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SYSTEMATIC REVIEW

Advanced Practice Nurses' Roles and Responsibilities in Advance Care Planning for Older Persons—A Mixed Methods Systematic Review

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ABSTRACT

Aim: To systematically identify, evaluate and synthesise the research literature about (a) the roles and responsibilities of advanced practice nurses (APNs) in the context of advance care planning (ACP) for older persons, (b) the characteristics of APNs' ACP practices and (c) the facilitators and barriers influencing APNs' involvement in ACP.

Design: Mixed-methods systematic review.

Methods: Followed the mixed methods systematic review guidelines outlined by the Joanna Briggs Institute. Three researchers independently screened studies for eligibility using the Covidence Screening Application. The screening involved two stages: titles and abstracts, followed by full-text evaluation. The Mixed Methods Appraisal Tool was used for quality assessment. A convergent integrated synthesis combined quantitative and qualitative data by 'qualitising' quantitative findings into text, enabling integration and thematic analysis to synthesise the results.

Data Sources: Medline, CINAHL and Embase were searched from 2012 to 2024 for original research in English, focusing on APNs involved in ACP for individuals aged 65 or older, using qualitative, quantitative or mixed method designs.

Results: The review included 19 studies: seven qualitative, nine quantitative and three mixed method designs. Thematic analysis revealed that APNs play a key role in ACP, aligning care with patient preferences through discussions and documentation. Studies from the United States (12), United Kingdom (4), Canada (2) and Australia (1) show varying APN roles and responsibilities.

Conclusion: APNs are crucial to ACP, but barriers limit their impact. Overcoming these is key to improving outcomes.

Implications for the Profession and Patient Care: APNs clinical expertise and close patient relationships are crucial for aligning care with patient preferences and needs in ACP. However, to fully maximise their contribution, it is essential to overcome barriers such as time constraints, lack of role recognition and insufficient training. Addressing these challenges will enhance the effectiveness of APNs in providing person-centred care.

Reporting Method: This review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement.

Patient or Public Contribution: No patient or public contribution.

1 | Introduction

Advance care planning (ACP) is defined as a process of discussing and documenting a person's life goals, values and healthcare preferences in order to guide decision-making about future medical treatment and health care (Rietjens et al. 2017; Sudore et al. 2017). ACP is a critical component of person-centred health care, particularly for older persons facing frailty, serious and chronic illness or nearing the end of life (OECD 2023). Advanced practice nurses (APNs) bring advanced clinical expertise and a holistic, person-centred approach to care. Their role extends beyond traditional nursing responsibilities, involving a higher level of decision-making and often serving as a key communication link between patients, families and the healthcare team (Schober et al. 2020). This central position makes them ideally suited to facilitate ACP by guiding patients through the complex ACP process. However, there is limited knowledge about APNs' roles, responsibilities and practices in ACP, and this review addresses these gaps and suggests ways to improve APNs' involvement.

1.1 | Background

ACP is commonly described as an ongoing, step-by-step process involving both dialogues and written directives in face-to-face interactions between patients, their proxies and healthcare personnel (Lum, Sudore, and Bekelman 2015; Park et al. 2021). Documentation, such as advance directives or Physician Orders for Life-Sustaining Treatment (POLST) forms, is one potential outcome of the ACP process. While it serves as a decision-making aid, ACP encompasses a broader and ongoing process of discussions about values, goals and care preferences (Lum, Sudore, and Bekelman 2015). The terminology used in such ACP documentation and its legally binding status can vary significantly and are often subject to the specific rules and regulations of individual countries (OECD 2023). Elements such as patients' written preferences, the identification of surrogate decision-makers, or stipulations for future medical care are typically grouped under the term 'advance directives' (Bossaert et al. 2015; Lum, Sudore, and Bekelman 2015). The primary instruments that serve as advance directive documents are the Durable Power of Attorney for Healthcare (DPAHC, or Healthcare Proxy Designations) and living wills (Silveira 2024). The adaptation of individual preferences into portable medical orders is an example of how ACP discussions can be translated into actionable medical decisions. While the ACP process extends beyond these documents to include ongoing dialogue and shared decision-making, such documentation aims to guide medical treatment across various healthcare settings based on the patient's current health status, prognosis and goals. These documents are often called Physician Orders for Life-Sustaining Treatment (POLST) (MacKenzie et al. 2018). However, titles vary, such as Medical Orders for Life-Sustaining Treatment (MOLST), Medical Orders for Scope of Treatment (MOST), Physician Orders for Scope of Treatment (POST) in certain US states (Vranas et al. 2021) and Treatment and Escalation Plans (TEPs) (Courtney 2020) or ReSPECT plans in the UK (Perkins et al. 2022). 'Do not attempt resuscitation' orders (DNR, DNAR and DNACPR) represent another category of medical orders that are considered part of ACP (Bossaert et al. 2015). Although these orders aim to align patient wishes with care optimisation, they are criticised for their limited scope and potential confusion due to varied acronyms and differing legislative frameworks worldwide (Bossaert et al. 2015; Mockford et al. 2015; Vranas et al. 2021).

Due to the complexity of ACP processes and the scope of associated decision aids, the overall effects of ACP interventions remain inconclusive (Flo et al. 2016; Jimenez et al. 2018; McMahan, Tellez, and Sudore 2021; Park et al. 2021). Nevertheless, several outcomes have been documented. Martin et al. (2016) reviewed studies examining the effects of ACP among nursing home residents and found that in this population ACP decreased hospitalisation rates by 9%–26%. Park et al. (2021) suggested that despite the results being inconclusive, ACP interventions could potentially enhance the quality of end-of-life care and reduce resource utilisation. An umbrella review by Jimenez et al. (2018) focused on ACP broadly and emphasised the benefits of ACP in optimising end-of-life care by ensuring it aligns with the most appropriate timing and setting. It also highlighted the importance of viewing ACP as a comprehensive process, raising questions about the competencies and roles necessary for effective facilitation.

While physicians traditionally lead ACP processes as key decision makers responsible for medical orders (Mockford et al. 2015), research increasingly shows that other healthcare personnel, both individually and in teams, can effectively facilitate ACP processes when provided with adequate training and clinical skills (Park et al. 2021; Rietjens et al. 2017). Previous research has examined the barriers that nurses perceive in taking a more prominent role in ACP. Poveda-Moral et al. (2021) identified a lack of knowledge and skills necessary to conduct ACP, hesitation about initiating conversations and lack of time as the main barriers for nurses to engage in ACP. Lack of time and insufficient education were also identified as barriers by Blackwood et al. (2019). Whereas nurses initiate and follow-up on ACP discussions, APNs may play a vital role in developing ACP models and leading ACP processes (Tetrault et al. 2022).

