabetes-related, sight-threatening retinopathy according to HTBS grading recommendations.
2. All people whose eye examination has revealed retinopathy have their glycaemic control and blood pressure reviewed and treated as clinically indicated.
3. All people with active proliferative diabetic retinopathy are offered laser treatment.

STANDARD 6 - Clinical Management: Cardiovascular Status

Standard Statement	Rationale
<p>All people with diabetes who have identified associated cardiovascular problems are managed according to locally agreed protocols and are considered for referral and additional treatment as clinically indicated.</p>	<p>Diabetes is associated with an increased risk of coronary heart disease, in particular, of myocardial infarction and heart failure. It is therefore important to address cardiovascular risk factors in order to prevent end organ damage.</p> <ul style="list-style-type: none">• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).• Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).

Criteria

Essential

1. Where blood pressure is consistently greater than 140 systolic and/or 80 diastolic (140/80mmHg), attempts are made to lower the blood pressure according to locally agreed protocols.
2. There is a local protocol for the management of consistently high cholesterol (>5mmol/l).
3. There is a local protocol for the management of angina.
4. All people with diabetes who have been diagnosed with acute myocardial infarction are offered clinical care as detailed in the CSBS *Clinical Standards for Secondary Prevention following Acute Myocardial Infarction*.
5. The *Joint British Societies Coronary Risk Prediction Chart*, or recognised equivalent, is used to assess coronary heart disease risk in primary care.

STANDARD 7 - Clinical Management: Feet

Standard Statement	Rationale
<p>All people with diabetes who have identified associated foot problems are referred for specialist assessment and, if necessary, treatment.</p>	<p>There is evidence that people at high risk of developing lower limb complications can be identified and offered effective treatment to reduce the risk of lower limb amputation. Foot ulceration is the most common complication in diabetes leading to hospitalisation.</p> <ul style="list-style-type: none">• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).

Criteria

Essential

1. There is a rapid referral process for people with diabetes with associated foot problems. The referral protocol states clearly whether referral is to primary or secondary care. In particular, conditions not responding to treatment provided by primary care are referred to secondary care.
2. All people with diabetes have appropriate access to state registered podiatry services.
3. There is a local protocol for drug and pressure relief treatment of diabetic foot disease.

Desirable

4. All people with diabetic foot ulcers are reviewed by a diabetes foot specialist, using digital camera photographs for comparison.

STANDARD 8 - Clinical Management: Glycaemia

Standard Statement	Rationale
<p>All people with diabetes have HbA1c measured and recorded as clinically indicated.</p>	<p>Sequential HbA1c measurements are an effective indicator of glycaemic control. Glycaemic control is important to reduce the incidence of hypo/hyperglycaemia and microvascular complications.</p> <ul style="list-style-type: none">• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).

Criteria

Essential

1. Drug and insulin therapy is tailored to achieve the best possible glycaemic control without frequent or severe hypo/hyperglycaemia, and there is specific guidance for children and pregnant women.
2. A DCCT compatible assay is used for the measurement of HbA1c.
3. Sequential HbA1c measurements are used to identify people with diabetes who have poor glycaemic control. Specific targets are agreed for each individual patient.
4. The incidence of hypo/hyperglycaemia is monitored and the results are discussed with the patient.

Desirable

5. HbA1c measurements are made available to colleagues in the diabetes (primary and secondary care) team and sent to patients.

STANDARD 9 - Clinical Management: Renal

Standard Statement	Rationale
<p>All people with diabetes and identified associated kidney problems are referred for specialist assessment and, if necessary, treatment.</p>	<p>Serum creatinine and proteinuria are useful markers which allow people with kidney disease to be identified for further investigation and treatment.</p> <ul style="list-style-type: none">• Diabetes Care and Research in Europe - The St Vincent Declaration. WHO Regional Office for Europe (1997).• SIGN Guideline 55: Management of Diabetes: A National Clinical Guideline. SIGN (2001).

