

### **Uitgangsvraag 3**

Wat is het effect van verschillende vormen van signaleren van distress/detecteren behoefte zorg op kwaliteit van leven, arts-patiënt communicatie, medische consumptie, ervaren distress en emotionele, psychologische, sociale, psychosociale, praktische, spirituele, levensbeschouwelijke, fysieke problemen, aantal verwijzingen, unmet needs, aangeboden, gewenste en werkelijk gekregen zorg?

### **Methodology report PICO 3**

Modulaire revisie, Richtlijn Detecteren behoefte psychosociale zorg, 2015

#### **1.1 PICO**

- P volwassen kankerpatiënten  
I Proces van signaleren van distress/detecteren behoefte zorg (= signaleren met of zonder bespreken, en verwijzen)<sup>1</sup>  
C Usual care  
O kwaliteit van leven , arts-patiënt communicatie, medische consumptie, ervaren distress en emotionele, psychologische, sociale, psychosociale, praktische, spirituele, levensbeschouwelijke, fysieke problemen, aantal verwijzingen, aangeboden, gewenste en werkelijk gekregen zorg

#### **1.2 Achtergrond**

Hier ligt geen specifiek knelpunt aan ten grondslag. Dit zou meer een algemene onderbouwing kunnen zijn voor het detecteren en implementatieknelpunt over meerwaarde van detecteren te ondervangen.

Patiënt tevredenheid werd niet gekozen als uitkomst. Hoewel patiënttevredenheid zeer relevant is, gaat deze vraag over de effectiviteit van signaleren. Patiënttevredenheid meet iets anders dan effectiviteit van zorg.

#### **1.3 Inclusiecriteria**

Studies	(1) meta-analyses, systematische reviews, (2) randomised controlled trials (RCT), controlled clinical trials (CCT) (3) observationele studies
Periode (vanaf tot):	1-1-2008 tot nu
Databases:	Medline, Cochrane, Embase, Psych info
Taal:	Eng. Ned.

#### **2 Golden hits**

- Absolom, K., et al. (2011). "The detection and management of emotional distress in cancer patients: the views of health-care professionals." Psychooncology 20(6): 601-8.
- Bidstrup, P. E., et al. (2011). "Screening for cancer-related distress: Summary of evidence from tools to programmes." Acta Oncol 50(2): 194-204.
- Carlson, L. E., et al. (2012). "Screening for distress and unmet needs in patients with cancer: review and recommendations." J Clin Oncol 30(11): 1160-77.
- Meijer, A., et al. (2011). "Depression screening and patient outcomes in cancer: a systematic review." PLoS One 6(11): e27181.

<sup>1</sup> Hiermee wordt een brede kijk op de behoeften van patiënten verondersteld. Studies die screenen op één aandoening (pijn, seksuele problemen) zijn hiermee uitgesloten. Omdat screening op distress en screening op angst en depressie dicht bij elkaar liggen, en deels overlappen, komen studies die screenen op angst en depressie wel in aanmerking, mits: (a) er geen sprake is van screening op alleen depressie of een angststoornis in engere zin, en (b) er naast psychologische/psychiatrische behandeling ook andere behandel mogelijkheden voorzien zijn als interventie

### 3 Search strategy

The search strings for PICO 3 were based upon those of the former searches for PICO 1 in 2008. Only some terms were added to the “outcome”, as is shown below. The searches were run on January the 19<sup>th</sup> 2015 (Medline and EMBASE). For PsychInfo and Cochrane, the strings were unchanged and the strings were not run again. Detailed search strings are given below. The searches were limited to publication date 2008-2014, language English and Dutch. Study types: all.

#### 3.1 Medline

##### P

1. cancer[tiab] 1093751
2. neoplasms[tiab] 69958
3. neoplasms/psychology[mesh] 34370
4. oncology[tiab] 56762
5. "cancer experience" 1312
6. Cancer-related[tiab] 14013
7. Cancer patients 931596
8. 1 t/m 7 combined with "OR" 1625006

##### I

9. screening[tiab] 347391
10. assessment[tiab] 607126
11. "Needs Assessment"[Mesh] 22550
12. "biopsychosocial assessment"[tiab] 52
13. "Decision Support Systems, Clinical"[Mesh] 4866
14. questionnaires[mesh] 315689
15. psychometrics/instrumentation[mesh] 2264
16. psychiatric status rating scales[mesh] 66277
17. instrument[tiab] 81805
18. inventory[tiab] 50970
19. checklist[tiab] 19261
20. "survey instrument"[tiab] 2278
21. Detecting[tiab] 117463
22. diagnosing[tiab] 45203
23. questions[tiab] 161700
24. cutoff scores[tiab] 657
25. determine[tiab] 1039890
26. screening tools[tiab] 2974
27. 9 t/m 26 combined with "OR" 2489808
28. distress[tiab] 74794
29. depressi\*[tiab] 264187
30. anxiety[tiab] 118217
31. panic[tiab] 12035
32. psychosocial[tiab] 62846
33. psychiatric[tiab] 142594
34. psychological[tiab] 138602
35. mental[tiab] 221380
36. mood[tiab] 49659
37. social[tiab] 328450
38. behavioral[tiab] 185887
39. spiritual[tiab] 8963
40. existential[tiab] 2660

41. adjustment[tiab] 106907
42. emotional[tiab] 96806
43. fatigue[tiab] 61230
44. "stress, psychological"[ mesh] 93272
45. 28 t/m 44 combined with "OR" 1369385
46. valid\*[tiab] 428640
47. reliability[tiab] 106153
48. accuracy[tiab] 243990
49. reproducibility[tiab] 52027
50. sensitivity[tiab] 557481
51. specificity[tiab] 336773
52. predictive value[tiab] 60666
53. ppv[tiab] 9570
54. npv[tiab] 5952
55. Validated 138745
56. Psychometrics 55948
57. Sensitive[tiab] 530730
58. 46 t/m 57 combined with "OR" 1836018

## O

59. "Quality of Life" [Mesh] 120211
60. "quality of life" 201003
61. "Health Status" [Mesh] 106094
62. "Health Status" 108628
63. "role function" 438
64. "role functioning" 1074
65. "psychosocial distress" 791
66. "emotional distress" 4252
67. "psychological distress" 11107
68. "Comorbidity"[Mesh] 69568
69. COMORBIDITY[tiab] 30402
70. "biopsychosocial health" [tiab] 32
71. "Psychophysiological Disorders"[Mesh] 17382
72. "Health Services Needs and Demand"[Mesh] 47352
73. "biopsychosocial case complexity"[tiab] 5
74. "complexity of care" 10410
75. "Delivery of Health Care, Integrated"[Mesh] 8759
76. "Interdisciplinary Communication"[Mesh] 11137
77. Anxiety disorders[tiab] 13071
78. Psychosocial problems[tiab] 2520
79. Mood disorders[tiab] 8703
80. distress[tiab] 74794
81. patient satisfaction
82. "Patient Satisfaction"[Mesh]
83. referral
84. "Referral and Consultation"[Mesh]
85. communication
86. "Communication"[Mesh]
87. 59 t/m 86 combined with "OR"
88. 8 AND 27 AND 45 AND 58 AND 87

Limieten

89. 88 AND ("2008/01/01"[PDat] : "2015/01/19"[PDat]) AND (English[lang] OR Dutch[lang] ) 1911

### 3.2 Cochrane database of systematic reviews

#1 MeSH descriptor: [Neoplasms] explode all trees 52834  
#2 MeSH descriptor: [Needs Assessment] explode all trees 308  
#3 #1 and #2 32

### 3.3 Embase

1 'neoplasm'/exp OR 'neoplasm'  
2 oncology:ab,ti  
3 'cancer experience'  
4 #1 OR #2 OR #3  
5 'screening'/exp  
6 assessment:ab,ti  
7 'decision support system'/exp  
8 'questionnaire'/exp  
9 'psychometry'/exp  
10 'psychological rating scale'/exp  
11 'checklist'/exp  
12 #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11  
13 'distress'/exp  
14 'distress syndrome':ab,ti  
15 'spiritual distress':ab,ti  
16 'emotional distress':ab,ti  
17 'behavioral distress':ab,ti  
18 'mental distress':ab,ti  
19 'mental stress':ab,ti  
20 'social distress':ab,ti  
21 'psychological distress':ab,ti  
22 'psychosocial distress':ab,ti  
23 'existential distress':ab,ti  
24 depression:ab,ti  
25 anxiety:ab,ti  
26 fatigue:ab,ti  
27 #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR  
#24 OR #25 OR #26  
28 validity:ab,ti  
29 'reliability':ab,ti  
30 'accuracy diagnostic'  
31 'reproducibility of results':ab,ti  
32 sensitivity:ab,ti  
33 specificity:ab,ti  
34 'predictive value of tests'  
35 ppv:ab,ti  
36 npv:ab,ti  
37 validated:ab,ti  
38 #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37  
39 'quality of life':ab,ti  
40 'health status':ab,ti  
41 'role function':ab,ti  
42 'role functioning':ab,ti

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43 'emotional distress':ab,ti
44 'psychosocial distress':ab,ti
45 'psychological distress':ab,ti
46 comorbidity:ab,ti
47 'biopsychosocial health':ab,ti
48 'psychophysiologic disorders':ab,ti
49 patient satisfaction
50 'patient satisfaction'/exp
51 referral
52 'referral'/exp
53 communication
54 'communication'/exp
55 #39 t/m #54 combineren met OR
56 #4 AND #12 AND #27 AND #38 AND #55
57 [dutch]/lim OR [english]/lim AND [2008-2014]/py
58 #56 AND #57 965
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### 3.4 Psych info

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#1 neoplasms/ 25159
#2 distress/ 15896
#3 #1 and #2 1049
#4 limit #3 to yr="2008 -Current" 527
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## 4 Search results

The Medline search yielded 1911 hits, while the search in Cochrane yielded 32 hits, EMBASE 965 hits and Psych info 527 hits. Four articles were identified through reference tracking. After merging the search files into one file (3438 hits) and removal of the duplicates (295 hits) 3143 records were screened on title and abstract. Of these 3081 records were excluded.

### 4.1 Studies were excluded

If they did not investigate:

- the situation with a process of screening against the situation without a process of screening according to the PICO
- the procedure did not concern distress or care needs

Or if they studied:

- effectiveness of a therapeutic intervention
- children, spouses or siblings of cancer patients, or adults who had cancer as a child.
- cancer screening
- coping styles
- health related quality of life
- the psychometric quality of instruments
- validation of the instrument in another language, or patient population
- single cases
- english abstracts, letters or comments
- correlates for distress such as illness perceptions
- symptom control
- the effect of decision aids
- geriatric assessment
- health information technology (HIT)
- accuracy of oncologists' recognition

- high risk familial cancer population
- terminal phase
- information needs

#### 4.2 Selection of references based on full text

Nine systematic reviews or narrative reviews based on a systematic search were identified (indicated in blue in Table 2 below):

- Bidstrup 2011
- Carey 2012
- Carlson 2012
- Chen 2013
- Luckett 2009
- Meijer 2013
- Mitchel 2012
- Mitchell 2013
- Valderas 2008

Because these reviews included from 1 to 28 RCTs, and because not one review included all relevant studies of relevance to us, we used these reviews for reference tracking and included the primary studies they included, if these primary studies were concordant with our PICO (Tabel 1 gives an overview of the full text selection of references on cancer patients tracked from systematic reviews). In addition, using the systematic reviews would be problematic because of the narrative presentation of results, the use of both RCTs and non-randomised studies in the conclusions, and because sometimes their PICO's only partially overlapped with our own PICO. Fourteen RCTs were selected for inclusion (Table 1).

Table 1 Full text selection of references sourced from systematic reviews

	<b>Reference</b>	<b>In/excluded</b>	<b>Reason exclusion</b>
1	Allen 2002	Ex	Other intervention (psychosocial support was offered to all patients, no screening procedure in place)
	Aranda 2006	Ex	Other intervention (psychosocial support was offered to all patients, no screening procedure in place)
	Berry 2011	In	
	Boyes 2006	Ex	Other study type (non-randomised study: alternate allocation)
5	Braeken 2013	In	
	Carlson 2010	In	
	Carlson 2012	Ex	Other comparator (computerized assessment vs. personal triage, no TAU group)
	Carlson 2013	In	
	Cleeland 2011	Ex	Other intervention (focus on physical symptoms exclusively)
10	Detmar 2002	In	
	Girgis 2009	In	
	Given 2008	Ex	Other comparator (screening by computer vs. screening by nurse)
	Hoekstra 2006	Ex	Other intervention (focus on physical symptoms exclusively)
	Hollingworth 2012	Ex	Other study type (preliminary abstract, Hollingworth 2013 is the full publication)
15	Kearney 2009	Ex	Other intervention (focus on side effects chemotherapy exclusively)

	King 2009	Ex	Other intervention (improving continuity of care)
	Klinkhammer-Schalke 2012	In	
	Kornblith 2006	In	
	MacVean 2007	Ex	Other intervention (screening results are discussed with a volunteer, not relevant to Dutch practice)
20	Maunsell 1996	In	
	McLachlan 2001	In	
	Mills 2009	Ex	Other intervention (patient keeps a QoL diary which he may or may not share with health care professionals)
	Rosenbloom 2007	In	
	Ruland 2011	In	
25	Sarna 1998	In	
	Scandrett 2010	Ex	Other study type (non-randomised trial, alternate allocation, while randomised trials are available)
	Trowbridge 1997	Ex	Other intervention (focus on pain exclusively)
	Velikova 2004, 2010	In	
29	White 2011	Ex	Other intervention (screening results are discussed with a volunteer, not relevant to Dutch practice)

Table 2 Full text selection from original search

	Reference	In/excluded	Reason exclusion
1	Beaupin, L., J. A. Hydeman and P. Paplham (2013). "A survivorship screening tool to help identify cancer survivors' needs." European Journal of Cancer 49: S394.	Ex	Other study type (no control group)
	Bidstrup, P. E., C. Johansen and A. J. Mitchell (2011). "Screening for cancer-related distress: Summary of evidence from tools to programmes." Acta Oncol 50(2): 194-204.	Ex	Used for reference tracking
	Bonacchi, A., A. Rossi, L. Bellotti, S. Franco, A. Toccafondi, G. Miccinesi and M. Rosselli (2010). "Assessment of psychological distress in cancer patients: A pivotal role for clinical interview." Psycho-Oncology 19(12): 1294-1302.	Ex	Other study type (no control group)
	Boothroyd, D. A. and D. Hodgson (2012). "The prevalence, detection and intervention for depression and anxiety in oncology." Journal of Radiotherapy in Practice 11(1): 33-43.	Ex	Other study type (narrative review on clinical depression)
5	Braeken, A. P., G. I. Kempen, D. B. Eekers, R. M. Houben, F. C. van Gils, T. Amberg and L. Lechner (2013). "Psychosocial screening effects on health-related outcomes in patients receiving radiotherapy. A cluster randomised controlled trial." Psycho-Oncology 22(12): 2736-2746.	In	RCT
	Braeken, A. P., L. Lechner, F. C. van Gils, R. M. Houben, D. Eekers, T. Amberg and G. Kempen (2009). "The effectiveness of the Screening Inventory of Psychosocial Problems (SIPP) in cancer patients treated with radiotherapy: design of a cluster randomised controlled trial." BMC Cancer 9: 177.	Ex	Study protocol
	Bultz, B. D., S. L. Groff, M. Fitch, M. C. Blais, J. Howes, K. Levy and C. Mayer (2011). "Implementing screening for distress, the 6th vital sign: A Canadian strategy for changing practice." Psycho-Oncology 20(5): 463-469.	Ex	Other study type (description of implementation strategy)
	Carey, M., S. Lambert, R. Smits, C. Paul, R. Sanson-	Ex	Used for reference tracking

