

Chest pain search strategies

The strategies were developed for use on the Dialog DataStar and OVID web interfaces. For clarification, access to Dialog DataStar was discontinued during the time the guideline was in production, hence the change to OVID. The following databases were searched: Cochrane Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effects (DARE), Health Technology Assessment Database (HTA), MEDLINE, EMBASE, CENTRAL, and CINAHL. Where appropriate to the question AMED and PsycINFO were also searched. All searches were rerun during March 2009.

The Economic literature was searched using an adapted economic filter developed by the Centre for Reviews and Dissemination (CRD) for Medline and EMBASE. The following were searched: NHS Economic Evaluations Database (NHSEED), MEDLINE, and EMBASE.

The strategies shown are those for MEDLINE using either the Dialog DataStar or OVID interfaces unless otherwise stated. These were then adapted for use on other databases as necessary. Copies of all the search strategies are available on request from the National Clinical Guideline Centre.

Devising a strategy to encompass the wide population included in this guideline proved challenging. A balance had to be achieved in formulating a strategy precise enough to capture the relevant papers amongst a very large literature base, but also sensitive enough to ensure relevant papers were not missed. As a consequence, the strategy was adapted during the development process of the guideline. Due to time constraints it was not possible to go back to earlier searches and rerun them using the new population strategy but checks were made when rerunning all the searches before submission of the guideline to ensure relevant papers had not been missed. Changes to the population strategies are annotated below.

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Subsequent to the searching, many of the questions were divided in two - 'Acute Chest Pain' and 'Stable Chest Pain' and papers allocated to each by the reviewer. In addition, some questions were consolidated, for example those for investigations. The questions and evidence are presented in the guideline in the order of the guideline which does not correspond to the number originally allocated and referred to in this document. The table below links the original number with the final number.

Questions		
Final Question Number:	Original Question number	Questions
1	20	What are the education and information needs in adults presenting with chest pain to optimise their understanding of the diagnostic process and their participation in decisions about their investigations?
2	1	What is the incremental benefit and cost effectiveness of a clinical history, risk factors and physical examination in evaluation of individuals with acute chest pain of suspected cardiac origin?
3	32	What is the diagnostic utility of pain relief with nitrates in the identification of patients with acute chest pain of cardiac origin.
4	24	Are the symptoms and description of the symptoms different in women presenting with acute chest pain of suspected cardiac origin compared with men
5	35	Are the symptoms and description of the symptoms different in Black and Ethnic Minorities presenting with acute chest pain of suspected cardiac origin compared with Caucasians
6	3	What is the utility (incremental value) and cost effectiveness of the resting ECG in evaluation of individuals with acute chest pain of suspected cardiac origin?
7	4	Are the symptoms and description of the symptoms different in women presenting with acute chest pain of suspected cardiac origin compared with men
8	16	In adults presenting with acute chest pain/discomfort of suspected cardiac origin, what is the clinical and cost effectiveness of giving oxygen compared with a placebo?
9	17	In adults presenting with chest pain, what is the clinical and cost effectiveness of pain management (e.g. sublingual and buccal nitrates, diamorphine, morphine with anti-emetic) compared with active comparators?
10	15	In adults presenting with chest pain/discomfort of acute suspected cardiac origin, what is the clinical and cost effectiveness of anti-platelet therapy (aspirin, clopidogrel alone or in combination) compared with a placebo?
11	11	What is the utility and cost effectiveness of cardiac biomarkers in evaluation of individuals with acute chest pain of suspected cardiac origin?
12	34	What is the diagnostic utility MSCT coronary angiography in the diagnosis of patients with acute chest pain of suspected cardiac origin
13	26	What is the incremental benefit and cost effectiveness of a clinical history, risk factors and physical examination in evaluation of individuals with stable chest pain of suspected cardiac origin?
14	37	Are the symptoms and description of the symptoms different in women presenting with stable chest pain

