

Guideline topic: Care for deteriorating patients

General comments

This is an update of SIGN 139

Search results (whole guideline topic)

Search results (specific key questions)

KQ	Date of search	Databases	Study type	Date range	Initial recall	Sifted results
1,2,3	20/5/22-23/5/22	Medline, Embase, Cochrane	All	2000-2022	1682 + 140 + 57	19 SR 18 RCT 134 Obs
4	21/6/22	Medline, Embase, Cochrane	All	2000-2022	69 + 19 + 8	16
5	24/5/22-25/5/22	Medline, Embase, Cochrane	All	2000-2022	161 + 240 + 53	2 SR 20 Obs
6						
7	27/7/22	Medline, Embase, cochrane	all	2000-2022	253 + 526 + 0	24
8,9	7/6/22	Medline, Embase, Cochrane	All	2000-2022	213 + 93 + 13	42 + 12 Qual
10	14/6/22	Medline, Embase, Cochrane	All	2000-2022	26 + 65 + 15	36
11	14/6/22	Medline, Embase, Cochrane	All	2000-2022	790 + 1185 + 20	4 SRs 2 RCTs 16 Obs
12	15/6/22	Medline, Embase, Cochrane	All	2000-2022	213 + 214 + 0	15
13	29/6/22	Medline	All	2000-2022	35	0
14	17/6/22	Medline, Embase, Cochrane	All	2000-2022	240 + 154 + 20	39

Search strategies used for specific key questions

The following are 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 thesauri used in non-Medline databases. Search filters were added to identify studies of a particular type (systematic review, RCT, economics etc.) Listings of the search filters used by SIGN can be found on the SIGN Web site.

KQ1,2,3

Database: Ovid MEDLINE(R) ALL <1946 to May 27, 2022>

Search Strategy:

-
- 63 ((electronic or automatic or continuous or remote) adj (observation\$ or monitor\$ or measur\$)).tw. (23773)
 - 64 ((monitor\$ or observ\$ or measur\$) adj vital adj (sign\$ or parameter\$)).tw. (587)
 - 65 ((mobile or healthcare or medical) adj monitor\$).tw. (1557)
 - 66 telemetry/ or remote sensing technology/ (13710)
 - 67 Telemedicine/ (33661)
 - 68 (teleme\$ adj (monitor\$ or observation\$ or measur\$)).tw. (776)
 - 69 Monitoring, Physiologic/ (57942)
 - 70 Hemodynamic Monitoring/ (340)
 - 71 internet of medical things.tw. (143)
 - 72 IoMT.tw. (154)
 - 73 ((electronic or automatic or continuous) adj (chart\$ or record\$)).tw. (6469)
 - 74 ((electronic or automatic or continuous) adj (writ\$ or transcri\$ or noting or notes)).tw. (225)
 - 75 or/63-74 (131040)
 - 76 vital signs/ or blood pressure/ or body temperature/ or heart rate/ or respiratory rate/ (432018)
 - 77 Glasgow Coma Scale/ (10374)
 - 78 Oxygen Saturation/ (458)
 - 79 (systolic adj2 pressure).tw. (77263)
 - 80 ((pulse or heart) adj rate\$).tw. (179074)
 - 81 respir\$ rate\$.tw. (23620)
 - 82 ((body or internal) adj temperature).tw. (31932)
 - 83 ((new or recent) adj confusion).tw. (23)
 - 84 ((o2 or oxygen) adj saturation).tw. (32138)
 - 85 glasgow coma scale.tw. (10821)
 - 86 or/76-85 (612420)
 - 87 exp Community Health Services/ (324324)
 - 88 general practice/ or family practice/ (77510)
 - 89 Home Care Services/ (35624)
 - 90 Physicians, Family/ (16968)
 - 91 Community Health Workers/ (6247)
 - 92 primary care.tw. (129947)
 - 93 general practi\$.tw. (86727)
 - 94 primary health\$.tw. (34821)
 - 95 family practi\$.tw. (10028)
 - 96 family medicine.tw. (11846)
 - 97 family physician\$.tw. (15686)
 - 98 home care.tw. (19681)
 - 99 community health\$.tw. (28329)
 - 100 community nurs\$.tw. (3903)
 - 101 health visit\$.tw. (4365)
 - 102 community pharmac\$.tw. (8164)
 - 103 nursing home.tw. (23690)
 - 104 care home.tw. (2797)
 - 105 or/87-104 (638731)
 - 106 exp Hospitals/ (304104)
 - 107 hospital\$.tw. (1485341)
 - 108 inpatient\$.tw. (127140)
 - 109 Health Services Administration/ (4540)
 - 110 Secondary Care/ (865)
 - 111 (secondary adj (health\$ or care)).tw. (9229)
 - 112 or/106-111 (1657889)
 - 113 exp General Practitioners/ (9723)
 - 114 (general practi* or GP or primary care).tw. (233424)

