**Search narrative for SIGN 118: Stroke rehabilitation, prevention and management of complications, and discharge planning**

**Search coverage**

**Patient searches**
The patient search was conducted using the search strategies below in conjunction with the patient search filter.

**Databases covered:** Medline, Embase, CINAHL, PsycINFO

**Dates covered:** 2002-2009

**Total hits: (all database results combined) 3530**

**Sifted result:** 467

<table>
<thead>
<tr>
<th>Medline search strategy (main stem)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cerebrovascular Accident/</td>
<td></td>
</tr>
<tr>
<td>2 exp stroke/ or exp brain infarction/ or exp brain stem infarctions/ or exp cerebral infarction/</td>
<td></td>
</tr>
<tr>
<td>3 stroke.tw.</td>
<td></td>
</tr>
<tr>
<td>4 exp Brain Ischemia/</td>
<td></td>
</tr>
<tr>
<td>5 ((cerebr$ or brain) adj2 (insult or isch$ or infarct$)).tw.</td>
<td></td>
</tr>
<tr>
<td>6 poststroke.tw.</td>
<td></td>
</tr>
<tr>
<td>7 post-stroke.tw.</td>
<td></td>
</tr>
<tr>
<td>8 ((visual or spatial) adj (neglect or inattention or dysfunction$)).tw.</td>
<td></td>
</tr>
<tr>
<td>9 or/1-8</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Embase search strategy (main stem)</th>
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<tbody>
<tr>
<td>1 exp Cerebral Vascular Accident/</td>
<td></td>
</tr>
<tr>
<td>2 stroke/ or exp brain infarction/</td>
<td></td>
</tr>
<tr>
<td>3 post-stroke.mp.</td>
<td></td>
</tr>
<tr>
<td>4 stroke.tw.</td>
<td></td>
</tr>
<tr>
<td>5 poststroke.tw.</td>
<td></td>
</tr>
<tr>
<td>6 Stroke/rh [Rehabilitation]</td>
<td></td>
</tr>
<tr>
<td>7 post stroke.tw.</td>
<td></td>
</tr>
<tr>
<td>8 or/1-7</td>
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<table>
<thead>
<tr>
<th>PsycINFO search strategy (main stem)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1 exp Cerebral Hemorrhage/ or exp Cerebrovascular Accidents/ or stroke.mp.</td>
<td></td>
</tr>
<tr>
<td>2 exp Sensory Neglect/</td>
<td></td>
</tr>
<tr>
<td>3 poststroke.tw.</td>
<td></td>
</tr>
<tr>
<td>4 post-stroke.tw.</td>
<td></td>
</tr>
<tr>
<td>5 ((visual or spatial) adj (neglect or inattention or dysfunction$)).tw.</td>
<td></td>
</tr>
<tr>
<td>6 (post adj stroke).tw.</td>
<td></td>
</tr>
<tr>
<td>7 (rehabilitation adj6 stroke).tw.</td>
<td></td>
</tr>
<tr>
<td>8 neuropsychological rehabilitation/ or cognitive rehabilitation/</td>
<td></td>
</tr>
<tr>
<td>9 or/1-8</td>
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</table>
### Guidelines – websites searched

<table>
<thead>
<tr>
<th>Website</th>
<th>URL</th>
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<tbody>
<tr>
<td>Agency for Health Care Research and Quality (AHRQ)</td>
<td><a href="http://www.ahcpr.gov/">http://www.ahcpr.gov/</a></td>
</tr>
<tr>
<td>NHS Centre for Reviews and Dissemination</td>
<td><a href="http://www.york.ac.uk/inst/crd/welcome.htm">http://www.york.ac.uk/inst/crd/welcome.htm</a></td>
</tr>
<tr>
<td>NHS Quality Improvement Scotland</td>
<td><a href="http://www.nhshealthquality.org">http://www.nhshealthquality.org</a></td>
</tr>
<tr>
<td>National Institute for Clinical Excellence (NICE)</td>
<td><a href="http://www.nice.org.uk/">http://www.nice.org.uk/</a></td>
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<tr>
<td>PRODIGY Knowledge</td>
<td><a href="http://www.prodigy.nhs.uk/">http://www.prodigy.nhs.uk/</a></td>
</tr>
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</table>

### Systematic reviews

**Databases covered:** Medline, Embase, CINAHL, PsycINFO, Cochrane Library

**Dates covered:**

<table>
<thead>
<tr>
<th>Total hits</th>
<th>Sifted result</th>
<th>Papers requested</th>
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</thead>
<tbody>
<tr>
<td>5588</td>
<td>217</td>
<td>135</td>
</tr>
</tbody>
</table>

### RCTs

**Databases covered:** Medline, Embase, CINAHL, PsycINFO, Cochrane Library

**Dates covered:** 2002-2009 (with variations depending on topic; see Search Strategies below)

### Observational studies/ Searches without filter

**Databases covered:** Medline, Embase, CINAHL, PsycINFO

**Dates covered:** 1998-2009 (with variations depending on topic; see Search Strategies below)
Search strategies

The following are listings of the main Medline strategies used for this guideline. All conventions and symbols are from the OvidSP implementation of Medline. Strategies used in other databases were substantially the same, although different terminology may have been used to take account of different controlled vocabulary used in non-Medline databases. These question-specific strategies were combined with the ‘main stem’ strategies listed on page 1 of this narrative. Search filters were then added to identify studies of a particular type (RCT, observational, etc.) Listings of the search filters used by SIGN can be found on the SIGN web site, www.sign.ac.uk.