Questions		
Final Question Number:	Original Question number	Questions
		of suspected cardiac origin compared with men
15	38	Are the symptoms and description of the symptoms different in Black and Ethnic Minorities presenting with stable chest pain of suspected cardiac origin compared with Caucasians
16	36	What is the utility (incremental value) and cost effectiveness of the resting ECG in evaluation of individuals with stable chest pain of suspected cardiac origin?
17	33	What is the diagnostic utility of calcium scoring for the evaluation of patients with stable chest pain of cardiac origin.
18	31	What is the diagnostic utility of non-invasive and invasive tests for the evaluation of patients with stable chest pain of suspected cardiac origin.
	10	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility and cost effectiveness of cardiac MRI (including MRA and stress CMR) in evaluation of individuals with chest pain of suspected cardiac origin
	9	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility and cost effectiveness of cardiac CT (including angiography and ? EBCT) in evaluation of individuals with chest pain of suspected cardiac origin?
	8	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility and cost effectiveness of myocardial perfusion scintigraphy with and without SPECT in evaluation of individuals with chest pain of suspected cardiac origin?
	7	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility and cost effectiveness of stress echocardiography in evaluation of individuals with chest pain of suspected cardiac origin?
	5	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility (incremental value) and cost effectiveness of echocardiography in evaluation of individuals with chest pain of suspected cardiac origin?
	2	MOVE TO ORIGINAL QUESTION NUMBER 1 What is the incremental benefit and cost effectiveness of assessment of cardiovascular risk factors in evaluation of individuals with acute chest pain of suspected cardiac origin?
	6	MERGED TO ORIGINAL QUESTION NUMBER 33 What is the utility and cost effectiveness of the exercise ECG in evaluation of individuals with chest pain

Questions		
Final Question Number:	Original Question number	Questions
		of suspected cardiac origin?
	12 IN ORIGINAL QUESTION NUMBER 11	What is the optimum timing for utility of cardiac biomarkers in evaluation of individuals with chest pain of suspected cardiac origin?
	13 MERGED TO ORIGINAL QUESTION NUMBER 33	What is the utility and cost effectiveness of coronary angiography in evaluation of individuals with chest pain of suspected cardiac origin?
	14 NOT USED	What is the utility and cost effectiveness of conducting an algorithm based on computerising relevant information in evaluation of individuals with chest pain of suspected cardiac origin?
	21	Are the presenting symptoms and description of the symptoms different in different groups (based on age, gender, socioeconomic status and ethnicity)?
	22 (MOVED TO ORIGINAL QUESTION NUMBER Q1	What is the incremental benefit and cost effectiveness of a physical examination in evaluation of individuals with acute chest pain of suspected cardiac origin?
	23	What is the accuracy of a computer assisted ECG interpretation
	25	Are the presenting symptoms and description of the symptoms different in women presenting with stable chest pain of cardiac origin compared with men
	27 (QUESTION NOW REDUNDANT MOVE ALL TO Q26	What is the incremental benefit and cost effectiveness of assessment of cardiovascular risk factors in evaluation of individuals with stable chest pain of suspected cardiac origin?
	28 (QUESTION NOW REDUNDANT MOVE ALL TO Q26	What is the incremental benefit and cost effectiveness of a physical examination in evaluation of individuals with stable chest pain of suspected cardiac origin?
	19 MERGED TO ORIGINAL QUESTION NUMBER 2	What are the education and information needs in adults presenting with acute chest pain to encourage early recognition of suspected ACS?

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For each question searches were carried out for systematic reviews (SR) and RCTs, (unless otherwise indicated) along with health economic (HE) literature. The MEDLINE filters used for systematic reviews , RCTs and the health economic literature are listed below:

Medline Systematic review filter. adapted from filter developed by Centre of Reviews and Dissemination (CRD)

