

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE**1 Guideline title**

Chest pain of recent onset: assessment and investigation of recent onset chest pain/discomfort of suspected cardiac origin.

1.1 Short title

Chest pain/discomfort of recent onset

2 Background

- a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Primary Care to develop a clinical guideline on the assessment and investigation of recent onset chest pain/discomfort of suspected cardiac origin for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health (see appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness. NICE has commissioned the National Collaborating Centre for Chronic Conditions to develop a guideline entitled 'Assessment and management of acute coronary syndromes' in parallel with this guideline.
- This guideline will give guidance on the investigation and assessment of chest pain/discomfort and any associated symptoms, and when the cause of the chest pain/discomfort is known, other guidelines should be used as appropriate.
- b) The Institute's clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals

published by the Institute after an NSF has been issued will have the effect of updating the Framework.

- c) NICE clinical guidelines support the role of healthcare professionals in providing care in partnership with patients, taking account of their individual needs and preferences, and ensuring that patients (and their carers and families, where appropriate) can make informed decisions about their care and treatment.

3 Clinical need for the guideline

- a) CHD by itself is the most common cause of death in the UK. Around one in five men and one in six women die from the disease. CHD causes around 101,000 deaths in the UK each year¹.
- b) Chest pain/discomfort is a common presenting symptom in primary and secondary care, and there are many possible causes. The most important of these with regard to mortality and morbidity is CHD, including acute coronary syndromes and myocardial infarction (MI).
- c) Chest pain/discomfort is caused by CHD in only a minority of cases, and guidance on the assessment of chest pain/discomfort will aid in making an accurate diagnosis, avoiding inappropriate diagnoses and treatment, and reducing unnecessary referral and admission to secondary care. Rapid identification of people with cardiac chest pain/discomfort who require further specialist assessment and management will reduce mortality and morbidity.

4 The guideline

- a) The guideline development process is described in detail in two publications that are available from the NICE website (see 'Further information'). 'The guideline development process: an overview for stakeholders, the public and the NHS' describes how organisations can become involved in the development of a guideline. 'The

guidelines manual' provides advice on the technical aspects of guideline development.

- b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health (see appendix).
- c) The areas that will be addressed by the guideline are described in the following sections.

4.1 *Population*

4.1.1 *Groups that will be covered*

- a) Adults (18 years and older) who have recent onset chest pain/discomfort of suspected cardiac origin, with or without a prior history and/or diagnosis of cardiovascular disease.
- b) Recommendations will be made, as appropriate and based on the evidence, for specific groups. In this guideline, for example, they may be particular issues for women and black and minority ethnic groups.

4.1.2 *Groups that will not be covered*

- a) People who have traumatic chest injury without cardiac symptoms.
- b) People in whom the cause of their chest pain/discomfort is known to be related to another condition, and without cardiac symptoms.

4.2 *Healthcare setting*

- a) The guideline will cover the care received from healthcare professionals who have direct contact with, and make decisions concerning, the care of people who have recent onset chest pain/discomfort of suspected cardiac origin

- b) The guideline will address care in primary and secondary healthcare settings and, where appropriate, other settings, including telephone advice prior to the arrival of any healthcare support and emergency care.
- c) The guideline will also be relevant to the work, but will not specifically cover the practice, of those working in the occupational health services and voluntary sector.

4.3 *Clinical assessment and investigation*

4.3.1 Areas that will be covered

- a) Assessment of people with recent onset chest pain/discomfort of suspected cardiac origin at initial presentation.
- b) Assessment and investigation of people with recent onset of chest pain/discomfort of suspected cardiac origin at initial presentation including:
 - history and physical examination
 - cardiovascular risk factor assessment (such as family history, age and gender)
 - communication and informed discussion of treatment options
 - early biochemical markers for the diagnosis of acute coronary syndrome and MI
 - cardiac investigations (such as electrocardiogram and chest X-ray) for the diagnosis of acute coronary syndrome and MI
 - diagnostic tests, such as exercise testing, myocardial perfusion imaging, and other appropriate imaging modalities in patients requiring further assessment.
- c) Early, initial pharmacological interventions in the management of people with recent onset chest pain/discomfort of suspected cardiac origin, such as oxygen, anti-platelet therapy and pain relief before a cause is known.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only where clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform their decisions for individual patients.

