

Author year/ Country	Research topic/ question	Method study	N=	Target group	Findings	Gaps/ limitations	Quantitative rating	Qualitative rating	Oxford evidence
Chapman et al[35], 2018 Australia	Aim- The role of specialist palliative care provided by a PCN-NP to achieve preferred place of death (PPoD) and reduce hospital admission	Quasi-experimental design	4 RCF Intervention group=10 4 Control group=17 3 historical descendants	Residents with palliative care needs	Needs rounds are a PC-NP led model Provides evidence of the benefits of integrating specialist palliative care (SPC) into RCF Residents who received the needs round intervention had higher rates of PPoD and shorter hospitalisations Reduces cost -comparison of hospital bed compared to PC-NP model of care NPs value in this setting is underexplored	Access to usual SPC assessment may have limited the study for the control group of descendants Incomplete data resulted in some resident exclusion. Uncertainty of the validity of prognostication may have not captured residents who would have been appropriate for discussion Only costs of hospital beds considered	72%	-	Level 2
Constantine et al[36], 2021 USA	Aim- What role do NPs play in completion of Physician Orders for Life-Sustaining Treatment forms (POLST) completion	Retrospective observational study	N=3829 POLST forms	NP vs physician rates of completion	NPs completed almost double the forms ($p=0.0064$) 16% of completion of POLST forms were done by NPs with completion rates of 24.4%	Research only conducted in 1 state- also in a state with a more developed registry for advanced directive and medical order registry The hospitals in this state have	82%	-	Level 2

	<p>and how does that differ between NPs and physicians in POLST orders</p>				<p>compared to physician completion of 8.90% NPs had higher “do not resuscitate” completion in section A ($p < 0.001$) and completion of comfort measures in section B ($p < 0.001$) compared to physicians.</p> <p>Finding also identified more palliative care NPs (64.2%) completed POLST forms compared to palliative care physician (17.90%)</p> <p>This study identified the opportunity for NPs can play in Advance care planning and it is suggested that this could be a niche role for NPs</p> <p>Supports policy recommendations to allow</p>	<p>more established specialist palliative care</p> <p>Patient population is limited to opt-in for submission of forms to the registry</p>			
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					NPs to work at their full level of expertise				
Dowson et al[37], 2019 Australia	Aim- Use of antimicrobials near end of life and opportunities for the nurse to undertake antimicrobial stewardship.	One on one semi-structured qualitative interviews	N=20	nurses	Antimicrobial decisions near end of life can be influenced by aged care nurses Nurses led discussions have social influence during decision making Talking about antimicrobials at end of life enables ACP discussion on goals of care	Not PC-NP Article does not mention limitations of study	-	A	-
Johnston et al[38], 2019 Australia	Aim- how does the role of specialist palliative care impact resident, relative and staffs experience PC-NP	Focus groups with thematic analysis	N=57 participants Staff n=40 Relative n=17	RCF	Normalising death reinforces dying is core business in aged care SPC-NPs model an approach to talking with relatives to promote capacity and capability with staff PC-NPs provide education to understand symptom management	Bias sample – due to the nature of the intervention-positive accounts due to focus group selection. Due to high turnover- staff in the focus groups -staff attendance were longer term staff GPs not invited to focus groups	-	A	-

					<p>Timelier end of life discussions</p> <p>PC-NPs provide palliative care expertise to improve symptom management</p> <p>PC-NPs provide medication review</p> <p>ACP begins sooner</p> <p>Reduced hospital admissions</p>				
<p>Kaasalainen et al [39], 2013 Canada</p>	<p>Aim- to explore the NP's role in providing palliative care in long-term care homes</p>	<p>Qualitative exploratory descriptive designs- case study</p>	<p>N= 143 participants</p>	<p>NP's</p>	<p>NPs in aged care are needed due to the complexity of caring for people in long-term homes due to multiple comorbidities- NPs provide this expertise</p> <p>NPs can problem solve in complex care needs as they as they have more time (employed by provider).</p>	<p>Highlights the need for further studies for the NP</p> <p>Small sample size</p> <p>Participants self-volunteered- bias – might have more positive view of NP than general population</p> <p>Only 5 homes were sampled</p> <p>There was limited demographic</p>	-	A	-

