Appendix 1. Search Strategy. (consultation date: 03/6/2024).

Database	Search Strategy	Results					
PubMed	((("Case Management"[Mesh]) OR ("Patient Navigation"[Mesh])) OR ("Critical Pathways"[Mesh])) AND (("Neoplasms"[Mesh])) OR ("Palliative Care"[Mesh])) AND ("palliative care"[tiab] OR "Palliative Treatment"[tiab] OR "Palliative Treatments"[tiab] OR "Palliative Treatments"[tiab] OR Tumor*[tiab] OR Tumor*[tiab] OR Cancer[tiab] OR Carcinoma[tiab] OR Neoplas*[tiab] OR Malignan*[tiab]) AND ("Case Manager"[tiab] OR "Case management"[tiab] OR "Care manager"[tiab] OR "Care management"[tiab] OR "nurse navigator"[tiab] OR "patient navigation"[tiab] OR "critical pathway"[tiab])	526					
Scopus	("case manag*" OR "patient navigat*" OR "nurse navigat*" OR "critical path*" OR "care manag*") AND ("neoplasm*" OR "Cancer*" or "tumor*" or "tumour*") AND ("palliative care*" or "palliative treatment*" OR "Treatment Withdrawal" OR "palliative medicine" OR "terminal")						
EMBASE	("case manag*" OR "patient navigat*" OR "nurse navigat*" OR "critical path*" OR "care manag*") AND ("neoplasm*" OR "Cancer*" or "tumor*" or "tumour*") AND ("palliative care*" or "palliative treatment*" OR "Treatment Withdrawal" OR "palliative medicine" OR "terminal")	1159					
CINAHL	((MH "Case Management") OR "Case Management" OR (MH "Case Managers") OR((MH "Patient Navigation") OR "Patient Navigation") OR ((MH "Critical Path") OR "critical path") OR "care management" OR "nurse navigator") AND ((MH "Neoplasms+") OR "Neoplasms" OR cancer*) AND ((MH "Palliative Care") OR "Palliative Care" OR (MH "Treatment Withdrawal") OR (MH "Palliative Medicine") OR "Palliative Treatment" OR (MH "Terminal Care (Saba CCC)+") OR (MH "Terminal Care+") OR (MH "Terminally Ill Patients+") OR "terminal")	268					
PsycINFO	("case manag*" OR "patient navigat*" OR "nurse navigat*" OR "critical path*" OR "care manag*") AND ("neoplasm*" OR "Cancer*" or "tumor*" or "tumour*") AND ("palliative care*" or "palliative treatment*" OR "Treatment Withdrawal" OR "palliative medicine" OR "terminal")	95					
Web Of Science	("case manag*" OR "patient navigat*" OR "nurse navigat*" OR "critical path*" OR "care manag*") AND ("neoplasm*" OR "Cancer*" or "tumor*" or "tumour*") AND ("palliative care*" or "palliative treatment*" OR "Treatment Withdrawal" OR "palliative medicine" OR "terminal")	411					
Google Scholar	("case manager" OR "patient navigator" OR "nurse navigator" OR "critical path" OR "care manag") AND ("neoplasm" OR "Cancer" or "tumor" or "tumour") AND ("palliative care" or "palliative treatment" OR "Treatment Withdrawal" OR "palliative medicine" OR "Terminal")	111					
Keywords: Ca	ase Management; Cancer; Palliative Care.						

