

## Guideline topic: Heart failure

### General comments

This is one of the components of the coronary heart disease guideline review 2004-5

### Search coverage

#### Patient searches

Databases covered:

Dates covered:

Total hits:

Sifted result:

#### Guidelines

GIN Web site

Embase 1999 - 2004

National Guidelines Clearinghouse

Medline 1999 - 2004

NeLH Guidelines Finder

NICE Web site

Total hits: 24

Guidelines evaluated using AGREE instrument:

American College of Cardiology / American Heart Association

European Society for Cardiology

Institute for Clinical Systems Improvement

New Zealand Guidelines Group

NICE

#### Systematic reviews

Databases covered:

Dates covered:

Cochrane Library

2004, Issue 2

Cinahl

1996 – April 2004

Embase

1996 – April 2004

Medline

1996 – April 2004

Total hits: 726

Sifted result: 130

#### RCTs – Alternative therapies

Databases covered:

Dates covered:

AMED

2000 – Jan 2005

Embase

2000 – Jan 2005

Medline

2000 – Jan 2005

Total hits: 231

Sifted result: 43

#### Observational studies – Alternative therapies

<p><i>Databases covered:</i> CINAHL Embase Medline <i>Total hits: 135</i></p>	<p><i>Dates covered:</i> 2000 – Jan 2005 2000 – Jan 2005 2000 – Jan 2005 <i>Sifted result: 38</i></p>
<p><b><i>RCTs – Care models</i></b></p>	
<p><i>Databases covered:</i> Cinahl Embase Medline <i>Total hits: 192</i></p>	<p><i>Dates covered:</i> 2000 – Jan 2005 2000 – Jan 2005 2000 – Jan 2005 <i>Sifted result: 62</i></p>
<p><b><i>RCTs – Comorbidity</i></b></p>	
<p><i>Databases covered:</i> Embase Medline <i>Total hits: 161</i></p>	<p><i>Dates covered:</i> 2000 – Jan 2005 2000 – Jan 2005 <i>Sifted result: 64</i></p>
<p><b><i>RCTs – Drug therapy</i></b></p>	
<p><i>Databases covered:</i> Embase Medline <i>Total hits: 1722</i></p>	<p><i>Dates covered:</i> 2000 – Feb 2005 2000 – Feb 2005 <i>Sifted result: 419</i></p>
<p><b><i>RCTs – Interventions</i></b></p>	
<p><i>Databases covered:</i> Embase Medline <i>Total hits: 748</i></p>	<p><i>Dates covered:</i> 2000 – Jan 2005 2000 – Jan 2005 <i>Sifted result: 245</i></p>
<p><b><i>RCTs – Nurse-led interventions</i></b></p>	
<p><i>Databases covered:</i> Cinahl Embase Medline <i>Total hits: 8</i></p>	<p><i>Dates covered:</i> 2000 – Jan 2005 2000 – Jan 2005 2000 – Jan 2005 <i>Sifted result: 8</i></p>
<p><b><i>Diagnostic studies</i></b></p>	
<p><i>Databases covered:</i> Embase Medline</p>	<p><i>Dates covered:</i> 2000 – 2004 2000 - 2004</p>

Total hits: 293

Sifted result: 170

**Supplementary searches 1 – Palliative care**

Databases covered:

AMED

Cinahl

Cochrane Library

Embase

Medline

Dates covered:

1985 – May 2004

1982 – May 2004

Issue 2, 2004

1980 – May 2004

1980 – May 2004

Total hits: 901

Sifted result: 160

**Search strategies**

The following are listings of the main Medline strategies used for this guideline. All conventions and symbols are from the Ovid implementation of Medline. Strategies used in other databases were substantially the same, though different terminology may have been used to take account of different thesaurii used in non-Medline databases.

Search filters were added to identify studies of a particular type (guideline, systematic review, etc.) Listings of the search filters used by SIGN can be found on the SIGN Web site.