1. SEARCH: (SYSTEMATIC\$ ADJ REVIEW\$).AB.
2. SEARCH: REVIEW.PT.
3. SEARCH: META-ANALYSIS OR METAANALYSIS OR (META ADJ ANALYSIS).AB.
4. SEARCH: META-ANALYSIS OR METAANALYSIS OR (META ADJ ANALYSIS).PT.
5. SEARCH: META-ANALYSIS OR METAANALYSIS OR (META ADJ ANALYSIS).TI.
6. SEARCH: 1 OR 2 OR 3 OR 4 OR 5
7. SEARCH: PT=COMMENT OR PT=EDITORIAL OR PT=LETTER OR PT=ENGLISH-ABSTRACT OR PT=CONGRESSES
8. SEARCH: 6 NOT 7

MEDLINE RCT filter developed by the Cochrane Collaboration

(RANDOMIZED ADJ CONTROLLED ADJ TRIAL).PT.
(CONTROLLED ADJ CLINICAL ADJ TRIAL).PT.
(RANDOMIZED ADJ CONTROLLED ADJ TRIALS).SH.
(RANDOM ADJ ALLOCATION).SH.
(DOUBLE ADJ BLIND ADJ METHOD).SH.
(SINGLE ADJ BLIND ADJ METHOD).SH.

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MEDLINE HE filter adapted from filter developed by the Centre for Reviews and Dissemination (CRD).

1. ECONOMICS.DE.
2. COSTS-AND-COST-ANALYSIS#.DE.
3. ECONOMICS-DENTAL.DE.
4. ECONOMICS-HOSPITAL#.DE.
5. ECONOMICS-MEDICAL.DE.
6. ECONOMICS-NURSING.DE.
7. ECONOMICS-PHARMACEUTICAL.DE.
8. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7
9. (COST\$ ADJ (EFFECTIVE\$ OR UTILIT\$ OR BENEFIT\$ OR MINIMI\$)).AB.
10. (ECONOMIC\$ OR COST OR COSTS OR COSTLY OR COSTING OR PRICE OR PRICES OR PRICING OR PHARMACOECONOMIC\$).TI,AB.
11. EXPENDITURE\$.TI,AB. NOT ENERGY.TI,AB.
12. (VALUE WITH MONEY).TI,AB.
13. BUDGET\$.TI,AB.
14. 9 OR 10 OR 11 OR 12 OR 13
15. 8 AND 14
16. Relevant sets for Population & Intervention AND 15
17. (METABOLIC ADJ COST).TI,AB.
18. ((ENERGY OR OXYGEN) ADJ COST).TI,AB.
19. 17 AND 18
20. 16 NOT (17 AND 18)

Question 1 – 14 relating to assessment and investigation

Question 1: What is the utility and cost effectiveness of a clinical history and examination in evaluation of individuals with chest pain of suspected cardiac origin?

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Question 2: What is the utility and cost effectiveness of assessment of cardiovascular risk factors in evaluation of individuals with chest pain of suspected cardiac origin?

CP AND RISK, HISTORY & PHYSICAL EXAM MEDLINE SEARCH STRATEGY

1. SEARCH: Risk-Assessment.MJ.
2. SEARCH: Medical-History-Taking.MJ.
3. SEARCH: Physical-Examination.MJ.
4. SEARCH: Risk.W..MJ.
5. SEARCH: (pretest ADJ (probability OR likelihood)).TI,AB.
6. SEARCH: (history NEAR (take OR takes OR taking)).TI,AB.
7. SEARCH: (risk ADJ assess\$5).TI,AB.
8. SEARCH: ((physical OR clinical) ADJ exam\$8).TI,AB.
9. SEARCH: ((medical OR family OR patient OR clinical) ADJ history).TI,AB.
10. SEARCH: (probability ADJ disease).TI,AB.
11. SEARCH: Framingham.TI,AB.
12. SEARCH: 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11
13. SEARCH: Chest-Pain#.DE.
14. SEARCH: angina.TI,AB.
15. SEARCH: Angina-Pectoris#.DE.
16. SEARCH: (acute ADJ coronary ADJ syndrome\$2).TI,AB.
17. SEARCH: Myocardial-Infarction#.DE.
18. SEARCH: 13 OR 14 OR 15 OR 16 OR 17
19. SEARCH: 12 AND 18

Question 3: What is the utility and cost effectiveness of the resting ECG in evaluation of individuals with chest pain of suspected cardiac origin?