	Fisher and T. Clinton-McHarg (2012). "The unfulfilled promise: a systematic review of interventions to reduce the unmet supportive care needs of cancer patients." <i>Support Care Cancer</i> 20(2): 207-219.		
	Carlson, L. E., S. K. Clifford, S. L. Groff, O. Maciejewski and B. D. Bultz (2010). Screening for depression in cancer care. <i>Screening for depression in clinical practice: An evidence-based guide</i> . New York, NY, Oxford University Press; US: 265-298.	Ex	Book
10	Carlson, L. E., A. Waller, S. L. Groff and B. D. Bultz (2013). "Screening for distress, the sixth vital sign, in lung cancer patients: Effects on pain, fatigue, and common problems-Secondary outcomes of a randomized controlled trial." <i>Psycho-Oncology</i> 22(8): 1880-1888.	In	RCT
	Carlson, L. E., A. Waller and A. J. Mitchell (2012) "Screening for distress and unmet needs in patients with cancer: review and recommendations." <i>J Clin Oncol</i> 30(11): 1160-1177.	Ex	Used for reference tracking
	Chen et al (2013). "A systematic review of the impact of routine collection of patient reported outcome measures on patients, providers and health organisations in an oncologic setting." <i>BMC Health Services Research</i> 2013, 13:211	Ex	Used for reference tracking
	Cormier, J. N. and R. L. Askew (2011). "Assessment of patient-reported outcomes in patients with melanoma." <i>Surg Oncol Clin N Am</i> 20(1): 201-213.	Ex	Other study type (not an intervention study)
	Coyne, J. (2013). "Second thoughts about implementing routine screening of cancer patients for distress." <i>Psycho-Oncologie</i> 7(4): 243-249.	Ex	Other study type (narrative review: no systematic search and selection. References to an earlier SR which is included here)
15	Creedon, M. and N. Hession (2009). "Is screening for distress useful? Screening for psychological distress in an Irish radiation oncology hospital." <i>Psycho-Oncology</i> 18: S293.	Ex	Other study type (no control group)
	Dolbeault, S., B. Boistard, J. Meuric, L. Copel and A. Bredart (2011). "Screening for distress and supportive care needs during the initial phase of the care process: A qualitative description of a clinical pilot experiment in a French cancer center." <i>Psycho-Oncology</i> 20(6): 585-593.	Ex	Other study type (no control group)
	Donovan, K. A., S. Thirlwell, S. Winn, S. M. Apte and D. G. Portman (2014). "Feasibility and effect of screening on referrals for palliative care services." <i>Supportive Care in Cancer</i> 22(1): S133.	Ex	Other study type (no control group)
	Estrada, S. S. (2013) "Systematic review of acceptability and feasibility of the use of computer driven assessment for psychosocial needs of adult cancer patients (Provisional abstract)." <i>Database of Abstracts of Reviews of Effects</i> , 1-100.	Ex	PhD thesis
	Fortugno, M., S. Godi, L. Aluigi, P. Giordani, V. Catalano and S. L. Fedeli (2010). "The distress evaluation in cancer patients - The feasibility of a systematic assessment with the distress measurement scales." <i>Supportive Care in Cancer</i> 18: S182.	Ex	Other study type (no control group)
20	Glare, P. A., D. Semple, S. M. Stabler and L. B. Saltz (2011). "Palliative care in the outpatient oncology setting: evaluation of a practical set of referral criteria." <i>J Oncol Pract</i> 7(6): 366-370.	Ex	Other study type (no control group)
	Grassi, L., S. Sabato, E. Rossi, L. Marmai and B.	Ex	Other study type (no control

	Biancosino (2009). "Affective syndromes and their screening in cancer patients with early and stable disease: Italian ICD-10 data and performance of the distress thermometer from the Southern European Psycho-Oncology Study (SEPOS)." <i>Journal of Affective Disorders</i> 114(1-3): 193-199.		group)
	Hernandez, M., J. A. Cruzado, C. Prado, E. Rodriguez, C. Hernandez, M. A. Gonzalez and J. C. Martin (2012). "Mental health and distress in cancer patients." <i>Psicooncologia</i> 9(2-3): 234-257.	Ex	Other language (Spanish)
	Hollingworth, W., C. Metcalfe, S. Mancero, S. Harris, R. Campbell, L. Biddle, D. McKell-Redwood and J. Brennan (2013) "Are needs assessments cost effective in reducing distress among patients with cancer? A randomized controlled trial using the Distress Thermometer and Problem List." <i>Journal of clinical oncology : official journal of the American Society of Clinical Oncology</i> 31, 3631-3638 DOI: 10.1200/JCO.2012.48.3040.	In	RCT
	Hussain, N., L. Grainger, P. Symonds and A. J. Mitchell (2010). "Implementation of a screening programme for cancer related distress: Part II - Does screening aid clinicians' communication, judgement or accuracy of anxiety and depression?" <i>Psycho-Oncology</i> 19: S81.	Ex	Other study type (no control group)
25	King, M., L. Jones, O. McCarthy, M. Rogers, A. Richardson, R. Williams, A. Tookman and I. Nazareth (2009). "Development and pilot evaluation of a complex intervention to improve experienced continuity of care in patients with cancer." <i>Br J Cancer</i> 100(2): 274-280.	In	RCT
	Lo, C., M. Li and G. Rodin (2008). "The assessment and treatment of distress in cancer patients: Overview and future directions." <i>Minerva Psichiatrica</i> 49(2): 129-143.	Ex	Other study type (narrative review)
	Luckett, T., Butow, P.M., King, M.T. (2009) Improving patient outcomes through the routine use of patient-reported data in cancer clinics: future directions. <i>Psyco-oncology</i> 18: 1129-1138	Ex	Used for reference tracking
	Meijer, A., M. Roseman, V. C. Delisle, K. Milette, B. Levis, A. Syamchandra, M. E. Stefanek, D. E. Stewart, P. de Jonge, J. C. Coyne and B. D. Thombs (2013). "Effects of screening for psychological distress on patient outcomes in cancer: a systematic review." <i>J Psychosom Res</i> 75(1): 1-17.	Ex	Used for reference tracking
	Meijer, A., M. Roseman, K. Milette, J. C. Coyne, M. E. Stefanek, R. C. Ziegelstein, E. Arthurs, A. Leavens, S. C. Palmer, D. E. Stewart, P. de Jonge and B. D. Thombs (2011). "Depression screening and patient outcomes in cancer: a systematic review." <i>PLoS One</i> 6(11): e27181.	Ex	Other intervention (screening for major depressive disorder)
30	Mitchell, A. J. (2010). Screening procedures for psychosocial distress. <i>Psycho-oncology</i> . New York, NY, Oxford University Press; US: 389-396.	Ex	Book
	Mitchell, A. J. (2010). "Short screening tools for cancer-related distress: a review and diagnostic validity meta-analysis." <i>J Natl Compr Canc Netw</i> 8(4): 487-494.	Ex	Other focus (on test accuracy)
	Mitchell, A. J. (2013). "Screening for cancer-related distress: when is implementation successful and when is it unsuccessful?" <i>Acta Oncol</i> 52(2): 216-224.	Ex	Used for reference tracking
	Mitchell, A. J. (2014). "Screening for distress in breast cancer." <i>Current Breast Cancer Reports</i> 6(3): 226-234.	Ex	Other study type (narrative review)
	Mitchell, A. J., N. Hussain, L. Grainger and P. Symonds (2011). "Identification of patient-reported distress by clinical nurse specialists in routine oncology practice: A	Ex	Other study type (no control group)

	multicentre UK study." <i>Psycho-Oncology</i> 20(10): 1076-1083.		
35	Mitchell, A. J., A. Vahabzadeh and K. Magruder (2011). "Screening for distress and depression in cancer settings: 10 lessons from 40 years of primary-care research." <i>Psycho-Oncology</i> 20(6): 572-584.	Ex	Other study type (narrative review)
	Mitchell, A. J., A. Waller and L. E. Carlson (2012). "Implementing a screening programme for distress in cancer settings: Science and practice." <i>Psicooncologia</i> 9(2-3): 259-275.	Ex	Used for reference tracking
	No authorship, i. (2013). "Implementing screening for distress: The Joint Position Statement From the American Psychosocial Oncology Society, Association of Oncology Social Work, and Oncology Nursing Society." <i>Oncology Nursing Forum</i> 40(5): 423-424.	Ex	Other study type (position statement)
	Palmer, S. C., A. Taggi, A. Demichele and J. C. Coyne (2012). "Is screening effective in detecting untreated psychiatric disorders among newly diagnosed breast cancer patients?" <i>Cancer</i> 118(10): 2735-2743.	Ex	Other study type (no control group)
	Palmer, S. C., C. van Scheppingen and J. C. Coyne (2011). "Clinical trial did not demonstrate benefits of screening patients with cancer for distress." <i>J Clin Oncol</i> 29(10): e277-278; author reply e279-280.	Ex	Other study type (letter, comment)
40	Parry, C., L. S. Padgett and B. Zebrack (2012). "Now what? Toward an integrated research and practice agenda in distress screening." <i>Journal of Psychosocial Oncology</i> 30(6): 715-727.	Ex	Other study type (narrative review)
	Petty, L. and J. Lester (2014). "Distress screening in chronic disease: essential for cancer survivors." <i>J Adv Pract Oncol</i> 5(2): 107-114.	Ex	Other study type (narrative review)
	Philip, E. J. (2012). "The 6th vital sign in medicine: Evaluation of a comprehensive model of distress in cancer care." <i>Dissertation Abstracts International: Section B: The Sciences and Engineering</i> 72(12-B): 7694.	Ex	Other study type (no control group)
	Randall, J. M., R. Voth, E. Cheney, L. Bazhenova and W. Bardwell (2011). "Outpatient clinic-based depression screening in lung cancer patients." <i>Psycho-Oncology</i> 20(1): 40.	Ex	Other study type (no control group)
	Rhondali, W. and M. Filbet (2010). "Should we use systematic screening for depression in palliative care? A systematic literature review." <i>Psycho-Oncology</i> 19: S35.	Ex	Other intervention (depression screening)
45	Rhondali, W., D. Hui, J. H. Kang, K. L. Kilgore, S. H. Kim, L. M. T. Nguyen and E. Bruera (2011). "Association between validated symptom assessment tool and nurse clinical impression in cancer patients admitted to a palliative care unit." <i>Supportive Care in Cancer</i> 19(2): S175-S176.	Ex	Other study type (review in abstract form)
	Richardson, L. A. and G. W. Jones (2009). "A review of the reliability and validity of the Edmonton Symptom Assessment System." <i>Curr Oncol</i> 16(1): 55.	Ex	Other focus (on test characteristics)
	Schilli, S. M. (2014). "Screening for distress in patients with cancer." <i>Clin J Oncol Nurs</i> 18(6): E103-106.	Ex	Other study type (narrative review)
	Shimizu, K., Y. Ishibash, S. Umezawa, H. Izumi, N. Akizuki, A. Ogawa, Y. Fujiwara, M. Ando, N. Katsumata, K. Tamura, T. Kouno, C. Shimizu, K. Yonemori, M. Yunokawa and Y. Uchitomi (2010). "Feasibility and usefulness of the 'Distress Screening Program in Ambulatory Care' in clinical oncology practice." <i>Psycho-Oncology</i> 19(7): 718-725.	Ex	Other study type (no control group)
	Singer, S., A. Brown, J. Einenkel, J. Hauss, A. Hinz, A. Klein, K. Papsdorf, J. U. Stolzenburg and E. Brahler	Ex	Other intervention (depression screening)

	(2011). "Identifying tumor patients' depression." <i>Support Care Cancer</i> 19(11): 1697-1703.		
50	Singer, S., H. Danker, A. Dietz, B. Homemann, S. Koscielny, J. Oeken, C. Matthaus, H. J. Vogel and O. Krauss (2008). "Screening for mental disorders in laryngeal cancer patients: A comparison of 6 methods." <i>Psycho-Oncology</i> 17(3): 280-286.	Ex	Other intervention (screening for clinical depression only)
	Smith, E. M., K. Skalla, T. Onega, K. Anton, S. Gallagher, J. Rhoda, W. DiSalvo and A. Dietrich (2010). "The cancer survivor survey: Using Web-based technology to assess cancer survivor challenges." <i>Journal of Clinical Oncology</i> 28(15).	Ex	Other study type (no control group)
	Snowden, A., C. A. White, Z. Christie, E. Murray, C. McGowan and R. Scott (2011). "The clinical utility of the distress thermometer: a review." <i>Br J Nurs</i> 20(4): 220-227.	Ex	Other study type (SR with no RCTs included, effectiveness of distress screening did not seem focus of SR)
	Thewes, B., P. Butow and R. Stuart-Harris (2009). "Does routine psychological screening of newly diagnosed rural cancer patients lead to better patient outcomes? Results of a pilot study." <i>Aust J Rural Health</i> 17(6): 298-304.	Ex	Other study type (comparative cohort study)
	Trask, P. (2009). "Review of methods and instruments to assess depression in individuals with cancer." <i>Psycho-Oncology</i> 18: S12-S13.	Ex	Other study type (review in abstract form)
55	Tu, C. H., M. C. Hsu, S. C. Chi, H. Y. Lin and Y. C. Yen (2014). "Routine depression screening and diagnosing strategy for cancer inpatients." <i>Psychooncology</i> 23(9): 1057-1067.	Ex	Other intervention (depression screening with referral to psychiatrist)
	Tuinman, M. A., S. M. Gazendam-Donofrio and J. E. Hoekstra-Weebers (2008). "Screening and referral for psychosocial distress in oncologic practice: use of the Distress Thermometer." <i>Cancer</i> 113(4): 870-878.	Ex	Other study type (no control group)
	Valderas et al. "The impact of measuring patient-reported outcomes in clinical practice: a systematic review of the literature." <i>Qual Life Res</i> (2008) 17: 179–193	Ex	Used for reference tracking
	van Scheppingen, C., M. J. Schroevens, A. Smink, Y. M. van der Linden, V. E. Mul, J. A. Langendijk, J. C. Coyne and R. Sanderman (2011). "Does screening for distress efficiently uncover meetable unmet needs in cancer patients?" <i>Psycho-Oncology</i> 20(6): 655-663.	Ex	Other study type (no control group)
	Velikova, G., Keding, A., Harley, C. et al. (2010) Patients report improvements in continuity of care when quality of life assessments are used routinely in oncology practice: Secondary outcomes of a randomised controlled trial. <i>European journal of cancer</i> 46: 2381–2388	In	
60	Vodermaier, A., W. Linden and C. Siu (2009). "Screening for emotional distress in cancer patients: a systematic review of assessment instruments." <i>J Natl Cancer Inst</i> 101(21): 1464-1488.	Ex	Other focus (on test characteristics)
	Waller, A., A. Williams, S. L. Groff, B. D. Bultz and L. E. Carlson (2013). "Screening for distress, the sixth vital sign: Examining self-referral in people with cancer over a one-year period." <i>Psycho-Oncology</i> 22(2): 388-395.	Ex	Other study type (no control group)
62	Wang, Y. P. and C. Gorenstein (2013). "Assessment of depression in medical patients: a systematic review of the utility of the Beck Depression Inventory-II." <i>Clinics (Sao Paulo)</i> 68(9): 1274-1287.	Ex	Other intervention ( validity of the Beck Depression Inventory)

### **Uitgangsvraag 4.1**

**Wat is er bekend over het signaleren van klachten/detecteren behoefte zorg bij volwassen kankerpatiënten in de eerste lijn?**

P        volwassen kankerpatiënten in primary care, general practice, general care, family practice  
I        Signaleren van distress en detecteren behoefte zorg. Distress in de breedste zin van het woord, betreffende het mentaal -, sociaal -, levensbeschouwelijk/spiritueel -,en fysiek functioneren, inclusief termen zoals: depression, anxiety, panic, social isolation, existential and spiritual crisis, health status, rol functioning, quality of life, emotional distress, fatigue, pain, sexuality, fear of recurrence, sleep disturbance.

C        -  
O        -

### **Uitgangsvraag 4.2**

**Wat zijn belemmerende en bevorderende factoren voor het signaleren van klachten/detecteren behoefte zorg bij volwassen kankerpatiënten in de eerste lijn?**

P        volwassen kankerpatiënten in primary care, general practice, general care, family practice  
I        Signaleren van distress en detecteren behoefte zorg. Distress in de breedste zin van het woord, betreffende het mentaal -, sociaal -, levensbeschouwelijk/spiritueel -,en fysiek functioneren, inclusief termen zoals: depression, anxiety, panic, social isolation, existential and spiritual crisis, health status, rol functioning, quality of life, emotional distress, fatigue, pain, sexuality, fear of recurrence, sleep disturbance.

C        -  
O        Barriers, facilitators, access to better healthcare resources but poorer access to hospital specialists; working in small practices; having routine review of clinical outcomes; and routine review of clinical performance of staff.

