

**Supplementary Table S1: Studies considering the association between increasing age and the length of the appraisal interval**

Authors	Country	Year	Impact of age			Finding	N. of participants	Cancer site	MMAT
			Associated with early diagnosis	Associated with later diagnosis	No effect				
Adelstein (24)	Australia	2012		X		Older adults (>70 years old) were less likely to take symptoms seriously than younger people. p for trend p<0.001 for females and P=0.03 for males	7736	Colorectal	5
Arndt (26)	Germany	2002		X		Older women (>65 years old) tended to consider their symptoms as temporary more often than middle aged or younger women. p for trend p=0.02	287	Breast	4
Arnold-Reed (27)	Australia	2008			X	Age had no impact on knowledge of prostate function	503	Prostate	5

Brain (28)	UK	2014		X		Symptom awareness was significantly lower in patients >70 years old. The adjusted mean number of ovarian symptoms recognised out of 11 was 7.23 (SD 2.62) for 50-59 year olds, 7.00 (SD 2.65) for 60-69 year olds and 6.08 (SD 2.94) for 70+ year olds. P<0.001	1043	Ovarian	4
Brunswick (29)	UK	2001	X			The odds ratio of the correct identification of five warning signs was 1.8 (95% CI 1.3-2.6) for 25-44 year olds, 3.3 (95% CI 2.2-5.0) for 45-54 year olds, 3.5 (95% CI 2.3-5.4) for 55-64 year olds, 5.6 (95% CI 3.4-9.2) for 65-74 year olds and 3.3 (95% CI 2.0-5.6) for 75+ year olds when compared with 16-24 year olds (ref OR=1)	3693	Any	3
Grunfeld (102)	UK	2002		X		Older adults (>65 years old) believed they were at decreased risk of breast cancer. The relationship between age and perception of risk ( $\chi^2=54.27$ , $df=6$ , $P<0.001$ )	996	Breast	4

Hvidberg (33)	Denmark	2014		X		The adjusted odds ratio of recognition of less than nine risk factors for cancer was 1.1 (95% CI 1.02-1.21) for 50-69 year olds and 1.23 (95% CI 1.10-1.37) for 70+ year olds when compared to 30-49 year olds (ref OR=1)	3000	Any	5
Jensen (35)	Denmark	2015	X			The adjusted prevalence ratio of attributing cancer symptoms to 1) benign causes was 0.78 (95% CI 0.68-0.91) for >=65 year olds, 2) psychological causes was 0.70 (95% CI 0.50-0.98) for >=65 year olds, 3) lifestyle causes was 0.67 (95% CI 0.47-0.95) for >=65 year olds All three compared to <=64 year olds (ref PR=1)	436	Colorectal	5

Linsell (38)	UK	2008	X	X		Older women were aware that a lump was a symptom of breast cancer. Older women were less knowledgeable about non lump symptoms. Older women were overly optimistic of their cancer risk.	712	Breast	5
Mccaffery (39)	UK	2003	X			Older adults had higher cancer knowledge scores. $p < 0.0001$ for effect of increasing age on increasing knowledge score.	1637	Colorectal cancer	5
Moffat (40)	UK	2015		X		Unprompted awareness of colorectal cancer symptoms was 15% for 75+ year olds and 31% for 55-74 year olds ( $p < 0.001$ ), Unprompted awareness of lung cancer symptoms was 35% for 75+ year olds and 43% for 55-74 year olds ( $p = 0.016$ )	355 bowel, 486 lung	Colorectal and lung	5
Moser (41)	UK	2007			X	There was no difference in knowledge by age group.	1496	Breast	4

Quaife (64)	UK	2014		X		Older adults were significantly less likely to recognise persistent cough or hoarseness $p < 0.001$ , unexplained bleeding $p < 0.001$ and unexplained lump or swelling $p < 0.001$ than younger adults.	6965	Breast, colorectal and lung	5
Rendle (43)	USA	2019			X	There was no difference in symptom recognition by age	1425	Lung, Colorectal, Breast, Melanoma	5
Robb (45)	UK	2009		X		Patients aged over 65 had lower recall and recognition of cancer symptoms. $P > 0.001$	2216	Any	5
Sarma (46)	USA	2020			X	The adjusted odds ratio and 95% CI given for each cancer symptom for age 50-64 year olds, compared with 65-79 year olds. For all 11 symptoms, the difference was non-significant	1425	Any	5

Sladden (48)	Australia	2000		X		Self-reported 'bother' from LUTS symptoms decreased with age	330	Prostate	3
--------------	-----------	------	--	---	--	--	-----	----------	---

**Supplementary Table S2: Studies considering the association between increasing age and the length of the help seeking interval**

Authors	Country	Year	Impact of age			Finding	N. of participants	Cancer site	MMAT
			Associated with early diagnosis	Associated with later diagnosis	No effect				
Brouha (50)	Netherlands	2005			x	Odds ratio of 'patient delay for pharyngeal cancer' was 5.0 (95% CI 1.0-25.6) for patients $\geq 65$ years old, $p=0.05$ . Odds ratio of 'patient delay for oral cancer' was 1.5 (95% CI 0.7-3.0) for patients $\geq 65$ years old, $p=0.29$ . Compared with patients $< 65$ (ref OR=1)	189	Oral and pharyngeal cancer	3
Burgess (101)	UK	2006			X	None of the personal characteristics were significantly associated with delayed presentation. Descriptive data only	69	Breast	5

Davies (51)	UK	2018			X	Adjusted odds ratio of 'help seeking for nipple rash' was 1.31 (95% CI 0.97-1.78) for 60-69 year olds and 1.44 (95% CI 0.96-2.14) for 70+ year olds compared with 47-59 year olds. Adjusted odds ratio for 'help seeking for axillary lump' was 1.16 (95% CI 0.77-1.74) for 60-69 year olds and 1.50 (95% CI 0.86-2.63) for 70+ year olds compared with 47-59 year olds. (ref OR=1)	961	Breast	5
Elnegaard (52)	Denmark	2017	X			Adjusted odds ratio of 'contact with a GP with a cancer symptom' was 1.23 (95% CI 1.16-1.30) for 40-59 year olds, 2.21 (95% CI 2.09-2.34) for 60-79 year olds and 3.15 (95% CI 2.78-3.56) for 80+ year olds compared with 20-39 year olds (ref OR=1)	49706	Any	5