APN is an umbrella term encompassing multiple advanced nursing roles, with nurse practitioners (NPs) and clinical nurse specialists (CNSs) being among the most widely recognised (Schober 2018). Despite both being classified under the APN umbrella, their roles differ significantly in scope and emphasis. NPs primarily focus on direct patient care, often serving as primary care providers in clinics, acute care and long-term care settings. They can diagnose, treat and manage care independently

Summary

- What problem did the study address?
  - ACP guides future medical decisions for patients, especially older persons, those with serious illness and those nearing end-of-life. APNs, with their clinical expertise and strong patient relationships, are well suited to facilitate ACP, but their specific roles, responsibilities and practices remain underexplored.
- What were the main findings?
  - The findings emphasise APNs' key role in ACP, leading discussions, completing POLST forms and improving outcomes. Their practice involves relationship-building, timing discussions, balancing family roles and promoting shared decision-making. Facilitators include organisational support, education and time management, whereas barriers include unclear roles, time constraints and insufficient training.
- Where and on whom will the research have an impact?
  - This research will impact APNs by enhancing their role in ACP for older persons. It will help ensure that care aligns with patient preferences, leveraging APNs' clinical expertise and strong patient relationships. For older persons and their families, this means more personalised and effective care. Healthcare services will benefit by addressing key barriers such as time constraints, lack of role recognition and insufficient training. Overcoming these challenges will enhance APNs' contributions to ACP, resulting in better patient outcomes and more efficient healthcare processes.
- What does this paper contribute to the wider global clinical community?
  - Sustainability of healthcare systems: It contributes by addressing how integrating APNs into ACP can help healthcare systems manage the growing pressures of ageing populations and resource constraints, ensuring long-term sustainability.
  - Improvement of person-centred care: It highlights the contribution of APNs in delivering high-quality, person-centred care by aligning ACP with individual patient preferences, improving the quality of care for older persons.
  - Overcoming barriers in ACP implementation: It identifies key barriers such as time constraints, unclear roles and inadequate training, addressing these may optimise APNs' roles in ACP globally.

or in collaboration with physicians, with many authorised to prescribe medications. By contrast, CNSs in some countries emphasise system-level improvements, shaping clinical practice, policy and staff training as consultants and educators (Schober et al. 2020). Countries with established APN practices often encompass multiple advanced nursing roles, further complicating role differentiation and implementation. In some regions, role definitions overlap, with the CNS title occasionally applied to nurses performing duties more aligned with NP roles, while some NPs assume responsibilities traditionally associated with CNSs (Brownwood and Lafortune 2024). Regardless of these variations, APNs possess advanced clinical skills and a person-centred approach, allowing them to participate in discussions, to ensure the understanding of patients' preferences and to facilitate informed decision-making (Wheeler et al. 2022). Furthermore, APNs can collaborate effectively with interdisciplinary teams in order to ensure continuity of care and the implementation of patients' preferences across various healthcare settings (Schober et al. 2020). These skills, competencies and approaches are considered important in ACP, but further research is needed to explore the extent of APNs' contributions.

Given the growing challenges in health care related to aging populations (OECD 2023), this study focuses on individuals over 65. Older persons often face complex health issues, frequent healthcare utilisation and uncertainties regarding treatment preferences and follow-up care. These factors make them particularly suited to benefit from a holistic approach through ACP (Park et al. 2021; Wang et al. 2023). While substantial research has been conducted on this group, the evidence regarding the overall effectiveness of ACP interventions remains inconclusive (Frechman et al. 2020; Park et al. 2021; Wang et al. 2023). The broad scope of practice, advanced competencies and person-centred approach of APNs position them uniquely to address the complexity and need for a holistic approach in this patient group. While previous research has primarily focused on other healthcare professionals, particularly nurses, there is a notable absence of comprehensive reviews specifically examining the role that APNs play in ACP for older persons.

2 | The Review

2.1 | Aim

The aim of this study was to systematically identify, evaluate and synthesise the research literature on (a) the roles and responsibilities of APNs in the context of ACP for older persons, (b) the characteristics of APNs' ACP practices and (c) the facilitators and barriers influencing APNs' involvement in ACP.

3 | Methods

3.1 | Design

This review was designed as a mixed methods systematic review (MMSR) following the methodological guidelines outlined by the Joanna Briggs Institute (JBI) (Lizarondo et al. 2020). A convergent integrated approach was used (Stern et al. 2021) to combine evidence from different methodologies in order to gain a comprehensive understanding of APNs' involvement in ACP. Following the MMSR guidelines (Lizarondo et al. 2020), the universal steps of a systematic review were adhered to. This involved identifying the problem, formulating review questions, establishing eligibility criteria and developing a search strategy. Subsequently, we conducted a systematic literature search, retrieved relevant studies and critically appraised the included studies. Finally, we performed data extraction and synthesised the findings. To ensure transparency and completeness in reporting, the review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Page et al. 2021).

3.2 | Search Methods

A systematic literature search was conducted by an academic librarian (MGS) in the Medline, CINAHL and Embase bibliographic databases for the period January 2012–February 2024. The search was originally conducted in December 2022 and updated in February 2024. The search terms 'Advanced Practice Nursing' and 'Advance Care Planning', including synonyms, keywords and database-specific controlled terms, were combined with the Boolean operators OR and AND. See File S1 and Figshare for full search strategy: https://doi.org/10.23642/usn.27135015.v1.

3.3 | Inclusion and Exclusion Criteria

Studies were eligible if they were (1) original studies with a qualitative, quantitative or mixed methods design; (2) written in English; (3) examining APNs, NPs or CNSs; (4) performing ACP (5) and including persons aged 65 years or older. We excluded studies if they reported reviews, study protocols, case studies, commentaries or conference abstracts were not peer-reviewed empirical studies or were conducted before 2012 (Table 1).

3.4 | Study Selection Process

Records were screened using the Covidence Screening Application. Three researchers (J.E.P., H.E. and L.H.F.) independently assessed and selected studies based on eligibility criteria reading title and abstract in the first round and based on the full text in the second. Any discrepancies in eligibility assessments were discussed within the group until consensus was reached.