**4. Wat zijn de organisatorische randvoorwaarden waarbinnen signaleren van klachten/detecteren behoefte zorg (signalering, gesprek en verwijzing) succesvol kan worden toegepast?**

P        volwassen kankerpatiënten  
I        aanwezige randvoorwaarden: lack of training and support, low acceptability and failure to link treatment to the screening results  
C        -  
O        -

Studies:                      alle typen studies

Taal:                          Engels, Nederlands

Jaar:                          2008 tot heden

Databases:                  Medline, Embase, Cochrane, Psychinfo

#### **1. Search strategy**

Searches were run on January 5 and 12, 2015. Detailed search strings are given below.

#### **2. Search Results**

The search for questions 2a and 2b resulted in 1851 single citations (including 2 references found through reference tracking). 17 Citations were requested full text. Two studies were finally included (0 studies for question 2a and 2 studies for question 2b).

The search for question 4 resulted in 7460 single citations (including 2 references found through reference tracking). 176 Citations were requested full text and 12 studies were included in the final selection.

1 Search strings

**1. medline (via Pubmed)**

KQ 2a and 2b: searched on January 5, 2015: 581 citations

	(cancer[tiab] OR cancers[tiab] OR "Neoplasms"[Mesh] OR neoplasms[tiab] OR neoplasm[tiab] OR oncology[tiab])
AND	(detection[tiab] OR detect[tiab] OR detected[tiab] OR "Symptom Assessment"[Mesh] OR "Needs Assessment"[Mesh] OR "Nursing Assessment"[Mesh] OR assessment[tiab] OR assess[tiab] OR assessed[tiab] OR screening[tiab] OR screen[tiab] OR screened[tiab] OR signal[tiab] OR signalling[tiab] OR signalled[tiab] OR evaluate[tiab] OR evaluation[tiab] OR evaluated[tiab] OR "distress thermometer"[tiab] OR "problem list"[tiab])
AND	(distress[tiab] OR distressed[tiab] OR "Stress, Psychological"[Mesh] OR stress[tiab] OR stressed[tiab] OR "psychosocial problem"[tiab] OR "psychologic problem"[tiab] OR "psychological problem"[tiab] OR "psychiatric problem"[tiab] OR "psychiatrical problem"[tiab] OR "psychosocial problems"[tiab] OR "psychologic problems"[tiab] OR "psychological problems"[tiab] OR "psychiatric problems"[tiab] OR "psychiatrical problems"[tiab] OR "mental problem"[tiab] OR "social problem"[tiab] OR "emotional problem"[tiab] OR "relational problem"[tiab] OR "sexual problem"[tiab] OR "physical problem"[tiab] OR "spiritual problem"[tiab] OR "existential problem"[tiab] OR "mental problems"[tiab] OR "social problems"[tiab] OR "emotional problems"[tiab] OR "relational problems"[tiab] OR "sexual problems"[tiab] OR "physical problems"[tiab] OR "spiritual problems"[tiab] OR "existential problems"[tiab] OR "Pain"[Mesh] OR pain[tiab] OR mood[tiab] OR "Depression"[Mesh] OR depression[tiab] OR depressed[tiab] OR depressive[tiab] OR "Anxiety"[Mesh] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab] OR "Fear"[Mesh] OR fear[tiab] OR fears[tiab] OR panic[tiab] OR panics[tiab] OR "Irritable Mood"[Mesh] OR "irritable mood"[tiab] OR "irritable moods"[tiab] OR "Anger"[Mesh] OR anger[tiab] OR angers[tiab] OR rage[tiab] OR rages[tiab] OR "Bereavement"[Mesh] OR bereavement[tiab] OR bereavements[tiab] OR grief[tiab] OR griefs[tiab] OR grieving[tiab] OR mourning[tiab] OR mournings[tiab] OR "Frustration"[Mesh] OR frustration[tiab] OR frustrations[tiab] OR "Guilt"[Mesh] OR guilt[tiab] OR guilts[tiab] OR shame[tiab] OR shames[tiab] OR "Loneliness"[Mesh] OR loneliness[tiab] OR "Fatigue"[Mesh] OR fatigue[tiab] OR tiredness[tiab])
AND	("Primary Health Care"[Mesh] OR "Physicians, Primary Care"[Mesh] OR "Primary Care Nursing"[Mesh] OR "primary care"[tiab] OR "primary health care"[tiab] OR "primary healthcare"[tiab] OR "general care"[tiab] OR "General Practice"[Mesh] OR "general practice"[tiab] OR "General Practitioners"[Mesh] OR "general practitioner"[tiab] OR "general practitioners"[tiab] OR "Family Practice"[Mesh] OR "family practice"[tiab] OR "family practitioner"[tiab] OR "family practitioners"[tiab] OR "family physician"[tiab] OR "family physicians"[tiab] OR "Nurse Practitioners"[Mesh] OR "nurse practitioner"[tiab] OR "nurse practitioner"[tiab] OR "Home Care Services"[Mesh] OR "domiciliary care"[tiab] OR "home care"[tiab])
	Filters: Publication date from 2008/01/01; Dutch; English

KQ 4: searched on January 13, 2015: 5840 citations

	(cancer[tiab] OR cancers[tiab] OR "Neoplasms"[Mesh] OR neoplasms[tiab] OR neoplasm[tiab] OR oncology[tiab])
AND	(detection[tiab] OR detect[tiab] OR detected[tiab] OR "Symptom Assessment"[Mesh] OR "Needs Assessment"[Mesh] OR "Nursing Assessment"[Mesh] OR assessment[tiab] OR assess[tiab] OR assessed[tiab] OR screening[tiab] OR screen[tiab] OR screened[tiab] OR signal[tiab] OR signalling[tiab] OR signalled[tiab] OR evaluate[tiab] OR evaluation[tiab] OR evaluated[tiab] OR "distress thermometer"[tiab] OR "problem list"[tiab])
AND	(distress[tiab] OR distressed[tiab] OR "Stress, Psychological"[Mesh] OR stress[tiab] OR stressed[tiab] OR "psychosocial problem"[tiab] OR "psychologic problem"[tiab] OR "psychological problem"[tiab] OR "psychiatric problem"[tiab] OR "psychiatrical problem"[tiab] OR "psychosocial problems"[tiab] OR "psychologic problems"[tiab] OR "psychological problems"[tiab] OR "psychiatric problems"[tiab] OR "psychiatrical problems"[tiab] OR "mental problem"[tiab] OR "social problem"[tiab] OR "emotional problem"[tiab])

	problem"[tiab] OR "relational problem"[tiab] OR "sexual problem"[tiab] OR "physical problem"[tiab] OR "spiritual problem"[tiab] OR "existential problem"[tiab] OR "mental problems"[tiab] OR "social problems"[tiab] OR "emotional problems"[tiab] OR "relational problems"[tiab] OR "sexual problems"[tiab] OR "physical problems"[tiab] OR "spiritual problems"[tiab] OR "existential problems"[tiab] OR "Pain"[Mesh] OR pain[tiab] OR mood[tiab] OR "Depression"[Mesh] OR depression[tiab] OR depressed[tiab] OR depressive[tiab] OR "Anxiety"[Mesh] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab] OR "Fear"[Mesh] OR fear[tiab] OR fears[tiab] OR panic[tiab] OR panics[tiab] OR "Irritable Mood"[Mesh] OR "irritable mood"[tiab] OR "irritable moods"[tiab] OR "Anger"[Mesh] OR anger[tiab] OR angers[tiab] OR rage[tiab] OR rages[tiab] OR "Bereavement"[Mesh] OR bereavement[tiab] OR bereavements[tiab] OR grief[tiab] OR griefs[tiab] OR grieving[tiab] OR mourning[tiab] OR mournings[tiab] OR "Frustration"[Mesh] OR frustration[tiab] OR frustrations[tiab] OR "Guilt"[Mesh] OR guilt[tiab] OR guilts[tiab] OR shame[tiab] OR shames[tiab] OR "Loneliness"[Mesh] OR loneliness[tiab] OR "Fatigue"[Mesh] OR fatigue[tiab] OR tiredness[tiab])
AND	("Health Planning"[Mesh] OR "Organization and Administration"[Mesh] OR barrier[tiab] OR barriers[tiab] OR obstacle[tiab] OR obstacles[tiab] OR "Health Plan Implementation"[Mesh] OR implementation[tiab] OR implement[tiab] OR imlemented[tiab] OR implementing[tiab] OR challenge[tiab] OR challenges[tiab] OR challenged[tiab] OR challenging[tiab] OR resistance[tiab] OR resisting[tiab] OR inadequate[tiab] OR impractical[tiab] OR feasible[tiab] OR feasibility[tiab] OR burden[tiab] OR burdens[tiab] OR workload[tiab] OR prerequisite[tiab] OR prerequisites[tiab] OR precondition[tiab] OR preconditions[tiab] OR "prior condition"[tiab] OR "prior conditions"[tiab] OR "boundary condition"[tiab] OR "boundary conditions"[tiab] OR "limiting condition"[tiab] OR "limiting conditions"[tiab])
	Filters: Publication date from 2008/01/01; Dutch; English

## 2. Embase (via OVID)

Searched on January 5, 2015

Database: Embase <1974 to 2014 December 30>

Search Strategy 2a en 2b:

- 
- 1 exp neoplasm/ (3383892)
  - 2 neoplasm.ti,ab. (52259)
  - 3 neoplasms.ti,ab. (82346)
  - 4 cancer.ti,ab. (1428700)
  - 5 cancers.ti,ab. (214544)
  - 6 exp oncology/ (110046)
  - 7 oncology.ti,ab. (105255)
  - 8 or/1-7 (3642087)
  - 9 detection.ti,ab. (732675)
  - 10 detect.ti,ab. (311881)
  - 11 detected.ti,ab. (992359)
  - 12 clinical evaluation/ (51145)
  - 13 exp clinical assessment/ (69194)
  - 14 psychologic assessment/ (20160)
  - 15 symptom assessment/ (1925)
  - 16 assessment.ti,ab. (803295)
  - 17 assess.ti,ab. (794524)
  - 18 assessed.ti,ab. (989025)
  - 19 exp screening/ (481089)
  - 20 screening.ti,ab. (446141)
  - 21 screen.ti,ab. (106138)
  - 22 screened.ti,ab. (133182)
  - 23 signal.ti,ab. (418936)
  - 24 signalling.ti,ab. (79973)
  - 25 signalled.ti,ab. (1221)
  - 26 evaluation.ti,ab. (1086235)
  - 27 evaluate.ti,ab. (978119)
  - 28 evaluating.ti,ab. (195056)

29 evaluated.ti,ab. (1242463)  
30 distress thermometer.ti,ab. (693)  
31 problem list.ti,ab. (659)  
32 or/9-31 (6657407)  
33 distress.ti,ab. (96711)  
34 distressed.ti,ab. (4185)  
35 exp stress/ (199988)  
36 stress.ti,ab. (568308)  
37 suffering.ti,ab. (142509)  
38 anguish.ti,ab. (836)  
39 mental problem.ti,ab. (99)  
40 social problem.ti,ab. (2854)  
41 emotional problem.ti,ab. (189)  
42 mental problems.ti,ab. (896)  
43 social problems.ti,ab. (5137)  
44 emotional problems.ti,ab. (4291)  
45 relational problem.ti,ab. (21)  
46 relational problems.ti,ab. (191)  
47 sexual problem.ti,ab. (378)  
48 sexual problems.ti,ab. (2962)  
49 physical problem.ti,ab. (158)  
50 physical problems.ti,ab. (1582)  
51 spiritual problem.ti,ab. (16)  
52 spiritual problems.ti,ab. (90)  
53 existential problem.ti,ab. (9)  
54 existential problems.ti,ab. (55)  
55 exp pain/ (864256)  
56 pain.ti,ab. (577496)  
57 mood.ti,ab. (68050)  
58 exp depression/ (324507)  
59 depression.ti,ab. (294972)  
60 depressed.ti,ab. (96106)  
61 depressive.ti,ab. (96429)  
62 exp anxiety/ (127125)  
63 anxiety.ti,ab. (159525)  
64 anxieties.ti,ab. (2602)  
65 anxious.ti,ab. (15568)  
66 exp fear/ (161492)  
67 fear.ti,ab. (52612)  
68 fears.ti,ab. (9875)  
69 exp panic/ (18033)  
70 panic.ti,ab. (15409)  
71 panics.ti,ab. (123)  
72 exp irritability/ (16340)  
73 exp anger/ (13342)  
74 anger.ti,ab. (13037)  
75 angers.ti,ab. (353)  
76 rage.ti,ab. (5646)  
77 rages.ti,ab. (328)  
78 exp bereavement/ (6294)  
79 bereavement.ti,ab. (4577)  
80 bereavements.ti,ab. (71)  
81 exp grief/ (9534)  
82 grief.ti,ab. (5643)  
83 griefs.ti,ab. (12)  
84 grieving.ti,ab. (1373)  
85 exp mourning/ (1051)  
86 mourning.ti,ab. (1766)  
87 mournings.ti,ab. (20)  
88 exp frustration/ (4676)

89 frustration.ti,ab. (6484)  
90 frustrations.ti,ab. (1091)  
91 exp guilt/ (9055)  
92 guilt.ti,ab. (6447)  
93 guilty.ti,ab. (10)  
94 exp shame/ (3089)  
95 shame.ti,ab. (3648)  
96 shames.ti,ab. (20)  
97 exp loneliness/ (4418)  
98 loneliness.ti,ab. (4036)  
99 exp fatigue/ (140107)  
100 fatigue.ti,ab. (86421)  
101 tiredness.ti,ab. (4263)  
102 or/33-101 (2494472)  
103 exp primary health care/ (111261)  
104 exp general practitioner/ (65545)  
105 exp nurse practitioner/ (18981)  
106 general practice/ (70301)  
107 primary care.ti,ab. (93168)  
108 primary health care.ti,ab. (17037)  
109 primary healthcare.ti,ab. (2986)  
110 general care.ti,ab. (644)  
111 general practice.ti,ab. (35631)  
112 general practitioner.ti,ab. (18844)  
113 general practitioners.ti,ab. (33607)  
114 family practice.ti,ab. (7260)  
115 family practitioner.ti,ab. (587)  
116 family practitioners.ti,ab. (1400)  
117 family physician.ti,ab. (4665)  
118 family physicians.ti,ab. (10547)  
119 nurse practitioner.ti,ab. (4842)  
120 nurse practitioners.ti,ab. (6471)  
121 exp home care/ (55232)  
122 home care.ti,ab. (16112)  
123 domiciliary care.ti,ab. (302)  
124 or/103-123 (349976)  
125 8 and 32 and 102 and 124 (2737)  
126 limit 125 to ((dutch or english) and yr="2008 -Current") (1633)

Database: Embase <1974 to 2014 December 30>

Search Strategy 4:

---

1 exp neoplasm/ (3383892)  
2 neoplasm.ti,ab. (52259)  
3 neoplasms.ti,ab. (82346)  
4 cancer.ti,ab. (1428700)  
5 cancers.ti,ab. (214544)  
6 exp oncology/ (110046)  
7 oncology.ti,ab. (105255)  
8 or/1-7 (3642087)  
9 detection.ti,ab. (732675)  
10 detect.ti,ab. (311881)  
11 detected.ti,ab. (992359)  
12 clinical evaluation/ (51145)  
13 exp clinical assessment/ (69194)  
14 psychologic assessment/ (20160)  
15 symptom assessment/ (1925)  
16 assessment.ti,ab. (803295)  
17 assess.ti,ab. (794524)  
18 assessed.ti,ab. (989025)