CHEST PAIN AND ECG MEDLINE SEARCH STRATEGY

1. SEARCH: CHEST-PAIN#.DE.
2. SEARCH: ANGINA.TI,AB.
3. SEARCH: ANGINA-PECTORIS#.DE.
4. SEARCH: (ACUTE ADJ CORONARY ADJ SYNDROME\$2).TI,AB.
5. SEARCH: MYOCARDIAL-INFARCTION#.DE.

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6. SEARCH: 1 OR 2 OR 3 OR 4 OR 5
7. SEARCH: ELECTROCARDIOGRAPHY#.W..DE.
8. SEARCH: ECG OR EKG.TI,AB.
9. SEARCH: ELECTROCARDIOGRA\$ OR ELECTROKARDIOGRA\$.TI,AB.
10. SEARCH: 12-LEAD OR TWELVE-LEAD OR '12' ADJ LEAD OR (TWELVE ADJ LEAD).TI,AB.
11. SEARCH: 7 OR 8 OR 9 OR 10
12. SEARCH: 6 AND 11

CHEST PAIN AND ECG MEDLINE SEARCH STRATEGY

Question 4: What is the utility and cost effectiveness of a chest X-ray in evaluation of individuals with chest pain of suspected cardiac origin?

This strategy was revised to include the original five terms plus two new terms in the population: CORONARY-DISEASE#.MJ. and (CORONARY ADJ HEART ADJ DISEASE).TI,AB. After April 2008, this population was used for the majority of the remaining searches. Any variations to this are noted at the relevant point.

Searches for this question were conducted for **systematic reviews and diagnostic accuracy (filter included below)**.

CHEST PAIN & XRAY MEDLINE SEARCH STRATEGY

1. SEARCH: (CHEST NEAR RADIOGRAPH\$.TI,AB.
2. SEARCH: RADIOGRAPHY#.W..DE.
3. SEARCH: (XRAY OR X-RAY OR X ADJ RAY).TI,AB.
4. SEARCH: (CHEST NEAR (XRAY OR X-RAY OR X ADJ RAY)).TI,AB.
5. SEARCH: (ROENTOGRA\$4 OR ROENTENOGRA\$4 OR ROENTNOGRA\$4).TI,AB.
6. SEARCH: 1 OR 2 OR 3 OR 4 OR 5
7. SEARCH: CHEST-PAIN#.MJ.
8. SEARCH: ANGINA.TI,AB.
9. SEARCH: ANGINA-PECTORIS#.MJ.
10. SEARCH: (ACUTE ADJ CORONARY ADJ SYNDROME\$2).TI,AB.

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11. SEARCH: MYOCARDIAL-INFARCTION#.MJ.
12. SEARCH: CORONARY-DISEASE#.MJ.
13. SEARCH: (CORONARY ADJ HEART ADJ DISEASE).TI,AB.
14. SEARCH: 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
15. SEARCH: 6 AND 14
16. SEARCH: SENSITIVITY-AND-SPECIFICITY.DE.
17. SEARCH: (SENSITIVITY OR SPECIFICITY OR ACCURACY).TI,AB.
18. SEARCH: (PREDICTIVE ADJ VALUE\$1).TI,AB.
19. SEARCH: (ROC ADJ CURVE\$1).TI,AB.
20. SEARCH: (FALSE ADJ (POSITIV\$2 OR NEGATIV\$2)).TI,AB.
21. SEARCH: (OBSERVER ADJ VARIATION\$).TI,AB.
22. SEARCH: (LIKELIHOOD ADJ RATIO\$).TI,AB.
23. SEARCH: DIAGNOSIS-DIFFERENTIAL.DE.
24. SEARCH: LIKELIHOOD-FUNCTIONS.DE.
25. SEARCH: DIAGNOSTIC-ERRORS#.DE.
26. SEARCH: PREDICTIVE-VALUE-OF-TESTS.DE.
27. SEARCH: 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26
28. SEARCH: 15 AND 27
29. SEARCH: 14 AND 27 AND 28
30. SEARCH: ANIMAL=YES
31. SEARCH: HUMAN=YES
32. SEARCH: 30 NOT (30 AND 31)
33. SEARCH: 29 NOT 32
34. SEARCH: (COMMENT OR EDITORIAL OR LETTER OR ENGLISH-ABSTRACT OR CONGRESSES).PT.
35. SEARCH: 33 NOT 34
36. SEARCH: LG=EN
37. SEARCH: 35 AND 36

