# Complete Summary

## GUIDELINE TITLE

Management of stable angina. A national clinical guideline.

## BIBLIOGRAPHIC SOURCE(S)

Scottish Intercollegiate Guidelines Network (SIGN). Management of stable angina. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2007 Feb. 57 p. (SIGN publication; no. 96). [310 references]

## GUIDELINE STATUS

This is the current release of the guideline.

This guideline was issued in 2007 and will be considered for review in three years. Any updates to the guideline in the interim period will be noted on the Scottish Intercollegiate Guidelines Network (SIGN) Web site.

## COMPLETE SUMMARY CONTENT



## SCOPE

### DISEASE/CONDITION(S)

Stable angina

### GUIDELINE CATEGORY

Counseling
Diagnosis
Evaluation

Management
Rehabilitation
Risk Assessment
Treatment

## CLINICAL SPECIALTY

Cardiology
Family Practice
Internal Medicine

## INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians

## GUIDELINE OBJECTIVE(S)

- To present evidence-based recommendations for the management of stable angina
- To examine the most appropriate models of care and referral as well as the investigations necessary to confirm the presence of coronary heart disease (CHD)
- To consider the optimum medical treatment to relieve symptoms
- To consider the optimum management of patients with angina requiring non-cardiac surgery
- To examine the relative benefits of different interventions and the provision of patient education
- To examine whether psychological interventions can help improve symptoms and quality of life

## TARGET POPULATION

Adult patients with stable angina

**Note**: Patients who have unstable angina (acute coronary syndrome) are outside the remit of this guideline, as these patients usually require more urgent and immediate management.

## INTERVENTIONS AND PRACTICES CONSIDERED

### Diagnosis/Evaluation

1. Baseline electrocardiogram and exercise tolerance test
2. Myocardial perfusion scintigraphy
3. Confirmation of diagnosis and assessment of the severity of underlying coronary heart disease in the chest pain evaluation service

## Treatment/Management

### Pharmacological Management

1. Beta-blockers as first line therapy
2. Dihydropyridine derivative calcium blockers in patients with Prinzmetal (vasospastic) angina
3. Sublingual glyceryl trinitrate tablets or spray
4. Rate limiting calcium blockers, long-acting nitrates, or nicorandil in patients who are intolerant of beta blockers
5. Addition of calcium channel blocker to beta-blockade
6. Long-term standard aspirin and statin therapy
7. Angiotensin-converting (ACE) enzymes

### Interventional Cardiology and Cardiac Surgery

1. Surgical revascularisation by coronary artery bypass grafting or percutaneous coronary interventions
2. Educational and rehabilitation approach based on cognitive behaviour principles
3. Non-cardiac surgery after preoperative assessments
4. Preoperative and postoperative drug interventions, as indicated (e.g., dual antiplatelet therapy, beta-blockers, statins)

### Psychological and Cognitive Issues

1. Assessment of the impact of angina on mood, quality of life, and functioning
2. Use of the Angina Plan
3. Patient advisement of post-surgical risk of cognitive decline
4. Consideration of the risk of cognitive decline when evaluating options for revascularisation
5. Pre-surgery and post-surgery screening for anxiety and depression
6. Post-revascularisation rehabilitation programmes
7. Assessment of patients beliefs about angina
8. Risk management interventions based on psychological principles

### Patient Issues and Follow Up

1. Early access to angiography and coronary artery bypass surgery
2. Long term structured follow up in primary care

## MAJOR OUTCOMES CONSIDERED

- Accuracy of diagnosis
- Promptness of diagnosis
- Blood pressure
- Oxygen demand
- Coronary flow
- Left ventricular function
- Incidence and severity of angina symptoms
- Postoperative cardiac complications

- Long term patency rates
- Survival
- Morbidity and mortality rates
- Incidence of coronary heart disease
- Quality of life
- Cognitive decline
- Levels of patient anxiety and distress
- Functional capacity