19 exp screening/ (481089)  
20 screening.ti,ab. (446141)  
21 screen.ti,ab. (106138)  
22 screened.ti,ab. (133182)  
23 signal.ti,ab. (418936)  
24 signalling.ti,ab. (79973)  
25 signalled.ti,ab. (1221)  
26 evaluation.ti,ab. (1086235)  
27 evaluate.ti,ab. (978119)  
28 evaluating.ti,ab. (195056)  
29 evaluated.ti,ab. (1242463)  
30 distress thermometer.ti,ab. (693)  
31 problem list.ti,ab. (659)  
32 or/9-31 (6657407)  
33 health care planning/ (79780)  
34 exp "organization and management"/ (1244658)  
35 barrier.ti,ab. (127224)  
36 barriers.ti,ab. (82355)  
37 obstacle.ti,ab. (15538)  
38 obstacles.ti,ab. (20807)  
39 implementation.ti,ab. (159719)  
40 implement.ti,ab. (46325)  
41 implemented.ti,ab. (116635)  
42 implementing.ti,ab. (46193)  
43 challenge.ti,ab. (259658)  
44 challenges.ti,ab. (165503)  
45 challenged.ti,ab. (56452)  
46 challenging.ti,ab. (102588)  
47 resistance.ti,ab. (572813)  
48 resisting.ti,ab. (3163)  
49 inadequate.ti,ab. (95327)  
50 impractical.ti,ab. (4667)  
51 feasible.ti,ab. (138749)  
52 feasibility.ti,ab. (137572)  
53 acceptability.ti,ab. (24057)  
54 accepting.ti,ab. (11067)  
55 accept.ti,ab. (20464)  
56 accepted.ti,ab. (127116)  
57 burden.ti,ab. (137664)  
58 burdens.ti,ab. (12308)  
59 acceptance.ti,ab. (59044)  
60 prerequisite.ti,ab. (31763)  
61 prerequisites.ti,ab. (7255)  
62 precondition.ti,ab. (2850)  
63 preconditions.ti,ab. (1875)  
64 prior condition.ti,ab. (52)  
65 prior conditions.ti,ab. (41)  
66 boundary condition.ti,ab. (1195)  
67 boundary conditions.ti,ab. (4877)  
68 limiting condition.ti,ab. (540)  
69 limiting conditions.ti,ab. (1965)  
70 or/33-69 (3261023)  
71 distress.ti,ab. (96711)  
72 8 and 32 and 70 and 71 (2602)  
73 limit 72 to ((dutch or english) and yr="2008 -Current") (2075)

### 3. Cochrane DAtabase of systematic reviews (via Cochrane library)

January 6, 2015: browsed by category:

- ➔ Cancer -> general cancer treatment -> complementary and alternative therapy
- ➔ Cancer -> general cancer treatment -> psychosocial care
- ➔ Cancer -> palliative and supportive care -> complementary and alternative therapy
- ➔ Cancer -> palliative and supportive care -> organization of care
- ➔ Cancer -> palliative and supportive care -> psychosocial interventions
- ➔ Cancer -> screening
- ➔ Complementary and alternative medicine -> cancer
- ➔ Complementary and alternative medicine -> mental health
- ➔ Diagnosis
- ➔ Effective practice/health services
- ➔ Mental health -> depression
- ➔ Mental health -> mental health in general
- ➔ Mental health -> mood disorders

### 4. Psychinfo (via OVID)

Searched on January 5, 2015.

Vraag 2a en 2b:

Database: PsycINFO <2002 to December Week 5 2014>

- 
- 1 exp neoplasm/ (26820)
  - 2 neoplasm.ti,ab. (252)
  - 3 neoplasms.ti,ab. (386)
  - 4 cancer.ti,ab. (30415)
  - 5 cancers.ti,ab. (2279)
  - 6 exp oncology/ (1909)
  - 7 oncology.ti,ab. (3471)
  - 8 or/1-7 (36714)
  - 9 detection.ti,ab. (25054)
  - 10 detect.ti,ab. (16125)
  - 11 detected.ti,ab. (20623)
  - 12 evaluation/ (9875)
  - 13 psychological assessment/ (6046)
  - 14 assessment.ti,ab. (130181)
  - 15 assess.ti,ab. (91956)
  - 16 assessed.ti,ab. (116762)
  - 17 exp screening/ (12978)
  - 18 screening.ti,ab. (29987)
  - 19 screen.ti,ab. (11243)
  - 20 screened.ti,ab. (7211)
  - 21 signal.ti,ab. (24104)
  - 22 signalling.ti,ab. (3206)
  - 23 signalled.ti,ab. (279)
  - 24 evaluation.ti,ab. (84625)
  - 25 evaluate.ti,ab. (66065)
  - 26 evaluating.ti,ab. (25320)
  - 27 evaluated.ti,ab. (68840)
  - 28 distress thermometer.ti,ab. (108)
  - 29 problem list.ti,ab. (56)
  - 30 or/9-29 (524294)
  - 31 exp distress/ (10825)
  - 32 distress.ti,ab. (29002)
  - 33 distressed.ti,ab. (2317)
  - 34 exp stress/ (42433)
  - 35 stress.ti,ab. (86068)

36 suffering.ti,ab. (19676)  
37 anguish.ti,ab. (501)  
38 mental problem.ti,ab. (36)  
39 social problem.ti,ab. (1639)  
40 emotional problem.ti,ab. (80)  
41 mental problems.ti,ab. (409)  
42 social problems.ti,ab. (2811)  
43 emotional problems.ti,ab. (2167)  
44 relational problem.ti,ab. (33)  
45 relational problems.ti,ab. (154)  
46 sexual problem.ti,ab. (129)  
47 sexual problems.ti,ab. (906)  
48 physical problem.ti,ab. (31)  
49 physical problems.ti,ab. (447)  
50 spiritual problem.ti,ab. (24)  
51 spiritual problems.ti,ab. (41)  
52 existential problem.ti,ab. (14)  
53 existential problems.ti,ab. (36)  
54 exp pain/ (28738)  
55 pain.ti,ab. (43226)  
56 mood.ti,ab. (33440)  
57 exp depression/ (5353)  
58 depression.ti,ab. (104577)  
59 depressed.ti,ab. (18631)  
60 depressive.ti,ab. (46389)  
61 exp anxiety/ (26630)  
62 anxiety.ti,ab. (76022)  
63 anxieties.ti,ab. (2090)  
64 anxious.ti,ab. (8538)  
65 exp fear/ (8348)  
66 fear.ti,ab. (25613)  
67 fears.ti,ab. (4736)  
68 exp panic/ (695)  
69 panic.ti,ab. (6496)  
70 panics.ti,ab. (199)  
71 exp irritability/ (355)  
72 exp anger/ (5427)  
73 anger.ti,ab. (12037)  
74 angers.ti,ab. (41)  
75 rage.ti,ab. (1145)  
76 rages.ti,ab. (69)  
77 exp bereavement/ (6221)  
78 bereavement.ti,ab. (3341)  
79 bereavements.ti,ab. (48)  
80 exp grief/ (5375)  
81 grief.ti,ab. (5138)  
82 griefs.ti,ab. (15)  
83 grieving.ti,ab. (1227)  
84 exp mourning/ (6221)  
85 mourning.ti,ab. (1692)  
86 mournings.ti,ab. (16)  
87 exp frustration/ (568)  
88 frustration.ti,ab. (3520)  
89 frustrations.ti,ab. (729)  
90 exp guilt/ (1779)  
91 guilt.ti,ab. (5376)  
92 guilts.ti,ab. (10)  
93 exp shame/ (2036)  
94 shame.ti,ab. (5086)  
95 shames.ti,ab. (22)

96 exp loneliness/ (1600)  
97 loneliness.ti,ab. (3414)  
98 exp fatigue/ (4156)  
99 fatigue.ti,ab. (10045)  
100 tiredness.ti,ab. (644)  
101 or/31-100 (367265)  
102 exp primary health care/ (10512)  
103 general practice/ (0)  
104 primary care.ti,ab. (16325)  
105 primary health care.ti,ab. (2080)  
106 primary healthcare.ti,ab. (508)  
107 general care.ti,ab. (59)  
108 general practice.ti,ab. (2295)  
109 general practitioner.ti,ab. (1458)  
110 general practitioners.ti,ab. (3247)  
111 family practice.ti,ab. (595)  
112 family practitioner.ti,ab. (28)  
113 family practitioners.ti,ab. (204)  
114 family physician.ti,ab. (356)  
115 family physicians.ti,ab. (821)  
116 nurse practitioner.ti,ab. (650)  
117 nurse practitioners.ti,ab. (928)  
118 exp home care/ (3172)  
119 home care.ti,ab. (2539)  
120 domiciliary care.ti,ab. (34)  
121 or/102-120 (30152)  
122 8 and 30 and 101 and 121 (211)  
123 limit 122 to ((dutch or english) and yr="2008 -Current") (136)

Vraag 4:

Database: PsycINFO <2002 to December Week 5 2014>

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1 exp neoplasm/ (26820)  
2 neoplasm.ti,ab. (252)  
3 neoplasms.ti,ab. (386)  
4 cancer.ti,ab. (30415)  
5 cancers.ti,ab. (2279)  
6 exp oncology/ (1909)  
7 oncology.ti,ab. (3471)  
8 or/1-7 (36714)  
9 detection.ti,ab. (25054)  
10 detect.ti,ab. (16125)  
11 detected.ti,ab. (20623)  
12 evaluation/ (9875)  
13 psychological assessment/ (6046)  
14 assessment.ti,ab. (130181)  
15 assess.ti,ab. (91956)  
16 assessed.ti,ab. (116762)  
17 exp screening/ (12978)  
18 screening.ti,ab. (29987)  
19 screen.ti,ab. (11243)  
20 screened.ti,ab. (7211)  
21 signal.ti,ab. (24104)  
22 signalling.ti,ab. (3206)  
23 signalled.ti,ab. (279)  
24 evaluation.ti,ab. (84625)  
25 evaluate.ti,ab. (66065)  
26 evaluating.ti,ab. (25320)  
27 evaluated.ti,ab. (68840)  
28 distress thermometer.ti,ab. (108)

29 problem.list.ti,ab. (56)  
30 or/9-29 (524294)  
31 management planning/ (716)  
32 exp management/ (25981)  
33 barrier.ti,ab. (7999)  
34 barriers.ti,ab. (26639)  
35 obstacle.ti,ab. (2157)  
36 obstacles.ti,ab. (7114)  
37 implementation.ti,ab. (41387)  
38 implement.ti,ab. (15242)  
39 implemented.ti,ab. (25487)  
40 implementing.ti,ab. (16491)  
41 challenge.ti,ab. (38740)  
42 challenges.ti,ab. (63544)  
43 challenged.ti,ab. (8078)  
44 challenging.ti,ab. (21500)  
45 resistance.ti,ab. (16039)  
46 resisting.ti,ab. (1293)  
47 inadequate.ti,ab. (9727)  
48 impractical.ti,ab. (443)  
49 feasible.ti,ab. (7701)  
50 feasibility.ti,ab. (9479)  
51 acceptability.ti,ab. (5304)  
52 accepting.ti,ab. (3908)  
53 accept.ti,ab. (6942)  
54 accepted.ti,ab. (14863)  
55 burden.ti,ab. (16863)  
56 burdens.ti,ab. (1704)  
57 acceptance.ti,ab. (19272)  
58 prerequisite.ti,ab. (2598)  
59 prerequisites.ti,ab. (1008)  
60 precondition.ti,ab. (610)  
61 preconditions.ti,ab. (511)  
62 prior condition.ti,ab. (3)  
63 prior conditions.ti,ab. (18)  
64 boundary condition.ti,ab. (189)  
65 boundary conditions.ti,ab. (816)  
66 limiting condition.ti,ab. (38)  
67 limiting conditions.ti,ab. (120)  
68 or/31-67 (330176)  
69 distress.ti,ab. (29002)  
70 exp distress/ (10825)  
71 or/69-70 (29682)  
72 8 and 30 and 68 and 71 (402)  
73 limit 72 to ((dutch or english) and yr="2008 -Current") (286)

### **Uitgangsvraag 5.1:**

Welke (screenings)instrumenten zijn er voor het signaleren van klachten/detecteren behoefte zorg tijdens en na afronding van de in opzet curatieve behandeling en in de (ziekte- en symptoomgerichte) palliatieve fase bij volwassen kankerpatiënten?

### **Methodology report PICO 1**

Modulaire revisie, Richtlijn Detecteren behoefte psychosociale zorg, 2015

### **PICO**

- P volwassen kankerpatiënten  
I (screenings)instrument voor het detecteren van distress en zorgbehoefte  
C een ander (screenings)instrument voor het detecteren van distress en/of zorgbehoefte  
O Distress in de breedste zin van het woord, betreffende het menLanguage -, sociaal -, levensbeschouwelijk/spiritueel -en fysiek functioneren, inclusief termen zoals: 1) emotionele distress, 2) moeheid, 3) pijn, 4) sociale functie, 5) activiteiten, 6) andere klachten. Daarnaast zijn meer specifiek relevant: 1) werk, 2) levensbeschouwelijke aspecten, 3) seksualiteit, 4) fear of recurrence, 5) slaap en 6) lichaamsgewaarwording

### **Background**

Welke instrumenten zijn er en welke is het meest geschikt voor de doelgroep? Deze vraag is op voorhand vastgesteld als te reviseren, omdat hier nieuwe literatuur voor handen is.

### **Inclusiecriteria**

Periode (vanaf tot): 1-1-2008 tot nu  
Databases: Medline, Cochrane, Embase, Psych info  
Language: Eng. Ned.

### **Exclusie**

- Studie gaat niet over kankerpatiënten
- Studie gaat over kinderen, adolescenten, ouders van kinderen met kanker, caretakers, volwassenen die op kinderleeftijd kanker hebben gehad
- Studie gaat niet over een meetinstrument voor distress, maar bijvoorbeeld over een instrument voor kancerscreening of om therapie-effect te meten
- Studie gaat over detectie van slaapgedrag, vermoeidheid, delier of pijn
- Studie gaat over vertaling van vragenlijst
- Studie gaat over copingstijlen
- Overige onderwerpen niet gerelateerd aan psychosociale onderwerpen, zoals voedingstoestand
- Ook artikelen die bijvoorbeeld QOL correleren aan ziekte-uitkomst/-overleving en die niet ingaan op instrument zelf zijn buiten beschouwing gelaten.

### **Inclusie**

- Instrument is geschikt voor de behandelingsfase en een aantal jaar follow-up (dus niet voor een kortdurend palliatief traject)
- Instrument is in het Engels of Nederlands
- Het instrument moet van toepassing zijn gebleken bij kankerpatiënten
- Instrument is kankergeneriek, niet kanker- of tumorspecifiek
- Het moet gaan om een multidimensioneel instrument dat zo veel mogelijk van de volgende relevante domeinen beslaat: mentaal -, sociaal functioneren -, levensbeschouwelijk/spiritueel – en fysiek functioneren, met als items: 1) emotionele distress, 2) moeheid, 3) pijn, 4) sociale functie, 5) activiteiten, 6) andere klachten. Daarnaast zijn meer specifiek relevant: 1) werk, 2)

levensbeschouwelijke aspecten, 3) seksualiteit, 4) fear of recurrence, 5) slaap en 6) lichaamsgebaarwording.

- Het instrument moet hanteerbaar zijn in de klinische praktijk en bijvoorbeeld geen batterij zijn van specifieke vragenlijsten
- Het pleit voor een instrument als het in verschillende etnische contexten bruikbaar is gebleken, omdat we hier immers ook met verschillende bevolkingsgroepen te maken hebben
- Instrument moet bij voorkeur inzicht geven in verwijswens van patiënt

#### Golden hits

- Admiraal, J. M., A. K. Reyners, et al. (2013). "Do cancer and treatment type affect distress?" *Psychooncology* 22(8): 1766-73.
- Bogaarts, M. P., B. L. Den Oudsten, et al. (2011). "Development of the Psychosocial Distress Questionnaire-Breast Cancer (PDQ-BC): a breast cancer-specific screening instrument for psychosocial problems." *Support Care Cancer* 19(10): 1485-93.
- Bogaarts, M. P., B. L. Den Oudsten, et al. (2012). "The Psychosocial Distress Questionnaire-Breast Cancer (PDQ-BC) is a useful instrument to screen psychosocial problems." *Support Care Cancer* 20(8): 1659-65.
- Braeken, A. P., L. Lechner, et al. (2011). "Psychometric properties of the Screening Inventory of Psychosocial Problems (SIPP) in Dutch cancer patients treated with radiotherapy." *Eur J Cancer Care (Engl)* 20(3): 305-14.
- Donovan, K. A., L. Grassi, et al. (2014). "Validation of the distress thermometer worldwide: state of the science." *Psychooncology* 23(3): 241-50.
- Ma, X., J. Zhang, et al. (2014). "The diagnostic role of a short screening tool--the distress thermometer: a meta-analysis." *Support Care Cancer* 22(7): 1741-55.
- Snowden, A., C. A. White, et al. (2011). "The clinical utility of the distress thermometer: a review." *Br J Nurs* 20(4): 220-7.