Criteria

Essential

1. All people with identified abnormal renal function serum creatinine (greater than 150 micromols/l) are considered for referral to a renal clinic.
2. All people whose urinary albumin concentration is greater than 300mg/l (ie albuminuria which is thought to be due to diabetic nephropathy), have blood pressure, glycaemic control and serum cholesterol levels reviewed as clinically indicated.
3. All people with Type 1 diabetes, with microalbuminuria as defined in a local protocol, are prescribed an ACE inhibitor unless there are contraindications.

Desirable

4. All people with proteinuria and a reduced glomerular filtration rate are offered dietetic intervention to review dietary protein intake and to assess the nutritional adequacy of their diet.

STANDARD 10 - Clinical Management: Acute Management

Standard Statement	Rationale
<p>All people with diabetes who experience an acute diabetic emergency including severe hypoglycaemia, diabetic ketoacidosis (DKA) or hyperosmolar non-ketotic state are rapidly assessed and managed according to local protocols.</p>	<p>The acute complications of diabetes can cause distress, disability or death. Appropriate initial management of diabetic emergencies can improve outcome from the event.</p> <p>Subsequent management may prevent readmission with similar problems.</p>

Criteria

Essential

1. There is a local protocol for the acute management of people with diabetes who experience an acute diabetic emergency including severe hypoglycaemia, diabetic ketoacidosis (DKA) or hyperosmolar non-ketotic state.
2. People with diabetes who are admitted to hospital with diabetic ketoacidosis are reviewed by a specialist diabetes physician or nurse prior to discharge.

Desirable

3. People with diabetes who experience severe hypoglycaemia are referred, on recovery, to specialist diabetes services for advice on psychological, clinical and lifestyle aspects of their care.
4. The rate of diabetic emergencies is monitored for all those with diabetes in the area.

10 Glossary of Terms

Term	Definition
accreditation	A process, based on a system of external peer review using written standards, designed to assess the quality of an activity, service or organisation.
ACE inhibitors	Angiotensin Converting Enzyme inhibitors are a group of drugs which lower blood pressure and expand the blood vessels.
acute myocardial infarction	Scientific term for a heart attack, which occurs when a blood vessel to the heart becomes blocked, usually by a blood clot, resulting in damage to the heart muscle. Abbreviated as AMI.
acute sector	Hospital-based health services which are provided on an in-patient or out-patient basis.
AHP	See allied health professions.
allied health professions (AHP)	Healthcare professionals directly involved in the provision of primary and secondary healthcare. Includes several groups such as physiotherapists, occupational therapists, dieticians, etc. Formerly known as professions allied to medicine (PAMs).
amputation	Surgical removal of part or all of a limb.
angina	Discomfort in the chest, jaw or arm which often occurs on exercising and which is due to a reduced blood supply to the heart.
angioplasty	Angioplasty is a method of treating patients suffering from arterial disease. In coronary angioplasty, narrowed or blocked arteries in or around the heart are opened by inflating a balloon at the tip of a catheter. Peripheral angioplasty is a similar procedure for the treatment of vascular disease in other areas of the body.
arteries	Blood-vessels which carry blood away from the heart to supply the tissues.
aspirin	A medication which thins the blood to prevent clots forming. It is the most widely tested antiplatelet agent.
assay	Determination of the purity of a substance or the amount of any particular constituent of a mixture.
assessment	The process of measuring patients' needs and/or the quality of an activity, service or organisation.
audit	Systematic review of the procedures used for diagnosis, care, treatment, and rehabilitation, examining how associated resources are used and investigating the effect care has on the outcome and quality of life for the patient.