Grunfeld (55)	UK	2003			x	There was no difference in help seeking for a range of symptoms between women aged 65 and over compared to younger women. p value for trend. P=0.132	546	Breast	5
Hannaforde (56)	UK	2020	X			Adjusted odds ratio of 'a patient experiencing a cancer symptoms and seeing their GP in the last year' was 0.90 (95% CI 0.78-1.03) for 60-69 year olds, 1.00 (95% CI 0.84-1.20) for 70-79 year olds and 1.48 (95% CI 1.15-1.89) for 80+ year olds compared to 50-59 year olds. (ref OR=1)	16778	Breast, colorectal, upper GI and Lung	5
Hvidberg (58)	Denmark	2015	x	x		Older adults were statistically more likely to "not want to know" if they have cancer and to believe that the cancer treatment is worse than the cancer itself. Older adults were less likely to be put off by perceived	3000	Any	5

						barriers to seeking help. Data provided as prevalence ratios with 95% CIs.			
Kaushal (69)	UK	2020	X			Odds ratio of contacting a GP when experiencing cancer symptoms was 1.52 (95% CI 1.13-2.05) for over 70 year olds compared with 50-59 year olds (OR=1)	2143	Lung	5
Lyratzopolous (59)	USA	2015		X		The mean fatalism score (a validated score of general fatalism ranging 4-16 using four, four point likert questions) was 10.8 for <55 year olds, 10.4 for 55-59 year olds, 10.4 for 60-64 year olds, 10.7 for 65-69 year olds, 10.7 for 70-74 year olds, 10.9 for 75-80 year olds and	4319	Lung and colorectal	5

						10.9 for 80+ year olds. P=<0.001			
Moffat (60)	UK	2016	x			Older adults were significantly less likely to endorse a list of 14 potential barriers to help seeking	1986	Any	5
Niksic (62)	UK	2016	x			75+ had the lowest barriers to help seeking.	38492	Any	5
Quaife (64)	UK	2014	x			Older adults were significantly less likely to wait more than 2 weeks before help seeking for a persistent cough and rectal bleeding. P<0.001	6965	Colorectal and lung	5

Rendle (43)	USA	2016	x			Adjusted odds ratio of 'anticipated delay in help seeking for rectal bleeding' was 2.03 (95% CI 1.25-3.32) for 50-64 year olds, p=0.005. Adjusted odds ratio of 'anticipated delay in help seeking for mole changes' was 1.55 (95% CI 1.10-2.18) for 50-64 year olds, p=0.01. Both compared with 65-99 year olds (OR=1),	1425	Any	5
Sarma (66)	USA	2008			x	The proportion of men seeking help for LUTS did not differ by age. p value for trend. P=0.20	165	Prostate	5
Sele (67)	Denmark	2016	x			The percentage of patients experiencing respiratory symptoms who contacted the GP increased with increasing age. p<0.001 for trend	49706	Lung	5

Sladden (48)	Australia	2000	x			The adjusted odds ratio of attending the GP due to urinary symptoms was 0.99 (95% CI 0.31-3.12) for 50-59 year olds, 3.87 (95% CI 1.39-10.8) for 60-69 year olds and 12.26 (95% CI 2.71-55.5) for 70-80 year olds compared with 40-49 year olds (ref OR=1)	330	Prostate	3
Svensden (68)	Denmark	2013	x			Adjusted odds ratio of 'seeking help for all cancer symptoms' 1.58 (95% CI 1.12-2.22) for 40-59 year olds, 1.93 (95% CI 1.33-2.78) for 60-79 year olds and 3.64 (95% CI 1.54-8.56) for 80-99 year olds compared with 20-39 year olds (ref OR=1)	1930	Breast, Lung, TCC and colorectal	5

Wagland (103)	UK	2016	x		Non consulters were more likely to be younger in patients at high risk of lung cancer. The incidence rate ratio for consultation behaviour by age was 1.12 (95% CI 0.94-1.34) p=0.18 for 60-69 year olds, 1.31 (95% CI 1.04-1.65) p=0.019 for 70-79 year olds and 1.44 (95% CI 1.08-1.92) p=0.013 for 80+ year olds compared to 50-59 year olds (ref IRR=1)	908	Lung	5
---------------	----	------	---	--	---	-----	------	---

**Supplementary Table S3: Studies considering the association between age and the length of the patient interval (appraisal + help seeking)**

First author	Country	Year	Impact of age			Outcome	N. of participants	Cancer site	MMAT
			Associated with earlier diagnosis	Associated with later diagnosis	No evidence of a difference				
Allgar (26)	UK	2019			X	Median appraisal interval in days was 30 (IQR 0-61) for <65 year olds and 0 (IQR 0-31) for ≥65 year olds. P=0.56	80	Head and neck	5
Arndt (29)	Germany	2002		X		The odds ratio of a >3 month delay for >65 year olds was 3.8 (95% CI 1.2-11.6), when compared to <50 year olds (ref OR=1)	287	Breast	4
Esteva (25)	Spain	2013			X	Median symptom duration in days was 171 for <50 year olds, 137 for 65-74 year olds and 159.5 for >75 year olds. P=0.34	795	Colorectal	4

Forbes (23)	UK	2014			x	Relative risk for delay in presentation of >3 months was 0.93 (95% CI 0.69-1.22) for 70-79 year olds and 0.76 (95% CI 0.46-1.24) for >80 year olds when compared to <50 year olds (ref RR=1)	1999	Any	5
Friese (30)	USA	2011			X	The adjusted odds ratio of delay for >=75 year olds was 1.45 (95% CI 1.27-1.65), when compared to <75 year olds (ref OR=1)	5086	Chronic Lymphocytic Leukaemia	5
Hansen (19)	Denmark	2008			x	Those aged over 70 had statistically shorter patient delay than younger patients. The odds ratio of a >60 day patient delay was 1.00 (95% CI 0.41-2.46) for 18-49 year olds, and 0.30 (95% CI 0.13-0.71) for >70 year olds when compared to 50-69 year olds (ref OR=1)	1252	Any	5
Howell (22)	UK	2018			x	Based on a small sample, those aged >65 had shorter diagnostic intervals than younger patients. Descriptive data only	20	Myeloma	3