115 physicians, family/ or physicians, primary care/ (21066)
 116 general practitioner\$.tw. (54530)
 117 family physician\$.tw. (15686)
 118 primary care physician.tw. (6650)
 119 or/113-118 (252822)
 120 105 or 112 or 119 (2220928)
 121 75 and 86 and 120 (2199)
 122 exp animals/ not humans.sh. (5011068)
 123 121 not 122 (2179)
 124 limit 123 to (english language and yr="2000 -Current") (1687)

KQ 5

Ovid MEDLINE(R) ALL <1946 to May 27, 2022>

1 news2.mp. 150
 2 "news 2".mp. 71
 3 "National Early Warning Score 2".mp. 103
 4 1 or 2 or 3 235
 5 exp General Practitioners/ 9723
 6 (general practi* or GP or primary care).tw. 233424
 7 physicians, family/ or physicians, primary care/ 21066
 8 general practitioner\$.tw. 54530
 9 family physician\$.tw. 15686
 10 primary care physician.tw. 6650
 11 or/5-10 252822
 12 exp Community Health Services/ 324324
 13 general practice/ or family practice/ 77510
 14 Home Care Services/ 35624
 15 Physicians, Family/ 16968
 16 Community Health Workers/ 6247
 17 primary care.tw. 129947
 18 general practi\$.tw. 86727
 19 primary health\$.tw. 34821
 20 family practi\$.tw. 10028
 21 family medicine.tw. 11846
 22 family physician\$.tw. 15686
 23 home care.tw. 19681
 24 community health\$.tw. 28329
 25 community nurs\$.tw. 3903
 26 health visit\$.tw. 4365
 27 community pharmac\$.tw. 8164
 28 nursing home.tw. 23690
 29 care home.tw. 2797
 30 or/12-29 638731
 31 exp Hospitals/ 304104
 32 hospital\$.tw. 1485341
 33 inpatient\$.tw. 127140
 34 Health Services Administration/ 4540
 35 Secondary Care/ 865
 36 (secondary adj (health\$ or care)).tw. 9229
 37 or/31-36 1657889
 38 or/11,30,37 2220928
 39 and/4,38 162
 40 animals/ not (animals/ and humans/) 4977366
 41 39 not 40 162
 42 limit 41 to (english language and yr="2000 -Current") 160

<https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=Xt3fsHiOUPYDHjPLVPXu31mZqjHPSeU5NHOQOu88QlobjVc2kkCxqB7CDpJzE2T>