BDR	Background Diabetic Retinopathy.
blood glucose	A measurement of the amount of sugar in the blood.
blood pressure	Blood pressure is related to the force of the heart pumping and the resistance to the flow of blood through the body. It is the pressure of the blood in the main arteries needed to push it through the smaller vessels of the circulation.
BMI	Body Mass Index. A measurement of weight in relation to height.
cardiologist	Specialist doctors who treat patients with heart conditions.
carer	A person who looks after family, partners or friends in need of help because they are ill, frail, or have a disability. The care they provide is unpaid.
case record	Patient's notes; documentation of care.
CHD	See coronary heart disease.
chronic	Present over a long period of time. Diabetes is an example of chronic disease.
circulation	The flow of blood through the heart and blood vessels of the body.
clinical governance	A framework through which NHS organisations are accountable for both continuously improving the quality of their services, and safeguarding high standards of care, by creating an environment in which excellence in clinical care will flourish.
clinical management system	A collection of core information from individuals relating to their care which allows ongoing useful clinical information to be recorded for use in direct patient care and service audit.
Clinical Resource and Audit Group (CRAG)	The lead body within the Scottish Executive Health Department promoting clinical effectiveness in Scotland. The main committee, together with its subcommittees provides advice to the Health Department, acts as a national forum to support and facilitate the implementation of the clinical effectiveness agenda and funds a number of clinical effectiveness programmes and projects. Website address: www.show.scot.nhs.uk/crag/
clinical review	A method of detecting specified disease in a targeted population at a stage where the individuals have no symptoms.
clinical service	Service provided by healthcare professionals.

Clinical Standards Board for Scotland (CSBS)	The Clinical Standards Board for Scotland is a statutory body, established as a Special Health Board in April 1999. Its role, in line with the Scottish Executive's commitment to quality, openness and public accountability, is to promote public confidence that the services provided by the NHS are safe and that they meet nationally agreed standards, and to demonstrate that, within the resources available, the NHS is delivering the highest possible standards of care.
clinical trial	Research study conducted with patients, usually to evaluate a new treatment or drug. Each trial is designed to answer scientific questions and to find better ways to treat individuals with a specific disease.
co-morbidity	The presence of coexisting or additional diseases with reference to either an initial diagnosis or to the index condition that is the subject of study. Co-morbidity may affect the ability of affected individuals to function, and also their survival; it may be used as a prognostic indicator for length of hospital stay, cost factors, and outcome or survival.
compliance	A measure of how conscientiously a person carries out advice tailored for that individual's benefit. For example, a situation where clinician and patient are in agreement about the best course of action and the patient carries out the plan by taking tablets or injections.
coronary heart disease (CHD)	Disease, such as angina, coronary thrombosis or heart attack, caused by the narrowing or blockage of the coronary arteries by atheroma.
criterion(s)/criteria(pl)	Provide the more detailed and practical information on how to achieve the standard, and relate to structure, process or outcome factors.
data source	The source of evidence to demonstrate whether a standard or criterion is being met.
DCCT compatible assay	Diabetes Control and Complications Trial compatible assay. A standardisation which allows comparison of glycated haemoglobin (HbA1c) results between different laboratories.
default	Failure to participate in something which is required.
desirable (criterion/criteria)	Good practice that is being achieved in some parts of the service and demonstrates levels of quality to which other providers of a similar service should strive.
diabetes mellitus	A condition in which the amount of glucose (sugar) in the blood is too high because the body cannot use it properly.
diabetic emergency	An acute diabetic episode including hypoglycaemia and diabetic ketoacidosis resulting in admission to hospital.