Innos (28)	Estonia	2013		X		Increased age was associated with prolonged delay (>90 days) from first noticing a symptom to first contact with GP. The odds ratio of a >90 day patient delay was 2.27 (95% CI 1.23-4.20) for >65 year olds, when compared to <50 year olds ( ref OR=1)	703	Breast	3
Keeble (17)	UK	2014	x			The odds ratio of >15 day delay in patient presentation was 0.83 (95% CI 0.74-0.93) for 75-84 year olds and 0.83 (95% CI 0.70-0.98) for >85 year olds when compared to 65-74 year olds (ref OR=1)	10297	Any	5
Korsgaard (20)	Denmark	2008	x			Patients aged $\geq 70$ had a shorter patient delay. Descriptive data only	743	Colorectal	5
Mikulin (31)	UK	1987		x		The oldest patients (>80) waited longest before presenting to primary care. Descriptive data only (median and IQR)	83	Gastric	3
Neal (18)	UK	2005	x			Younger adults had longer prehospital delay than older adults for lung, breast and non Hodgkins lymphoma cancer. P value for trend, lung $P=0.0033$ , non Hodgkins lymphoma $P<0.001$ , breast $P<0.001$	65192	Breast, colorectal, prostate, NHL, lung and ovarian	5

Pederson (21)	Denmark	2018	x			Patients in this study were asked hypothetically if they would wait >1month before presenting with symptoms. Odds ratio for “anticipated long patient interval > 1 month” for a persistent cough was, 0.75 (95% CI 0.67-0.83) for 70-79 year olds and 0.57 (95% CI 0.48-0.67) for >80 year olds. Odds ratio for anticipated long patient interval > 1 week for rectal bleeding was 0.67 (95% CI 0.59-0.76) for 70-79 year olds and 0.51 (95% CI 0.41-0.62) for >80 year olds. Both compared to 50-59 year olds (ref OR=1)	20814	Lung and colorectal	5
Richard (32)	France	2000	x			Median time to seek help in days was 44 for 50-65 year olds and 41 for >=65 year olds. P=0.003	590	Melanoma	2
Samet (33)	USA	1988		x		The results show a trend for cancers to be at a more advanced stage in elderly due to delay in seeking medical attention. Descriptive data only	800	Any	4

Skeppner (27)	Sweden	2012			x	There was no association between age and time to presentation. Descriptive data only	59	Penile cancer	3
Van Hout (24)	Holland	2011			x	Odds ratio of >90 day patient delay was 0.93 (95% CI 0.40-2.12) for <80 year olds compared to >80 year olds (ref OR=1)	197	Colorectal	5

**Supplementary Table S4: Included qualitative studies considering the association between age and symptom appraisal or help seeking**

Author	Country	Year	Question/Aim	No. of Participants	Cancer site	MMAT
Andersen (75)	Denmark	2010	What are the processes involved in symptom interpretation and how do they affect help seeking	30	Lung, Melanoma, Colorectal	5
Birt (77)	UK	2014	What are the appraisal and help seeking decisions of patients with symptoms suggestive of lung cancer	35	Lung	5
Broughton (88)	UK	2004	What are patient and carer experiences of the	49	Bowel	4

			diagnostic process in colorectal cancer			
Cunningham-Burley (91)	UK	1996	What are men's perceptions and help seeking for urinary symptoms	198	Prostate	5
Evans (70)	UK	2014	Patients accounts of symptoms before a pancreatic cancer diagnosis	40	Pancreatic	5
Hall (79)	UK	2015	Investigating symptom appraisal and help seeking in patients with symptoms suggestive of colorectal cancer	40	Colorectal	5
Howell (90)	UK	2018	What are the experiences of myeloma patients from detection of a health change to diagnosis	20	Myeloma	3
Kannan (92)	Australia	2019	To explore prostate cancer awareness	15	Prostate	5
King-Okoye (93)	Trinidad and Tobago	2019	To explore men's pre-diagnosis experience of prostate cancer	51	Prostate	5

Leydon (89)	UK	2003	To consider the events from first noticing a symptom to diagnosis	33	Any	5
McCutchan (82)	UK	2016	What are the barriers to cancer symptom presentation	30	Any	5
McLachlan (76)	UK	2015	To understand interpretation of symptoms and help seeking prior to diagnosis	29	Lung and colorectal	5
Oberoi (81)	Australia	2016	To explore the reasons for diagnostic delay in men with colorectal cancer	20	Colorectal	5
Parsonage (86)	UK	2017	To understand patient perspectives on their diagnostic journey	530	Breast, Ovarian, Colorectal, and Lung	
Ramos (84)	Spain	2010	To investigate perceptions of colorectal cancer diagnosis and the factors that trigger a medical consultation	12	Colorectal	5

Rankin (78)	Australia	2017	To describe the lung cancer diagnostic pathway	30	Lung	5
Renzi (99)	UK	2016	To assess the impact of an "all clear" on future help seeking	62	Any	5
Seibaek (71)	Denmark	2011	To assess symptom appraisal and help seeking among Danish women	10	Ovarian	3
Salander (87)	Sweden	1999	To explore patients pathway to medical care with brain tumours	28	Brain tumour	3
Samuelsson (80)	Sweden	2018	To describe how older adults experience the 'healthcare chain' prior to colorectal cancer	16	Colorectal	5
Scott (72)	UK	2009	To understand patient delay in oral cancer	57	Oral	5