Question 5: What is the utility and cost effectiveness of echocardiography in evaluation of individuals with chest pain of suspected cardiac origin?

Question 6: What is the utility and cost effectiveness of the exercise ECG in evaluation of individuals with chest pain of suspected cardiac origin?

Question 7: What is the utility and cost effectiveness of stress echocardiography in evaluation of individuals with chest pain of suspected cardiac origin?

Searches were conducted for systematic reviews and diagnostic accuracy (filter included below)

CHEST PAIN & ECG MEDLINE SEARCH STRATEGY

1. SEARCH: CHEST-PAIN#.MJ.
2. SEARCH: ANGINA.TI,AB.
3. SEARCH: ANGINA-PECTORIS#.MJ.
4. SEARCH: (ACUTE ADJ CORONARY ADJ SYNDROME\$2).TI,AB.
5. SEARCH: MYOCARDIAL-INFARCTION#.MJ.
6. SEARCH: CORONARY-DISEASE#.MJ.
7. SEARCH: (CORONARY ADJ HEART ADJ DISEASE).TI,AB.
8. SEARCH: 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7
9. SEARCH: ELECTROCARDIOGRAPHY.W..MJ.
10. SEARCH: ECG OR EKG.TI,AB.
11. SEARCH: ELECTROCARDIOGRA\$ OR ELECTROKARDIOGRA\$.TI,AB.
12. SEARCH: 12-LEAD OR TWELVE-LEAD OR '12' ADJ LEAD OR (TWELVE ADJ LEAD).TI,AB.
13. SEARCH: 9 OR 10 OR 11 OR 12
14. SEARCH: 8 AND 13
15. SEARCH: SENSITIVITY-AND-SPECIFICITY.DE.
16. SEARCH: (SENSITIVITY OR SPECIFICITY OR ACCURACY).TI,AB.
17. SEARCH: (PREDICTIVE ADJ VALUE\$1).TI,AB.
18. SEARCH: (ROC ADJ CURVE\$1).TI,AB.
19. SEARCH: (FALSE ADJ (POSITIV\$2 OR NEGATIV\$2)).TI,AB.
20. SEARCH: (OBSERVER ADJ VARIATION\$).TI,AB.
21. SEARCH: (LIKELIHOOD ADJ RATIO\$1).TI,AB.
22. SEARCH: DIAGNOSIS-DIFFERENTIAL.DE.
23. SEARCH: LIKELIHOOD-FUNCTIONS.DE.
24. SEARCH: DIAGNOSTIC-ERRORS#.DE.

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- 25. SEARCH: PREDICTIVE-VALUE-OF-TESTS.DE.
- 26. SEARCH: 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22
OR 23 OR 24 OR 25
- 27. SEARCH: 14 AND 26
- 28. SEARCH: 8 AND 26 AND 27
- 29. SEARCH: PT=COMMENT OR PT=EDITORIAL OR PT=LETTER
OR PT=ENGLISH-ABSTRACT OR PT=CONGRESSES
- 30. SEARCH: 28 NOT 29
- 31. SEARCH: ANIMAL=YES
- 32. SEARCH: HUMAN=YES
- 33. SEARCH: 31 NOT (31 AND 32)
- 34. SEARCH: 30 NOT 33
- 35. SEARCH: LG=EN
- 36. SEARCH: 34 AND 35

Question 8: What is the utility and cost effectiveness of myocardial perfusion scintigraphy with and without SPECT in evaluation of individuals with chest pain of suspected cardiac origin?