3.5 | Quality Appraisal

Study quality was assessed using the Mixed Methods Appraisal Tool (MMAT) (Hong et al. 2018), which offers a flexible framework for evaluating methodological quality across qualitative, quantitative and mixed method studies. Three authors (L.H.F., H.E. and I.T.) independently assessed each study, scoring each question of the MMAT as 'yes', 'no' or 'cannot tell' according to the guidelines (Hong et al. 2018) (see File S2). MMAT scores were used as a descriptive aid to summarise quality for transparency (Table 2), with studies rated as high quality with scores of 4–5, moderate quality with scores of 3 and low quality with scores of 0–2. Fifteen studies were high quality, four moderate and none low. High-quality studies received the most emphasis in the presentation of results.

3.6 | Data Extraction

To ensure rigorous data extraction, three authors (J.E.P., I.T. and L.H.F.) extracted data independently, resolving discrepancies through discussion. Data extraction included title, author, year, country, aim, sample, setting, design, methods for data collection and analysis and main findings (Table 3).

TABLE 1 | Eligibility criteria.

Inclusion	Exclusion
Empirical research using qualitative, quantitative or mixed methods	Theoretical articles, literature reviews, commentaries, discussion papers, dissertations, conference abstract, study protocols, case studies, editorials or essays
Studies published in English	Studies not published in English
Advanced Practice Nurse, Nurse Practitioner, Clinician Nurse Specialist (APN, NP, CNS)	APN, NP or CNS not specified in Section 4
Advance care planning (ACP)	ACP not mentioned, mentioned peripherally or focusing on unrelated aspects (e.g., administration, technical details)
Persons age > 65 years old	Exclusive focus on younger populations
Studies published between 2012 and 2024	Studies published before 2012
Peer-reviewed publications	Nonpeer-reviewed publications

3.7 | Data Synthesis and Analysis

Data synthesis followed the convergent integrated approach recommended by the JBI MMSR guidelines (Stern et al. 2021). This approach combines data from quantitative and qualitative studies by 'qualitizing' quantitative data into a textual format, thus enabling data integration. In this study, relevant data were extracted for analysis from the findings of both quantitative and qualitative studies (see File S3). Thematic analysis (Clarke and Braun 2021) was performed, and this involved becoming familiarised with the extracted data through iterative readings; generating initial codes; identifying emerging themes based on similarities in meaning; reviewing, refining and defining the themes and reporting the findings.

4 | Results

4.1 | Search Outcome

The PRISMA flow diagram outlines the results of the literature search (Figure 1). A total of 481 studies were identified in the first search, and 71 were identified in the updated search in February 2024, and these were imported into Covidence. Following the removal of duplicates, 401 records underwent independent screening. We excluded 326 studies, leaving 75 full-text articles for further evaluation. Of these, 56 were subsequently excluded based on eligibility criteria, resulting in 19 studies included for review.

TABLE 2 | Quality appraisal MMAT.

Author	1	2	3	4	5	Quality score
Arnett et al. (2017)[a]	1	0	1	0	1	Moderate
Boot and Wilson (2014)[b]	1	1	1	1	1	High
Caprio, Rollins, and Roberts (2012)[c]	1	1	0	0	1	Moderate
Constantine et al. (2018)[a]	1	1	1	1	1	High
Constantine et al. (2021)[a]	1	1	1	1	1	High
Dube, McCarron, and Nannini (2015)[a]	1	0	1	0	1	Moderate
Dyar[d]	1	0	1	0	1	Moderate
Ersek[a]	1	1	1	1	1	High
Hayes[a]	1	1	1	1	1	High
Howell[b]	1	1	1	1	1	High
Hussain[a]	1	1	1	1	1	High
Jennings[a]	1	1	1	1	1	High
Llewellyn[b]	1	1	1	1	1	High
Mitchell[c]	1	1	1	1	1	High
Mullaney[c]	1	1	1	1	1	High
Payongayong[a]	1	0	1	1	1	High
Popejoy[a]	1	1	1	1	1	High
Rietze[a]	1	0	1	1	1	High
Vellani[b]	1	1	1	1	1	High

Note: 1 = 'yes' and 0 = 'no' or 'cannot tell' (see File S2 for specific definition of criteria score).
[a]Quantitative.
[b]Qualitative.
[c]Mixed methods.
[d]Randomised control trials.

4.2 | Study Characteristics

The study characteristics are presented in Table 3. Seven studies had a qualitative design, three used mixed methods and nine were quantitative. The studies were conducted in the United States ($n = 12$), UK ($n = 4$), Canada ($n = 2$) and Australia ($n = 1$), with sample sizes ranging from 4 to 3829 participants. Most studies ($n = 10$) referred to APNs as NPs, whereas others used the term APN ($n = 5$) and CNS ($n = 4$). A majority of the studies ($n = 15$) focused on older persons, either explicitly or indirectly, whereas the remaining four addressed the general population (Boot and Wilson 2014; Dyar et al. 2012; Llewellyn et al. 2018; Payongayong et al. 2022). However, these studies were conducted in settings where patients were predominantly older or adults.

The studies highlight the diverse roles of APNs in facilitating ACP. In the United Kingdom, CNSs played important roles in delivering ACP to terminally ill patients (Boot and Wilson 2014), leading community palliative care in hospice and home settings (Howell et al. 2014), improving outcomes through CNS-led palliative neurology services (Hussain, Adams, and Campbell 2013) and addressing structural and social factors influencing ACP discussions in neuro-oncology (Llewellyn et al. 2018). In the United States, Arnett et al. (2017) described APNs collaborative contributions in rural, safety net and long-term care settings. Constantine et al. (2018, 2021) demonstrated NPs' accuracy in completing POLST forms in palliative care. Dube, McCarron, and Nannini (2015) noted challenges like time constraints and unclear policies for NPs in hospitals and community settings. Caprio, Rollins, and Roberts (2012) and Jennings et al. (2019) reported frequent NP-led POLST use and engagement with patients and families in nursing homes. Dyar et al. (2012) described the impact of APN-led palliative interventions in oncology, whereas Mullaney et al. (2016) showed reduced hospitalisations resulting from NP-led ACP discussions. Payongayong et al. (2022) explored APN roles in nephrology, and Popejoy et al. (2019) noted reduced hospital transfers through ACP in nursing homes. In Canada, Vellani et al. (2021) highlighted NPs' leadership in long-term care during COVID-19. Rietze et al. (2016) identified barriers to NP engagement across acute, primary and long-term care. In Australia, Mitchell et al. (2016) studied NP-led palliative care in rural settings.