Taib (94)	Malaysia	2011	To explore the experience of women with advanced breast cancer on interpretation and appraisal of breast symptoms	19	Breast	5
Tod (83)	UK	2007	To identify factors influencing delay in reporting symptoms of lung cancer	20	Lung	5
Topping (74)	UK	2013	To examine the pre diagnostic journeys of people with melanoma	45	Melanoma	5
Van Schalkwyk (85)	South Africa	2008	To understand the routes followed from first symptom to diagnosis	15	Cervical	4
Walter (73)	UK	2014	To explore appraisal and help seeking decisions of patients with melanoma	63	Melanoma	5
Cromme (100)	UK	2016	When do patients worry that they are wasting GP time and is this a barrier to help seeking	62	Any	5
Lammers (95)	Holland	2015	To gain insights in to why men with LUTs visit their doctor	18	Prostate	5

Maclean (97)	UK	2017	Does gender affect help seeking in lung cancer?	45	Lung	5
Mitchell (96)	UK	2013	To gain insights into the diagnostic process for lung cancer	132	Lung	5
Tookey (98)	UK	2018	To understand how the doctor-patient interactions influence help seeking	62	Any	5

## Supplementary Information S1: Search Strategy

Nine academic databases and 3 other sources were searched on 29<sup>th</sup> April 2020 and on 29<sup>th</sup> July 2021. The search strategies looked for search terms for the concepts: Cancer, Older Adults, Primary Care. No limits were added. The databases searched were:

- EBSCOhost CINAHL
- Ovid Embase Classic+Embase 1947 to 2021 July 28
- Ovid MEDLINE(R) ALL 1946 to July 28, 2021
- Ovid APA PsycInfo 1806 to July Week 3 2021
- ProQuest Applied Social Sciences Index and Abstracts (ASSIA)
- Web of Science Core Collection which included the following searched simultaneously:
  - Arts & Humanities Citation Index (Web of Science) 1975-present
  - Conference Proceedings Citation Index- Science (Web of Science) 1990-present
  - Conference Proceedings Citation Index- Social Science & Humanities (Web of Science) 1990-present
  - Science Citation Index-Expanded (Web of Science) 1900-present
  - Social Sciences Citation Index (Web of Science) 1900-present



- Emerging Sources Citation Index (Web of Science) 2015-present
- Wiley Cochrane Central Register of Controlled Trials: Issue 7 of 12, July 2021
- Wiley Cochrane Database of Systematic Reviews: Issue 7 of 12, July 2021

Other sources:

- ClinicalTrials.gov
- Evidence Search <https://www.evidence.nhs.uk/>
- ISRCTN registry [www.isrctn.com](http://www.isrctn.com)

Search strategies per database:

**EBSCOhost CINAHL**

Search Date: 29/07/2021

Records found: 805

Search strategy notes:

Search lines using an MH code are subject heading searches.

Subject heading searches ending in a + are exploded.

Search lines using a TI code search in the title only.

Search lines using an AB code search in the abstract only.

Search lines using a SU code search in

[ADD TX and NEAR codes?]

\* is used for truncation.

? Is used for a compulsory wildcard.

# is used for an optional wildcard.

y Nx z searches for where there are up to x words in-between word y and the word z.

-----

#	Query	Results
S34	S8 AND S16 AND S29 AND S33	805
S33	S30 OR S31 OR S32	841,892
S32	SU (cancer* or neoplas* or tumor* or tumour* or carcinoma* or hodgkin* or nonhodgkin* or non-hodgkin* or adenocarcinoma* or leuk#emia* or metasta* or malignan* or lymphoma* or sarcoma* or melanoma* or myeloma* or oncolog*)	629,586
S31	TI ( cancer* or neoplas* or tumor* or tumour* or carcinoma* or hodgkin* or nonhodgkin* or non-hodgkin* or adenocarcinoma* or leuk#emia* or metasta* or malignan* or lymphoma* or sarcoma* or melanoma* or myeloma* or oncolog* ) OR AB ( cancer* or neoplas* or tumor* or tumour* or carcinoma* or hodgkin* or nonhodgkin* or non-hodgkin* or adenocarcinoma* or leuk#emia* or metasta* or malignan* or lymphoma* or sarcoma* or melanoma* or myeloma* or oncolog* )	675,038
S30	(MH "Neoplasms+")	587,404
S29	S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28	315,008
S28	(MH "Help Seeking Behavior")	7,249
S27	(MH "Trust")	11,673
S26	TI ( help-seeking or (trust n2 (patient* or clinician* or doctor* or GP or health service?)) ) OR AB ( help-seeking or (trust n2 (patient* or clinician* or doctor* or GP or health service?)) )	7,723
S25	TX Consultation pattern#	170
S24	TI (patient# n1 (preference# or view*)) OR AB (patient# n1 (preference# or view*)) OR SU (patient# n1 (preference# or view*))	10,824
S23	TI (decide# or deciding) OR AB (decide# or deciding) OR SU (decide# or deciding)	20,763
S22	TI ((share# or sharing) n2 decision*) OR AB ((share# or sharing) n2 decision*) OR SU ((share# or sharing) n2 decision*)	7,972
S21	(MH "Professional-Patient Relations") OR (MH "Physician-Patient Relations") OR (MH "Professional-Family Relations")	82,991
S20	(MH "Patient Preference")	1,306
S19	(MH "Consumer Participation")	21,515
S18	TI (decision# n1 mak*) OR AB (decision# n1 mak*) OR SU (decision# n1 mak*) OR TI patient# decision* OR AB patient# decision* OR SU patient# decision*	168,715
S17	(MH "Decision Making+")	134,812
S16	S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15	969,557
S15	TI (gerontolog*) OR AB (gerontolog*) OR SU (gerontolog*)	40,899
S14	TX sexagenarian or septuagenarian or octogenarian or nonagenarian or centenarian	2,333
S13	TX (Age# n3 (over or older) n2 (50 or 55 or 60 or 65 or 70 or 75 or 80 or 85 or 90 or 95))	328,209
S12	(MH "Geriatrics")	5,705
S11	TI (older n1 (adult# or m?n or wom?n or person# or people)) OR AB (older n1 (adult# or m?n or wom?n or person# or people)) OR SU (older n1 (adult# or m?n or wom?n or person# or people))	107,943
S10	TI (elderly or geriatric* or senior) OR AB (elderly or geriatric* or senior) OR SU (elderly or geriatric* or senior)	161,569