Question 9: What is the utility and cost effectiveness of cardiac CT (including angiography and ? EBCT) in evaluation of individuals with chest pain of suspected cardiac origin?

Question 10: What is the utility and cost effectiveness of cardiac MRI (including MRA and stress CMR) in evaluation of individuals with chest pain of suspected cardiac origin?

Question 13: What is the utility and cost effectiveness of coronary angiography in evaluation of individuals with chest pain of suspected cardiac origin?

Chest Pain and diagnostic accuracy MEDLINE search strategy

1. exp "Sensitivity and Specificity"/
2. (sensitivity or specificity or accuracy).ti,ab.
3. (predictive and value*).ti,ab.
4. (roc and curve*).ti,ab.

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5. (false and (positiv* or negative*)).ti,ab.
6. (observer and variation*).ti,ab.
7. (likelihood and ratio*).ti,ab.
8. Likelihood Functions/
9. Diagnosis, Differential/
10. exp Diagnostic Errors/
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. exp *Chest Pain/
13. exp *Angina Pectoris/
14. angina.ti,ab.
15. (acute and coronary and syndrome*).ti,ab.
16. exp *Myocardial Infarction/
17. exp *Coronary Disease/
18. (coronary and heart and disease).ti,ab.
19. 12 or 13 or 14 or 15 or 16 or 17 or 18
20. 11 and 19
21. limit 20 to (english language and humans)

Question 11: What is the utility and cost effectiveness of cardiac biomarkers in evaluation of individuals with chest pain of suspected cardiac origin?

Question 12: What is the optimum timing for utility of cardiac biomarkers in evaluation of individuals with chest pain of suspected cardiac origin?

CHEST PAIN AND BIOMARKERS MEDLINE SEARCH STRATEGY

1. SEARCH: (CARDIAC ADJ BIOMARKERS).TI,AB.
2. SEARCH: BIOMARKERS-PHARMACOLOGICAL#.DE.
3. SEARCH: (CARDIAC NEAR BIOLOGICAL ADJ MARKERS).TI,AB.
4. SEARCH: (TROPONIN ADJ (I OR 'T')).TI,AB.
5. SEARCH: TROPONIN-I#.DE.
6. SEARCH: TROPONIN-T#.DE.

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7. SEARCH: MYOGLOBIN.TI,AB.
8. SEARCH: (CK-MB OR CK ADJ MB OR CKMB).TI,AB.
9. SEARCH: (CPK-MB OR CPK ADJ MB OR CPKMB).TI,AB.
10. SEARCH: (CREATINE ADJ KINASE ADJ MB).TI,AB.
11. SEARCH: (TNI OR TNT OR CTNI OR CTNT).TI,AB.
12. SEARCH: TROPONIN.TI,AB.
13. SEARCH: 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12
14. SEARCH: CHEST-PAIN#.MJ.
15. SEARCH: ANGINA.TI,AB.
16. SEARCH: ANGINA-PECTORIS#.MJ.
17. SEARCH: (ACUTE ADJ CORONARY ADJ SYNDROME\$2).TI,AB.
18. SEARCH: MYOCARDIAL-INFARCTION#.MJ.
19. SEARCH: CORONARY-DISEASE#.MJ.
20. SEARCH: (CORONARY ADJ HEART ADJ DISEASE).TI,AB.
21. SEARCH: 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20
22. SEARCH: 13 AND 21

Question 14: What is the utility and cost effectiveness of conducting an algorithm based on computerising relevant information in evaluation of individuals with chest pain of suspected cardiac origin?

CP and algorithms MEDLINE search strategy

1. exp Algorithms/
2. algorithm*.ti,ab.
3. (risk adj scor*).ti,ab.
4. 1 or 3 or 2
5. exp Chest Pain/
6. exp Angina Pectoris/
7. angina.ti,ab.
8. exp Acute Coronary Syndrome/
9. acute coronary syndrome.ti,ab.
10. exp Myocardial Infarction/
11. exp Coronary Disease/
12. coronary heart disease.ti,ab.