diabetic ketoacidosis	A life-threatening metabolic emergency resulting from absolute insulin deficiency. Lack of insulin results in abnormal metabolism of carbohydrate and fat, and accumulation of by-products called ketones, which are acidic. The acidosis may lead to coma and death if not promptly treated.
diabetic retinopathy	A complication of diabetes that affects the health and function of the retina by blocking off its small blood vessels.
diagnosis	Identification of an illness or health problem by means of its signs and symptoms. This involves ruling out other illnesses and causal factors for the symptoms.
diastolic (blood pressure)	Two levels of blood pressure are measured - the higher, or systolic, pressure, which occurs each time the heart pushes blood into the vessels, and the lower, or diastolic, pressure, which occurs when the heart rests. In a blood pressure reading of 120/80, for example, 120 is the systolic pressure and 80 is the diastolic pressure.
dietician	An expert in nutrition who helps people with special health needs plan the kinds and amount of foods to eat.
digital camera	A camera which captures images which can be digitised, stored and transmitted using microprocessor technology.
DKA	See diabetic ketoacidosis.
end organ damage	The results of a disease process that affects the structure and function of a number of body organs.
essential (criterion/criteria)	A criterion that should be met wherever a service is provided.
evidence-based medicine	The process of systematically finding and assessing research findings and applying these to the treating patients.
fibrovascular proliferation	One result of a disease process which affects blood vessels and surrounding tissue.
fundoscopy	Examination of the fundus (the retina) of the eye through the pupil using a handheld instrument.
gangrene	The death of body tissue. It is most often caused by a loss of blood flow, especially in the legs and feet.
generic standards	Standards that apply to most, if not all, clinical services.
gestational diabetes	A form of diabetes which begins during pregnancy and usually disappears following delivery.

glomerular filtration rate	Measure of the kidneys' ability to filter and remove waste products.
glycated haemoglobin (HbA1c)	A test that sums up how well controlled diabetes has been in the preceding three to four months.
GP	General Practitioner.
HbA1C	See glycated haemoglobin.
HDL	See Health Department Letter.
Health Board	See NHS Boards.
Health Council	Each NHS Board area has a Health Council, an organisation whose aim is to promote public consultation and participation in health-related matters. Sometimes referred to as a Local Health Council.
Health Department Letter (HDL)	Health Department Letter (formerly known as Management Executive Letter - MEL), formal communications from the Scottish Executive Health Department to NHSScotland.
health technology assessment (HTA)	Health technology assessment is a multi-disciplinary field of policy analysis, which studies the medical, social, ethical and economic implications of development, diffusion and use of health technology.
healthcare professional	A person qualified in a health discipline.
heart attack	Non-medical term for a sudden serious disorder of the heart when part of the heart muscle can be damaged. Usually this refers to coronary thrombosis (see thrombosis).
heart failure	A condition in which the pumping action of the heart is impaired.
hormone	A circulating chemical messenger made in one part of the body and acting on other parts.
hypercholesterolaemia	Where abnormally high concentrations of cholesterol are present in the bloodstream. This can lead to heart disease, hardening of the arteries, heart attacks, and strokes.
hyperlipidaemia	High level of fats (lipids) in the blood.
hyperosmolar non-ketonic state	A complication of diabetes caused by a lack of insulin and dehydration. It is diagnosed when the patient has: <ol style="list-style-type: none"> 1. very high levels of glucose (sugar) in the blood; 2. absence of ketoacidosis; 3. severe dehydration; 4. sleepy, confused, or comatose state.

hypertension	High blood pressure which, if uncontrolled, can increase the risk of heart disease or a stroke.
hypoglycaemia	Hypoglycaemia (hypos) occur when blood glucose levels are low; below 4mmol/l.
IM&T	Information Management and Technology.
incidence	The number of new cases of a disease within a defined group of people over a period of time.
informed consent	The principle by which a patient/user is informed about the nature, purpose and likely effects of any treatment proposed, before being asked to consent to accepting it.
insulin	A hormone secreted by the pancreas. Insulin regulates the blood glucose level, and is important for growth and tissue repair.
insulin therapy	Treatment using insulin in patients with diabetes following trauma to the body such as a heart attack.
integration	Shared or overlapping processes which result in a stronger whole. For example, a situation where all aspects of care are connected and clinicians are working together.
ischaemia	Reduced blood flow, usually because of narrowing or blockage of an artery.
Joint British Societies Coronary Risk Prevention Chart	Validated information produced in the form of a chart which is used by healthcare professionals to predict a person's risk of developing coronary heart disease taking into account several different risk factors.
ketoacidosis	See diabetic ketoacidosis.
ketones	A breakdown product of fat that accumulates in the blood as a result of inadequate insulin or inadequate calorie intake.
laser treatment	Using a special strong beam of light of one colour (laser) to heal a damaged area. A person with diabetes might be treated with a laser beam to heal blood vessels in the eye.
LDSAG	See Local Diabetes Service Advisory Group.
lead consultant	Clinician with administrative responsibilities for a specific service.
Local Diabetes Service Advisory Group	A strategic planning group of local diabetes service users, carers and providers who advise NHSScotland Boards in matters relating to services for individuals with diabetes.
macro-vascular	Something that concerns large blood vessels.