4.3 | Study Findings

In the following sections the results from the qualitative analysis will be presented. The identified themes and subthemes are displayed in Table 4.

4.3.1 | The Roles and Responsibilities of APNs in ACP

The roles and responsibilities of APNs in ACP describe how APNs contribute to ACP discussions, their roles in completing POLST forms and their impact on clinical outcomes through ACP interventions.

4.3.1.1 | Substantial Involvement in ACP Discussions and ACP Counselling. Several studies highlighted the substantial involvement of APNs in ACP counselling with patients or family members, despite physicians being traditionally identified as the person in charge (Arnett et al. 2017; Boot and Wilson 2014; Caprio, Rollins, and Roberts 2012; Dube, McCarron, and Nannini 2015; Rietze et al. 2016). In a cross-sectional study involving healthcare providers in the US, Arnett et al. (2017) found that even if physicians were the predominant practitioners of ACP, APNs were frequently involved in direct ACP counselling in clinical practice. While most respondents agreed that physicians should primarily be responsible for ACP discussions, there was even stronger support for other healthcare team members, such as APNs, to conduct these discussions if they have received appropriate training. The study also revealed that within the interprofessional team, APNs conducted comparatively longer ACP conversations, although this difference did not reach statistical significance (Arnett et al. 2017). This corresponds to Caprio, Rollins, and Roberts's (2012) study on healthcare professionals'

TABLE 3 | Study characteristics.