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The evidence base for this guideline was synthesised in accordance with Scottish Intercollegiate Guidelines Network (SIGN) methodology. A systematic review of the literature was carried out using an explicit search strategy devised by a SIGN Information Officer. Searches were focused on existing guidelines, systematic reviews, randomised controlled trials, and (where appropriate) observational and/or diagnostic studies. Databases searched include Medline, Embase, Cinahl, PsychINFO, and the Cochrane Library. The year range covered was 1999-2005. Internet searches were carried out on various websites including those for the Australian Centre for Clinical Effectiveness, National Institute for Health and Clinical Excellence, the National Library for Health, Swedish Council on Technology Assessment in Healthcare, US Agency for Healthcare Research and Quality, and the US National Guidelines Clearinghouse. The Medline version of the main search strategies can be found on the SIGN website, in the section covering supplementary guideline material. The main searches were supplemented by material identified by individual members of the development group. Each of the selected papers was evaluated by two members of the group using standard SIGN methodological checklists before conclusions were considered as evidence.

### NUMBER OF SOURCE DOCUMENTS

Not stated

### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

**Levels of Evidence:**

**1++**: High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias

**1+**: Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias

**1-**: Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias

**2++**: High quality systematic reviews of case control or cohort studies

High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal

**2+**: Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal

**2-**: Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal

**3**: Non-analytic studies (e.g., case reports, case series)

**4**: Expert opinion

## METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Once papers have been selected as potential sources of evidence, the methodology used in each study is assessed to ensure its validity. The result of this assessment will affect the level of evidence allocated to the paper, which will in turn influence the grade of recommendation that it supports.

The methodological assessment is based on a number of key questions that focus on those aspects of the study design that research has shown to have a significant influence on the validity of the results reported and conclusions drawn. These key questions differ between study types, and a range of checklists is used to bring a degree of consistency to the assessment process. Scottish Intercollegiate Guidelines Network (SIGN) has based its assessments on the MERGE (Method for Evaluating Research and Guideline Evidence) checklists developed by the New South Wales Department of Health, which have been subjected to wide consultation and evaluation. These checklists were subjected to detailed evaluation and adaptation to meet SIGN's requirements for a balance between methodological rigour and practicality of use.

The assessment process inevitably involves a degree of subjective judgment. The extent to which a study meets a particular criterion (e.g., an acceptable level of loss to follow up) and, more importantly, the likely impact of this on the reported results from the study will depend on the clinical context. To minimise any

potential bias resulting from this, each study must be evaluated independently by at least two group members. Any differences in assessment should then be discussed by the full group. Where differences cannot be resolved, an independent reviewer or an experienced member of SIGN Executive staff will arbitrate to reach an agreed quality assessment.

### Evidence Tables

Evidence tables are compiled by SIGN executive staff based on the quality assessments of individual studies provided by guideline development group members. The tables summarise all the validated studies identified from the systematic literature review relating to each key question. They are presented in a standard format to make it easier to compare results across studies, and will present separately the evidence for each outcome measure used in the published studies. These evidence tables form an essential part of the guideline development record and ensure that the basis of the guideline development group's recommendations is transparent.

Additional details can be found in the companion document titled "SIGN 50: A Guideline Developers' Handbook" (see "Availability of Companion Documents" field in this summary).

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

### Synthesising the Evidence

Guideline recommendations are graded to differentiate between those based on strong evidence and those based on weak evidence. This judgment is made on the basis of an (objective) assessment of the design and quality of each study and a (perhaps more subjective) judgment on the consistency, clinical relevance and external validity of the whole body of evidence. The aim is to produce a recommendation that is evidence-based, but which is relevant to the way in which health care is delivered in Scotland and is therefore implementable.

It is important to emphasise that the grading does not relate to the importance of the recommendation, but to the strength of the supporting evidence and, in particular, to the predictive power of the study designs from which that data was obtained. Thus, the grading assigned to a recommendation indicates to users the likelihood that, if that recommendation is implemented, the predicted outcome will be achieved.

### Considered Judgment

It is rare for the evidence to show clearly and unambiguously what course of action should be recommended for any given question. Consequently, it is not always clear to those who were not involved in the decision making process how

guideline developers were able to arrive at their recommendations, given the evidence they had to base them on. In order to address this problem, SIGN has introduced the concept of considered judgment.