Management Executive Letter (MEL)	Formal communications from the Scottish Executive Health Department to NHSScotland, now known as Health Department Letters (HDLs).
medication	Drugs prescribed to treat a condition.
medicines management	Organisation of various medications involving the timing, frequency and period of treatment.
MEL	See Management Executive Letter.
meta-analysis	Statistical method for the analysis of more than one randomised clinical trial.
microalbuminuria	Leakage of small amounts of protein (albumin) into the urine. An early warning of kidney damage.
micro-vascular	Something that concerns small blood vessels.
mmol/l	Millimoles per litre: a measurement of the level of lipids (fats) circulating in the blood.
morbidity	A diseased condition or state. The incidence of a particular disease or group of diseases in a given population during a specified period of time.
mortality (rate)	The number of deaths in a given population during a specified period of time.
multidisciplinary	A multidisciplinary team is a group of people from different disciplines (both healthcare and non-healthcare) who work together to provide care for patients with a particular condition. The composition of multidisciplinary teams will vary according to many factors. These include: the specific condition, the scale of the service being provided, and geographical/socio-economic factors in the local area.
multidisciplinary system of working	A method of working in a multidisciplinary team with protocols in place for most, if not all, eventualities.
nephropathy	Kidney damage from any cause; quite often diabetes.
neuropathy	Disease of the nervous system. Neuropathy is one of the long-term complications of diabetes. Nerve damage can affect many parts of the body. The most common form is called peripheral neuropathy, and usually affects the longest nerves first: those that supply the feet and legs. Neuropathy may cause numbness, tingling or pain in the feet or legs. Other types of neuropathy may impair digestive or sexual function, or cause pain.

NHS Board	NHS Boards replaced the separate board structures of Health Boards and NHS Trusts. The NHS Boards cover the same geographical area as the old Health Boards. The overall purpose of NHS Boards is to ensure the efficient, effective and accountable governance of the local NHS system, and to provide strategic leadership and direction for the system as a whole, focusing on agreed outcomes.
NHSScotland	The National Health Service in Scotland.
obesity	Condition of being grossly overweight. At least 20% heavier than the heaviest weight in the 'ideal' range for that person's height.
oedema	A collection of fluid. It may be a result of leaking small vessels causing fluid to accumulate around the cells of the retina or may be a result of sick and dying cells ballooning up because they are starved of oxygen and food.
ophthalmologist	A medical doctor specially trained to diagnose and treat disorders of the eye. An ophthalmologist is qualified to prescribe medication, prescribe and adjust spectacles and contact lenses, and is usually to perform laser treatment and surgery.
optician	Fits, supplies and adjusts spectacles and contact lenses. An optician cannot examine the eyes or prescribe spectacles or medication.
optometrist	Although not a doctor of medicine, an optometrist is specifically trained to diagnose eye abnormalities and prescribe, supply and adjust spectacles and contact lenses.
outcome	The end result of care and treatment and/or rehabilitation. In other words, the change in health, functional ability, symptoms or situation of a person, which can be used to measure the effectiveness of care and treatment, and/or rehabilitation.
out-patient	A patient reviewed in a hospital but who does not need to be admitted to the hospital.
patient	A person who is receiving care or medical treatment. A person who is registered with a doctor, dentist, or other healthcare professional, and is treated by him/her when necessary. Sometimes referred to as a user.
patient journey	The pathway through the health services taken by the patient (the person who is receiving treatment), and as viewed by the patient.
PCRG	See Primary Care Reference Group.
PCT	Primary Care Trust. See Trust and Primary Care.