Embase <1974 to 2022 May 27>

1 news2.mp. 199
2 "news 2".mp. 110
3 "National Early Warning Score 2".mp. 174
4 1 or 2 or 3 346
5 exp *hospital/ 307716
6 hospital\$.tw. 2280644
7 inpatient\$.tw. 214827
8 *health service/ 54366
9 *secondary health care/ 1182
10 ((secondary adj health\$) or (secondary adj care)).tw. 15487
11 or/5-10 2559067
12 *general practitioner/ 26357
13 (general practi* or GP or primary care).tw. 312938
14 family physician\$.tw. 19846
15 primary care physician.tw. 10137
16 or/12-15 333337
17 exp *community care/ 57912
18 general practice/ 81662
19 home care/ 66238
20 general practitioner/ 109780
21 health auxiliary/ 8427
22 primary care.tw. 177315
23 general practi\$.tw. 108265
24 primary health\$.tw. 41382
25 family practi\$.tw. 11249
26 family medicine.tw. 14925
27 family physician\$.tw. 19846
28 home care.tw. 23466
29 health auxil\$.tw. 54
30 community health\$.tw. 33972
31 community nurs\$.tw. 4135
32 health visit\$.tw. 4571
33 community pharmac\$.tw. 15751
34 nursing home.tw. 30864
35 care home.tw. 3786
36 or/17-35 575571
37 or/11,16,36 3055124
38 and/4,37 242
39 animal/ not (animal/ and human/) 1155395
40 38 not 39 242
41 limit 40 to (english language and yr="2000 -Current") 238

<https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=36s8da bMZPpsOaqL9DzhO1wayHcO5R7VeNlr4MaLHgke9vTYeJjknd9H1n5RTNzmi>

KQ8,9

Database: Ovid MEDLINE(R) ALL <1946 to June 06, 2022>

Search Strategy:

1 anticipat\$ care plan\$.tw. (38)

- 2 treatment escalation plan\$.tw. (25)
- 3 dnacpr.tw. (97)
- 4 (ceiling\$ adj2 care).tw. (64)
- 5 "do not attempt CPR".tw. (9)
- 6 or/1-5 (217)
- 7 limit 6 to (english language and yr="2000 -Current") (213)

KQ10

Database: Ovid MEDLINE(R) ALL <1946 to June 13, 2022>
 Search Strategy:

-
- 1 (deteriorat\$ adj2 patient\$.tw. (7575)
 - 2 clinical deterioration/ (540)
 - 3 1 or 2 (7944)
 - 4 (generic adj2 response\$.tw. (203)
 - 5 (structure\$ adj2 response\$.tw. (1967)
 - 6 standard operat\$ procedure\$.tw. (3433)
 - 7 escalation\$ protocol\$.tw. (207)
 - 8 (grad\$ adj2 response\$.tw. (5595)
 - 9 or/4-8 (11395)
 - 10 3 and 9 (26)

KQ11

Ovid MEDLINE(R) ALL <1946 to June 14, 2022>

- 1 exp Hospitals/ 304857
- 2 hospital\$.tw. 1491550
- 3 inpatient\$.tw. 127657
- 4 Health Services Administration/ 4540
- 5 Secondary Care/ 866
- 6 (secondary adj (health\$ or care)).tw. 9271
- 7 or/1-6 1664383
- 8 exp Critical Care/ 64363
- 9 Postoperative Care/ 60714
- 10 ((critical or intensive) adj care).mp. 254130
- 11 (postoperative care or post-operative care).mp. 66993
- 12 or/8-11 317500
- 13 exp Emergency Service, Hospital/ 93976
- 14 patient care team/ 68843
- 15 (emergency adj (department* or "Hospital Service" or "Outpatient Unit" or room* or unit* or ward*)).mp. 137786
- 16 outreach.mp. 16486
- 17 or/13-16 257732
- 18 and/12,17 17031
- 19 Hospital Rapid Response Team/967
- 20 Medical Emergency Team*.mp. 695
- 21 Cardiac Crash Team.mp. 1
- 22 Code Team.mp.91
- 23 Rapid Response Team.mp. 1412
- 24 Emergency Medical Services/ 46943
- 25 Emergency Medical Service*.mp. 52653
- 26 Emergency Service, Hospital/ 82600
- 27 Emergency Hospital Service*.mp. 68
- 28 Emergency Outpatient Unit.mp. 13
- 29 Hospital Emergency Service*.mp. 728