Under the heading of considered judgment, guideline development groups summarise their view of the total body of evidence covered by each evidence table. This summary view is expected to cover the following aspects:

- Quantity, quality, and consistency of evidence
- Generalisability of study findings
- Directness of application to the target population for the guideline.
- Clinical impact (i.e., the extent of the impact on the target patient population, and the resources needed to treat them.)
- Implementability (i.e., how practical it would be for the National Health Service (NHS) in Scotland to implement the recommendation.)

Guideline development groups are provided with a pro forma in which to record the main points from their considered judgment. Once they have considered these issues, the group is asked to summarise their view of the evidence and assign a level of evidence to it, before going on to derive a graded recommendation.

Additional detail about SIGN's process for formulating guideline recommendations is provided in Section 6 of the companion document titled "SIGN 50: A Guideline Developers' Handbook" (see "Availability of Companion Documents" field in this summary).

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

### Grades of Recommendations

*Note: The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation*.

**A**: At least one meta-analysis, systematic review of randomized controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; *or*

A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results

**B**: A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 1++ or 1+

**C**: A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 2++

**D**: Evidence level 3 or 4; *or*

Extrapolated evidence from studies rated as 2+

**Good Practice Points**: Recommended best practice based on the clinical experience of the guideline development group

### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

### METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The national open meeting is the main consultative phase of Scottish Intercollegiate Guidelines Network (SIGN) guideline development.

**Peer Review**

All SIGN guidelines are reviewed in draft form by independent expert referees, who are asked to comment primarily on the comprehensiveness and accuracy of interpretation of the evidence base supporting the recommendations in the guideline. A number of general practitioners (GPs) and other primary care practitioners also provide comments on the guideline from the primary care perspective, concentrating particularly on the clarity of the recommendations and their assessment of the usefulness of the guideline as a working tool for the primary care team. The draft is also sent to a lay reviewer in order to obtain comments from the patient's perspective. The comments received from peer reviewers and others are carefully tabulated and discussed with the chairman and with the guideline development group. Each point must be addressed and any changes to the guideline as a result noted or, if no change is made, the reasons for this recorded.

As a final quality control check prior to publication, the guideline and the summary of peer reviewers' comments are reviewed by the SIGN Editorial Group for that guideline to ensure that each point has been addressed adequately and that any risk of bias in the guideline development process as a whole has been minimised. Each member of the guideline development group is then asked formally to approve the final guideline for publication.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

***Note from the Scottish Intercollegiate Guidelines Network (SIGN) and National Guideline Clearinghouse (NGC)****: In addition to these evidence-based*

*recommendations, the guideline development group also identifies points of best clinical practice in the full-text guideline document.*

The grades of recommendations (A–D) and levels of evidence (1++, 1+, 1-, 2++, 2+, 2-, 3, 4) are defined at the end of the "Major Recommendations" field.

## Diagnosis and Assessment

### Establishing a Diagnosis

**C** - Patients with suspected angina should usually be investigated by a baseline electrocardiogram and an exercise tolerance test.

**B** - Patients unable to undergo exercise tolerance testing or who have pre-existing electrocardiogram abnormalities should be considered for myocardial perfusion scintigraphy.

### Models of Care

**B** - Following initial assessment in primary care, patients with suspected angina should, wherever possible, have the diagnosis confirmed and the severity of the underlying coronary heart disease assessed in the chest pain evaluation service which offers the earliest appointment, regardless of model.

## Pharmacological Management

### Drug Monotherapy to Alleviate Angina Symptoms

**A** - Beta blockers should be used as first line therapy for the relief of symptoms of stable angina.

**B** - Patients with Prinzmetal (*vasospastic*) angina should be treated with a dihydropyridine derivative calcium channel blocker.

**A** - Sublingual glyceryl trinitrate tablets or spray should be used for the immediate relief of angina and before performing activities that are known to bring on angina.

**A** - Patients who are intolerant of beta-blockers should be treated with either rate-limiting calcium channel blockers, long-acting nitrates or nicorandil.

### Combination Therapy to Alleviate Angina Symptoms

**A** - When adequate control of anginal symptoms is not achieved with beta-blockade a calcium channel blocker should be added.