#### Key question PICO 1b

Wat zijn de psychometrische eigenschappen (betrouwbaarheid, validiteit, klinische relevantie, sensitiviteit, specificiteit, positief voorspellende waarde en sensitiviteit ) van de bij 1.a. geselecteerde (screenings)instrumenten voor het signaleren van klachten/detecteren behoefte zorg tijdens en na afronding van de in opzet curatieve behandeling en in de (ziekte- en symptoomgerichte) palliatieve fase bij volwassen kankerpatiënten?

#### PICO

- P volwassen kankerpatiënten  
I (screenings)instrument voor het detecteren van distress  
C een ander (screenings)instrument voor het detecteren van distress  
O Validity, accuracy, reproducibility, klinische relevantie, sensitivity, specificity, predictive value, ppv, npv

#### Background

Deze vraag is op voorhand vastgesteld als te reviseren, omdat hier nieuwe literatuur voor handen is.

#### 4.3 Inclusion criteria

Like PICO 1a

#### Inclusie

- Het instrument moet betrouwbaar en valide zijn (internationaal en in Nederland)
- Het heeft de voorkeur dat een instrument een afkappunt heeft en dat het inzicht geeft in de klinische relevantie
- Het instrument moet geschikt zijn voor screening (d.w.z. bewijs met betrekking tot sensitiviteit, specificiteit, enz.)

#### Golden hits

- Mitchell, A. J. (2007). "Pooled results from 38 analyses of the accuracy of distress thermometer and other ultra-short methods of detecting cancer-related mood disorders." *J Clin Oncol* 25(29): 4670-81.

#### Search strategy

Like PICO 1a, see below:

#### Search strategy

Medline, Cochrane, Embase, and Psych info were searched. The searches were run on December 22<sup>nd</sup> 2014 (Medline), December 23<sup>rd</sup> 2014 (Cochrane and Psych info) and January the 5th 2015 (EMBASE). Detailed search strings are given below. The searches were limited to publication date 2008-2014, language English and Dutch. Study types: all.

#### **Medline**

##### **P**

1. cancer[tiab] 1093751
2. neoplasms[tiab] 69958
3. neoplasms/psychology[mesh] 34370
4. oncology[tiab] 56762
5. "cancer experience" 1312
6. Cancer-related[tiab] 14013
7. Cancer patients 931596
8. 1 t/m 7 combined with "OR" 1625006

##### **I**

9. screening[tiab] 347391
10. assessment[tiab] 607126
11. "Needs Assessment"[Mesh] 22550
12. "biopsychosocial assessment"[tiab] 52
13. "Decision Support Systems, Clinical"[Mesh] 4866
14. questionnaires[mesh] 315689
15. psychometrics/instrumentation[mesh] 2264
16. psychiatric status rating scales[mesh] 66277
17. instrument[tiab] 81805
18. inventory[tiab] 50970
19. checklist[tiab] 19261
20. "survey instrument"[tiab] 2278
21. Detecting[tiab] 117463
22. diagnosing[tiab] 45203
23. questions[tiab] 161700
24. cutoff scores[tiab] 657

25. determine[tiab] 1039890  
 26. screening tools[tiab] 2974  
 27. 9 t/m 26 combined with "OR" 2489808
28. distress[tiab] 74794  
 29. depressi\*[tiab] 264187  
 30. anxiety[tiab] 118217  
 31. panic[tiab] 12035  
 32. psychosocial[tiab] 62846  
 33. psychiatric[tiab] 142594  
 34. psychological[tiab] 138602  
 35. mental[tiab] 221380  
 36. mood[tiab] 49659  
 37. social[tiab] 328450  
 38. behavioral[tiab] 185887  
 39. spiritual[tiab] 8963  
 40. existential[tiab] 2660  
 41. adjustment[tiab] 106907  
 42. emotional[tiab] 96806  
 43. fatigue[tiab] 61230  
 44. "stress, psychological"[ mesh] 93272  
 45. 28 t/m 44 combined with "OR" 1369385
46. valid\*[tiab] 428640  
 47. reliability[tiab] 106153  
 48. accuracy[tiab] 243990  
 49. reproducibility[tiab] 52027  
 50. sensitivity[tiab] 557481  
 51. specificity[tiab] 336773  
 52. predictive value[tiab] 60666  
 53. ppv[tiab] 9570  
 54. npv[tiab] 5952  
 55. Validated 138745  
 56. Psychometrics 55948  
 57. Sensitive[tiab] 530730  
 58. 46 t/m 57 combined with "OR" 1836018

## O

59. "Quality of Life" [Mesh] 120211  
 60. "quality of life" 201003  
 61. "Health Status" [Mesh] 106094  
 62. "Health Status" 108628  
 63. "role function" 438  
 64. "role functioning" 1074  
 65. "psychosocial distress" 791  
 66. "emotional distress" 4252  
 67. "psychological distress" 11107  
 68. "Comorbidity"[Mesh] 69568  
 69. COMORBIDITY[tiab] 30402  
 70. "biopsychosocial health" [tiab] 32  
 71. "Psychophysiological Disorders"[Mesh] 17382  
 72. "Health Services Needs and Demand"[Mesh] 47352  
 73. "biopsychosocial case complexity"[tiab] 5

74. "complexity of care" 10410  
 75. "Delivery of Health Care, Integrated"[Mesh] 8759  
 76. "Interdisciplinary Communication"[Mesh] 11137  
 77. Anxiety disorders[tiab] 13071  
 78. Psychosocial problems[tiab] 2520  
 79. Mood disorders[tiab] 8703  
 80. distress[tiab] 74794  
 81. 59 t/m 80 combined with "OR" 2018649  
  
 82. 8 AND 27 AND 45 AND 58 AND 81 2897

#### Limieten

83. 82 AND ("2008/01/01"[PDat] : "2014/12/22"[PDat]) AND (English[lang] OR Dutch[lang] ) 1587

#### Cochrane database of systematic reviews

#1 MeSH descriptor: [Neoplasms] explode all trees 52834  
 #2 MeSH descriptor: [Needs Assessment] explode all trees 308  
 #3 #1 and #2 32

#### Embase

#1	'neoplasm'/exp OR 'neoplasm'	3,492,513
#2	oncology:ab,ti	105,861
#3	'cancer experience'	2,014
#4	#1 OR #2 OR #3	3,514,200
#5	'screening'/exp	482
#6	assessment:ab,ti	803,414
#7	'decision support system'/exp	13,316
#8	'questionnaire'/exp	420,666
#9	'psychometry'/exp	63,203
#10	'psychological rating scale'/exp	14,909
#11	'checklist'/exp	9,236
#12	#5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11	1,671,373
#13	'distress'/exp	22,238
#14	'distress syndrome':ab,ti	23,651
#15	'spiritual distress':ab,ti	218
#16	'emotional distress':ab,ti	5,338
#17	'behavioral distress':ab,ti	175
#18	'mental distress':ab,ti	1,135
#19	'mental stress':ab,ti	3,152
#20	'social distress':ab,ti	265
#21	'psychological distress':ab,ti	13,642
#22	'psychosocial distress':ab,ti	1,164
#23	'existential distress':ab,ti	134
#24	depression:ab,ti	296,115
#25	anxiety:ab,ti	160,238
#26	fatigue:ab,ti	86,541
#27	#13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26	511,86
#28	validity:ab,ti	133,314
#29	'reliability':ab,ti	124,837
#30	'accuracy diagnostic'	77
#31	'reproducibility of results':ab,ti	645
#32	sensitivity:ab,ti	668,086
#33	specificity:ab,ti	398,981

#34	'predictive value of tests'	457
#35	ppv:ab,ti	15,797
#36	npv:ab,ti	11,21
#37	validated:ab,ti	193,759
#38	#28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37	1,245,479
#39	'quality of life':ab,ti	222,69
#40	'health status':ab,ti	45,87
#41	'role function':ab,ti	581
#42	'role functioning':ab,ti	1,5
#43	'emotional distress':ab,ti	5,338
#44	'psychosocial distress':ab,ti	1,164
#45	'psychological distress':ab,ti	13,642
#46	comorbidity:ab,ti	45,333
#47	'biopsychosocial health':ab,ti	42
#48	'psychophysiologic disorders':ab,ti	67
#49	#39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48	318,229
#50	#4 AND #12 AND #27 AND #38 AND #49	1,009
#51	[dutch]/lim OR [english]/lim AND [2008-2014]/py	7,479,518
#52	#50 AND #51	781

## Psych info

#1 neoplasms/ 25159  
#2 distress/ 15896  
#3 #1 and #2 1049  
#4 limit #3 to yr="2008 -Current" 527

## Search results

The Medline search yielded 1587 hits, while the search in Cochrane yielded 32 hits, EMBASE 781 hits and Psych info 527 hits. After merging the search files into one file (2926 hits) and removal of the duplicates (254 hits) 2672 records were screened on title and abstract.

An additional search was done in Medline on March the 10<sup>th</sup> with the same strings, but including "clinical impact OR clinical relevance OR clinically relevant", yielding 63 extra hits. These were included in to the selection process.

## Selection on titel and abstract

Of the 2735 studies, 2616 were excluded; 119 were selected on title and abstract to be checked full text (Table 1).

The most important reasons for exclusion were that studies were:

- About other research questions
- About monodimensional instruments
- About instruments that did not measure both the physical domain and the psychosocial domain
- About cancer screening
- About effect of screening
- Not about the psychometric quality of the instrument
- About validation of the instrument in another language, or patient population
- About interventions or screening programs, not about screenings instruments
- About children with cancer, or about adults who had cancer as a child
- About coping styles

- Published before 2008
- Case studies
- Abstracts, letters or comments
- About the dying phase
- About qualitative methodology
- About distress in partners
- No cut off or clinical relevance described

### **Golden hits, not selected**

- Admiraal: does not investigate the psychometric characteristics of the instrument
- Bogaarts (2011): breast cancer specific
- Bogaarts (2012): breast cancer specific
- Mitchell: published before 2008
- Donovan: translation study

### **Included references**

Table 1. References to be checked full text

Authors	Title	Journal	In/ex	reason
<b>Abernethy AP, Zafar SY, Uronis H, Wheeler JL, Coan A, Rowe K, et al</b>	Validation of the patient care monitor (version 20): A review of system assessment instrument for cancer patients	Journal of pain and symptom management	ex	Other question
<b>Badger TA, Segrin C, Meek P</b>	Development and validation of an instrument for rapidly assessing symptoms: the general symptom distress scale	Journal of pain and symptom management	ex	Not about the social domain
<b>Bagha SM, Macedo A, Jacks LM, Lo C, Zimmermann C, Rodin G, et al</b>	The utility of the Edmonton Symptom Assessment System in screening for anxiety and depression	European journal of cancer care	ex	Not about the physical and social domain
<b>Baken DM, Woolley C</b>	Validation of the distress thermometer, impact thermometer and combinations of these in screening for distress	Psycho-oncology	ex	Included in Ma et al, 2014
<b>Baro E, Carulla J, Cassinello J, Colomer R, Mata JG, Gascon P, et al</b>	Development of a new questionnaire to assess patient perceptions of cancer-related fatigue: Item generation and item reduction	Value in Health	ex	monodimensional
<b>Bauwens S, Baillon C, Distelmans W, Theuns P</b>	The 'Distress Barometer': Validation of method of combining the Distress Thermometer with a rated Complaint scale	Psycho-oncology	ex	Already included
<b>Beaupin L,</b>	A survivorship screening	European Journal of	ex	abstract

<b>Hydeman JA, Paplham P</b>	tool to help identify cancer survivors' needs	Cancer		
<b>Beck KR, Tan SM, Lum SS, Lim LE, Krishna LK</b>	Validation of the emotion thermometers and hospital anxiety and depression scales in Singapore: Screening cancer patients for distress, anxiety and depression	Asia-Pacific journal of clinical oncology	ex	Not about the physical and social domain
<b>Bidstrup PE, Johansen C, Mitchell AJ</b>	Screening for cancer-related distress: Summary of evidence from tools to programmes	Acta oncologica	ex	About effect of screening
<b>Bonacchi A, Rossi A, Bellotti L, Franco S, Toccafondi A, Miccinesi G, et al</b>	Assessment of psychological distress in cancer patients: A pivotal role for clinical interview	Psycho-oncology	ex	Battery of 4 questionnaires, neither one includes all three domains
<b>Book K, Marten-Mittag B, Hennch G, Dinkel A, Scheddel P, Sehlen S, et al</b>	Distress screening in oncology-Evaluation of the Questionnaire on Distress in Cancer Patients-Short Form (QSC-R10) in a German Sample	Psycho-oncology	ex	Other language
<b>Boyes A, D'Este C, Carey M, Lecathelinais C, Grgis A</b>	How does the Distress Thermometer compare to the Hospital Anxiety and Depression Scale for detecting possible cases of psychological morbidity among cancer survivors?	Supportive care in Cancer	ex	Included in Ma et al, 2014
<b>Braeken A, Kempen G, Lechner L, Houben R, Van Gils F</b>	Psychometric properties of the screening inventory psychosocial problems (SIPP) in cancer patients treated with radiotherapy	Psycho-oncology	ex	Abstract
<b>Braeken A, Lechner L, Houben R, Van Gils F, Kempen G</b>	Psychometric properties of the Screening Inventory of Psychosocial Problems (SIPP) in Dutch cancer patients treated with radiotherapy	European journal of cancer care	in	
<b>Brennan J, Gingell P, Brant H, Hollingworth W</b>	Refinement of the Distress Management Problem List as the basis for a holistic therapeutic conversation among UK patients with cancer	Psycho-oncology	ex	
<b>Bulli F, Miccinesi G, Maruelli A, Katz M, Paci E</b>	The measure of psychological distress in cancer patients: The use of distress thermometer in the oncological rehabilitation center of florence	Supportive Care in Cancer	ex	Included in Ma et al, 2014
<b>Bunevicius A, Deltuva V, Tamasauskas S,</b>	Screening for psychological distress in neurosurgical brain tumor patients using the Patient	Psycho-oncology	ex	Monodimensional, tumorspecific

<b>Tamasauskas A, Bunevicius R</b>	Health Questionnaire-2			
<b>Bussing A, Fischer J, Haller A, Heusser P, Ostermann T, Matthiessen PF</b>	Validation of the brief multidimensional life satisfaction scale in patients with chronic diseases	European journal of medical research	ex	Not about distress
<b>Campbell HS, Sanson-Fisher R, Taylor-Brown J, Hayward L, Wang XS, Turner D</b>	The cancer support person's unmet needs survey: psychometric properties	Cancer	ex	Not about distress
<b>Carlson LE, Waller A, Mitchell AJ</b>	Screening for distress and unmet needs in patients with cancer: review and recommendations	Journal of clinical oncology : official journal of the American Society of Clinical Oncology	ex	No accuracy measures
<b>Clover K, Carter GL, Mackinnon A, Adams C</b>	Is my patient suffering clinically significant emotional distress? Demonstration of a probabilities approach to evaluating algorithms for screening for distress	Supportive care in cancer	ex	Included in Ma et al, 2014
<b>Cortesi PA, Scalzone L, Ciampichini R, Cozzolino P, Cesana G, Mantovani LG, et al</b>	Health related quality of life in the major liver conditions	Hepatology (Baltimore, Md)	ex	abstract
<b>Couper J, Pollard A, Corry J, Boonzaier A, Neilson K, Smith D, et al</b>	An investigation of levels of psychological distress (depression and anxiety) and unmet needs amongst people diagnosed with head and neck cancer	Psycho-oncology	ex	poster
<b>Craike MJ, Livingston PM, Warne C</b>	Sensitivity and specificity of the distress impact thermometer for the detection of psychological distress among CRC survivors	Journal of psychosocial oncology	ex	Included in Ma et al, 2014
<b>Creedon M, Hession N</b>	Is screening for distress useful? Screening for psychological distress in an irish radiation oncology hospital	Psycho-oncology	ex	poster
<b>Crespi CM, Ganz PA, Petersen L, Castillo A, Caan B</b>	Refinement and psychometric evaluation of the impact of cancer scale	Journal of the National Cancer Institute	ex	No physical domain
<b>Den Oudsten BL, Van Heck GL, Van der</b>	The WHOQOL-100 has good psychometric properties in breast cancer	Journal of clinical epidemiology	ex	Other phase