					<p>NP's work closely with families- educate and provide support "being there"</p> <p>NP's role in developing pain management strategies – particularly in cognitively impaired</p> <p>NP's use a holistic approach</p> <p>NP have advanced knowledge of pain medication</p> <p>NP's can sign death certificate</p> <p>Working in a multidisciplinary way- with allied health</p> <p>NP support staff</p> <p>NPs facilitate a "good Death"</p>	information collected for study cohort.			
Liu et al[40], 2012 USA	Aim- examine family satisfaction with end-of-life	Retrospective, descriptive design and a mailed survey to collect data	N= 131 family members returned the survey.	Family members or health care proxies from a	98% of family members agreed that they were satisfied with the end-of-life	Homogeneous demographics of family members - hence, the generalizability to diverse	82%	-	Level 2

	care provided by nurse practitioners (NP) to nursing home (NH) residents with dementia; explore the relationship between overall family satisfaction with end-of-life care and NP-family communication, resident comfort, and satisfaction with care		Response rate was 55%	health maintenance organization database of NH residents with a diagnosis of dementia (any type) who died in the NH	care provided by the NP Pearson's correlations demonstrated that overall satisfaction was significantly associated with NP-family communication, resident comfort, and satisfaction with NP care	populations or to spouses is limited Unclear whether family members who were more satisfied or those who were less satisfied felt compelled to respond to the survey qualitative data were limited a single statement inviting comment			
Miller et al[41], 2016a USA	Aim- Does palliative care consults by NPs in nursing homes influence end of life hospitalisations	NH longitudinal file with data provided from 268 nursing homes	N=286 nursing homes	Nurse practitioners	The NHs that introduced of speciality palliative care consults (SPCC) had greater overall reduction in hospitalisation rates compared to NHs without SPCC consults NHs that introduced SPCC has lower nursing staff ratios and lower Registered nurse to nurse	Further study is warranted No resident level data No internal study of SPCC	91%	-	Level 2

					ratio suggesting they recognised the need for SPCC				
Miller et al[42], 2016b USA	Aim- to evaluate how timely visits by NPs are associated with end-of-life transfers and how these impacts on acute care use	Propensity score-matched retrospective cohort study	N=46 nursing homes in 2 states 6458 deaths	Speciality palliative care consultations for residents with advanced illness	Speciality consultations add value to NH care Early intervention results in better outcomes of palliative care (95% CI) Speciality consultations reduce acute care use and burdensome between nursing homes and hospital (95% CI)	Retrospective study -bias concerns	93%	-	Level 2
Mullaney et al[43], 2016 USA	Aim- what are clinical outcomes of mortality risk assessments and advance care planning by NPs for new enrolled medicare patients in nursing homes	Mixed method-convergent mixed method design- quantitative and qualitative data conducted simultaneously	N=87 (mortality risk assessment) Focus group 1. N=8 2. N=6	NP intervention on newly enrolled residents	MRAs help prioritise ACP discussion Reduction in hospitalisations ($p=.025$) ACP discussions have a positive impact on outcomes Reduction in CPR status ACP support a "good death"	Not PC-NP Small sample Did not consider ACP discussions before enrolment Did not consider how long residents had lived in the nursing home The MRA was a tool internally designed. The tool was based on previous research but -reliability and	-	A	-

					NPs play a key role in ACP	<p>validity had not been assessed</p> <p>Some ACP discussions may have been missed if not documented in notes</p> <p>NP's from only 2 states invited to participate in focus groups</p>			
Parker et al[44], 2013 USA	Aim- were patients satisfied with care provided during consults by NPs consults and what were outcomes	Descriptive study	N=100 chart reviews	NPs	High rate of satisfaction of NP care	<p>No way to link satisfaction transitions in care (transfer to hospice or transfer to another site) or to follow transitions over a prolonged time</p> <p>Difficult to measure satisfaction with tools Low survey return</p>	-	A	-
Samara et al[45], 2021 Australia	Aim- Are palliative care needs rounds by PC-NPs using telehealth as effective as face to face	Quality improvement framework	N=28 care homes	NPs	<p>Needs rounds are cost effective and increases exposure to specialist palliative care</p> <p>Telehealth needs rounds are as effective as face-to-face delivery</p> <p>Telehealth allows</p>	<p>Relies on good internet and phone access as well as availability of devices such as laptops and ipads</p> <p>Cost of equipment such as iPads and laptops</p>	-	B	-

					overseas and interstate families to participate in conferences				
Stephens et al[46], 2015 USA	Aim- role of family in decisions to send nursing home residents to the emergency department (ED)	Descriptive study – focus groups (including NPs)	N=35 focus group participants	families	ED transfer decisions are influenced by family Concerns about nursing home care influence decisions to go to ED Lack of communication results in being unprepared for end of life, Ed presentations are a result of inadequate ACP and Lack of palliative care and specialist medical care increased ED admissions Findings suggest the need for reframing the negative perception of the role of family in decision making to send resident to the ED	Technological-oriented group may have influenced responses received Small sample Only over 3 counties of Northern California	-	A	-