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Arnett et al. (2017), USA	To better understand current clinical routines, system-based workflow processes and policies related to ACP to help inform opportunities to improve ACP in diverse clinical settings.	APN	The APNs worked in interprofessional teams in rural, safety net and long-term care settings as part of the ACP process.	$N=118$ Healthcare team members (62 physicians, 21 APNs, 13 RN, 22 'others', that is, administrators, social workers, chaplains and pharmacists).	Quantitative cross-sectional descriptive	Online survey with the following domains: (1) role in the team, clinical specialty/setting and geographic location; (2) clinical routines, workflow processes and policies; (3) perspectives and experiences with ACP. Descriptive statistics, chi-squared test and thematic analysis with a mixed inductive and deductive approach.	Physicians had the primary role regarding ACP, however, APNs were substantially involved in the in ACP counselling. Precise and effective timing were crucial factors in promoting ACP. Reported barriers were unclear policies and guidelines, structural and system-related factors regarding billing, documentation and electronic medical journal systems in addition to difficulties of integrating ACP with routine care and lack of APN training.
Boot and Wilson (2014), UK	To identify the challenges experienced by clinical nurse specialists (CNSs) when facilitating advance care planning (ACP) conversations with terminally ill patients.	CNS	The CNSs worked in two geographically separate multiprofessional teams (one urban and one rural location) caring for patients with advanced progressive diseases as part of the ACP process.	$N=12$ Palliative care CNSs.	Qualitative	Individual semi-structured interviews with CNSs. Thematic analysis with an inductive approach.	The CNSs were closely involved with the patient taking the initiative and responsibility for ACP discussions. The CNSs were 'tightrope walking' regarding ACP, balancing a fine line of helping and harming the patient. Being attentive to patients' cues, the CNSs personal views, building meaningful relationship and viewing families as important collaborators was identified as crucial characteristic of CNSs ACP practices.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Caprio, Rollins, and Roberts (2012), USA	To characterise the self-reported practices and opinions of nursing home (NH) healthcare professionals using the North Carolina Medical Orders for Scope of Treatment (MOST) form, an adaptation of the Physician Orders for Life-Sustaining Treatment (POLST) paradigm.	NP	The NPs worked in interdisciplinary team at two separate nursing homes caring that included either independent living or assisted living facilities.	$N=11$ Health professionals (6 physicians, 3 NPs, 2 social workers) from 2 NHs in North Carolina.	Mixed method—quantitative driven	Cross-sectional survey with the following domains: (1) timing and appropriateness of form completion; (2) review criteria, barriers and (3) concerns about using the form. Qualitative interviews Descriptive statistics and a review of the interviews content to clarify or supplement survey responses.	All respondents indicated that they were familiar with the MOST form and had experience completing the form with patients and families in the nursing home. Although these healthcare professionals represent three different disciplines, their responses were generally similar. Timing was crucial factors in promoting ACP such as admission and routine meetings. MOST forms improved communication, not only between healthcare workers and patients/families but also among healthcare workers and across clinical settings. System-related barriers to ACP occurred due to inadequate systems for electronic transfer of ACP documents.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Constantine et al. (2018), USA	To examine how recent legislation allowing NPs signatory authority for completion of POLST forms has affected POLST completion.	NP	The NPs worked in community and hospital specialist palliative care.	$N = 2292$ POST forms from the WV (West Virginia) statewide registry of POST forms completed by all authorised personnel.	Quantitative retrospective observational study	Secondary data analysis of POLST forms. Descriptive statistics, chi-squared test and analysis of variance.	NPs played a crucial role in facilitating ACP through completing and submitting POLST forms. NPs working in palliative care settings, whether in community-based or hospital-based environments, completed most of the forms that were signed by NPs. NPs were also more likely to be registry ready (error free) compared with physicians.
Constantine et al. (2021), USA	To examine the role that nurse practitioners (NPs) play in POLST completion and differences between NPs and physicians in POLST orders.	NP	The NPs worked in community and hospital specialist palliative care.	$N = 3829$ POLST forms submitted to the WV (West Virginia) e-Directive. Registry between July 1, 2018 and June 30, 2019, which was completed by 98 NPs and 511 physicians.	Quantitative Retrospective observational study	Secondary data analysis of POST forms. Descriptive statistics, independent samples *t*-test, chi-squared test, odds ratio (OR) and 95% confidence interval (CI).	NPs played a crucial role in facilitating ACP by completing and submitting POLST forms. The study confirmed the crucial role of NPs and in additionally reported an increased rate of POLST form completion by NPs compared to the 2018 publication. Furthermore, NPs were also more likely to be registry ready (error free) compared with physicians.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Dube, McCarron, and Nannini (2015), USA	To assess the prevalence of ACP by NPs and to identify perceived personal, professional and systems barriers and facilitators to NPs having ACP discussions.	NP	The NPs worked in community in or outpatient settings and hospitals.	$N=160$ NPs working in physicians office, hospitals, community care and long-term care in the United States.	Quantitative non-experimental descriptive design	Online survey with a validated questionnaire. The questionnaire included questions regarding demographic and professional characteristics, previous end-of-life education and barriers and facilitators to ACP for NP practice and one open-ended question. Descriptive statistics, Kruskall–Wallis test and a post hoc power analysis.	The NPs were substantially involved in the in ACP discussions. NPs with additional education and sufficient time were reported as key facilitators in APC discussion led by NPs. Reported barriers were difficulties of integrating ACP with routine care, time constraint and system factors.
Dyar et al. (2012), USA	To determine if an intervention with a palliative ARNP would lead to improvement in the patients' QoL, improvement in knowledge about hospice, earlier referral to hospice services, and decreased sense of abandonment from the oncology practice upon hospice referral.	APN	The APNs were integrated into the oncology team for early palliative care interventions in the management of metastatic cancer patients in one clinic.	$N=26$ Patients with metastatic cancer ($N=12$ in intervention group, $N=14$ in no intervention group).	Quantitative randomised phase 2 trial.	Survey included hospice knowledge questionnaires (HKQ), and two validated quality of life (QoL) tools: the Functional Assessment of Cancer Therapy-General [FACT-G] and the Linear Analogue Self-Assessment scale (LASA) at baseline (pre-intervention) and 1 month later (post-intervention). Descriptive statistics and Mann–Whitney *U*.	The characteristics of APNs practices, which prioritise early palliative care, provide education about hospice, and conduct assessments of quality of life, significantly contributed to improving quality of life for patients diagnosed with metastatic cancer. For both the QoL tools, patients in the intervention group showed significant improvements in emotional and mental well-being with APN-directed education and follow-up.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN CNS NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Ersek et al. (2018), USA	To describe stakeholders' perspectives on (a) the most and least effective components of the intervention, (b) barriers to implementation and (c) program features that promoted its adoption.	NP	The NPs worked at a nursing home where they conducted evaluations that included medication reconciliation, resident and family education, follow-up management of ongoing resident needs and communication with facility providers and staff.	$N=63$ Stakeholders (23 nursing home staff and leaders, 4 primary care providers, 10 family members, 19 RNs and 7 NPs).	Qualitative	Semi-structured, group and individual interviews. Directed content analysis that used existing frameworks and theories to guide the interview questions and coding.	The intervention facilitated NPs' involvement in ACP discussion by using the POST form. This view was supported by the NPs, RNs, providers, families and facility staff. Hindering factors affecting APNs' involvement in ACP was on an organisational level from lack of support and/or conflicts with facility leadership or primary care providers. Lack of clarity regarding the roles and responsibilities of RNs and NPs contributed to inconsistent practices.
Hayes et al. (2017), USA	To investigate the percentage of Oregon POLST forms signed by APRNs and examine the obstacles faced by states attempting to allow APRNs to sign POLST forms.	APN	The APNs worked state-wide and signed POLST forms.	$N=226,101$ Oregon POLST Registry forms from 2010 to 2015.	Quantitative cross-sectional	Analysis of registered POLTS forms completed by an APN, physician or physician assistant. Descriptive statistics.	Results described APNs' involvement in ACP. From 2010 to 2015, 226,101 forms were added to the Oregon POLST Registry. Of those, 10.9%, or 24,620, forms were signed by APRNs, and 85.3% were signed by physicians. The remaining 3.8% were signed by physician assistants. The percentage of POLST forms signed by APRNs in Oregon increased from 9.0% to 11.4% between 2010 and 2012 and remained relatively flat until the study was published 4years later.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Howell et al. (2014), UK	To describe community palliative care clinical nurse specialist (CPC-CNS) activities during interactions with patients.	CNS	The CNSs were specialist in communitive palliative care and worked in one multidisciplinary team with patient living at home or in-patient at a hospice setting.	$N=4$ CPC–CNSs in interactions with 34 patients in their own homes or in hospice settings in north England.	Qualitative	Unstructured and unobtrusive observations while the CNSs visited patients, which were then audio recorded and transcribed. Thematic analysis.	The CNSs were observed leading discussions and assessments of preferences around place of care and death were observed to facilitate interventions around ACP by involving both patients and family members. Communication techniques were a key theme underpinning many of the interactions and, in addition to various questioning techniques, involved giving and receiving information, offering appropriate explanations, providing support and reassurance, listening and summarising.