<b>Steeg AF, Roukema JA, De Vries J</b>	patients			
<b>Dolbeault S, Boistard B, Meuric J, Copel L, Bredart A</b>	Screening for distress and supportive care needs during the initial phase of the care process: A qualitative description of a clinical pilot experiment in a French cancer center	Psycho-oncology	ex	No accuracy measures
<b>Dolbeault S, Bredart A, Mignot V, Hardy P, Gauvain- Piquard A, Mandereau L, et al</b>	Screening for psychological distress in two French cancer centers: Feasibility and performance of the adapted distress thermometer	Palliative and Supportive Care	ex	No physical domain
<b>Donovan HS, Ward S, Sherwood P, Serlin RC</b>	Evaluation of the Symptom Representation Questionnaire (SRQ) for assessing cancer-related symptoms	Journal of pain and symptom management	ex	Illness perception
<b>Emanuel RM, Dueck AC, Geyer HL, Kiladjian JJ, Slot S, Zweegman S, et al</b>	Myeloproliferative neoplasm (MPN) symptom assessment form total symptom score: Prospective international assessment of an abbreviated symptom burden scoring system among patients with MPNs	Journal of Clinical Oncology	Ex	Tumor specific
<b>Feldstain A, Tomei C, Belanger M, Lebel S</b>	Screening for distress in patients with cancer: methodologic considerations	Current oncology (Toronto, Ont)	Ex	Narrative review
<b>Fischbeck S, Maier BO, Reinholz U, Nehring C, Schwab R, Beutel ME, et al</b>	Assessing somatic, psychosocial, and spiritual distress of patients with advanced cancer: development of the Advanced Cancer Patients' Distress Scale	The American journal of hospice & palliative care	ex	Other phase
<b>Garssen B, Van der Lee M</b>	Re: Screening for emotional distress in cancer patients: a systematic review of assessment instruments	Journal of the National Cancer Institute	ex	Comment
<b>Geller J, Martens K, Quispe J, Madore S, Kilbourn K</b>	Psycho-oncology screening tool (POST): Relevance to upcoming commission on cancer distress screening standards	Psycho-oncology	ex	abstract
<b>Gessler S, Low J, Daniells E, Williams R, Brough V, Tookman A, et al</b>	Screening for distress in cancer patients: Is the Distress Thermometer a valid measure in the UK and does it measure change over time? A	Psycho-oncology	ex	Allready included

	prospective validation study			
<b>Grassi L, Johansen C, Annunziata MA, Capovilla E, Costantini A, Gritti P, et al</b>	Screening for distress in cancer patients: A multicenter, nationwide study in Italy	Cancer	ex	Translation study
<b>Grassi L, Sabato S, Rossi E, Marmai L, Biancosino B</b>	Affective syndromes and their screening in cancer patients with early and stable disease: Italian ICD-10 data and performance of the distress thermometer from the Southern European Psycho-Oncology Study (SEPOS)	Journal of affective disorders	ex	Translation study
<b>Gray M, Neilson K, Pollard A, Boonzaier A, Corry J, Castle D, et al</b>	Screening for anxiety and depression in Australian head and neck cancer patients: Comparison of the HADS and DASS21	Psycho-oncology	ex	abstract
<b>Grimison PS, Simes RJ, Hudson HM, Stockler MR</b>	Preliminary validation of an optimally weighted patient-based utility index by application to randomized trials in breast cancer	Value in Health	ex	Other question
<b>Grimison PS, Simes RJ, Hudson HM, Stockler MR</b>	Deriving a patient-based utility index from a cancer-specific quality of life questionnaire	Value in health : the journal of the International Society for Pharmacoeconomics and Outcomes Research	ex	Other question
<b>Han SI, Jeon YW, Park EJ</b>	The reliability and validity of WHOQOL in patients with breast cancer: Physical domain and depression	International Journal of Psychiatry in Clinical Practice	ex	Tumor specific
<b>Hauser K, Walsh D</b>	Visual analogue scales and assessment of quality of life in cancer	The journal of supportive oncology	ex	Narrative review
<b>Hawkes AL, Hughes KL, Hutchison SD, Chambers SK</b>	Feasibility of brief psychological distress screening by a community-based telephone helpline for cancer patients and carers	BMC cancer	ex	Other question
<b>Hegel MT, Collins ED, Kearing S, Gillock KL, Moore CP, Ahles TA</b>	Sensitivity and specificity of the Distress Thermometer for depression in newly diagnosed breast cancer patients	Psycho-oncology	ex	Allready included
<b>Herschbach P, Book K, Brandl T, Keller M, Marten-Mittag</b>	The basic documentation for psycho-oncology (PO-Bado) - An expert rating scale for the psychosocial	Onkologie	ex	No social domain

<b>B</b>	experience of cancer patients				
<b>Hinz A, Einenkel J, Briest S, Stolzenburg JU, Papsdorf K, Singer S</b>	Is it useful to calculate sum scores of the quality of life questionnaire EORTC QLQ-C30?	European journal of cancer care	in	update	
<b>Hollingworth W, Metcalfe C, Mancero S, Harris S, Campbell R, Biddle L, et al</b>	Are needs assessments cost effective in reducing distress among patients with cancer? A randomized controlled trial using the Distress Thermometer and Problem List	Journal of clinical oncology	ex	Other question	
<b>Hydeman J, Beaupin L, Paplham P</b>	Assessment of cancer survivors' needs through the survivorship screening tool	Psycho-oncology	ex	abstract	
<b>Jones D, Vichaya EG, Cleeland CS, Cohen L, Thekdi SM, Wang XS, et al</b>	Screening for depressed mood in patients with cancer using the MD Anderson Symptom Inventory: investigation of a practical approach for the oncologist	Journal of oncology practice / American Society of Clinical Oncology	in	update	
<b>Kawada T</b>	Patient Health Questionnaire-2 as a screening tool for psychological distress in brain tumor patients	Psycho-oncology	ex	letter	
<b>Kayser K, Acquati C, Tran TV</b>	No patients left behind: A systematic review of the cultural equivalence of distress screening instruments	Journal of psychosocial oncology	ex	Other question	
<b>Kilbourn KM, Bargai N, Durning PE, Deroche K, Madore S, Zabora J</b>	Validity of the Psycho-Oncology Screening Tool (POST)	Journal of psychosocial oncology	ex	No cut off or clinical relevance described	
<b>King MT, Bell ML, Costa D, Butow P, Oh B</b>	The Quality of Life Questionnaire Core 30 (QLQ-C30) and Functional Assessment of Cancer-General (FACT-G) differ in responsiveness, relative efficiency, and therefore required sample size	Journal of clinical epidemiology	in	update	
<b>King MT, Stockler MR, Cella DF, Osoba D, Eton DT, Thompson J, et al</b>	Meta-analysis provides evidence-based effect sizes for a cancer-specific quality-of-life questionnaire, the FACT-G	Journal of clinical epidemiology	In	update	
<b>Kirchheiner K, Czajka A, Ponocny-Seliger E,</b>	Validation and practical implementation of a multidisciplinary cancer distress screening	Strahlentherapie und Onkologie : Organ der Deutschen	ex	No accuracy measures	

<b>Komarek E, Hohenberg G, Potter R, et al</b>	questionnaire	Rontgengesellschaft [et al]		
<b>Knight L, Mussell M, Brandl T, Herschbach P, Marten-Mittag B, Treiber M, et al</b>	Development and psychometric evaluation of the Basic Documentation for Psycho-Oncology, a tool for standardized assessment of cancer patients	Journal of psychosomatic research	ex	No social domain
<b>Kvale EA, Azuero CB, Azuero A, Fisch M, Ritchie C</b>	Use of the MD anderson symptom inventory to screen for depression in breast cancer	Cancer Research	ex	abstract
<b>Lambert SD, Pallant JF, Clover K, Britton B, King MT, Carter G</b>	Using Rasch analysis to examine the distress thermometer's cut-off scores among a mixed group of patients with cancer	Quality of life research	in	update
<b>Lazenby M, Dixon J, Bai M, McCorkle R</b>	Comparing the distress thermometer (DT) with the patient health questionnaire (PHQ)-2 for screening for possible cases of depression among patients newly diagnosed with advanced cancer	Palliative and Supportive Care	in	update
<b>Lazenby M, McCorkle R, Dixon J, Ercolano E, Bai M</b>	Using the distress thermometer to screen newly diagnosed patients with advanced cancer for depression	Psycho-oncology	ex	abstract
<b>Lehmann V, Oerlemans S, van de Poll- Franse LV, Vingerhoets AJ, Mols F</b>	Suffering in long-term cancer survivors: an evaluation of the PRISM-R2 in a population-based cohort	Quality of life research	ex	Illness perception
<b>Lim HA, Mahendran R, Chua J, Peh CX, Lim SE, Kua EH</b>	The Distress Thermometer as an ultra-short screening tool: a first validation study for mixed-cancer outpatients in Singapore	Comprehensive psychiatry	ex	Translation study
<b>Lowery AE, Greenberg MA, Foster SL, Clark K, Casden DR, Loscalzo M, et al</b>	Validation of a needs-based biopsychosocial distress instrument for cancer patients	Psycho-oncology	in	New instrument
<b>Luckett T, King MT, Butow PN, Oguchi M, Rankin N, Price MA, et al</b>	Choosing between the EORTC QLQ-C30 and FACT-G for measuring health-related quality of life in cancer clinical research: issues, evidence and recommendations	Annals of oncology : official journal of the European Society for Medical Oncology / ESMO	in	update
<b>Lyons KD,</b>	Reliability and Validity of	Journal of pain and	ex	Other phase

<b>Bakitas M, Hegel MT, Hanscom B, Hull J, Ahles TA</b>	the Functional Assessment of Chronic Illness Therapy- Palliative Care (FACIT-Pal) Scale	symptom management		
<b>Ma X, Zhang J, Zhong W, Shu C, Wang F, Wen J, et al</b>	The diagnostic role of a short screening tool--the distress thermometer: a meta-analysis	Supportive care in cancer	in	update
<b>Meraner V, Giesinger J, Kemmler G, Hubalek M, Rumpold G, Sperner- Unterweger B, et al</b>	Development of a screening tool for the identification of psychooncological treatment need in breast cancer patients	Psycho-oncology	ex	Other language
<b>Merport A, Bober SL, Grose A, Recklitis CJ</b>	Can the distress thermometer (DT) identify significant psychological distress in long-term cancer survivors? A comparison with the Brief Symptom Inventory-18 (BSI-18)	Supportive care in cancer	ex	Included in Ma et al, 2014
<b>Miller MF, Buzaglo JS, Clark KL, Loscalzo MJ, Kennedy V, Taylor J, et al</b>	Demonstrating the psychometric properties of a problem-related distress screener in a community sample of 319 cancer survivors	Psycho-oncology	in	New instrument
<b>Miller MF, Mullins CD, Onukwugha E, Gayer C, Golant M, Buzaglo JS</b>	Discriminatory power of a 25-item distress screening tool CancerSupport Source: A cross-sectional study of 251 cancer survivors	Journal of Clinical Oncology	ex	IDI insufficient description psychometric properties
<b>Mitchell AJ</b>	Short screening tools for cancer-related distress: a review and diagnostic validity meta-analysis	Journal of the National Comprehensive Cancer Network : JNCCN	in	
<b>Mitchell AJ</b>	Screening for cancer- related distress: when is implementation successful and when is it unsuccessful?	Acta oncologica	ex	No accuracy measures
<b>Mitchell AJ, Baker-Glenn EA, Granger L, Symonds P</b>	Can the Distress Thermometer be improved by additional mood domains? Part I Initial validation of the Emotion Thermometers tool	Psycho-oncology	ex	Included in Ma et al, 2014
<b>Mitchell TAJ, Coggan C, Herdman J, Kavanagh J</b>	How well do cancer clinicians detect perceived distress? Diagnoses of clinical nurse specialists vs the distress	Psycho-oncology	ex	abstract
<b>Muzzatti B, Annunziata MA</b>	Assessing quality of life in long-term cancer survivors:	Supportive care in cancer	ex	None of the original studies

	a review of available tools			meet the inclusion criteria
<b>Oldenmenger WH, de Raaf PJ, de Klerk C, van der Rijt CC</b>	Cut points on 0-10 numeric rating scales for symptoms included in the Edmonton Symptom Assessment Scale in cancer patients: a systematic review	Journal of pain and symptom management	in	
<b>Patel D, Sharpe L, Thewes B, Bell ML, Clarke S</b>	Using the Distress Thermometer and Hospital Anxiety and Depression Scale to screen for psychosocial morbidity in patients diagnosed with colorectal cancer	Journal of affective disorders	ex	Included in Ma et al, 2014
<b>Patrick-Miller LJ, Zhao F, Cleeland CS, Wagner LI, Fisch M, Mendoza TR</b>	Validity and utility of the University of Texas M. D. Anderson Symptom Inventory (MDASI) among prostate cancer patients: Data from E2Z02: Symptom Outcomes and Practice Patterns (SOAPP)	Journal of Clinical Oncology	ex	abstract
<b>Petty L, Lester J</b>	Distress screening in chronic disease: essential for cancer survivors	Journal of the advanced practitioner in oncology	ex	Narrative review
<b>Pigott C, Pollard A, Thomson K, Aranda S</b>	Unmet needs in cancer patients: development of a supportive needs screening tool (SNST)	Supportive care in cancer	ex	No accuracy measures
<b>Richardson LA, Jones GW</b>	A review of the reliability and validity of the Edmonton Symptom Assessment System	Current Oncology	ex	No accuracy measures
<b>Rodin G</b>	New findings in psychosocial oncology research	Journal of psychosomatic research	ex	editorial
<b>Rohan EA</b>	Removing the stress from selecting instruments: Arming social workers to take leadership in routine distress screening implementation	Journal of psychosocial oncology	ex	Narrative review
<b>Ryan D, Gallagher P, Wright S, Cassidy E, O'Brien T, Bowler A</b>	Screening for psychological distress and psychiatric morbidity among patients with advanced cancer: Preliminary findings from an Irish validation study	Psycho-oncology	ex	Abstract
<b>Ryan D, Wright S, Gallagher P, Cassidy E</b>	Methodological challenges in assessing levels of psychological distress and psychiatric morbidity among patients with advanced cancer: What does the literature (NOT) tell us?	Psycho-oncology	ex	abstract

<b>Ryan DA, Gallagher P, Wright S, Cassidy EM</b>	Sensitivity and specificity of the Distress Thermometer and a two-item depression screen (Patient Health Questionnaire-2) with a 'help' question for psychological distress and psychiatric morbidity in patients with advanced cancer	Psycho-oncology	ex	Included in Ma et al, 2014
<b>Sanchez R, Ballesteros M, Arnold BJ</b>	Validation of the FACT-G scale for evaluating quality of life in cancer patients in Colombia	Quality of life research	ex	Translation study
<b>Sautier LP, Vehling S, Mehnert A</b>	Assessment of patients' dignity in cancer care: Preliminary psychometrics of the German version of the patient dignity inventory (PDI-G)	Journal of pain and symptom management	ex	Other question
<b>Schilli SM</b>	Screening for distress in patients with cancer	Clinical journal of oncology nursing	ex	Narrative review
<b>Schmidt H, Cleeland CS, Bauer A, Landenberger M, Jahn P</b>	Symptom Burden of Cancer Patients: Validation of the German M. D. Anderson Symptom Inventory: A Cross-Sectional Multicenter Study	J Pain Symptom Manage	ex	German version
<b>Schofield P, Gough K, Lotfi-Jam K, Aranda S</b>	Validation of the Supportive Care Needs Survey-short form 34 with a simplified response format in men with prostate cancer	Psycho-oncology	ex	tumorspecific
<b>Schofield P, Ugalde A, Gough K, Dolling L, Aranda S, Sanson-Fisher R</b>	Validation of the needs assessment for advanced cancer patients - Short form (NA-ACP-SF38) in people with advanced lung cancer	Psycho-oncology	ex	abstract
<b>Schubart JR, Mitchell AJ, Dietrich L, Gusani NJ</b>	Accuracy of the Emotion Thermometers (ET) Screening Tool in Patients Undergoing Surgery for Upper Gastrointestinal Malignancies	Journal of psychosocial oncology	ex	Not about the physical and social domain
<b>Sharkey K, Ugalde A, Krishnasamy M, Gough K, Ball D, Aranda S, et al</b>	Screening for psychological distress in inoperable lung cancer patients: An evaluation of the Brief Distress Thermometer	Asia-Pacific journal of clinical oncology	ex	
<b>Shim EJ, Lee KS, Park JH, Park JH</b>	Comprehensive needs assessment tool in cancer (CNAT): the development and validation	Supportive care in cancer	ex	Other culture