## Appendix 2 – Reason for article exclusion

N	AUTHOR	YEAR	тпи	INCLUSION (Reason)
1	Yamarik	2022	Nurse-Led Telephonic Palliative Care A Case-Based Series of a Novel Model of Palliative Care Delivery	No (No Case manager)
2	Valenti	2022	Nurse-led telephone follow-up for early palliative care patients with advanced cancer	Yes
			Analysis of team types based on collaborative relationships among doctors, home-visiting nurses and care managers for effective support of patients in end-	
3	Fujita	2017	of-life home care	No (Insufficient data)
4	Fillion	2011	Implementation of screening for distress with professional cancer navigators	No (Insufficient data)
5	Schindel	2023	Associations among navigational support and health care utilization and costs in patients with advanced cancer: An analysis based on administrative health insurance data	No (Insufficient data)
6	Knudsen	2022	The American Cancer Society and patient navigation: Past and future perspectives	No (Insufficient data)
7	Dwyer	2022	Collective pursuit for equity in cancer care: The National Navigation Roundtable	No (Insufficient data)
8	Miller	2020	Academic Nurse Navigation: Unique Aspects and Strategies for Success	No (Insufficient data)
9	Phillips	2019	In their own words: patient navigator roles in culturally sensitive cancer care	No (Lay navigators)
10	Lockhart	2003	The PhoenixCare Program	Yes
11	Head	2010	Palliative care case management: increasing access to community-based palliative care for Medicaid recipients	No (Insufficient data)
12	Meier	2004	Integrating case management and palliative care	No (Not oncological focus)
13	Franklin	2022	Solidifying roles, responsibilities, and the process of navigation across the continuum of cancer care: The Professional Oncology Navigation Task Force	No (Insufficient data)
14	Head	2009	Mark's journey: a study in medicaid palliative care case management	Yes
15	Wiederholt	2007	Bridging gaps in multidisciplinary head and neck cancer care: nursing coordination and case management	No (no palliative care)
16	Kuhn	2012	Identifying patients suitable for palliative carea descriptive analysis of enquiries using a Case Management Process Model approach	Yes
17	Howell	2004	Enhancing the role of case managers with specialty populations: development and evaluation of a palliative care education program	No (Not oncological focus)
18	Jakobsen	2014	Case study shows that the case manager function for cancer patients is used unevenly across the different cancer forms	No (no palliative care)
19	Lee	2021	Patient navigator and community health worker attitudes toward end-of-life care	No (Not oncological focus)
20	Fischer	2013	Apoyo con carino: RCT of patient navigation to improve palliative care outcomes	No (Not oncological focus)
21	van der Plas	2017	Informal care givers' experiences with support in primary palliative care when a case manager is involved: A descriptive study in the Netherlands	No (secondary analysis of another included article)
22	van der Plas	2015	Palliative care case management in primary care: A descriptive study about referrals in relation to treatment aims	Yes
23	Oatley	2020	A nurse practitioner-led model of care improves access, early assessment and integration of oncology services: an evaluation study;	No (no palliative care)
24	Özçelik	2014	Case management based multidisciplinary care protocol in the palliative care of cancer patients	No (insufficient data)
25	Özçelik	2014	Examining the effect of the case management model on patient results in the palliative care of patients with cancer	Yes
26	Wu	2014	Economic value of a cancer case management program;	Yes
27	Mercadante	2016	The palliative-supportive care unit in a comprehensive cancer center as crossroad for patients' oncological pathway;	No (No Case manager)
28	Shah,S. H	2005	Integrated care pathway for the last days of life	No (insufficient data)
29	The Lancet	2014	Palliative care: More than one chance to get it right	No (insufficient data)
30	Simone C.	2015	Early palliative care and integration of palliative care models in modern oncology practices	No ( insufficient data)
31	Fischer S.	2007	Patient navigation: A culturally competent strategy to address disparities in palliative care	No (insufficient data)