Hussain, Adams, and Campbell (2013), UK	To assess key outcomes of a UK nurse-led palliative neurology service against the National End-of-Life Care Programme (NEoLCP) standards.	CNS	The CNSs were specialist in palliative neurology and worked in multidisciplinary teams at a nurse-led hospice with solely neurology patients.	$N=62$ Clinical records of patients who died from advanced neurological conditions under the care of the service from December 2006 to April 2012 in UK.	Quantitative	Retrospective audit of clinical records Descriptive statistics	The CNSs contributed to patient care and led discussions regarding future care for a vulnerable group of patients and carers. The results indicate improved patient outcomes, including a reduction in hospital admissions in the last year of life and an increased number of home and hospice deaths.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Jennings et al. (2019), USA	To examine end-of-life care in a dementia care program that specifically addressed advance care planning with all participants.	NP	The NPs worked at hospital, emergency department (ED), and hospice use. and signed POLST forms.	*N* = 322 Persons enrolled in dementia care management after July 1, 2012, who died before July 1, 2016.	Quantitative: Observational retrospective	Analysis of health records. Descriptive statistics, chi-squared test, Fisher's exact test or Wilcoxon-Mann–Whitney rank-sum test.	Nearly, all decedents (99.7%, *N* = 321) had at least one goals-of-care conversation documented in the last 6 months of life, and 64% had a documented advance care preference regarding CPR, medical interventions or artificial nutrition recorded in the UCLA electronic health record. Over half (57%) of decedents (or their proxy decision maker) had completed a POLST.
Llewellyn et al. (2018), UK	To elicit key social and structural conditions contributing to the avoidance of ACP in neuro-oncology.	CNS	The CNSs were experienced with neuro-oncology patients and worked at one tertiary care hospital.	*N* = 15 Healthcare professionals working in neuro-oncology [8 physicians, 4 clinical nurse specialists (CNS), 3 allied healthcare professionals].	Qualitative	Semi-structured in-depth interviews Framework analysis	An overall finding was that there was a 'culture of shared avoidance' that was associated with lack of responsibility. Three key factors contributed to this. The first factor involved difficulties with ACP, particularly having highly emotive conversations with the patient where time-intensive practice required the right 'window of opportunity'. The second factor was presence and availability of others. Third factor was ambiguities in the definition, purpose and practice of ACP.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Mitchell et al. (2016), Australia	To pilot an NP coordinated care planning project, targeting people living in a rural area nearing the end of their lives, and principally with non-malignant disease.	NP	The NPs led the clinical care plans and negotiated with health professionals, patient and/or family through a single multidisciplinary case conference in rural district.	$N=7$ Patients with non-malignant disease, positive surprise question and prognosis <12 months, >1 month. $N=6$ Carers living with the indexed patients. $N=4$ clinicians (1 NP, 1 RN, 1 Nursing Unit manager, 1 District manager).	Quantitative: Pilot evaluation	Semi-structured interviews Audit of clinical records and outcome measures that included: The Hospital Anxiety and Depression Scale (HADS), the Palliative Outcomes Scale (POS), the Australian Karnofsky Performance Scale (AKPS), the Carer support needs assessment tool (CSNAT), the Advanced Cancer Care scale (FAMCARE) and Quality of Life scale (EORTC QLQ C-30). Descriptive statistics.	NP-coordinated, GP-supported care resulted in the prompt initiation of treatment, effective follow-up and a care plan with clearly assigned responsibilities for all professionals. NP-coordinated palliative care enabled more integrated care and may effectively reduce hospitalisations. The service enabled patients to remain at home when they otherwise might not have been able to, improved the confidence of hands-on staff in managing end-of-life issues and improved relations with the ambulance service through better documentation and the presence of advance care plans.
Mullaney et al. (2016), USA	To investigate the impact nurse practitioners' (NPs) documented mortality risk assessments (MRAs) and advance care planning (ACP) discussions have on clinical outcomes for newly enrolled Medicare Advantage nursing home patients.	NP	The NPs led ACP discussions with patients and families and collaborated with primary care physicians of medically complex nursing home patients at a nursing home.	$N=87$ Patients newly admitted to long-term care in a Medicare Advantage Program in USA. $N=14$ NPs caring for patients in a Medicare Advantage nursing home program.	Mixed method	A convenience sample of NPs' MRAs and medical record reviews 6 months later. Descriptive statistics, One way ANOVA, Fisher's exact test and logistic regression. Focus group interviews with NPs. Descriptive and qualitative content analysis approach.	MRAs effectively prioritise ACP discussions with patients and families. ACP discussions led to positive clinical outcomes of increase in patients opting for comfort care, reduction in patients maintaining full-code status and significant reduction in hospitalisations. NPs agreed that ACP discussions contribute positively to patient outcomes, including achieving a 'good' death.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Payongayong et al. (2022), USA	To examine the effects of knowledge, attitude and perceived behavioural control on the engagement of APNs in end-of-life (EOL) communication and the mediating and moderating effects of attitude and perceived behavioural control on the relationships between knowledge and end of life communication.	APN	The APNs worked in nephrology settings, including inpatient and/or outpatient dialysis units or nephrology ambulatory care practices.	$N = 127$ APNs working in nephrology settings in USA.	Quantitative cross-sectional	Online survey: the knowledge, attitudes and Advance Care Plan, The Knowledge about Advance Care Planning scale, Discussing Advance Care Planning scale, Attitudes About Meeting Patient and Family Needs with Advance, the Comfort and Confidence in Discussing Advance Care Planning scale and the Practice Behaviour in Discussing Advance Care Planning scale. Descriptive statistics, Pearson's correlation and multiple linear regression	APNs' attitudes about professional responsibility for EOL communication and meeting patient and family EOL communication needs were moderately high. Attitude about professional responsibility for EOL communication, attitude about meeting patient and family needs for EOL communication, and perceived behavioural control were significantly correlated with EOL communication behaviour. EOL communication behaviours were correlated with having practice authority to sign POLST orders. Perceived behavioural control had a significant independent effect on EOL communication behaviour.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Popejoy et al. (2019), USA	To explore the differences in potentially avoidable/unavoidable hospital transfers as well as APRN-recognised opportunities for improvement to decrease avoidable transfers through the use of INTERACT (Interventions to Reduce Acute Care Transfers).	APN	The APNs worked in nursing homes as part of the Missouri Quality Initiative (MOQI) and collaborated with a multidisciplinary support team to provide comprehensive care management, including advanced care planning, for long-stay patients.	$N = 3996$ ACTs (INTERACT QI Acute Care Transfers) tool from 16 nursing homes for 32.5 calendar months from 2014 to 2016. PARTICIPANTS: A total of 5168 residents with a median age of 82 years.	Quantitative cross-sectional descriptive	ACT tool review that included five categories related to resident characteristics, risk factors and non-clinical contributors to hospitalisation, actions taken to evaluate and manage condition changes before transfer, descriptions of hospital transfers and identified opportunities for improvement. Descriptive statistics, chi-squared tests and logistic regressions.	Better management within nursing homes, earlier communication and the implementation of advance directives could reduce avoidable transfers. Unavoidable transfers were primarily due to more severe clinical conditions requiring hospital care. Over half of the hospital transfers were identified as avoidable. Many avoidable transfers resulted in emergency department visits without hospital admission.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN / CNS / NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Rietze et al. (2016), Canada	To understand the knowledge, attitudes and practice of Ontario NPs from all specialties and practice settings related to ACP.	NP	The NPS worked in acute care in hospital or primary care settings community health centre, long-term care of family health team and had legal authority to initiate and review ACP.	$N = 101$ NPs in primary healthcare, acute care (hospital) and long-term care	Quantitative cross-sectional descriptive	Online survey (The research developed a tool with included questions regarding beliefs and attitudes, subjective norms and perceived control based on previous literature). Descriptive statistics and chi-squared tests.	Nurse Practitioners (NPs) recognise the importance of advance care planning (ACP) but vary in their engagement levels, with about half frequently initiating it, especially in acute care settings. Despite lacking formal policies, all NPs feel comfortable discussing ACP with clients. They generally believe that ACP is best initiated after a patient's first hospitalisation for a life-limiting illness. Barriers to ACP include limited time and unclear organisational procedures. However, when ACP policies are present and colleagues expect engagement, NPs are more likely to prioritise ACP discussions.