### Drug Interventions to Prevent New Vascular Events

**A** - All patients with stable angina due to atherosclerotic disease should receive long term standard aspirin and statin therapy.

**A** - All patients with stable angina should be considered for treatment with angiotensin-converting (ACE) enzyme inhibitors.

## Interventional Cardiology and Cardiac Surgery

### Choice of Revascularisation Technique

**A** - Patients who have been assessed and are anticipated to receive symptomatic relief from revascularisation should be offered either coronary artery bypass grafting or percutaneous coronary interventions.

**A** - Patients with significant left main stem disease should undergo coronary artery bypass grafting.

**A** - Patients with triple vessel disease should be considered for coronary artery bypass grafting to improve prognosis, but where unsuitable be offered percutaneous coronary intervention.

**A** - Patients with single or double vessel disease, where optimal medical therapy fails to control angina symptoms, should be offered percutaneous coronary intervention or where unsuitable, considered for coronary artery bypass grafting.

**D** - Patients undergoing surgical revascularisation of the left anterior descending coronary artery should receive an internal mammary artery graft, where feasible.

### Effect of On-/Off-Pump Coronary Artery Bypass Grafting on Cognitive Impairment

**A** - Off-pump coronary artery bypass grafting should not be used as the basis of providing long term protection against cognitive decline.

### Managing Refractory Angina

**D** - Patients with refractory angina may benefit from an educational and rehabilitation approach based on cognitive behaviour principles prior to considering other invasive treatments.

## Stable Angina and Non-Cardiac Surgery

### Assessment Prior to Surgery

**B** - As part of the routine assessment of fitness for non-cardiac surgery, a risk assessment tool should be used to quantify the risk of serious cardiac events in patients with coronary heart disease.

**B** - Patients undergoing high risk surgery who have a history of coronary heart disease, stroke, diabetes, heart failure or renal dysfunction should have further investigation by either exercise tolerance testing or other non-invasive testing or coronary angiography, if appropriate.

**D** - An objective assessment of functional capacity should be made as part of the preoperative assessment of all patients with coronary heart disease before major surgery.

### Preoperative Revascularisation

**D** - Coronary artery bypass grafting is not recommended before major or intermediate risk non-cardiac surgery unless cardiac symptoms are unstable and/or coronary artery bypass grafting would be justified on the basis of long term outcome.

**D** - If emergency or urgent non-cardiac surgery is required after percutaneous coronary intervention, dual antiplatelet therapy should be continued whenever possible. If the bleeding risk is unacceptable and antiplatelet therapy is withdrawn, it should be reintroduced as soon as possible after surgery.

### Drug Therapy in Angina Patients Undergoing Non-Cardiac Surgery

**A** - Preoperative beta-blocker therapy should be considered in patients with coronary heart disease undergoing high or intermediate risk non-cardiac surgery who are at high risk of cardiac events.

**B** - Pre-existing beta-blocker therapy should be continued in the perioperative period.

**C** - Low-dose aspirin therapy should only be withheld before non-cardiac surgery in patients with coronary heart disease where the aspirin related bleeding complications are expected to be significant (venous thromboembolism [VTE], myocardial infarction [MI], stroke, peripheral vascular occlusion, or cardiovascular death).

**D** - If low-dose aspirin therapy is withdrawn before non-cardiac surgery in patients with coronary heart disease, it should be recommenced as soon as possible after surgery.

**B** - Patients with coronary heart disease undergoing major non-cardiac vascular surgery should be established on a statin before surgery.

## Psychological and Cognitive Issues

### How Does Angina Affect Quality of Life?

**D** - Patients with angina should be assessed for the impact of angina on mood, quality of life and function, to monitor progress and inform treatment decisions.

### Improving Symptom Control with Behavioural Interventions

**B** - Patients with stable angina whose symptoms remain uncontrolled or who are experiencing reduced physical functioning despite optimal medical therapy should be considered for the Angina Plan.

### The Effect of Treatment for Angina on Cognition

**B** - Patients undergoing coronary artery bypass grafting should be advised that cognitive decline is relatively common in the first two months after surgery.