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13. 8 or 6 or 11 or 7 or 10 or 9 or 12 or 5

14. 4 and 13

Questions 15 to 17 relating to treatment

The searches for questions 15 and 16, carried out in November 2007, were some of the first to be carried out for this guideline before the final population strategy had been agreed upon.

Question 15: In adults presenting with chest pain/discomfort of suspected cardiac origin, what is the clinical and cost effectiveness of anti-platelet therapy (aspirin, clopidogrel alone or in combination) compared with a placebo?

CP AND ANTI-PLATELET THERAPY MEDLINE SEARCH STRATEGY

1. SEARCH: CHEST-PAIN#.DE.
2. SEARCH: (CHEST NEAR (PAIN OR DISCOMFORT OR TIGHT\$4 OR PRESSURE)).TI,AB.
3. SEARCH: (CARDIAC ADJ PAIN).TI,AB.
4. SEARCH: (THORA\$3 NEAR PAIN).TI,AB.
5. SEARCH: (SUSPECT\$2 NEAR CARDIAC NEAR PAIN).TI,AB.
6. SEARCH: (SUSPECT\$2 NEAR ACUTE ADJ CORONARY NEAR SYNDROME\$2).TI,AB.
7. SEARCH: (UNSTABLE NEAR ANGINA).TI,AB.
8. SEARCH: MYOCARDIAL.TI,AB.
9. SEARCH: INFARCT\$3.TI,AB.
10. SEARCH: (MYOCARDIAL ADJ INFARCTION).TI,AB.
11. SEARCH: (PREINFARCTION OR PRE-INFARCTION OR PRE ADJ INFARCTION).TI,AB.
12. SEARCH: (HEART NEAR (ARREST\$2 OR ATTACK\$2)).TI,AB.
13. SEARCH: 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12
14. SEARCH: PLATELET-AGGREGATION-INHIBITORS#.DE.
15. SEARCH: ((ANTIPLATELET OR ANTI ADJ PLATELET OR ANTI-

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- PLATELET) NEAR THERAP\$3).TI,AB.
16. SEARCH: ASPIRIN#.W..DE.
 17. SEARCH: ASPIRIN.TI,AB.
 18. SEARCH: CLOPIDOGREL.TI,AB.
 19. SEARCH: PLAVIX.TI,AB.
 20. SEARCH: 14 OR 15 OR 16 OR 17 OR 18 OR 19
 21. SEARCH: 13 AND 20

Question 16: In adults presenting with chest pain/discomfort of suspected cardiac origin, what is the clinical and cost effectiveness of giving oxygen compared with a placebo?

CP AND OXYGEN MEDLINE SEARCH STRATEGY

1. SEARCH: CHEST-PAIN#.DE.
2. SEARCH: (CHEST NEAR (PAIN OR DISCOMFORT OR TIGHT\$4 OR PRESSURE)).TI,AB.
3. SEARCH: (CARDIAC ADJ PAIN).TI,AB.
4. SEARCH: (THORA\$3 NEAR PAIN).TI,AB.
5. SEARCH: (SUSPECT\$2 NEAR CARDIAC NEAR PAIN).TI,AB.
6. SEARCH: (SUSPECT\$2 NEAR ACUTE ADJ CORONARY NEAR SYNDROME\$2).TI,AB.
7. SEARCH: (UNSTABLE NEAR ANGINA).TI,AB.
8. SEARCH: MYOCARDIAL.TI,AB.
9. SEARCH: INFARCT\$3.TI,AB.
10. SEARCH: (MYOCARDIAL ADJ INFARCTION).TI,AB.
11. SEARCH: (PREINFARCTION OR PRE-INFARCTION OR PRE ADJ INFARCTION).TI,AB.
12. SEARCH: (HEART NEAR (ARREST\$2 OR ATTACK\$2)).TI,AB.
13. SEARCH: 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12
14. SEARCH: OXYGEN.W..MJ.
15. SEARCH: OXYGEN-INHALATION-THERAPY#.DE.
16. SEARCH: OXYGEN.TI,AB.
17. SEARCH: 14 OR 15 OR 16
18. SEARCH: 13 AND 17

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Question 17: In adults presenting with chest pain, what is the clinical and cost effectiveness of pain management (e.g. sublingual and buccal nitrates, diamorphine, morphine with anti-emetic) compared with active comparators?