(Continues)

TABLE 3 | (Continued)

First author (year), country	Aim	APN CNS NP	APNs work settings for ACP	Sample size and setting	Design	Method and analysis	Key findings
Vellani et al. (2021), Canada	To explore the role of NPs in facilitating a dignified death for LTC home residents while also facing increased pressures related to the COVID-19 pandemic.	NP	NPs providing care to patients from 14 separate long-term care homes during the pandemic in both rural and urban settings.	$N=14$ NPs working in LTC homes in Canada during COVID-19.	Qualitative	Semi-structured interviews Thematic analysis	During the pandemic, Nurse Practitioners (NPs) in long-term care homes focused on advance care planning (ACP). They held frequent discussions with residents and families, especially during critical changes in residents' conditions. Some NPs were designated to support staff due to resource constraints. They organised virtual care conferences to facilitate communication. These discussions enabled shared decision-making, providing crucial support to families during a challenging time.

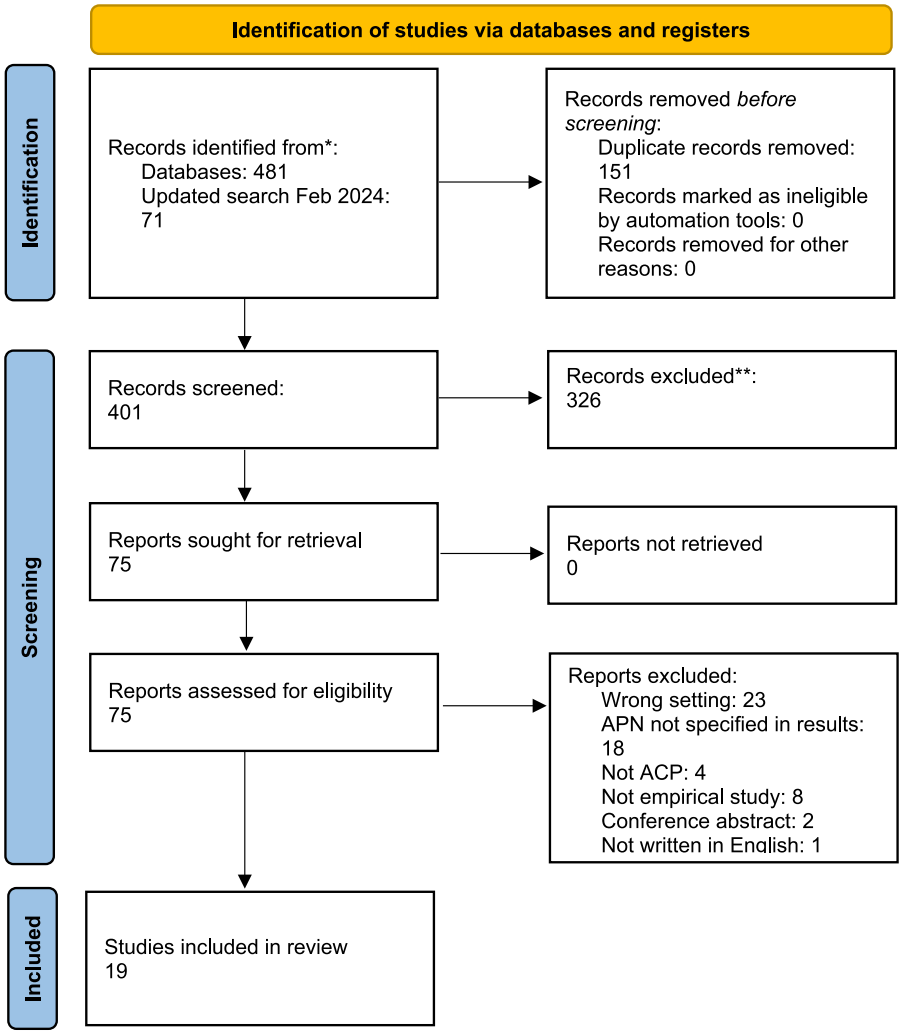

FIGURE 1 | PRISMA flow diagram. *Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers). **If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools. From Page et al. (2021). For more information, visit: http://www.prisma-statement.org/.

views and use of the MOST form in US nursing homes. Most respondents believed NPs could handle MOST discussions with patients and families if trained properly. Also, Dube, McCarron, and Nannini (2015) reported similar findings. By assessing NP practices regarding ACP discussions, they found that 65% of NPs reported engaging in such discussions. Those who practiced in primary care, were over 30 years old, held certification in adult/gerontology, worked over 20 h, or worked in long-term care, inpatient, or community settings tended to have ACP discussions more frequently. Rietze et al. (2016) aimed to understand ACP in NP practice using an online survey of NPs working in long-term care, acute care and primary care settings. They found that most respondents were comfortable initiating ACP, with over half of NPs reporting frequent engagement in ACP discussions with their patients. While all NPs deemed ACP to be important in their practice, those in acute care settings were more likely to initiate ACP.

In a qualitative study, Boot and Wilson (2014) investigated the experiences of CNSs with ACP. Their findings emphasised the crucial role of CNSs, who are closely involved with patients, in initiating and taking responsibility for ACP. In contrast, Llewellyn et al.'s (2018) qualitative study presented a less clear distribution of roles in ACP discussions. In their interviews with healthcare professionals in neuro-oncology, they found that the responsibility for ACP was commonly dispersed, influenced by participants' perceptions of their professional roles. Neurosurgeons and physicians emphasised their focus on treatment, leading them to delegate ACP to CNS due to their perceived capacity for in-depth patient interactions. Conversely, CNS positioned themselves in relation to ACP by viewing it primarily within the context of end-of-life care, aligning with their role in providing palliative care. However, this perception limited their understanding of ACP discussions as being distinct from their other duties, resulting in an unclear distribution of responsibilities for ACP. Many participants viewed ACP as a shared responsibility, with uncertainty surrounding specific practices. The majority found ACP challenging, with only a few having conducted documented ACP discussions, thus emphasising the need for training in completing ACP processes (Llewellyn et al. 2018). Conversely, in the study by Rietze et al. (2016) most respondents felt comfortable initiating ACP discussions and expressed confidence in discussing end-of-life care.

TABLE 4 | Study findings.