**D** - Patients who are older and have other evidence of atherosclerosis and/or existing cognitive impairment may be more at risk of increasing decline and these factors should be considered when evaluating options for revascularisation to achieve symptom relief.

### The Effect of Psychological Factors on Clinical Outcomes Including Mortality

**D** - Patients undergoing coronary artery bypass grafting should receive screening for anxiety and depression pre-surgery and during the following year as part of postsurgical assessment, rehabilitation and coronary heart disease secondary prevention clinics. Where required patients should receive appropriate treatment (psychological therapy, rehabilitation, medication).

**D** - Rehabilitation programmes should be implemented after revascularisation for patients with stable angina.

### The Effect of Health Beliefs on Symptoms and Functional Status

**D** - Patients' beliefs about angina should be assessed when discussing management of risk factors and how to cope with symptoms.

**B** - Interventions based on psychological principles designed to alter beliefs about heart disease and angina, such as the Angina Plan, should be considered.

## Patient Issues and Follow Up

### Cardiac Waiting Times

**C** - Early access to angiography and coronary artery bypass surgery may reduce the risk of adverse cardiac events and impaired quality of life.

### Follow Up in Patients with Angina

**A** - Patients presenting with angina and with a diagnosis of coronary heart disease should receive long term structured follow up in primary care.

## Definitions:

### Grades of Recommendations

*Note: The grade of recommendation relates to the strength of the evidence on which the recommendation is based. It does not reflect the clinical importance of the recommendation.*

**A**: At least one meta-analysis, systematic review of randomized controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; *or*

A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results

**B**: A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 1++ or 1+

**C**: A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 2++

**D**: Evidence level 3 or 4; *or*

Extrapolated evidence from studies rated as 2+

**Good Practice Points**: Recommended best practice based on the clinical experience of the guideline development group

**Levels of Evidence**

**1++**: High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias

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High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal

**2+**: Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal

**2-**: Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal

**3**: Non-analytic studies, e.g., case reports, case series

**4**: Expert opinion

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Accurate, prompt diagnoses
- Improved blood pressure, oxygen demand, coronary flow, left ventricular function
- Reduced incidence and severity of angina symptoms
- Fewer postoperative cardiac complications
- Improved long term patency rates
- Improved survival
- Decreased morbidity and mortality rates
- Decreased incidence of coronary heart disease
- Improved quality of life
- Improved cognitive function
- Lower levels of patient anxiety and distress
- Improved functional capacity

### POTENTIAL HARMS

- The main side effect of nitrates is headache, which usually wears off after continuous use, but in some patients this could become intolerable and necessitate change to another anti-anginal drug.
- Preoperative coronary artery bypass grafting (CABG) will be appropriate for only a minority of patients as the procedure carries a significant risk of mortality (around 3%) and morbidity, and these risks must be added to those of the coronary angiography and the non-cardiac surgery itself.
- Coated stents delay re-endothelialisation.
- Patients who have had percutaneous coronary interventions (PCI) and stent insertion are at risk of stent thrombosis if their dual antiplatelet therapy is discontinued.
- Cognitive decline is relatively common in the early period following CABG and, in some patients, the initial decline may improve over the first three months.

## CONTRAINDICATIONS

### CONTRAINDICATIONS

- Beta blockers are contraindicated in patients with severe bradycardia, atrioventricular (AV) block, sick sinus syndrome, decompensated heart failure and asthma.

- Rate-limiting calcium channel blockers (CCBs) (verapamil and diltiazem) are contraindicated in heart failure and in patients with bradycardia or AV block.
- Beta-blockers should not be used in Prinzmetal (vasospastic) angina because they may worsen the coronary spasm.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is, however, advised that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

Implementation of national clinical guidelines is the responsibility of each National Health Service (NHS) Board and is an essential part of clinical governance. It is acknowledged that every Board cannot implement every guideline immediately on publication, but mechanisms should be in place to ensure that the care provided is reviewed against the guideline recommendations and the reasons for any differences assessed and, where appropriate, addressed. These discussions should involve both clinical staff and management. Local arrangements may then be made to implement the national guideline in individual hospitals, units and practices, and to monitor compliance. This may be done by a variety of means including patient-specific reminders, continuing education and training, and clinical audit.