<b>Singer S, Danker H, Dietz A, Homemann B, Koscielny S, Oeken J, et al</b>	Screening for mental disorders in laryngeal cancer patients: A comparison of 6 methods	Psycho-oncology	ex	monodimensional
<b>Snowden A, White CA, Christie Z, Murray E, McGowan C, Scott R</b>	The clinical utility of the distress thermometer: a review	British journal of nursing (Mark Allen Publishing)	ex	No accuracy measures
<b>Snyder CF, Blackford AL, Brahmer JR, Carducci MA, Pili R, Stearns V, et al</b>	Needs assessments can identify scores on HRQOL questionnaires that represent problems for patients: an illustration with the Supportive Care Needs Survey and the QLQ-C30	Quality of life research	in	New instrument
<b>Sohl SJ, Levine B, Avis NE</b>	Evaluation of the Quality of Life in Adult Cancer Survivors (QLACS) scale for early post-treatment breast cancer survivors	Quality of life research	ex	Other phase
<b>Thekkumpurath P, Venkateswaran C, Kumar M, Newsham A, Bennett MI</b>	Screening for psychological distress in palliative care: performance of touch screen questionnaires compared with semistructured psychiatric interview	Journal of pain and symptom management	ex	Other phase
<b>Thomas B, Thomas I, Nandamohan V, Nair M, Pandey M</b>	Screening for distress can predict loss of follow-up and treatment in cancer patients: Results of development and validation of the Distress Inventory for Cancer Version 2	Psycho-oncology	ex	Instrument not available in English or Dutch
<b>Tishelman C, Lovgren M, Broberger E, Hamberg K, Sprangers MA</b>	Are the most distressing concerns of patients with inoperable lung cancer adequately assessed? A mixed-methods analysis	Journal of clinical oncology : official journal of the American Society of Clinical Oncology	ex	Other question
<b>Tschiesner U, Rogers SN, Harreus U, Berghaus A, Cieza A</b>	Content comparison of quality of life questionnaires used in head and neck cancer based on the international classification of functioning, disability and health: a systematic review	European archives of otorhinolaryngology	ex	Other question
<b>Tuinman MA, Gazendam- Donofrio SM, Hoekstra- Weebers JE van Scheppingen C, Schroevens MJ, Smink A,</b>	Screening and referral for psychosocial distress in oncologic practice: use of the Distress Thermometer  Does screening for distress efficiently uncover meetable unmet needs in cancer patients?	Cancer  Psycho-oncology	ex	Already included  No physical or social domain

van der Linden YM, Mul VE, Langendijk JA, et al					
<b>Vodermaier A, Linden W, Siu C</b>	Screening for emotional distress in cancer patients: a systematic review of assessment instruments	Journal of the National Cancer Institute	ex	None of the original studies meet the inclusion criteria	
<b>Waller A, Girgis A, Lecathelinais C, Scott W, Foot L, Sibbritt D, et al</b>	Validity, reliability and clinical feasibility of a Needs Assessment Tool for people with progressive cancer	Psycho-oncology	ex	For palliative phase only	
<b>Waller A, Williams A, Groff SL, Bultz BD, Carlson LE</b>	Screening for distress, the sixth vital sign: Examining self-referral in people with cancer over a one-year period	Psycho-oncology	ex	Other question	
<b>Wan C, Yang Z, Meng Q, Feng C, Wang H, Tang X, et al</b>	Development and validation of the general module of the system of quality of life instruments for cancer patients	International journal of cancer Journal international du cancer	ex	Validated in Chinese cancer population	
<b>Watanabe SM, Nekolaichuk CL, Beaumont C</b>	The Edmonton symptom assessment system, a proposed tool for distress screening in cancer patients: Development and refinement	Psycho-oncology	ex	No accuracy measures	
<b>Webber K, Davies AN</b>	Validity of the memorial symptom assessment scale-short form psychological subscales in advanced cancer patients	Journal of pain and symptom management	ex	No accuracy measures	
<b>Wells-Di Gregorio S, Porensky EK, Minotti M, Brown S, Snapp J, Taylor RM, et al</b>	The James Supportive Care Screening: integrating science and practice to meet the NCCN guidelines for distress management at a Comprehensive Cancer Center	Psycho-oncology	in	New instrument	
<b>Wu S, Schuler T, You DS, Andersen B</b>	The abbreviated PSWQ is a reliable screening tool for elevated worry in breast and gynecological cancer patients	Psycho-oncology	ex	abstract	
<b>Wu SM, Schuler TA, Edwards MC, Yang HC, Brothers BM</b>	Factor analytic and item response theory evaluation of the Penn State Worry Questionnaire in women with cancer	Quality of life research	ex	Monodimensional	
<b>Yanez B, Pearman T, Lis CG, Beaumont JL, Celli D</b>	The FACT-G7: A rapid version of the functional assessment of cancer therapy-general (FACT-G) for monitoring symptoms and concerns in oncology practice and research	Annals of Oncology	ex	No social domain	
<b>Yip WK,</b>	Reliability, validity and	International journal	ex	None of the	

<b>Mordiffi SZ, Ang E</b>	feasibility of quality of life instruments for adult patients with cancer undergoing chemotherapy: result from a systematic review	of evidence-based healthcare	original studies meet the inclusion criteria geselecteerd
<b>Zhao L, Portier K, Stein K, Baker F, Smith T</b>	Exploratory factor analysis of the Cancer Problems in Living Scale: A report from the American Cancer Society's Studies of Cancer Survivors	Journal of pain and symptom management	ex No cut off or clinical relevance described

#### Added by suggestion of guideline working group

<b>Admiraal, J., Reyners, A., &amp; Hoekstra- Weebers, J. Snyder, C. F., Blackford, A. L., Sussman, J., Bainbridge, D., Howell, D., Seow, H. Y., . . . Wu, A. W.</b>	Do cancer and treatment type affect distress?	Psychooncology,	in
	Identifying changes in scores on the EORTC-QLQ-C30 representing a change in patients' supportive care needs	Qual Life Res	in
<b>Chambers S.K., Zajdlewicz L., Youlden D.R., Holland, J.C., Dunn, J.</b>	The validity of the distress thermometer in prostate cancer populations	Psycho-oncology	in In meta analyses Ma

#### Golden hits, not selected

- Snowden: no accuracy measures

#### Included studies

Nineteen new studies were included for quality appraisal and data extraction.

New instruments:

Instrument	(type) studies	Cut off or clinical relevance
1. James supportive care screening	(Wells-Di Gregorio et al., 2013)	specificity in identifying MDD was 90% for patients reporting moderate-to-severe distress, indicating that referral on the basis of this item and cut-off is likely to identify patients in need of psychological treatment for depression. The uncertainty question also demonstrated excellent specificity (87%) in identifying patients with GAD. In contrast, for the recommended cut-off score of 4 or more on the DT, specificity was just 45% for both MDD and GAD.

2. Distress screener met 36 items	(Miller et al., 2013)	ROC analyses showed a cutoff score of 8 for problem items rated $\geq 3$ had optimal sensitivity and specificity relative to the CES-D and DT.
3. Cancer needs distress inventory (CaNDI)	(Lowery et al., 2012)	Visual inspection of the ROC curve and the sensitivity and specificity values (against the HADS: sensitivity of 0.83, a specificity of 0.74, and a positive predictive value of 37.50%) suggested the optimum CaNDI depression subscale score cutoff was 6
4. Screening Inventory of Psychosocial Problems (SIPP)	(Braeken, Lechner, Houben, Van Gils, & Kempen, 2011)	a cut-off point of 4/5 for physical complaints, and a cut-off score of 5/6 for psychological complaints with respect to subclinical symptoms gave a sensitivity of 76.9% and 84.6%, and a specificity of 74.1% and 77.6% respectively.

Update:

Instrument	(type) studies	Cut off or clinical relevance
DT	(Mitchell, 2010) (Ma et al., 2014)	optimale cut off waarde van 4 voor de DT
	(Admiraal, Reyners, & Hoekstra-Weebers, 2013) (Chambers, Zajdlewicz, Youlden, Holland, Dunn, 2014)	de cut off score afhankelijk van het type kanker bij 4 of 5. De cut off varieerde tussen $\geq 3$ en $\geq 6$ bij maximale sensitiviteit en specificiteit.
Zie Ma 2014	(Baken & Woolley, 2011)	
Zie Ma 2014	(Boytes, D'Este, Carey, Lecathelinais, & Gigris, 2013)	
Zie Ma 2014	(Bulli, Miccinesi, Maruelli, Katz, & Paci, 2009)	
Zie Ma 2014	(Clover, Carter, Mackinnon, & Adams, 2009)	
Zie Ma 2014	(Craike, Livingston, & Warne, 2011).	
Zie Ma 2014	(Mitchell, Baker-Glenn, Granger, & Symonds, 2010)	
Zie Ma 2014	(Patel, Sharpe, Thewes, Bell, & Clarke, 2011)	
Zie Ma 2014	(Ryan, Gallagher, Wright, & Cassidy, 2012)	
	(Lambert et al., 2014)	De klinisch relevante cut off waarden waren 7 (voor angst) en 8 (voor depressie).
	(Lazenby, Dixon, Bai, & McCorkle, 2014)	optimale cut off waarde bij 2
	(Merport, Bober, Grose, & Recklitis,	optimale cut off waarde bij 4

	2012)	
<b>EORTC</b>	(Hinz et al., 2012) (Snyder et al., 2010)	Scores > 2.0 represent presence of an unmet need
	(Snyder et al., 2015)	
<b>FACT-G</b>	(King et al., 2010)	berekeningen van effect sizes voor clinische interpretatie
<b>FACT-G en EORTC</b>	(King, Bell, Costa, Butow, & Oh, 2014)	Gaat over de mate waarin beide instrumenten een verandering in HRQOL kunnen opmerken
	(Luckett et al., 2011)	
<b>MDASI</b>	(Jones et al., 2014)	
<b>ESAS</b>	(Oldenmenger, de Raaf, de Klerk, & van der Rijt, 2013)	

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### **Uitgangsvraag 5.3**

Welk afkappunt van de lastmeter, eortc qlq c30 of sipp is het meest geschikt voor het signaleren van distress bij volwassen kankerpatiënten?

### **5. Key question**

#### **Knelpunt:**

**Uitgangsvraag 5.3:** Welk afkappunt van de lastmeter, SIPP of EORTC QLQ C30 is het meest geschikt voor het signaleren van distress/unmet needs bij volwassen kankerpatiënten?

<b>P</b>	Volwassen patiënten met (doorgemaakt) kanker Subgroepen: - tumortype - palliatief vs. curatieve behandeling (tijdens behandeltraject vs. na afloop van behandeltraject)
<b>I</b>	Lastmeter, SIPP, EORTC QLQ C30 (afgenomen in het Engels of Nederlands)
<b>C</b>	Gouden standaard (bijv. HADS)
<b>O</b>	Cut-off distress/unmet needs schaal: Se, Sp, FP, FN, AOC, indeling distress/unmet needs

#### **Inclusiecriteria**

<b>Studies</b>	(1) meta-analyses, systematische reviews, (2) randomised controlled trials (RCT), controlled clinical trials (CCT) (3) vergelijkende cohort studies (3) beschrijvende studies
<b>Periode (vanaf tot):</b>	Vanaf vorige richtlijn tot nu
<b>Databases:</b>	Medline
<b>Taal:</b>	Eng. Ned.

### **6. Search strategy**

The search was run in Medline on December 3, 2015. Detailed search strings are given below.

### **7. Search Results**

The search resulted in 864 single citations. 58 Citations were requested full text. Four studies were selected for inclusion (Ma 2014, Braeken 2011, Snyder 2010 and Snyder 2013). As Ma 2014 was a systematic review with meta-analysis on the distress thermometer, most primary studies identified in the search were already included in Ma 2014. Additional primary studies (omitted by Ma or published after its search date) were not included as these concerned non-Western populations, and were thus considered of minor relevance. Braeken 2011 concerned the SIPP; Snyder 2010 and 2013 concerned the EORTC QLQ-C30.

#### **2 Search string**

### **8. medline (via Pubmed)**

Searched on December 3, 2015: 864 citations

(cancer[tiab] OR cancers[tiab] OR "Neoplasms"[Mesh] OR neoplasms[tiab] OR neoplasm[tiab] OR oncology[tiab])
---

AND

(Lastmeter OR "distress thermometer" OR "problem list" OR SIPP\* OR "screening inventory of social problems" OR "EORTC QLQ-C30" OR "EORTC QLQ C30" OR "EORTC-QLQ-C30" OR "European Organisation for Research and Treatment of Cancer Quality of life Questionnaire C30" OR "European Organisation for Research and Treatment of Cancer Quality of life Questionnaire-C30")

AND

("cut-off" OR cutoff OR "cut off" OR level OR moderate OR moderately OR severe OR severely OR significant OR significantly OR discriminate OR discriminates OR discriminating OR discriminative OR differentiate OR differentiates OR differentiating OR discern OR discerning OR discerns)

AND

(distress[tiab] OR distressed[tiab] OR "Stress, Psychological"[Mesh] OR stress[tiab] OR stressed[tiab] OR "unmet need" OR "unmet needs" OR referral OR psychosocial OR psychological OR psychologic OR mental OR social OR emotional OR relational OR physical OR sexual OR spiritual OR existential)

Filters: **Publication date from 2008/01/01; Dutch; English**

## **Uitgangsvraag 6**

Op welke meetmomenten in het patiënttraject dient het instrument te worden ingezet om tijdig distress te kunnen vaststellen?

### **Inclusiecriteria**

<b>Studies</b>	(4) meta-analyses, systematische reviews, (5) randomised controlled trials (RCT), controlled clinical trials (CCT) vergelijkende cohort studies (6) beschrijvende studies
<b>Periode (vanaf tot):</b>	Vanaf vorige richtlijn tot nu
<b>Databases:</b>	Medline
<b>Taal:</b>	Eng. Ned.

### **9. Search strategy**

The search was run in Medline on June 24, 2015. Detailed search strings are given below.

### **10. Search Results**

The search resulted in 3942 single citations. 18 Citations were requested full text, of which none were selected full text.

### **3 Search string**

### **11. medline (via Pubmed)**

Searched on June 24, 2015: 3942 citations

```
((((((((((((cancer[tiab])) OR ((neoplasms[tiab]))) OR ((neoplasms/psychology[mesh]))) OR
((oncology[tiab]))) OR ("cancer experience")))) AND (((screening[tiab])) OR ((assessment[tiab]))))
AND ((((((((((distress[tiab])) OR ((depressi*[tiab]))) OR ((anxiety[tiab]))) OR ((panic[tiab]))) OR
((psychosocial[tiab]))) OR ((psychiatric[tiab]))) OR ((psychological[tiab]))) OR ((mental[tiab]))) OR
((mood[tiab]))) OR ((social[tiab]))) OR ((behavioral[tiab]))) OR ((spiritual[tiab]))) OR ((existential[tiab])))
OR ((adjustment[tiab]))) OR ((emotional[tiab]))) OR ((fatigue[tiab]))) OR ((stress,
psychological[mesh])))))) AND (((((((frequency)) OR ((timing))) OR ((clinical pathway))) OR ((practice)))
OR ((refer*))) OR ((clinical management)))))) OR (((((((cancer[tiab])) OR ((neoplasms[tiab]))) OR
((neoplasms/psychology[mesh]))) OR ((oncology[tiab]))) OR ("cancer experience")))) AND
(((screening[tiab])) OR ((assessment[tiab]))) AND ((((((((((distress[tiab]))) OR
((depressi*[tiab]))) OR ((anxiety[tiab]))) OR ((panic[tiab]))) OR ((psychosocial[tiab]))) OR
((psychiatric[tiab]))) OR ((psychological[tiab]))) OR ((mental[tiab]))) OR ((mood[tiab]))) OR
((social[tiab]))) OR ((behavioral[tiab]))) OR ((spiritual[tiab]))) OR ((existential[tiab]))) OR
((adjustment[tiab]))) OR ((emotional[tiab]))) OR ((fatigue[tiab]))) OR ((stress, psychological[mesh])))))
AND (((((((recurrence)) OR ((second tumor))) OR ("end of treatment")))) OR ((treatment completion)))
OR ("start of treatment"))))))))
```

**Publication date from 2008/01/01; Dutch; English**

## **Uitgangsvraag 7**

Wie bespreekt wat, wanneer en hoe met de patiënt, n.a.v. de uitkomsten van het instrument?