30	Emergency Response Team*.mp.	192
31	or/19-30	132280
32	or/18,31	143843
33	clinical deterioration/	541
34	(deteriorat\$ adj2 (patient\$ or clinical\$)).mp.	14762
35	acutely ill.mp.	4253
36	or/33-35	18970
37	and/7,32,36	866
38	limit 37 to (english language and yr="2000 -Current")	790

KQ12

Database: Ovid MEDLINE(R) ALL <1946 to June 14, 2022>
 Search Strategy:

- 1 exp General Practitioners/ (9772)
- 2 (general practi* or GP or primary care).tw. (234113)
- 3 physicians, family/ or physicians, primary care/ (21094)
- 4 general practitioner\$.tw. (54645)
- 5 family physician\$.tw. (15712)
- 6 primary care physician.tw. (6660)
- 7 or/1-6 (253530)
- 8 exp Community Health Services/ (324664)
- 9 general practice/ or family practice/ (77562)
- 10 Home Care Services/ (35660)
- 11 Physicians, Family/ (16984)
- 12 Community Health Workers/ (6265)
- 13 primary care.tw. (130422)
- 14 general practi\$.tw. (86881)
- 15 primary health\$.tw. (34988)
- 16 family practi\$.tw. (10041)
- 17 family medicine.tw. (11884)
- 18 family physician\$.tw. (15712)
- 19 home care.tw. (19725)
- 20 community health\$.tw. (28465)
- 21 community nurs\$.tw. (3921)
- 22 health visit\$.tw. (4371)
- 23 community pharmac\$.tw. (8205)
- 24 nursing home.tw. (23770)
- 25 care home.tw. (2806)
- 26 or/8-25 (640041)
- 27 7 or 26 (672041)
- 28 Emergency Medical Technicians/ (5939)
- 29 (advanc\$ adj paramedic\$.tw. (54)
- 30 (paramedic\$ adj2 "critical care").tw. (56)
- 31 or/28-30 (6015)
- 32 27 and 31 (213)

KQ13

Ovid MEDLINE(R) ALL <1946 to June 28, 2022>

1	Clinical Protocols/st	3748
2	"standardi?ed treatment protocol*".mp.	430

3	(standard* adj2 "clinical response").mp.	45
4	("clinical response" adj3 protocol).mp.	12
5	("clinical response" adj3 polic*).mp.	2
6	or/1-5	4224
7	(trigger adj1 (treshold* or level*)).mp.	235
8	(escalation adj1 (treshold* or level*)).mp.	58
9	or/7-8	293
10	exp Community Health Services/	325045
11	general practice/ or family practice/	77610
12	Home Care Services/	35682
13	Physicians, Family/	16994
14	Community Health Workers/	6284
15	primary care.tw.	130768
16	general practi\$.tw.	87015
17	primary health\$.tw.	35102
18	family practi\$.tw.	10041
19	family medicine.tw.	11929
20	family physician\$.tw.	15734
21	home care.tw.	19755
22	community health\$.tw.	28566
23	community nurs\$.tw.	3923
24	health visit\$.tw.	4378
25	community pharmac\$.tw.	8233
26	nursing home.tw.	23784
27	care home.tw.	2812
28	or/10-27	641099
29	6 and 9	0
30	6 and 28	264
31	(treshold* or level*).mp.	4545945
32	30 and 31	35

KQ14

Database: Ovid MEDLINE(R) ALL <1946 to June 16, 2022>

Search Strategy:

1	hospital to home transition/ or patient discharge/ or patient handoff/ or patient transfer/ (46548)
2	(clinical adj2 handover\$.tw. (248)
3	SBAR.tw. (236)
4	SBARD.tw. (2)
5	RSVP.tw. (703)
6	or/1-5 (47519)
7	exp General Practitioners/ (9779)
8	(general practi* or GP or primary care).tw. (234151)
9	physicians, family/ or physicians, primary care/ (21093)
10	general practitioner\$.tw. (54646)
11	family physician\$.tw. (15710)
12	primary care physician.tw. (6661)
13	or/7-12 (253569)
14	exp Hospitals/ (304923)