S9	(MH "Aged+")	877,609
S8	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7	213,789
S7	(MH "Primary Health Care")	67,370
S6	TX "out of hours" OR TX "after hours" or TX "population-based study" or TX "population-based survey#" 17,635	
S5	TI ((general or family) n1 (practice* or practitioner* or physician* or doctor* or nurs*)) OR AB ((general or family) n1 (practice* or practitioner* or physician* or doctor* or nurs*)) OR SU ((general or family) n1 (practice* or practitioner* or physician* or doctor* or nurs*)) 79,666	
S4	TI (primary n4 (care or health* or service* or center* or centre* or practice*)) OR AB (primary n4 (care or health* or service* or center* or centre* or practice*)) OR SU (primary n4 (care or health* or service* or center* or centre* or practice*)) 129,758	
S3	TI GP# OR AB GP# OR SU GP#	26,479
S2	(MH "Family Practice")	25,657
S1	(MH "Physicians, Family")	21,047

### **Ovid Embase Classic+Embase 1947 to 2021 July 28**

Search Date: 29/07/2021

Records found: 1921

Search strategy notes:

Search lines ending in a '/' are subject heading searches.

Search lines beginning 'exp' are exploded subject heading searches.

Search lines ending in .tw. search in the title and abstract only.

Search lines ending in .tw,kw search in the title, abstract and keywords only.

or/x-y combines search sets in the range x-y with Boolean operator OR.

\* is used for truncation of words.

# is used for a compulsory wildcard.

? is used for an optional wildcard.

y ADJx z searches for where there are up to x-1 words in-between the word y and the word z.

“xx xx” searches for the exact phrase that is displayed within the quote marks

- 
- 1 GP?.tw. (164222)
  - 2 (primary adj4 (care or health\* or service\* or center\* or centre\* or practice\*)).tw. (239919)
  - 3 ((general or family) adj (practice\* or practitioner\* or physician\* or doctor\* or nurs\*)).tw. (148894)
  - 4 general practitioner/ (109695)
  - 5 general practice/ (87024)
  - 6 primary medical care/ (113494)
  - 7 out-of-hours care/ (514)
  - 8 "out of hours".tw,kw. (3907)
  - 9 "after hours".tw,kw. (2206)
  - 10 (population-based study or population-based survey?).tw. (50499)
  - 11 or/1-10 [Primary Care] (624619)
  - 12 exp aged/ (3374270)
  - 13 elderly.tw,kw. (389927)

- 14 geriatric\*.tw,kw. (95168)
- 15 senior.tw,kw. (52239)
- 16 (older adj (adult? or m#n or wom#n or person? or people)).tw,kw. (192348)
- 17 exp geriatrics/ (47359)
- 18 (Age? adj3 (over or older) adj2 (5# or 6# or 7# or 8# or 9#)).tw. (71004)
- 19 sexagenarian.tw,kw. (82)
- 20 septuagenarian.tw,kw. (289)
- 21 octogenarian.tw,kw. (2502)
- 22 nonagenarian.tw,kw. (940)
- 23 centenarian.tw,kw. (993)
- 24 gerontolog\*.tw,kw. (12320)
- 25 (">=5# years old" or ">5# years old").tw. (30684)
- 26 (">=6# years old" or ">6# years old").tw. (46018)
- 27 (">=7# years old" or ">7# years old").tw. (28797)
- 28 (">=8# years old" or ">8# years old").tw. (17350)
- 29 (">=9# years old" or ">9# years old").tw. (5658)
- 30 or/12-29 [Older People] (3668442)
- 31 exp neoplasm/ (5229884)

- 32 (cancer\* or neoplas\* or tumo\* or carcinoma\* or hodgkin\* or nonhodgkin\* or non-hodgkin\* or adenocarcinoma\* or leuk?emia\* or metasta\* or malignan\* or lymphoma\* or sarcoma\* or melanoma\* or myeloma\* or oncolog\*).tw,kw. (5617252)
- 33 31 or 32 [Cancer] (6543241)
- 34 exp decision making/ (409757)
- 35 (decision? adj1 mak\*).tw,kw. (242495)
- 36 patient? decision\*.tw,kw. (6418)
- 37 patient attitude/ (71422)
- 38 patient participation/ (29760)
- 39 patient preference/ (21174)
- 40 professional-patient relationship/ or doctor patient relationship/ (16550)
- 41 ((share? or sharing) adj2 decision\*).tw,kw. (16396)
- 42 (decide? or deciding).tw,kw. (126438)
- 43 clinical decision making/ (52728)
- 44 (patient? adj1 (preference? or view?)).tw,kw. (26046)
- 45 Consultation pattern?.tw. (166)
- 46 trust/ (27361)
- 47 (trust adj2 (patient\* or clinician\* or doctor\* or GP or health service?)).tw. (3493)
- 48 \*help seeking behavior/ (3346)

49 help-seeking.tw. (7827)

50 or/34-49 [shared decision making] (767151)

51 11 and 30 and 33 and 50 [Primary Care Older Person Cancer Decision making] (1921)

**Ovid MEDLINE(R) ALL <1946 to July 28, 2021>**

Search Date: 29/07/2021

Records found: 1758

Search strategy notes:

Search lines ending in a '/' are subject heading searches.

Search lines beginning 'exp' are exploded subject heading searches.

Search lines ending in .tw. search in the title and abstract only.

Search lines ending in .tw,kw search in the title, abstract and keyword heading only.

or/x-y combines search sets in the range x-y with Boolean operator OR.

\* is used for truncation of words.

# is used for a compulsory wildcard.

? is used for an optional wildcard.

y Nx z searches for where there are up to x-1 words in-between word y and the word z.