**Core strategy for identification of heart failure patients (this was combined with the other strategies in turn):**

1. Explode Heart failure, congestive/
2. Ventricular dysfunction, left/
3. heart failure.ti.
4. Left ventricular failure.mp.
5. Left ventricular dysfunction.mp.
6. left ventricular systolic dysfunction.mp.
7. lvsd.mp.
8. or/1-7

**Strategy for alternative therapies:**

9. exp Drinking Behavior/
10. temperance/
11. physical activity.mp.
12. exp Exercise Movement Techniques/
13. \*exercise therapy/
14. 12 not 13
15. body weight/
16. monitoring, ambulatory/
17. 15 and 16
18. fluid restriction.mp.
19. Diet, Sodium-Restricted/
20. exp Complementary Therapies/
21. exp "Mind-Body and Relaxation Techniques"/
22. exp Massage/
23. or/9-11,14,17-22
24. 8 and 23
25. limit 24 to (humans and abstracts and yr = 2000 - 2005)
26. nutritional advice.mp.
27. \*nutrition/ and \*patient education/
28. dietary advice.mp.
29. exp Dietary Supplements/
30. vitamin supplement\$.mp.
31. or/26-30
32. 8 and 31
33. 25 or 32

**Strategy for care models:**

9. exp Counseling/
10. patient education/ or patient discharge education/
11. exp Discharge Planning/
12. Pharmacists/
13. telephone follow-up.mp.
14. \*after care/ and \*telephone/
15. telemonitoring.mp.
16. Support Groups/
17. PAMPHLETS/
18. teaching materials/
19. communication skills training.mp.
20. Home Care Services, Hospital-Based/
21. telehealth.mp.
22. or/9-21
23. 8 and 22
24. limit 23 to (humans and abstracts and yr = 2000 - 2005)

***Strategy for comorbid conditions***

9. exp \*Gout/dh, dt, su, th [Diet Therapy, Drug Therapy, Surgery, Therapy]
10. exp \*Angina Pectoris/dh, dt, rt, su, th [Diet Therapy, Drug Therapy, Radiotherapy, Surgery, Therapy]
11. exp \*Kidney Diseases/dh, dt, rt, su, th [Diet Therapy, Drug Therapy, Radiotherapy, Surgery, Therapy]
12. or/9-11
13. limit 12 to (humans and abstracts and yr = 2000-2005)
14. 8 and 13
15. \*Atrial Fibrillation/dh, dt, rt, su, th [Diet Therapy, Drug Therapy, Radiotherapy, Surgery, Therapy]
16. exp \*Hypertension/dh, dt, rt, su, th [Diet Therapy, Drug Therapy, Radiotherapy, Surgery, Therapy]
17. 15 or 16
18. limit 17 to (humans and abstracts and yr = 2004-2005)
19. 8 and 18
20. 14 or 19

**Strategy for SG1 – diagnosis**

9. exp Electrocardiography/
10. electrocardiograph\$.ti.
11. ecg.mp.
12. echocardiography/ or exp echocardiography, doppler/ or echocardiography, stress/ or exp echocardiography, three-dimensional/ or echocardiography, transesophageal/
13. echocardiograph\$.ti.
14. Heart/ra [Radiography]
15. chest x-ray.mp.
16. exp Magnetic Resonance Imaging/
17. cardiac mri.mp.
18. or/9-17
19. Heart Failure, Congestive/di [Diagnosis]
20. jugular venous pressure.mp.
21. jugular veins/
22. venous pressure/
23. Edema/
24. oedema.mp.
25. Dyspnea/
26. breathlessness.mp.
27. (shortage adj2 breath).mp.
28. breathing difficult\$.mp.
29. dyspnea, paroxysmal/ or edema, cardiac/
30. or/20-29
31. 19 and 30
32. 8 and 18
33. 31 or 32
34. myocardial biopsy.mp.
35. myocardium/ and biopsy/
36. Coronary Angiography/
37. Exercise Test/
38. exercise tolerance test\$.mp.
39. viral testing.mp.
40. exp HIV Infections/di [Diagnosis]
41. exp Coxsackievirus Infections/di [Diagnosis]
42. exp Enterovirus Infections/di [Diagnosis]
43. exp Echocardiography/
44. exp Radionuclide Ventriculography/
45. rnvq.mp.
46. exp Magnetic Resonance Imaging/
47. exp Tomography, Emission-Computed/
48. pet scan\$.mp.
49. mri.mp.
50. or/34-49
- 51 8 and 50
- 52 33 or 51