### 4 Key question 6

#### **12. Key question**

<b>Knelpunt:</b>	
<b>Uitgangsvraag 6:</b> Wie bespreekt wat, wanneer en hoe met de patiënt, n.a.v. de uitkomsten van het instrument? En naar wie moet eventueel doorverwezen worden voor welke problematiek?	
P	
I	
C	
O	

#### **Inclusiecriteria**

<b>Studies</b>	(7) meta-analyses, systematische reviews, (8) randomised controlled trials (RCT), controlled clinical trials (CCT) vergelijkende cohort studies (9) beschrijvende studies
<b>Periode (vanaf tot):</b>	Vanaf vorige richtlijn tot nu
<b>Databases:</b>	Medline
<b>Taal:</b>	Eng. Ned.

#### **13. Search strategy**

The search was run in Medline on June 17, 2015. Detailed search strings are given below.

#### **14. Search Results**

The search resulted in 2781 single citations. 17 Citations were requested full text. One study was included after full text evaluation.

### 5 Search string

#### **15. medline (via Pubmed)**

Searched on June 17, 2015: 2781 citations

```
Search (((((((cancer[tiab]))) OR ((neoplasms[tiab]))) OR ((neoplasms/psychology[mesh]))) OR
((oncology[tiab]))) OR ("cancer experience")))) AND ((((((((((((((distress[tiab]))) OR
((depressi*[tiab]))) OR ((anxiety[tiab]))) OR ((panic[tiab]))) OR ((psychosocial[tiab]))) OR
((psychiatric[tiab]))) OR ((psychological[tiab]))) OR ((mental[tiab]))) OR ((mood[tiab]))) OR
((social[tiab]))) OR ((behavioral[tiab]))) OR ((spiritual[tiab]))) OR ((existential[tiab]))) OR
((adjustment[tiab]))) OR ((emotional[tiab]))) OR ((fatigue[tiab]))) OR ((stress, psychological[mesh]))))
AND ((((((((((communicat*))) OR ((evaluat*))) OR ((consultat*))) OR ((management))) OR ((medical
care))) OR ((trajectory))) OR ((referral and consultation[mesh]))) OR ((patient care[mesh]))) OR
((patient care planning[mesh]))) OR ((patient care management[mesh])))) AND
(((((((physicians[mesh]))) OR ((doctor))) OR ((specialist))) OR ((staff))) OR ((nurses[mesh]))) OR
((nurse*))) Filters: Publication date from 2008/01/01; Dutch; English
```

## **Uitgangsvraag 9**

Wat zijn de organisatorische randvoorwaarden waarbinnen signaleren van klachten/detecteren behoefte zorg (signalering, gesprek en verwijzing) succesvol kan worden toegepast?

### **16. Key question**

*4. Wat zijn de organisatorische randvoorwaarden waarbinnen signaleren van klachten/detecteren behoefte zorg (signalering, gesprek en verwijzing) succesvol kan worden toegepast?*

P volwassen kankerpatiënten

I aanwezige randvoorwaarden: lack of training and support, low acceptability and failure to link treatment to the screening results waarbinnen signaleren van klachten/detecteren behoefte zorg in de breedste zin van het woord (dus niet beperkt tot huidige Nederlandse situatie of de Lastmeter) succesvol kan worden toegepast.

C -

O -

Studies: studies gebaseerd op wetenschappelijke data. Opiniërende stukken, mits ze uit een gremium met breed draagvlak voortkomen.

Taal: Engels, Nederlands

Jaar: 2008 tot heden

Databases: Medline, Embase, Cochrane, Psychinfo

Full tekst artikel gepubliceerd.

### **17. Search strategy**

Searches were run on January 5 and 12, 2015. Detailed search strings are given below.

### **18. Search Results**

The search for question 4 resulted in 7460 single citations (including 2 references found through reference tracking). 176 Citations were requested full text.

## **6 Search strings**

### **19. medline (via Pubmed)**

KQ 4: searched on January 13, 2015: 5840 citations

	(cancer[tiab] OR cancers[tiab] OR "Neoplasms"[Mesh] OR neoplasms[tiab] OR neoplasm[tiab] OR oncology[tiab])
AND	(detection[tiab] OR detect[tiab] OR detected[tiab] OR "Symptom Assessment"[Mesh] OR "Needs Assessment"[Mesh] OR "Nursing Assessment"[Mesh] OR assessment[tiab] OR assess[tiab] OR assessed[tiab] OR screening[tiab] OR screen[tiab] OR screened[tiab] OR signal[tiab] OR signalling[tiab] OR signalled[tiab] OR evaluate[tiab] OR evaluation[tiab] OR evaluated[tiab] OR "distress thermometer"[tiab] OR "problem list"[tiab])
AND	(distress[tiab] OR distressed[tiab] OR "Stress, Psychological"[Mesh] OR stress[tiab] OR stressed[tiab] OR "psychosocial problem"[tiab] OR "psychologic problem"[tiab] OR "psychological problem"[tiab] OR "psychosocial problems"[tiab] OR "psychologic problems"[tiab] OR "psychological problems"[tiab] OR "psychiatric problem"[tiab] OR "psychiatrical problem"[tiab] OR "mental problem"[tiab] OR "social problem"[tiab] OR "emotional problem"[tiab] OR "relational problem"[tiab] OR "sexual problem"[tiab] OR "physical problem"[tiab] OR "spiritual problem"[tiab] OR "existential problem"[tiab] OR "mental problems"[tiab] OR "social problems"[tiab] OR "emotional problems"[tiab] OR "relational problems"[tiab] OR "sexual problems"[tiab] OR "physical problems"[tiab] OR "spiritual problems"[tiab] OR "existential problems"[tiab] OR "Pain"[Mesh] OR pain[tiab] OR

	mood[tiab] OR "Depression"[Mesh] OR depression[tiab] OR depressed[tiab] OR depressive[tiab] OR "Anxiety"[Mesh] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab] OR "Fear"[Mesh] OR fear[tiab] OR fears[tiab] OR panic[tiab] OR panics[tiab] OR "Irritable Mood"[Mesh] OR "irritable mood"[tiab] OR "irritable moods"[tiab] OR "Anger"[Mesh] OR anger[tiab] OR angers[tiab] OR rage[tiab] OR rages[tiab] OR "Bereavement"[Mesh] OR bereavement[tiab] OR bereavements[tiab] OR grief[tiab] OR griefs[tiab] OR grieving[tiab] OR mourning[tiab] OR mournings[tiab] OR "Frustration"[Mesh] OR frustration[tiab] OR frustrations[tiab] OR "Guilt"[Mesh] OR guilt[tiab] OR guilts[tiab] OR shame[tiab] OR shames[tiab] OR "Loneliness"[Mesh] OR loneliness[tiab] OR "Fatigue"[Mesh] OR fatigue[tiab] OR tiredness[tiab])
AND	("Health Planning"[Mesh] OR "Organization and Administration"[Mesh] OR barrier[tiab] OR barriers[tiab] OR obstacle[tiab] OR obstacles[tiab] OR "Health Plan Implementation"[Mesh] OR implementation[tiab] OR implement[tiab] OR imlemented[tiab] OR implementing[tiab] OR challenge[tiab] OR challenges[tiab] OR challenged[tiab] OR challenging[tiab] OR resistance[tiab] OR resisting[tiab] OR inadequate[tiab] OR impractical[tiab] OR feasible[tiab] OR feasibility[tiab] OR burden[tiab] OR burdens[tiab] OR workload[tiab] OR prerequisite[tiab] OR prerequisites[tiab] OR precondition[tiab] OR preconditions[tiab] OR "prior condition"[tiab] OR "prior conditions"[tiab] OR "boundary condition"[tiab] OR "boundary conditions"[tiab] OR "limiting condition"[tiab] OR "limiting conditions"[tiab])
	Filters: Publication date from 2008/01/01; Dutch; English

## 20. Embase (via OVID)

Searched on January 5, 2015

Database: Embase <1974 to 2014 December 30>

Search Strategy 4:

- 
- 1 exp neoplasm/ (3383892)
  - 2 neoplasm.ti,ab. (52259)
  - 3 neoplasms.ti,ab. (82346)
  - 4 cancer.ti,ab. (1428700)
  - 5 cancers.ti,ab. (214544)
  - 6 exp oncology/ (110046)
  - 7 oncology.ti,ab. (105255)
  - 8 or/1-7 (3642087)
  - 9 detection.ti,ab. (732675)
  - 10 detect.ti,ab. (311881)
  - 11 detected.ti,ab. (992359)
  - 12 clinical evaluation/ (51145)
  - 13 exp clinical assessment/ (69194)
  - 14 psychologic assessment/ (20160)
  - 15 symptom assessment/ (1925)
  - 16 assessment.ti,ab. (803295)
  - 17 assess.ti,ab. (794524)
  - 18 assessed.ti,ab. (989025)
  - 19 exp screening/ (481089)
  - 20 screening.ti,ab. (446141)
  - 21 screen.ti,ab. (106138)
  - 22 screened.ti,ab. (133182)
  - 23 signal.ti,ab. (418936)
  - 24 signalling.ti,ab. (79973)
  - 25 signalled.ti,ab. (1221)
  - 26 evaluation.ti,ab. (1086235)
  - 27 evaluate.ti,ab. (978119)
  - 28 evaluating.ti,ab. (195056)
  - 29 evaluated.ti,ab. (1242463)
  - 30 distress thermometer.ti,ab. (693)
  - 31 problem list.ti,ab. (659)
  - 32 or/9-31 (6657407)
  - 33 health care planning/ (79780)
  - 34 exp "organization and management"/ (1244658)

35 barrier.ti,ab. (127224)  
36 barriers.ti,ab. (82355)  
37 obstacle.ti,ab. (15538)  
38 obstacles.ti,ab. (20807)  
39 implementation.ti,ab. (159719)  
40 implement.ti,ab. (46325)  
41 implemented.ti,ab. (116635)  
42 implementing.ti,ab. (46193)  
43 challenge.ti,ab. (259658)  
44 challenges.ti,ab. (165503)  
45 challenged.ti,ab. (56452)  
46 challenging.ti,ab. (102588)  
47 resistance.ti,ab. (572813)  
48 resisting.ti,ab. (3163)  
49 inadequate.ti,ab. (95327)  
50 impractical.ti,ab. (4667)  
51 feasible.ti,ab. (138749)  
52 feasibility.ti,ab. (137572)  
53 acceptability.ti,ab. (24057)  
54 accepting.ti,ab. (11067)  
55 accept.ti,ab. (20464)  
56 accepted.ti,ab. (127116)  
57 burden.ti,ab. (137664)  
58 burdens.ti,ab. (12308)  
59 acceptance.ti,ab. (59044)  
60 prerequisite.ti,ab. (31763)  
61 prerequisites.ti,ab. (7255)  
62 precondition.ti,ab. (2850)  
63 preconditions.ti,ab. (1875)  
64 prior condition.ti,ab. (52)  
65 prior conditions.ti,ab. (41)  
66 boundary condition.ti,ab. (1195)  
67 boundary conditions.ti,ab. (4877)  
68 limiting condition.ti,ab. (540)  
69 limiting conditions.ti,ab. (1965)  
70 or/33-69 (3261023)  
71 distress.ti,ab. (96711)  
72 8 and 32 and 70 and 71 (2602)  
| 73 limit 72 to ((dutch or english) and yr="2008 -Current") (2075)

## 21. Cochrane DAtabase of systematic reviews (via Cochrane library)

January 6, 2015: browsed by category:

- ➔ Cancer -> general cancer treatment -> complementary and alternative therapy
- ➔ Cancer -> general cancer treatment -> psychosocial care
- ➔ Cancer -> palliative and supportive care -> complementary and alternative therapy
- ➔ Cancer -> palliative and supportive care -> organization of care
- ➔ Cancer -> palliative and supportive care -> psychosocial interventions
- ➔ Cancer -> screening
- ➔ Complementary and alternative medicine -> cancer
- ➔ Complementary and alternative medicine -> mental health
- ➔ Diagnosis
- ➔ Effective practice/health services
- ➔ Mental health -> depression
- ➔ Mental health -> mental health in general
- ➔ Mental health -> mood disorders

## 22. Psychinfo (via OVID)

Searched on January 5, 2015.

Vraag 4:

Database: PsycINFO <2002 to December Week 5 2014>

- 
- 1 exp neoplasm/ (26820)
  - 2 neoplasm.ti,ab. (252)
  - 3 neoplasms.ti,ab. (386)
  - 4 cancer.ti,ab. (30415)
  - 5 cancers.ti,ab. (2279)
  - 6 exp oncology/ (1909)
  - 7 oncology.ti,ab. (3471)
  - 8 or/1-7 (36714)
  - 9 detection.ti,ab. (25054)
  - 10 detect.ti,ab. (16125)
  - 11 detected.ti,ab. (20623)
  - 12 evaluation/ (9875)
  - 13 psychological assessment/ (6046)
  - 14 assessment.ti,ab. (130181)
  - 15 assess.ti,ab. (91956)
  - 16 assessed.ti,ab. (116762)
  - 17 exp screening/ (12978)
  - 18 screening.ti,ab. (29987)
  - 19 screen.ti,ab. (11243)
  - 20 screened.ti,ab. (7211)
  - 21 signal.ti,ab. (24104)
  - 22 signalling.ti,ab. (3206)
  - 23 signalled.ti,ab. (279)
  - 24 evaluation.ti,ab. (84625)
  - 25 evaluate.ti,ab. (66065)
  - 26 evaluating.ti,ab. (25320)
  - 27 evaluated.ti,ab. (68840)
  - 28 distress thermometer.ti,ab. (108)
  - 29 problem list.ti,ab. (56)
  - 30 or/9-29 (524294)
  - 31 management planning/ (716)
  - 32 exp management/ (25981)
  - 33 barrier.ti,ab. (7999)
  - 34 barriers.ti,ab. (26639)
  - 35 obstacle.ti,ab. (2157)
  - 36 obstacles.ti,ab. (7114)
  - 37 implementation.ti,ab. (41387)
  - 38 implement.ti,ab. (15242)
  - 39 implemented.ti,ab. (25487)
  - 40 implementing.ti,ab. (16491)
  - 41 challenge.ti,ab. (38740)
  - 42 challenges.ti,ab. (63544)
  - 43 challenged.ti,ab. (8078)
  - 44 challenging.ti,ab. (21500)
  - 45 resistance.ti,ab. (16039)
  - 46 resisting.ti,ab. (1293)
  - 47 inadequate.ti,ab. (9727)
  - 48 impractical.ti,ab. (443)
  - 49 feasible.ti,ab. (7701)
  - 50 feasibility.ti,ab. (9479)
  - 51 acceptability.ti,ab. (5304)
  - 52 accepting.ti,ab. (3908)
  - 53 accept.ti,ab. (6942)
  - 54 accepted.ti,ab. (14863)
  - 55 burden.ti,ab. (16863)

56 burdens.ti,ab. (1704)  
57 acceptance.ti,ab. (19272)  
58 prerequisite.ti,ab. (2598)  
59 prerequisites.ti,ab. (1008)  
60 precondition.ti,ab. (610)  
61 preconditions.ti,ab. (511)  
62 prior condition.ti,ab. (3)  
63 prior conditions.ti,ab. (18)  
64 boundary condition.ti,ab. (189)  
65 boundary conditions.ti,ab. (816)  
66 limiting condition.ti,ab. (38)  
67 limiting conditions.ti,ab. (120)  
68 or/31-67 (330176)  
69 distress.ti,ab. (29002)  
70 exp distress/ (10825)  
71 or/69-70 (29682)  
72 8 and 30 and 68 and 71 (402)  
73 limit 72 to ((dutch or english) and yr="2008 -Current") (286)