Key points for audit are identified in the original guideline document.

### IMPLEMENTATION TOOLS

Audit Criteria/Indicators
Chart Documentation/Checklists/Forms
Foreign Language Translations
Patient Resources
Quick Reference Guides/Physician Guides

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better
Living with Illness

### IOM DOMAIN

Effectiveness
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Scottish Intercollegiate Guidelines Network (SIGN). Management of stable angina. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2007 Feb. 57 p. (SIGN publication; no. 96). [310 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2001 Apr (revised 2007 Feb)

### GUIDELINE DEVELOPER(S)

Scottish Intercollegiate Guidelines Network - National Government Agency [Non-U.S.]

### SOURCE(S) OF FUNDING

Scottish Executive Health Department

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

*Guideline Development Group*: Dr Alan Begg (*Chair*) General Practitioner, Montrose; Ms Shona Black, Cardiovascular Facilitator, Dundee Community Health Partnership; Mr Tom Brighton, Lay Representative, Montrose; Dr Rob Cargill, Consultant Cardiologist, Victoria Hospital, Kirkcaldy; Ms Joyce Craig, Senior Health Economist, NHS Quality Improvement Scotland; Dr Mohamed Elfellah, Cardiovascular Lead Pharmacist, Aberdeen Royal Infirmary; Dr Neil Gillespie, Senior Lecturer, Section of Ageing and Health, University of Dundee; Mr Bob Jeffrey, Consultant Cardiothoracic Surgeon, Aberdeen Royal Infirmary; Dr Alistair Macfie, Consultant Anaesthetist, Western Infirmary, Glasgow; Mrs Catriona McGregor, Head of Clinical Physiology, Ayr Hospital; Mr Alexander Masson, Lay Representative, Montrose; Dr John Milne, General Practitioner, Leslie Medical Practice, Glenrothes; Dr Moray Nairn, Programme Manager, SIGN Executive; Dr Keith Oldroyd, Interventional Cardiologist, Western Infirmary, Glasgow; Mr Dennis Sandeman, Chest Pain Nurse Specialist, Victoria Hospital, Kirkcaldy; Mr Duncan Service, Information Officer, SIGN Executive; Ms Nicola Stuckey, Consultant Clinical Psychologist, Astley Ainslie Hospital, Edinburgh

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

All members of the guideline development group made declarations of interests and further details of these are available on request from the Scottish Intercollegiate Guidelines Network (SIGN) Executive.

## GUIDELINE STATUS

This is the current release of the guideline.

This guideline was issued in 2007 and will be considered for review in three years. Any updates to the guideline in the interim period will be noted on the Scottish Intercollegiate Guidelines Network (SIGN) Web site.

## GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Scottish Intercollegiate Guidelines Network (SIGN) Web site.

## AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Quick reference guide: Heart disease. Scottish Intercollegiate Guidelines Network, 2007 Feb. 31 p. Available in Portable Document Format (PDF) from the SIGN Web site.
- SIGN 50: A guideline developer's handbook. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network. (SIGN publication; no. 50). Available from the Scottish Intercollegiate Guidelines Network (SIGN) Web site.
- Appraising the quality of clinical guidelines. The SIGN guide to the AGREE (Appraisal of Guidelines Research & Evaluation) guideline appraisal instrument. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network, 2001. Available from the SIGN Web site.

- Management of coronary heart disease: A national clinical and resource impact assessment. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network, 2007 Feb. 120 p. Available in Portable Document Format (PDF) from the SIGN Web site.
- Excel spreadsheets to assist health boards to estimate their local costs (used in conjunction with the national clinical and resource impact assessment). Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network, 2007 Feb. Available from the SIGN Web site.

### PATIENT RESOURCES

The following is available:

- Stable angina for patients. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network. 2007. 32 p.

Available in Portable Document Format (PDF) from the SIGN Web site. Urdu translation is also available from the SIGN Web site.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

### NGC STATUS

This summary was completed by ECRI Institute on October 17, 2001. The information was verified by the guideline developer as of December 17, 2001. This NGC summary was updated by ECRI Institute on April 19, 2007.

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