**Strategy for drug therapy**

9. exp Angiotensin-Converting Enzyme Inhibitors/
10. angiotensin receptor blocker\$.mp.
11. (angiotensin adj3 antagonist\$.mp.
12. arb.mp.
13. Spironolactone/
14. exp Aldosterone Antagonists/
15. eplerenone.mp.
16. exp Diuretics/
17. Aspirin/
18. exp Anticoagulants/
19. exp Digoxin/
20. exp Cardiotonic Agents/
21. inotrope\$.mp.
22. exp Vasodilator Agents/
23. hydralazine/
24. Nitrates/
25. exp Adrenergic alpha-Antagonists/
26. exp Calcium Channel Blockers/
27. exp Adrenergic beta-Antagonists/
28. or/9-27
29. exp Pneumococcal Infections/
30. Vaccination/
31. exp Bacterial Vaccines/
32. 29 and (30 or 31)
33. Furosemide/
34. torasemide.mp.
35. torsemide.mp.
36. Bumetanide/
37. 33 and (34 or 35 or 36)
38. exp Diuretics, Thiazide/
39. clopidogrel.mp.
40. TICLOPIDINE/
41. exp Erythropoietin/
42. pimobendan.mp.
43. Pravastatin/
44. exp Lovastatin/
45. exp Epoprostenol/
46. Harpagophytum/
47. Hypericum/
48. or/38-47
49. Influenza Vaccines/
50. exp influenza/
51. 49 or (50 and (30 or 31))
52. 8 and (28 or 32)

**Strategy for interventions:**

9. assisted ventilation.mp.
10. exp Positive-Pressure Respiration/
11. cpap.mp.
12. bipap.mp.
13. exp Coronary Artery Bypass/
14. cabg.mp.
15. exp Counterpulsation/
16. Heart-Assist Devices/
17. ventricular assist\$.mp.
18. exp Heart Transplantation/
19. cardiac transplant\$.mp.
20. or/9-19
21. limit 20 to (humans and abstracts and yr = 2002 - 2005)
22. Exercise Therapy/
23. exercise training program\$.mp.
24. cardiac resynchroni?ation.mp.
25. resynchroni?ation therapy.mp.
26. Cardiac Pacing, Artificial/
27. Pacemaker, Artificial/
28. or/22-27
29. limit 28 to (humans and abstracts and yr = 2003 - 2005)
30. Cardiomyoplasty/
31. Ventricular Remodeling/
32. Heart Valve Prosthesis/
33. heart valve prosthesis implantation/
34. mitral valve/su
35. mitral valve repair.mp.
36. mitral valve replacement.mp.
37. or/30-36
38. limit 37 to (humans and abstracts and yr = 2000 - 2005)
39. 8 and (21 or 29 or 38)

***Palliative care strategy:***

***Core strategy plus:***

9. Palliative care/
10. Terminal care/
11. Hospice care/
12. Resuscitation orders/
13. exp Withholding treatment/
14. end adj2 life.mp.
15. anemia/
16. Dyspnea/
17. Breathlessness.mp.
18. Shortage adj2 breath.mp.
19. Fatigue/
20. Cachexia/
21. Ascites/
22. Nausea/
23. Vomiting/
24. Constipation
25. exp Pain/ or pain, intractable/
26. Pain control.mp.
27. Frusemide/
28. exp Anelgesics, opioid/
29. Oxygen inhalation therapy/
30. Domiciliary oxygen.mp.
31. exp Psychotherapy/
32. or/9-31
33. 8 and 32