32	Bookbinder	2005	Improving End-of-Life Care: Development and Pilot-Test of a Clinical Pathway	Yes
33	Oncology Nursing Society	2018	Role of the Oncology Nurse Navigator Throughout the Cancer Trajectory	No (insufficient data)
34	Haylock	2013	Patient navigation in cancer care. Introduction	No (insufficient data)
35	Hospital case management	2016	When patients are stressed, in pain, suggest palliative care	No (insufficient data)
36	Wells,M	2017	Recognising European cancer nursing (RECaN): A systematic review of trial evidence that helps to identify the roles and interventions of nurses caring for patients with cancer	No (insufficient data)
37	Nadolny,S	2021	The character of early palliative care interventions on adult clinical oncology: Results of a systematic review	No (insufficient data)
38	Chan,Raymond J	2013	End-of-life care pathways for improving outcomes in caring for the dying	No (insufficient data)
39	Han,P. K.	2010	The coordination of primary and oncology specialty care at the end of life	No (insufficient data)
40	Addington-Hall	1992	Randomised controlled trial of effects of coordinating care for terminally in cancer patients	No (No Case manager)
41	Alfieri	2023	Characterizing Different Multidisciplinary Team Models Implemented Within One Comprehensive Cancer Center	No (No palliative care, no Case Manager)
42	Burbage	2024	Introduction _ Patient Navigation in Cancer Care	No (no palliative care)
43	De Domenico	2024	Nurse Navigator of Cancer Patients:	No (no palliative care)
45	De Domenico	2024	contributions to the discussion on the national stage	No (no pamative care)
44	Gerhardt	2023	Qualitative evaluation of a palliative care case management intervention for patients with incurable gastrointestinal cancer (PalMaGiC) in a hospital department	Yes
			Nurse-led supportive Coordinated Transitional Care	
45	Madrigal	2023	(CTraC) program improves care for veterans	Yes
			with serious illness	
46	Owens	2024	Needs of Oncology Nurse Navigators Serving Young or Metastatic Breast Cancer Patients	No (insufficient data)
47	Rodriguez	2024	TransitionalCareNavigation	No (insufficient data)
			Associations among navigational support and health care	
48	Shindel	2022	utilization and costs in patients with advanced cancer: An	Yes
			analysis based on administrative health insurance data	
49	Varanasi	2024	Patient navigation job roles by levels of experience:  Workforce Development Task Group, National Navigation	No (no palliative care)
			Roundtable	, and parties out of
50	Paranhos	2023	Metastatic Rectal Cancer in Young Adult After Child Cancer Survivor: Challenges for Nurse Navigator-A Case Study	No (insufficient data)
51	Bailey	2023	Implementation and Impact of an Oncology Nurse Navigator-Led Survivorship Program in a Hospital Outpatient Setting	No (insufficient data)
52	Zhang	2024	Multi-Voiced Narrative of Home-Based Palliative Care: Report of One Case	No (Insufficient data)
53	Fusetti	2023	Palliative Care Nursing Case Management in Young Adults With Advanced Rare Cancer: Case Discussion of a Multidisciplinary Approach	Yes

## Appendix 3 data charting from original studies

First author	Year	Title	Study design	Country	Setting	Sample description (n)	Intervention	Monodisciplinary or multidisciplinary	Cm profession	Cm delivery
Valenti	2022	Nurse-led tele- phone follow-up for early palliative care patients with advanced cancer	Observational, retrospective	Italy	In Hospital	patient and caregiver phone calls (323 phone calls for a total of 171 patients)	Palliative care nurse-led telephone case management	Monodisciplinary	PC nurse with training on medication and counselling	Phone
Lockhart	2003	The PhoenixCare Program	Model description	USA	Home based services	model description paper (136)	Defined set of home-based services address- ing disease and symptom management, education to patient and familyicaregiver, and social, psychological, and spiritual support services	Monodisciplinary	Three registered nurse case managers were the primary caregivers while a medical director, a half-time social worker, and a half-time pastoral counselor acted primarily as consultants to the case more consultants to the case performed the team performed.	Phone and home visits with adapted ration between disease acuity. CM Service outside hospital.