- d) The guideline will cover education and information provision for people with recent onset chest pain/discomfort of suspected cardiac origin.
- e) Where relevant and where associated with chest pain/discomfort, the special needs of people from different groups will be considered, for example:
- black and minority ethnic groups
 - older people
 - socio-economic groups
 - women
 - people with disabilities
 - people who have experienced chest pain/discomfort in the past.
- f) The guideline development groups will take reasonable steps to identify ineffective interventions and approaches to care. If robust and credible recommendations for re-positioning the intervention for optimal use, or changing the approach to care to make more efficient use of resources can be made, they will be clearly stated. If the resources released are substantial, consideration will be given to listing such recommendations in the 'Key priorities for implementation' section of the guideline.

4.3.2 Areas that will not be covered

- a) Management and symptom control once the cause of chest pain/discomfort is known (see related NICE guidance).
- b) Assessment for coronary revascularisation.

- c) Management of asymptomatic people with possible ischaemic heart disease (for example, people with abnormal ECG due to left bundle branch block or left ventricular dysfunction).

4.4 Status

4.4.1 Scope

This is the final scope.

The following related NICE guidance will be referred to as appropriate.

Published

Atrial fibrillation: the management of atrial fibrillation. NICE clinical guideline 36 (2006). Available from: www.nice.org.uk/CG036

Management of chronic heart failure in adults in primary and secondary care. NICE clinical guideline 5 (2007). Available from: www.nice.org.uk/CG005

Hypertension: management of hypertension in adults in primary care. NICE clinical guideline 34 (2006). Available from: www.nice.org.uk/CG034

Secondary prevention in primary and secondary care for patients following a myocardial infarction. NICE clinical guideline 48 (2007). Available from: www.nice.org.uk/CG048

Clopidogrel in the treatment of non-ST-segment elevation acute coronary syndrome. NICE technology appraisal guidance 80 (2004). Available from: www.nice.org.uk/TA080

Glycoprotein IIb/IIIa inhibitors in the treatment of acute coronary syndromes. NICE technology appraisal guidance 47 (2007). Available from: www.nice.org.uk/TA047

Myocardial perfusion scintigraphy for the diagnosis and management of angina and myocardial infarction. NICE technology appraisal guidance 73 (2003). Available from: www.nice.org.uk/TA073

Implantable cardioverter defibrillators (ICDs) for the treatment of arrhythmias (review of TA11). NICE technology appraisal guidance 95 (2007). Available from: www.nice.org.uk/TA095

Bradycardia – dual chamber pacemakers. NICE technology appraisal guidance 88 (2005). Available from: www.nice.org.uk/TA088

Statins for the prevention of cardiovascular events in patients at increased risk of developing cardiovascular disease or those with established cardiovascular disease. NICE technology appraisal guidance 94 (2006). Available from: www.nice.org.uk/TA094

Cardiac resynchronisation therapy for the treatment of heart failure. NICE technology appraisal guidance 120 (2007). Available from: www.nice.org.uk/TA120

Guidance on the use of coronary artery stents. NICE technology appraisal guidance 71 (2003). Available from: www.nice.org.uk/TA071

Alteplase for the treatment of acute ischaemic stroke. NICE technology appraisal guidance 122 (2007). Available from: www.nice.org.uk/TA122

Guidance on the use of drugs for early thrombolysis in the treatment of acute myocardial infarction. NICE technology appraisal guidance 52 (2002). Available from: www.nice.org.uk/TA052

Clopidogrel and dipyridamole for the prevention of atherosclerotic events. NICE technology appraisal guidance 90 (2005). Available from: www.nice.org.uk/TA090

In development

Acute coronary syndromes: assessment and management of acute coronary syndromes. NICE clinical guideline (publication date to be confirmed)

Cardiovascular risk assessment: the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. NICE clinical guideline (publication expected January 2008)

Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack. NICE clinical guideline (publication expected July 2008)

4.4.2 Guideline

The development of the guideline recommendations will begin in December 2007.

5 Further information

Information on the guideline development process is provided in:

- 'The guideline development process: an overview for stakeholders, the public and the NHS'
- 'The guidelines manual'.

These booklets are available as PDF files from the NICE website (www.nice.org.uk/guidelinesmanual). Information on the progress of the guideline will also be available from the website.

Appendix: Referral from the Department of Health

The Department of Health asked the Institute:

To prepare a clinical guideline for the NHS in England on the investigation, assessment and management of acute chest pain of suspected cardiac origin.