- 15 hospital\$.tw. (1492100)
- 16 inpatient\$.tw. (127736)
- 17 Health Services Administration/ (4541)
- 18 Secondary Care/ (867)
- 19 (secondary adj (health\$ or care)).tw. (9274)
- 20 or/14-19 (1664968)
- 21 exp Community Health Services/ (324734)
- 22 general practice/ or family practice/ (77559)
- 23 Home Care Services/ (35671)
- 24 Physicians, Family/ (16980)
- 25 Community Health Workers/ (6270)
- 26 primary care.tw. (130447)
- 27 general practi\$.tw. (86880)
- 28 primary health\$.tw. (34998)
- 29 family practi\$.tw. (10040)
- 30 family medicine.tw. (11887)
- 31 family physician\$.tw. (15710)
- 32 home care.tw. (19731)
- 33 community health\$.tw. (28478)
- 34 community nurs\$.tw. (3922)
- 35 health visit\$.tw. (4372)
- 36 community pharmac\$.tw. (8206)
- 37 nursing home.tw. (23789)
- 38 care home.tw. (2812)
- 39 or/21-38 (640181)
- 40 13 or 20 or 39 (2229264)
- 41 clinical deterioration/ (542)
- 42 acutely ill.mp. (4252)
- 43 (deteriorat\$ adj2 (patient\$ or clinical\$)).mp. (14767)
- 44 or/41-43 (18974)
- 45 6 and 40 and 44 (240)

KQ4 Escalation of Care

Database: Ovid MEDLINE(R) ALL <1946 to June 20, 2022>

Search Strategy:

-
- 1 exp General Practitioners/ (9784)
 - 2 (general practi* or GP or primary care).tw. (234274)
 - 3 physicians, family/ or physicians, primary care/ (21100)
 - 4 general practitioner\$.tw. (54668)
 - 5 family physician\$.tw. (15714)
 - 6 primary care physician.tw. (6662)
 - 7 or/1-6 (253696)
 - 8 exp Hospitals/ (305014)
 - 9 hospital\$.tw. (1493300)
 - 10 inpatient\$.tw. (127849)
 - 11 Health Services Administration/ (4541)
 - 12 Secondary Care/ (867)
 - 13 (secondary adj (health\$ or care)).tw. (9277)
 - 14 or/8-13 (1666228)
 - 15 exp Community Health Services/ (324787)
 - 16 general practice/ or family practice/ (77567)
 - 17 Home Care Services/ (35672)
 - 18 Physicians, Family/ (16986)
 - 19 Community Health Workers/ (6274)
 - 20 primary care.tw. (130530)

- 21 general practi\$.tw. (86910)
- 22 primary health\$.tw. (35031)
- 23 family practi\$.tw. (10039)
- 24 family medicine.tw. (11895)
- 25 family physician\$.tw. (15714)
- 26 home care.tw. (19738)
- 27 community health\$.tw. (28510)
- 28 community nurs\$.tw. (3924)
- 29 health visit\$.tw. (4375)
- 30 community pharmac\$.tw. (8212)
- 31 nursing home.tw. (23799)
- 32 care home.tw. (2814)
- 33 or/15-32 (640413)
- 34 7 or 14 or 33 (2230728)
- 35 Clinical Deterioration/ (544)
- 36 acutely ill.mp. (4257)
- 37 (deteriorat\$ adj2 (patient\$ or clinical\$)).mp. (14778)
- 38 or/35-37 (18990)
- 39 (escalation\$ adj2 care).tw. (456)
- 40 34 and 38 and 39 (69)

KQ7

Database: Ovid MEDLINE(R) ALL <1946 to July 26, 2022>

Search Strategy:

-
- 1 (sepsis adj (six or "6")).tw. (253)