Head	2009	Mark's journey: a study in medicaid palliative care case management	case study	USA	Not stated	1	illustrate the implementation of palliative care case management by describing in detail the case management of a Medicaid recipient diagnosed with a life-threatening disease.	Multidisciplinary	PC nurse ( RN with PC training) + social worker	not stated
Kuhn	2012	Identifying pa- tients suitable for palliative care—a descriptive analysis of enquiries using a Case Management Process Model approach	Retrospective	Germany	In Hospital	1000 enquiries	1	Monodisciplinary	PC experience nurse with additional training certified by the German Society of Care and Case Management	mostly telephone, but also fax, email and personal
Van Der Plas	2015	Palliative care case management in primary care: A descriptive study about referrals in relation to treat- ment aims	Cross-sectional survey	Nether- lands	Home based services	questionnaires 687 pts 448 referrers	questionnaire completed by case managers and referrers to case management	Monodisciplinary	nurse with expertice in PC	home care
Wu	2014	Economic value of a cancer case management program	Retrospective	USA	Health care system	8843 pts	telephonic interview	Monodisciplinary	experienced oncology nurses	phone
Bookbinder	2005	Improving End-of- Life Care: Devel- opment and Pilot-Test of a Clinical Pathway	Pilot	USA	In Hospital	101+156 pts	chart audit tool	Multidisciplinary	advanced practice nurses, physicians, an ethicist, researchers, educators, a pharmacist, social workers, a dieticians, and chaplains. Two part-time partice nurses coordinated the activities of the team	hospital
Ozcelik	2014	Examining the effect of the case management model on patient results in the palliative care of patients with cancer	Experimental investigation	Turkey	In Hospital	22+22	palliative care cancer case management intervention	Multidisciplinary	nurse (education not stated) with involvement of: social worker, psychia- trists, and dietician)	hospital
Gerhardt	2023	Qualitative evalua- tion of a palliative care case manage- ment intervention for patients with incurable gastro- intestinal cancer (PalMaGiC) in a hospital depart- ment	Qualitative study	Denmark	In Hospital	14	palliative care cancer case management intervention	Monodisciplinary	Specialist nurses ex- perienced in surgical gastroenterology and paliative care	In hospital, Phone
Madrigal	2023	Nurse-led support- ive Coordinated Transitional Care (CTraC) program improves care for veterans with serious illness	Implementation study	USA	Health care system	104	a telephone-based, nurse-driven program shown to decrease readmissions	Monodisciplinary	RN NCM with experience in geriatrics and palliative care	Phone
Shindel	2022	Associations among navigational support and health care utilization and costs in patients with advanced cancer: An analysis based on administrative health insurance data	Secondary analysis	Germany	In Hospital	717 patients	a telephone-based, nurse-driven program	Monodisciplinary	Social care nurses with a professional background and nursing training, occupational training as social worker, or a degree in social pedagogy	Phone, email, or in hospital
Fusetti	2023	Palliative Care Nursing Case Management in Young Adults With Advanced Rare Can- cer: Case Discus- sion of a Multidisci- plinary Approach	Case study	Italy	In Hospital	1 patient and 2 caregivers	palliative care cancer case management intervention	Monodisciplinary	nurse with expertice in PC	Phone, In hospital

## Appendix 3 data charting from original studies

First author Yes	Year	Cm model (if stated)	Activities	Outcomes	Main results	Case lead	Gaps in research
Valued 2022	2 not stand	d	-distributed in the management of cases related symptoms and under the control of	Effectiveness	*Norm bull skephone service in a feasible and effective seathed to offer early PC follow up.  The season of the se	222 phone calls for a smilet 177 patients.  March 2020-August 2020	-pulses and COV unifolded on the service -consmit layer -december of the service -consmit layer -discrimens of the service.