“xx xx” searches for the exact phrase that is displayed within the quote marks

- 
- 1 general practitioners/ (8682)
  - 2 physicians, primary care/ (3845)
  - 3 Family Practice/ (65719)
  - 4 GP\*.tw. (192697)
  - 5 (primary adj4 (care or health\* or service\* or center\* or centre\* or practice\*)).tw. (176059)
  - 6 ((general or family) adj (practice\* or practitioner\* or physician\* or doctor\* or nurs\*)).tw. (112564)
  - 7 After-Hours Care/ (1974)
  - 8 "out of hours".tw,kw. (2169)
  - 9 "after hours".tw,kw. (1425)
  - 10 (population-based study or population-based survey?).tw. (37593)
  - 11 or/1-10 [Primary Care] (500814)
  - 12 exp Aged/ (3279055)
  - 13 elderly.tw,kw. (263149)
  - 14 geriatric\*.tw,kw. (68513)
  - 15 senior.tw,kw. (36217)
  - 16 (older adj (adult? or m#n or wom#n or person? or people)).tw,kw. (146170)



- 17 Geriatrics/ (30568)
- 18 (Age? adj3 (over or older) adj2 (5# or 6# or 7# or 8# or 9#)).tw. (46188)
- 19 sexagenarian.tw,kw. (62)
- 20 septuagenarian.tw,kw. (193)
- 21 octogenarian.tw,kw. (1510)
- 22 nonagenarian.tw,kw. (618)
- 23 centenarian.tw,kw. (771)
- 24 gerontolog\*.tw,kw. (7790)
- 25 (">=5# years old" or ">5# years old").tw. (14725)
- 26 (">=6# years old" or ">6# years old").tw. (22928)
- 27 (">=7# years old" or ">7# years old").tw. (14168)
- 28 (">=8# years old" or ">8# years old").tw. (8397)
- 29 (">=9# years old" or ">9# years old").tw. (2783)
- 30 or/12-29 [Older persons] (3471926)
- 31 exp Neoplasms/ (3508823)
- 32 (cancer\* or neoplas\* or tumo\* or carcinoma\* or hodgkin\* or nonhodgkin\* or non-hodgkin\* or adenocarcinoma\* or leuk?emia\* or metasta\* or malignan\* or lymphoma\* or sarcoma\* or melanoma\* or myeloma\* or oncolog\*).tw,kw. (3964650)
- 33 31 or 32 [Cancer] (4709617)

- 34 exp decision making/ (213387)
- 35 (decision? adj1 mak\*).tw,kw. (170931)
- 36 patient? decision\*.tw,kw. (4037)
- 37 "patient acceptance of health care"/ (50756)
- 38 patient participation/ (27379)
- 39 patient preference/ (9613)
- 40 professional-patient relations/ or physician-patient relations/ (101878)
- 41 ((share? or sharing) adj2 decision\*).tw,kw. (10769)
- 42 (decide? or deciding).tw,kw. (74777)
- 43 Clinical Decision-Making/ (12191)
- 44 (patient? adj1 (preference? or view?)).tw,kw. (15930)
- 45 Consultation pattern?.tw. (125)
- 46 (trust adj2 (patient\* or clinician\* or doctor\* or GP or health service?)).tw. (2388)
- 47 Trust/ (10715)
- 48 help-seeking.tw. (6506)
- 49 help-seeking behavior/ (971)
- 50 or/34-49 [shared decision making broad] (591794)
- 51 11 and 30 and 33 and 50 [Primary Care Older Person Cancer Decision making] (1758)

**Ovid APA PsycInfo 1806 to July Week 3 2021**

Search Date: 29/07/2021

Records found: 251

Search strategy notes:

Search lines ending in a '/' are subject heading searches.

Search lines beginning 'exp' are exploded subject heading searches.

Search lines ending in .tw. search in the title and abstract only.

Search lines ending in .tw,id search in the title, abstract and key concept only.

or/x-y combines search sets in the range x-y with Boolean operator OR.

\* is used for truncation of words.

# is used for a compulsory wildcard.

? is used for an optional wildcard.

y Nx z searches for where there are up to x-1 words in-between word y and the word z.

"xx xx" searches for the exact phrase that is displayed within the quote marks

-----  
1 GP?.tw. (16342)

2 (primary adj4 (care or health\* or service\* or center\* or centre\* or practice\*)).tw. (45200)

- 3 ((general or family) adj (practice\* or practitioner\* or physician\* or doctor\* or nurs\*)).tw. (20277)
- 4 general practitioners/ (6065)
- 5 family medicine/ (1272)
- 6 family physicians/ (1572)
- 7 primary health care/ (19254)
- 8 "out of hours".tw,id. (230)
- 9 "after hours".tw,id. (240)
- 10 (population-based study or population-based survey?).tw. (6321)
- 11 or/1-10 [Primary Care] (80527)
- 12 (aged\* or very old\*).ag. (345515)
- 13 elderly.tw,id. (65477)
- 14 geriatric\*.tw,id. (18543)
- 15 senior.tw,id. (22424)
- 16 (older adj (adult? or m#n or wom#n or person? or people)).tw,id. (76600)
- 17 exp geriatrics/ (14266)
- 18 Gerontology/ (9829)
- 19 (Age? adj3 (over or older) adj2 (5# or 6# or 7# or 8# or 9#)).tw. (15260)
- 20 sexagenarian.tw,id. (10)

- 21 septuagenarian.tw,id. (14)
- 22 octogenarian.tw,id. (86)
- 23 nonagenarian.tw,id. (47)
- 24 centenarian.tw,id. (197)
- 25 gerontolog\*.tw,id. (6460)
- 26 (">=5# years old" or ">5# years old").tw. (1667)
- 27 (">=6# years old" or ">6# years old").tw. (2730)
- 28 (">=7# years old" or ">7# years old").tw. (1348)
- 29 (">=8# years old" or ">8# years old").tw. (1097)
- 30 (">=9# years old" or ">9# years old").tw. (457)
- 31 or/12-30 [Older persons] (412656)
- 32 exp neoplasms/ (54946)
- 33 (cancer\* or neoplas\* or tumor\* or carcinoma\* or hodgkin\* or nonhodgkin\* or non-hodgkin\* or adenocarcinoma\* or leuk?emia\* or metasta\* or malignan\* or lymphoma\* or sarcoma\* or melanoma\* or myeloma\* or oncolog\*).tw,id. (91023)
- 34 32 or 33 [Cancer] (92374)
- 35 decision making/ or exp choice behavior/ or exp group decision making/ (124422)
- 36 (decision? adj1 mak\*).tw,id. (117568)
- 37 patient? decision\*.tw,id. (1203)