CP and nitrates MEDLINE search strategy

1. exp NITRATES/
2. nitrate*.ti,ab.
3. (glycerin and trinitrate*).ti,ab.
4. GTN.ti,ab.
5. exp NITROGLYCERIN/
6. (isosorbide and dinitrate).ti,ab.
7. exp ISOSORBIDE DINITRATE/
8. ISDN.ti,ab.
9. (isosorbide and mononitrate).ti,ab.
10. ISMN.ti,ab.
11. nitroglycerin.ti,ab.
12. 6 or 11 or 3 or 7 or 9 or 2 or 8 or 1 or 4 or 10 or 5
13. exp Chest Pain/
14. exp Angina Pectoris/
15. angina.ti,ab.
16. exp Acute Coronary Syndrome/
17. acute coronary syndrome.ti,ab.
18. exp Myocardial Infarction/
19. exp Coronary Disease/
20. coronary heart disease.ti,ab.
21. 17 or 20 or 15 or 14 or 18 or 13 or 16 or 19
22. 21 and 12

Questions 18 to 21 – relating to other questions

Question 18: What are the indicators for referral from primary care to secondary care in adults presenting with chest pain?

Question 19: What are the education and information needs in adults presenting with chest pain to encourage early recognition of suspected ACS?

Question 20: What are the education and information needs in adults presenting with chest pain to optimise their understanding of the diagnostic process and their participation in decisions about their investigations?

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CP AND EDUCATION & INFORMATION NEEDS MEDLINE SEARCH STRATEGY

1. psychoeducation.ti,ab.
2. ((panic or anxiety) adj manag*).ti,ab.
3. ((behavioural or behavioral) adj activation).ti,ab.
4. ((behavioural or behavioral) adj motivation).ti,ab.
5. Patient Education as Topic/
6. "Early Intervention (Education)"/
7. (early adj intervention).ti,ab.
8. ((treatment or health) adj seeking adj (behavior or behaviour)).ti,ab.
9. Health Behavior/
10. (health adj behaviour).ti,ab.
11. Decision Making/
12. (decision adj making adj process*).ti,ab.
13. collaborat*.ti,ab.
14. empower*.ti,ab.
15. (illness adj (representation* or perception*)).ti,ab.
16. (control or (perceiv* adj control)).ti,ab.
17. ((education or information) adj need*).ti,ab.
18. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17
19. exp Chest Pain/
20. exp Angina Pectoris/
21. angina.ti,ab.
22. exp Acute Coronary Syndrome/
23. (acute adj coronary adj syndrome).ti,ab.
24. exp Myocardial Infarction/
25. exp Coronary Disease/
26. (coronary adj heart adj disease).ti,ab.
27. 25 or 21 or 26 or 20 or 22 or 24 or 19 or 23
28. 27 and 18

Question 21: Are the presenting symptoms and description of the symptoms different in different groups (based on age, gender, diabetes, socioeconomic status and ethnicity)?

CP signs symptoms MEDLINE search strategy

1. exp "SIGNS AND SYMPTOMS"/
2. exp *CHEST PAIN/

Appendix C2 Chest Pain – Final Draft

3. exp *ANGINA PECTORIS/
4. angina.ti,ab.
5. exp *ACUTE CORONARY SYNDROME/
6. (acute and coronary and syndrome*).ti,ab.
7. exp *MYOCARDIAL INFARCTION/
8. exp *CORONARY DISEASE/
9. (coronary and heart and disease).ti,ab.
10. 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. 1 and 10