Lockhart 2003	2 The Phoe managem and prese clinical ca	orbifors  Coan meet referenced.  The description of the control of	Disease and symptom measurement, Educational Services, Support Services, TRILE EXELENT PERSONNEL Medical Messagement, energousy response plan, Abrace Can Theoritic, Services and Control of the Contro	"improve patient quality of He "improve patient quality of He "dealtar costs with usual practice	**The The Controlled Production of Controlled Produ	6.63 pc NC Cd $(600) \hspace{1cm} 30.35 \hspace{1cm} per \hspace{1cm} N0 \hspace{1cm} pad)$	Characteristic flow patient most filled in handle done which found CM (Spreach, and CM (Spr
Steed 2000	9 Yellow and American		Companies of the control of the cont	Com militario con principal via destinavia con consistenti con	and contained and an experimental process of the control of the co	and month (from happer)	and staned
Esha 2012	2 Broker Ma		International Conference of the Conference of th	makes or do how the case management was used by different experting proops and (a) how the case management was used by different experting proops and (a) how case management and for patterns over excess and the patterns over excess excess and the patterns.	when the property of the prope	and record	equality of the handling of the surgests.  Suppose and deficiences on the parient hereit,  Suppose and adjusted of the surgests and suppose of the surgests of
Van Der Plas 2015	S patient added model	drocacy	"Adult the printed and the course I have to flower time for engage".  "Indicate the printed and the course I have to flower time for the printed and projection."  "Indicate the printed and the printed and projection."  "Indicate the printed and the printed and projection."  "Indicate the printed and the printed and p	contellactiveues	Mars priores selected have a mobilished and reference also piles, like on piles, like any personany and sense and contact and plants and the form with a hospital and all pollutions. I would not all which are also prior as it contact for a statistical piles in a specific to a sense of all expert of designating parts as a most for a statistical piles in a specific to a sense of all any personal piles and a sense of the angular piles and a sense of the angular piles in a sense of all any personal piles and a sense of the angular piles and a sense of the angular piles in a sense of the angular piles and a sense of the angular piles and a sense of the angul	XA.	MA
Wu 2014	4 oncology s physicians	y names with support of ne and social workers	telephonic case management program on cancer-related medical conte and betales use. "All pipe is knowledge "support "management of parisans proprieties" features regarding beginn an approprieties" features regarding approprieties" features regarding beginn services and palitative care "revisenting medicarisate.	cost-effectivenes	Salf-salected gardisparies in the cancer support program was associated with hower-cancer en- hand medical costs and geneter hospites use.	N.A.	- effect of CM on artic chemotherapy treatment cods - prespective studies - looser rick unbanared parlents.
Buddinder 200	Suggest for liquid securities		Specific in consensus and receives with a consensus of the content of the consensus of the	Effective	has talken related frags port for the seas cardes of 15 grows secured. It peaks because opening to inverted into container with the perhaps, and 6 constitution requests.	37 partners in t-manufac	Small Silver of the primary is availed an electrical and activations of the primary is availed an electrical and activations of the primary is availed an electrical and activation of the primary is a second activation of the second
Greatilik 2014	4 model of a		Integration to request designs of patients or green as management, production of the measurement of the meas	ergenne, godin et tile, meteor and Engly mildesten, and direct come	The difference between best opened must be used and the distribution of comparison of an interior particular distribution of the comparison of the compariso	**	It is consequently the entire of the control of the
Gerhardt 2022	2 Ad Hoc de	devoloped - FaiMaGIC	-assessment and management of pallitive and home care needsinterviews, care planning, case and menturent overfloation and needs based follow upputents and caregivers were able to contact the specialist name directly.	Variations in quality of life Satisfaction with intervention Proceived collaboration	Participants perceived the intervention or Eligs p. up p. ref. as a secure Wildia in the healthcare system side or provided 24 to secure, a designated specialist saves, and a particle healthcare alliance. Using a noble about opposeds, Palhatistic Changool the perfect pasts' focus from diseases to quality of life.	N.L.	Parential areas for importing of the intervention include horsoning the force on continuity premaring loop-from the time of diagnosis and throughout the Elizent trajectory.  Need for machineumic studies.
Madrigal 2023	3 not stated	4	Madd designificary core confinction namels  Confine core made and performance  Tables privately indicated and office and distributed indicated and designificant and designificant and designificant d	pallation and hospics care was, note care use, Manuschauetts Medical Others for its Manuschauetts Medical Others for the care of the care	Es exaction was 1% have high a send in height date the exaction group in "D is.  The exaction of the exaction	Me pulson in 1. E pues	Burther program evaluation with confid attention to patient reported dissentent measures
		4	assess patient needs and identify gaps in care contact to inpution and outputions, therapiers, support groups, early radiation or	parient-reported quality of life shift from impatient to outparient care	It's parlients showed shorter average lengths of hospital stays (11 days vs. 15 days, p. +0.001). In the IG, 25% fewer medications were prescribed and these were on average 15% fewer outparlient decise contacts per model. Average billed costs in the IG wore 25% lower than in the costrols (1574 LDR vs. 1568 CER, p. 45.00).		Pattern research should examine the advantages of appointing a manigator in hospital can be likeled to parties manigation effects in the outputters cans sector.