KQ 1 Gait, balance and mobility
RCT 2002 – 12 March 2009

38. exp Gait Apraxia/ or exp Gait/ or exp Gait Disorders, Neurologic/ or exp Gait Ataxia/

39. (gait or balance or mobility or walking).ti,ab.

40. exp Postural Balance/

41. exp Mobility Limitation/

42. or/38-41

43. biofeedback.mp. or exp "Biofeedback (Psychology)"/

44. feedback.tw.

45. exp Feedback, Biochemical/ or exp Feedback/

46. or/43-45

49. canes/ or crutches/ or walkers/

50. "Dependent Ambulation"/

51. (walking adj aid$).mp.

52. walker$.ti,ab.

53. zimmer.ti,ab.

54. (walking adj stick$).ti,ab.

55. (walking adj frame$).ti,ab.

56. exp Self-Help Devices/

57. (walk$ or movement or ambulat$).mp.

58. 56 and 57

59. or/49-55,58

60. 42 or 46 or 59

KQ 2 c Virtual reality
RCT 2002 - 5 April 2010

1. Computer Simulation/ or Computer-Assisted Instruction/ or virtual reality.mp.

2. Wii.mp.


4. Playstation.tw.

5. Xbox.tw.

6. or/1-5

KQ 3 Vision disorders
RCT 1996 - 12 March 2009

31. ((visual or spatial) adj (neglect or inattention or dysfunction$)).tw.

32. exp Hemianopsia/ or exp Vision Disorders/

33. exp Ocular Motility Disorders/

34. ((visual or eye or vision or sight) adj2 (disorder$ or dysfunction$ or impairment$ or defect$)).mp.

35. or/31-34
KQ 4, 5, 6 Nutrition and dysphagia
No study type filter, 2002 -12 March 2009

38. nutrition assessment/
39. exp Deglutition Disorders/
40. dysphag$i$.mp.
41. swallow$.tw.
42. Nutritional Status/
43. exp Malnutrition/
44. (malnourished or (nutrition$ adj2 compromised)).tw.
45. or/38-44
46. Nutrition Disorders/di [Diagnosis]
47. (assess$ or screen$) adj3 (nutrition$ or malnutrition$ or malnourish$)).mp.
48. or/38-47

KQ 7 Sialorrhoea
No study type filter, 1970 -12 March 2009

38. Sialorrhoea/
39. saliva$.tw.
40. drool$.tw.
41. sialorrhoea$.tw.
42. sialorrhoea$.tw.
43. or/38-42

KQ 8 Incontinence
RCTs to update systematic review 2007 -2 March 2009

33. exp Incontinence Pads/ or exp Urinary Incontinence, Urge/ or exp Fecal Incontinence/ or exp Urinary Incontinence, Stress/ or exp Urinary Incontinence/
34. incontinen$.tw.
35. exp Urination Disorders/
36. exp Urinary Bladder, Neurogenic/
37. (bladder adj3 control$).mp.
38. or/33-37

KQ 9 Spasticity
RCT 2002 - 28 May 2009

34. exp Muscle Spasticity/
35. exp Spasm/
36. spasm$.tw.
37. spastic$.tw.
38. hypertonicity.tw.
39. exp Muscle Hypertonia/
40. (muscle$ adj contract$).mp.
41. or/34-40
KQ 10 and 12 Shoulder pain and subluxation
RCT 2003 - 1 June 2009

36. exp Shoulder Dislocation/
37. exp Shoulder Joint/ or exp Shoulder/ or exp Shoulder Pain/
38. subluxat$.tw.
39. (shoulder$ adj3 (sublux$ or dislocat$ or displace$ or malalign$ or misalign$)).tw.
40. (shoulder$ adj pain$).mp.
41. (glenohumeral adj (pain or sublux$)).tw.
42. (upper extremity adj hemipar$).mp.
43. exp Paresis/
44. exp Upper Extremity/
45. exp Shoulder/
46. 43 and (44 or 45)
47. or/36-42,46

KQ 11 Post stroke pain
RCT 1980 – 12 March 2009
Include:
- Central post stroke pain
- Dejerine-Roussy syndrome
- Alldynia
- Thalamic pain
- Complex regional pain syndrome
- Reflex sympathetic dystrophy
- Deafferentation pain
- Sudeck’s atrophy
- Causalgia
- Neuroalgodystrophy

Do not include general neuropathic pain, post-herpetic neuralgia, diabetic neuropathy, central pain due to other conditions such as spinal cord injury etc.