- 38 client attitudes/ (17911)
- 39 client participation/ (2494)
- 40 therapeutic processes/ (26150)
- 41 ((share? or sharing) adj2 decision\*).tw,id. (3733)
- 42 (decide? or deciding).tw,id. (29224)
- 43 (patient? adj1 (preference? or view?)).tw,id. (3971)
- 44 Consultation pattern?.tw. (34)
- 45 (trust adj2 (patient\* or clinician\* or doctor\* or GP or health service?)).tw. (927)
- 46 "trust (social behavior)"/ (12268)
- 47 help-seeking.tw. (9652)
- 48 exp \*help seeking behavior/ (11297)
- 49 or/35-46 [shared decision making] (252294)
- 50 11 and 31 and 34 and 49 [Primary Care Older Person Cancer Decision making] (251)

**ProQuest Applied Social Sciences Index and Abstracts (ASSIA)**

Search Date: 29/07/2021

Records found: 109

Search strategy notes:

Searches beginning 'noft' search in all fields except the full text.

Search lines beginning ' MAINSUBJECT.EXACT.EXPLODE' are exploded subject heading searches.

y NEAR/x z searches for where word y and the word z are within x words apart.

"xx xx" searches for the exact phrase that is displayed within the quote marks

-----

S1 (noft((GP OR GPs OR "out of hours" OR "after hours")) OR noft((primary NEAR/4 (care OR health OR healthcare OR service OR center OR centre OR practice))) OR noft((general NEAR/1 (practice OR practitioner OR physician OR doctor OR nurse OR nursing))) OR NOFT(family NEAR/1 (practice OR practitioner OR physician OR doctor OR nurse OR nursing)) OR (MAINSUBJECT.EXACT("General practitioners") OR MAINSUBJECT.EXACT.EXPLODE("General practice")) OR noft("population-based study" OR "population-based survey" OR "population-based surveys")) AND (noft((older NEAR/1 (adult OR adults OR men OR man OR women OR woman OR person OR people))) OR noft(((Age OR Aged) NEAR/3 (over OR older) NEAR/2 (50 OR 55 OR 60 OR 65 OR 70 OR 75 OR 80 OR 85 OR 90 OR 95))) OR noft(elderly OR geriatric OR geriatrics OR senior OR gerontology) OR noft(sexagenarian OR septuagenarian OR octogenarian OR nonagenarian OR centenarian) OR (MAINSUBJECT.EXACT.EXPLODE("Elderly people") OR MAINSUBJECT.EXACT.EXPLODE("Older people"))) AND (noft(cancer OR cancerous OR neoplasm OR tumor OR tumour OR carcinoma OR hodgkin OR nonhodgkin OR non-hodgkin OR adenocarcinoma) OR noft(leukemia OR leukaemia OR metastatic OR metastasis OR metastases OR malignant OR malignancy OR malignancies OR lymphoma OR sarcoma OR melanoma OR myeloma OR oncology OR oncological OR oncologist OR oncologists) OR (MAINSUBJECT.EXACT.EXPLODE("Cancer") OR MAINSUBJECT.EXACT.EXPLODE("Tumours"))) AND (noft(decide OR decision OR deciding) OR noft(prefer OR preference OR view OR viewpoint OR attitude OR accept OR acceptance) OR (MAINSUBJECT.EXACT("Patient participation") OR MAINSUBJECT.EXACT.EXPLODE("Decision making")) OR (MAINSUBJECT.EXACT("Patient participation") OR MAINSUBJECT.EXACT.EXPLODE("Decision making")) OR noft(trust OR "help-seeking") OR (MAINSUBJECT.EXACT.EXPLODE("Trust") OR MAINSUBJECT.EXACT("Helpseeking")))

**Web of Science Core Collection** which included the following searched simultaneously:

- Arts & Humanities Citation Index (Web of Science) 1975-present
- Conference Proceedings Citation Index- Science ( Web of Science) 1990-present
- Conference Proceedings Citation Index- Social Science & Humanities (Web of Science) 1990-present

- Science Citation Index-Expanded (Web of Science) 1900-present
- Social Sciences Citation Index (Web of Science) 1900-present
- Emerging Sources Citation Index (Web of Science) 2015-present

Search Date: 29/07/2021

Records found: 515

Search strategy notes:

Searches beginning TS= search in TOPIC....

\* is used for truncation.

\$ is used for an optional wildcard.

? Is used for a compulsory wildcard.

y near/x z searches for where there are up to x words in-between word y and the word z.

"xx xx" searches for the exact phrase that is displayed within the quote marks

---

# 17	515	#16 AND #11 AND #10 AND #5
# 16	873,931	#15 OR #14 OR #13 OR #12
# 15	4,167	TS=(trust near/2 (patient* or clinician* or doctor* or GP or "health service*") )
# 14	17,629	TOPIC: (Consultation pattern*) OR TOPIC: (help-seeking)
# 13	270,162	TOPIC: ((decide? or deciding) ) OR TOPIC: ((patient\$ near/1 (prefer* or view* or participat* or accept* ) ) OR TOPIC: ((patient\$ near/2 (relations* or communication* ) )



- # 12 617,518 TOPIC: ((decision\$ near/1 mak\*) ) OR TOPIC: ((patient\$ decision\*) ) OR TOPIC: (((share\$ or sharing) near/2 decision\*))
- # 11 4,932,788 TS= (cancer\* or neoplas\* or tumo\* or carcinoma\* or hodgkin\* or nonhodgkin\* or non-hodgkin\* or adenocarcinoma\* or leuk\$emia\* or metasta\* or malignan\* or lymphoma\* or sarcoma\* or melanoma\* or myeloma\* or oncolog\*)
- # 10 851,607 #8 OR #7 OR #6 or #9
- # 9 75,545 TOPIC: (((Age or aged) near/3 (over or older) near/2 (50 or 55 or 60 or 65 or 70 or 75 or 80 or 85 or 90 or 95) ))
- # 8 10,475 TOPIC: (sexagenarian\$ or septuagenarian\$ or octogenarian\$ or centenarian\$ or nonagenarian\$)
- # 7 450,836 TOPIC: (older near/1 (adult\$ or m?n or wom?n or person\$ or people) )
- # 6 434,263 TOPIC: (elderly OR geriatric\* or senior or gerontolog\*)
- # 5 469,587 #4 OR #3 OR #2 OR #1
- # 4 48,039 TS=("out of hours" or "after hours" or "population-based study" or "population-based survey\*")
- # 3 118,824 TOPIC: ((general or family) near/1 (practice\* or practitioner\* or physician\* or doctor\* or nurs\*) )
- # 2 209,234 TOPIC: (primary near/4 (care or health\* or service\* or center\* or centre\* or practice\*) )
- # 1 148,566 TOPIC: (GP or GPs)