Shindel 2022	2 not stated		assess published these land salestary gaps in care published cases and disspanses, respect groups, early published cases and disspanses, respecting support groups, early published cases reduced barriers to receiving timely services educate parties at about the healthlane system				Need to test the intervention in larger group independent of the health insurance type, beyond the cancer diagnoses and severities included.

 $PC = Palliative \ Care, RN= \ Registered \ Nurse, CM= \ Case \ Manager, CMG= \ Case \ management, \ IG= Intervention \ group, \ NCM= \ Nurse \ CaSe \ Manager, ICU= Intensive \ Care \ Unit.$ 

Appendix 4. Analysis of case management activities derived from the studies, based on case management service delivery mode

Case management Service Delivery Mode	Studies	Montly case load estimation	Professional structure of case management service	Case Management Activities in Palliative Care Practice
Telephone	Valenti 2022 Wu 2014 Madrigal 2023	29	Monodisciplinar (Nurse)	Management of cancer-related symptoms Medication and treatment education Medication refills Scheduling of appointments for patients Homecare organisation Hospice information Coordinating care Facilitate completion of advance directives and orders for life sustaining treatment Management of interdisciplinary issues Psychological, and emotional support and counselling Community/specialists resource referral Cost savings interventions Main family and patient referral and support Monitoring of pharmacotherapy Provision of medical/nursing/ pratical knowledge and informations Assessment, Screening and Anticipation of care needs Reviewing pharmacotherapy Follow up Discharge plan Optimization
Home Care	Van der Plaas 2014	32	Monodisciplinar (Nurse)	Coordinating care Management of interdisciplinary issues Advocacy within the system Bereavement management (assessment for patient and caregivers, education and support) Home visits Negotiation between patient and healthcare providers Main family and patient referral and support Monitoring of pharmacotherapy Provision of medical/nursing/ pratical knowledge and informations Anticipating care needs Psychological, and emotional support and counselling Spiritual support and counselling
In Hospital	Bookbinder 2005  Ozcelik 2014	7	Multidisciplinar team work approach (nurses, physicians, ethicist, research- ers, educators, pharmacist, social workers, dieticians, and chaplains).  Coordination of the activities by nurses  Multidisciplinar team work approach	Management of cancer-related symptoms Advance Care Planning Tailored scheduling of appointments for patients Psychological, and emotional support and counselling Community/specialists resource referral Family meeting Coordinating care Bereavement management (assessment for patient and caregivers, education and support) Networking of healthcare providers through frequent communication for informations and advices Main family and patient referral and support Provision of medical/nursing/ pratical knowledge and informations Provision of condolence and educational materials
Mixed (delivery mode structure)	Lockhert 2003 ( mostly phone plus home visits)  Kuhn 2012 ( mostly phone plus	30-35	3 nurse case managers with a medical director, a social worker, and a pastoral counselor that acted as consultants.  Monodisciplinar (Nurse)	Homecare organisation Coordinating care Management of healthcare documentation Emergency Response plan Advance Care Planning Psychological, and emotional support and counselling Spiritual support and counselling Community/specialists resource referral Comprehensive assessment and development of individualized plan of care Advocacy within the system Cost savings interventions Justification of individualized, patient-focused services within the managed care organization Bereavement management (assessment for patient and caregivers, education and support) Join the funeral service
	home visits)  Head 2003 (home, hospital, phone)  Fusetti 2023	/ Phone	Multidisciplinar team work approach led by palliative care nurse and social worker	Secure preauthorization for home administration of blood products and medications  Family meeting  Arrangement of interdisciplinary meeting  Assure healthcare resources provision in case of travel  Networking of healthcare providers through frequent communication for informations and advices
	Shindel 2022 Gerhardt 2023	In hospital		In-patient admission  Management of requests for the home care or palliative care Consultations service and related patients' allocation  Identification of patients in need of case management  Bed planning  Management of pathway of care and transfert when patient is discharged  Participation in the multi-professional team meetings  Provision of medical/nursing/ pratical knowledge and informations  Triaging and monitoring needs and symptoms  Contact person for patients and carevigers  Support in decision making  Management of barriers to access services