38 hyperalgesia.mp. or exp Hyperalgesia/
39 post stroke pain.mp.
40 post-stroke pain.mp.
41 neuralgia.mp. or Neuralgia/
42 (neuropathic adj pain).tw.
43 exp Reflex Sympathetic Dystrophy/ or exp Complex Regional Pain Syndromes/ or complex regional pain.mp.
44 exp Causalgia/
45 Dejerine-Roussy syndrome.mp. or exp Thalamic Diseases/
46 Alldynia.mp.
47 (thalamic adj pain).tw.
48 complex regional pain.tw.
49 reflex sympathetic dystrophy.tw.
50 (deafferentat$ adj pain).tw.
51 Sudeck’s atrophy.mp.
52 neuroalgodystrophy.tw.
53 sudeck$ atrophy.mp.
54 causalgia.tw.
55 (central adj pain).tw.
56 (shoulder$ adj hand$ adj syndrome$).tw.
57 (reflex adj neuromuscular adj dystroph$).tw.
58 or/38-57
KQ 13 Post stroke fatigue
RCT 1996 – 12 March 2009

34. exp Fatigue/
35. fatigue$.mp.
36. (astheni$ or neurastheni$ or tired or tiredness or weary or weariness or exhausted or exhaustion or lassitude or listlessness or letharg$ or apath$ or malaise).tw.
37. exp Asthenia/
38. exp Lethargy/
39. exp Mental Fatigue/
40. exp Muscle Fatigue/
41. (low adj3 energy).tw.
42. or/34-41

KQ 14 Emotionalism
RCT 1996 – 12 March 2009

38. Affective Symptoms/
39. crying/ or laughter/
40. Anger/
41. exp Emotions/
42. ((uncontrol$ or control$) adj3 (emotion$ or feeling$ or anger$ or sad$ or cry$ or laugh$)).tw.
43. emotionalism.tw.
44. (emotional adj lability).tw.
45. or/38-44

KQ 17 Post stroke emotional/psychological adjustment
RCT 1996 – 12 March 2009

38. body image.mp. or Body Image/
39. self concept/ or self efficacy/
40. (self-esteem or self esteem).tw.
41. (self-confidence or self confidence).tw.
42. exp sexual behavior/ or sexuality/
43. or/38-42

KQ 18 b Early Mobilisation
RCTs to update systematic review 2005 – 2 March 2009

33. Early Ambulation/
34. movement/ or locomotion/
35. Walking/
36. Motor Activity/
37. ((early or earlie$ or accelerat$ or immediate or fast-track or timing or rapid) adj10 (mobil$ or ambulat$ or rehab$ or activity or movement or sitting or standing or walking or semi-recumb$)).tw.
38. or/33-37

KQ 20 Home based versus outpatient rehabilitation
RCT 2002 – 12 March 2009

38. community health services/ or exp home care services/ or exp home nursing/ or exp rehabilitation nursing/ or home care services/ or nursing service, hospital/
39. Outpatients/
40. exp Outpatient Clinics, Hospital/ or exp Ambulatory Care/
41. (home adj2 rehabilitation).mp.
42. (outpatient$ adj2 rehabilitation).mp.
43. or/38-42
Additional searches conducted following peer review

Therapeutic positioning
RCTs 2006 - 1 April 2010

40 exp Posture/
41 (active adj position$).tw.
42 (therapeutic adj position$).tw.
43 "Beds"/
44 "Bed Rest"/
45 (supine adj6 (bed$ or position$)).tw.
46 (prone adj6 (bed$ or position$)).tw.
47 (lateral adj6 (bed$ or position$)).tw.
48 ((bed$ or head$) adj6 (elevat$ or inclin$)).tw.
49 reposition$.tw.
50 kinetic therapy.tw.
51 (body adj2 position$).tw.
52 recumbent.tw.
53 semirecumbent.tw.
54 or/40-53

Activities of Daily Living
No study type filter, 1996 - 2 April 2010

10. "activities of daily living"/ or occupational therapy/
11. Cosmetics/ or personal care.mp.
12. (adl or dadl or padl or iadl).ti,ab.
13. activities of daily living,ti,ab.
14. (kitchen$ or cooking or cookery).tw.
15. Baths/ or Hygiene/ or personal hygiene.mp.
16. grooming.mp.
17. chaining.mp.
18. exp Eating/
19. bathing.mp.
20. showering.mp.
21. toileting.mp.
22. toileting.mp.
23. exp Toilet Facilities/ or toilet$.mp.
24. clothing/ or shoes/
25. (dressing or clothes or clothing or sock$ or stocking$).mp.
26. exp Self-Help Devices/ or reacher.mp.
27. (plate adj guard$).mp. [mp = title, original title, abstract, name of substance word, subject heading word, unique identifier]
28. dynafork.tw.
29. occupational performance.mp.
30. model of human occupation.mp.
31. or/10-30