**Wiley Cochrane Central Register of Controlled Trials: Issue 7 of 12, July 2021**

Search Date: 29/07/2021

Records found: 213

Search strategy notes:

Searches ending....

Searches beginning MeSH descriptor and ending explode all trees

\* is used for truncation.

\* is used for an optional wildcard.

? Is used for a compulsory wildcard.

y near/x z searches for where there are up to x-1 words in-between word y and the word z.

{or #x-#y} combines search sets in the range x-y with Boolean operator OR.

- 
- #1 MeSH descriptor: [General Practitioners] explode all trees
  - #2 MeSH descriptor: [Physicians, Primary Care] explode all trees
  - #3 MeSH descriptor: [Family Practice] explode all trees
  - #4 (GP or GPs or "out of hours" or "after hours"):ti,ab,kw
  - #5 (primary near/4 (care or health\* or service\* or center\* or centre\* or practice\*)):ti,ab
  - #6 ((general or family) NEXT (practice\* or practitioner\* or physician\* or doctor\* or nurs\*)):ti,ab
  - #7 MeSH descriptor: [After-Hours Care] explode all trees
  - #8 "population-based study" or (population-based NEXT survey\*)
  - #9 {or #1-#8}
  - #10 MeSH descriptor: [Aged] explode all trees

- #11 (elderly or geriatric\* or senior or gerontolog\*):ti,ab,kw
- #12 MeSH descriptor: [Geriatrics] explode all trees
- #13 (older NEXT (adult\* or m?n or wom?n or person\* or people)):ti,ab,kw
- #14 (Age\* near/3 (over or older) near/2 (50 or 55 or 60 or 65 or 70 or 75 or 80 or 85 or 90)):ti,ab
- #15 (sexagenarian or septuagenarian or octogenarian or nonagenarian or centenarian):ti,ab,kw
- #16 {or #10-#15}
- #17 MeSH descriptor: [Neoplasms] explode all trees
- #18 (cancer\* or neoplas\* or tumo\* or carcinoma\* or hodgkin\* or nonhodgkin\* or non-hodgkin\* or adenocarcinoma\* or leuk\*emia\* or metasta\* or malignan\* or lymphoma\* or sarcoma\* or melanoma\* or myeloma\* or oncolog\*):ti,ab,kw
- #19 #17 or #18
- #20 MeSH descriptor: [Decision Making] explode all trees
- #21 (decision\* near/1 mak\*):ti,ab,kw
- #22 (patient\* NEXT decision\*):ti,ab,kw
- #23 MeSH descriptor: [Patient Acceptance of Health Care] this term only
- #24 MeSH descriptor: [Patient Participation] this term only
- #25 MeSH descriptor: [Patient Preference] this term only
- #26 MeSH descriptor: [Professional-Patient Relations] this term only
- #27 MeSH descriptor: [Physician-Patient Relations] this term only

- #28 ((share\* or sharing) near/2 decision\*):ti,ab,kw
- #29 (decide\* or deciding):ti,ab,kw
- #30 MeSH descriptor: [Clinical Decision-Making] explode all trees
- #31 (patient\* near/1 (preference\* or view\*)):ti,ab,kw
- #32 Consultation NEXT pattern\*:ti,ab,kw
- #33 (trust near/2 (patient\* or clinician\* or doctor\* or GP or health service?)):ti,ab,kw
- #34 MeSH descriptor: [Help-Seeking Behavior] this term only
- #35 help-seeking:ti,ab,kw
- #36 {or #20-#35}
- #37 #9 and #16 and #19 and #36

**Wiley Cochrane Database of Systematic Reviews: Issue 7 of 12, July 2021**

Search Date: 29/07/2021

Records found: 2

\*same search strategy as Cochrane Central Register of Controlled Trials (Wiley): Issue 7 of 12, July 2021

**Other Sources**

**ClinicalTrials.gov**

Search Date: 29/07/2021

Records found: 42

Search strategy notes:

“xx xx” searches for the exact phrase that is displayed within the quote marks

---

Advanced Search interface used.

*Condition or disease:* Cancer OR Tumour OR Tumor OR neoplasm

AND

*Other terms:* “primary care” OR “general practice” OR “general practitioner” OR “family practice” or “family practitioner” OR “population-based”

AND

*Title:* decision OR choice OR choose OR view OR preference OR decide OR trust OR help-seeking

AND

*Eligibility Criteria > Age Group Filters:* Older Adults 65+

**ISRCTN registry [www.isrctn.com](http://www.isrctn.com)**

Search Date: 29/07/2021

Records found: 30

Search strategy notes:

“xx xx” searches for the exact phrase that is displayed within the quote marks

-----  
("older people" OR elderly OR geriatric) (choice OR view OR preference OR decision) (cancer OR tumour OR tumor OR neoplasm)

Searched in textword search field.

**Evidence Search** <https://www.evidence.nhs.uk/>

Search Date: 29/07/2021

Records found: 326

Search strategy notes:

“xx xx” searches for the exact phrase that is displayed within the quote marks

(-----

"primary care" OR "general practice" OR "general practitioner" OR "population-based") AND ("older people" OR elderly OR geriatric) AND (Cancer OR Tumour OR Tumor OR neoplasm) AND ("Decision making" OR "patients decision" OR "shared decision")

Filters used:

Secondary Evidence or Primary Research

Area of Interest: Commissioning and Management