peer review	Review of a service by those with expertise and experience in that service, either as a provider, user or carer, but who are not involved in its provision in the area under review. In the CSBS approach, all members of a review team are equal.
peripheral vascular disease	Disorder affecting the blood-vessels in the body preventing the ready supply of oxygenated blood to the peripheral parts of the body.
photocoagulation	Using a special strong beam of light (laser) to seal off bleeding blood vessels such as in the eye. The laser can also burn away blood vessels that should not have grown in the eye. This is the main treatment for diabetic retinopathy.
placebo	Dummy treatment which is given to some of the volunteers participating in a clinical trial. Patients can feel better even when the treatment they are given is a 'sugar pill' or placebo.
plan of care	A set of targets geared to each individual's personal situation/lifestyle, accompanied by a plan to help the person work towards those targets, with a regular review to assess progress and adjust the plan as necessary.
podiatrist/chiroprapist	Person with expert knowledge in footcare.
prescription	Usually a written recipe of treatment.
pressure relief	A means of redistributing gravitational force to prevent further tissue damage.
primary care	The conventional first point of contact between a patient and the NHS. This is the component of care delivered to patients outside hospitals and is typically, though by no means exclusively, delivered through general practices. Primary care services are the most frequently used of all services provided by the NHS. Primary care encompasses a range of family health services provided by family doctors, dentists, pharmacists, optometrists and ophthalmic medical practitioners.
primary prevention	The prevention of the development of a condition, such as coronary heart disease, by avoidance of factors known to contribute to its development, for example, smoking and lack of exercise.
prognosis	An assessment of the expected future course and outcome of a person's disease.
proliferative retinopathy	Diabetes can cause small blood vessels to block off resulting in the retina being starved of food and oxygen. If enough small blood vessels block, then the eye tries to grow new blood vessels (proliferative retinopathy) that are prone to bleeding and pulling of the retina.

prophylactic medication	Drugs prescribed to prevent something happening.
prophylaxis	The prevention of disease; preventive treatment.
prophylaxis	The prevention of disease; preventive treatment. Intervention to prevent an unwanted outcome.
protein	One of the three main classes of food. Proteins are made of amino acids, which are called the building blocks of the cells. The cells need proteins to grow and to mend themselves. Protein is found in many foods such as meat, fish, poultry, and eggs.
proteinuria	Too much protein in the urine. This may be a sign of kidney damage.
protocol	A policy or strategy which defines appropriate action in specific circumstances, such as handwashing or assessment. These may be national, or agreed locally to take into account local requirements.
psychological	Relating to human behaviour.
quality assurance (QA)	Improving performance and preventing problems through planned and systematic activities including documentation, training and review.
randomised	Randomly allocated to one of more than one different choices.
rationale	Scientific/objective reason for taking specific action.
RCGP	Royal College of General Practitioners.
referral	The process whereby a patient is transferred from one professional to another, usually for specialist advice and/or treatment.
renal	A term that means relating to the kidneys.
renal failure	An abnormality resulting from the inability of the kidneys to function and resulting in a build-up of poisons in the body.
renal function	A measure of how well a person's kidneys are working to remove waste products from the body.
renal impairment	A reduction in the ability of the kidneys to carry out their functions.
retinal photography	Use of a camera to take pictures of the surface of the retina.
retinopathy	Damage to the retina at the back of the eye. Retinopathy is one of the possible long-term complications of diabetes. The retina contains many small blood vessels that can be injured by high blood glucose and high blood pressure.

risk factor	A clearly defined occurrence or characteristic that has been associated with the increased rate of a subsequently occurring disease or health problem. Risk factors include aspects of personal behaviour, lifestyle, environmental exposure, or inborn or inherited characteristics, which are known to be associated with the disease.
Scottish Diabetes Survey	A Scottish Executive initiative attempting to build a national register of people with diabetes and to monitor diabetes care, with the aim of facilitating better healthcare.
Scottish Executive Health Department (SEHD)	The Scottish Executive Health Department is responsible for health policy and the administration of NHSScotland.
Scottish Intercollegiate Guidelines Network (SIGN)	SIGN was established in 1993 by the Academy of Royal Colleges and Faculties in Scotland, to sponsor and support the development of evidence-based clinical guidelines for NHSScotland. Where a SIGN guideline exists for a specialty or service for which CSBS is setting standards, it will be referenced. For further information relating to SIGN guidelines or the methodology by which SIGN guidelines are developed, contact: SIGN Secretariat, Royal College of Physicians, 9 Queen Street, Edinburgh EH2 1JQ. Website address: www.sign.ac.uk/
secondary prevention	All those factors that should be addressed, such as lifestyle changes or drugs, in order to reduce the likelihood of recurrence of, slowing or reversing the progression of disease.
self-assessment	Assessment of performance against standards by individual/clinical team/Trust providing the service to which the standards are related.
serum creatinine	A biochemical measurement or test of one of the body's waste products which is an indicator of renal function.
side-effect	An effect of treatment in addition to its desired therapeutic effect. A side-effect is usually unpleasant and unwanted.
SIGN	See Scottish Intercollegiate Guidelines Network.
SIGN guideline	Scottish Intercollegiate Guidelines Network guideline.
slit lamp	A method of examining the structures of the eye using a special microscope.
SPICE-pc	Scottish Programme for Improving Clinical Effectiveness in Primary Care. Website address: www.ceppc.org/spice/index.shtml

St Vincent Declaration	The main aim of the St Vincent Declaration is to reduce the serious health problems linked to diabetes, such as blindness, renal failure, amputation and coronary heart disease, through governmental and healthcare team initiatives.
standard statement	An overall statement of desired performance.
statutory	Enacted by statute; depending on statute for its authority as a statutory provision. Required by law.
systolic (blood pressure)	Two levels of blood pressure are measured-the higher, or systolic, pressure, which occurs each time the heart pushes blood into the vessels, and the lower, or diastolic, pressure, which occurs when the heart rests. In a blood pressure reading of 120/80, for example, 120 is the systolic pressure and 80 is the diastolic pressure.
tractional retinal detachment	When the surface of the back of the eye becomes separated from the underlying structures by new blood vessels.
Type 1 (insulin-dependent) diabetes	Type 1 diabetes develops if the body is unable to produce any insulin. This type of diabetes usually appears before the age of 40. It is treated by insulin injections and diet.
Type 2 (non-insulin dependent) diabetes	Type 2 diabetes develops when the body can still make some insulin, but not enough, or when insulin that is produced does not work properly (known as insulin resistance). This type of diabetes usually appears in people over the age of 40, though it often appears before the age of 40 in the South Asian and African-Caribbean population. It is treated by diet alone or by diet and tablets or, sometimes, by diet and insulin injections.
ulceration	Breaks or deep sores in the skin.
urinary albumin concentration	A measure of how much albumin (protein) leaks from the blood into urine as a result of one or more disease processes in the body.
visual acuity	A measure of how well a person sees distant and close objects.

Our Commitment

CSBS will:

- involve NHS staff, patients and the public in all parts of its work;
- work with and support NHS staff in improving standards;
- assist NHSScotland in delivering the highest quality of NHS care to each patient;
- base its conclusions and recommendations on the best evidence available;
- be open and transparent in all its work through wide circulation of reports written in language that can be understood by all and is jargon free;
- seek to avoid duplication of effort through working closely with other national organisations involved in improving the quality of care within the NHS; and
- ensure that its own work is subject to quality assurance and evaluation.



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