The roles and responsibilities of APNs in ACP
• Substantial involvement in ACP discussions and ACP counselling • APNs can complete and submit POLST • APNs contribute to reduced hospitalisation and strengthen patient care through ACP
The characteristics of APN practices in ACP
• Relationship as a point of departure • Timing it right • Balancing the role of family involvement • Enhancing effective communication and shared decision-making
Facilitators and barriers influencing APNs involvement in ACP

• Facilitators for APNs involvement
  • Organisational support and education
  • Effective time management and timing
• Barriers for APNs involvement
  • Lack of guidelines and support
  • Time constraints and organisational procedures
  • Structural and system-related barriers
  • Lack of training and education

4.3.1.2 | APNs Can Complete and Submit POLST. Some studies explored the role of APNs in ACP by assessing their involvement in completing POLST forms. Constantine et al. (2018, 2021) performed two retrospective studies in West Virginia, analysing POLST forms after NPs gained the authorization to complete them. They found that NPs played a crucial role in facilitating ACP by completing and submitting POLST forms. In 2018, 1 year after NPs gained authorization, they completed 14.4% (430 forms) of the total 2292 POLST forms (Constantine et al. 2018). This increased to 24.4% (935 out of 3829 forms) in 2021 (Constantine et al. 2021). NPs in palliative care and those practicing in community and hospital-based settings completed many NP-signed forms, accounting for 73.0% of the total (Constantine et al. 2018). NPs significantly outpaced physicians in completing POLST forms, nearly doubling the average number completed (Constantine et al. 2021). Additionally, NPs were more likely than physicians to order 'Do Not Resuscitate' and comfort measures on Section A and Section B of the POLST form. NPs' POLST forms also had fewer errors than physicians (Constantine et al. 2018, 2021). Similarly, Hayes et al. (2017) investigated the percentage of POLST forms signed by APNs in Oregon using the Oregon POLST registry. They found that between 2010 and 2015, 10.9% of forms were signed by APNs compared to 85.3% signed by physicians. The percentage of POLST forms signed by APNs increased from 9.0% to 11.4% between 2010 and 2012.

4.3.1.3 | APNs Contribute to Reduced Hospitalisation and Strengthen Patient Care Through ACP. A few studies investigated how the roles of healthcare personnel, especially APNs, contribute to improve clinical outcomes and patient care. In a UK study evaluating a nurse-led palliative neurology service (Hussain, Adams, and Campbell 2013), the findings revealed that discussions regarding future care as part of ACP were conducted by the palliative care team in nearly all cases. These discussions were typically led either by a CNS in palliative neurology, often conducted in the patient's home, or jointly by a palliative medicine consultant and a CNS during in-patient admission. Mitchell et al. (2016) evaluated an NP-coordinated care-planning initiative for rural residents. They found that the implementation of ACP processes enabled patients to remain at home, effectively connecting specialist palliative care services with general practitioners (GPs) in district and nursing homes. This service not only improved healthcare personnel's confidence in handling end-of-life matters, but also strengthened relations with the ambulance service by improving documentation and ensuring that advanced health directives were available at patient's homes. In Popejoy et al.'s (2019) study investigating differences in potentially avoidable and unavoidable hospital transfers and identifying opportunities for improvement suggested by APNs for decreasing avoidable transfers, the team-based approach showed that over half of the transfers were avoidable. In the study by Mullaney et al. (2016), the examination of ACP discussions on clinical outcomes revealed significant positive changes in patients' expressed goals of care along with a decrease in full-code status. Moreover, a notable correlation was observed between the frequency of ACP discussions and a reduction in hospitalizations, with the greatest impact occurring between the third and fourth conversation. In the qualitative aspect of the study, NPs recognised the association between ACP discussions and improved clinical outcomes. They underscored that ACP discussions could reduce hospital admissions and enhance care quality. Moreover, they highlighted the value of family discussions for providing person-centred care.

4.3.2 | The Characteristics of APN Practices in ACP

The characteristics of APNs' practices involve recognising the importance of developing meaningful and lasting relationships, overcoming challenges in timing, balancing the role of family involvement, and emphasising effective communication.

4.3.2.1 | Relationship as a Point of Departure. Developing meaningful relationships appeared as an important characteristic in APNs' ACP practices because this effectively engaged patients and their families in ACP discussions (Boot and Wilson 2014; Llewellyn et al. 2018; Mullaney et al. 2016; Vellani et al. 2021). The ACP discussions included a series of conversations aimed at fostering and nurturing trust, listening to, and questioning the patient or their family as well as providing essential information, clarifying patient goals and ensuring alignment with the plan of care (Dyar et al. 2012; Llewellyn et al. 2018; Mullaney et al. 2016; Vellani et al. 2021). The participants in the qualitative study by Llewellyn et al. (2018) underscored the importance of relationships by describing how they made a point of assigning patients based on their existing relationships with the patient and their families because this positioned them to better handle ACP discussions. The closeness to

patients and the ability to foster stronger patient relationships was also the reason why CNSs were perceived to be preferred candidates to lead ACP initiatives.

In Mullaney et al. (2016), the NPs also emphasised the value of relationship-building. They perceived ACP discussions as a dynamic, iterative and evolving process, a perspective they shared with the NPs working in long-term care interviewed by Vellani et al. (2021). This was in accordance with the shared understanding that trust is a crucial component of ACP discussions (Mullaney et al. 2016; Vellani et al. 2021). Boot and Wilson's (2014) interviews with CNSs further supported this. They recognised ongoing relationship maintenance as integral to their ACP discussion strategies, acknowledging the risk of harming relationships if ACP discussions were introduced poorly. As they became more familiar with patients, they better identified when to discuss ACP, balancing the risks of harming the relationship.

4.3.2.2 | Timing It Right. Timing emerged as a crucial characteristic of APNs' ACP practices. Boot and Wilson (2014) emphasised the significance of timing in both initiating and conducting ACP discussions. Through interviews, CNSs explained the challenges they faced in determining when to initiate ACP discussions, balancing their moral obligation with patients' individual wishes. The timing was crucial and using cues, such as hospital discharge or resuscitation orders, was common. Similarly, in the study by Rietze et al. (2016), cues were identified, with NPs often considering the patient's initial hospitalisation due to a life-limiting illness as an appropriate timing for ACP initiation. Boot and Wilson (2014) further clarified that while some CNSs took a proactive approach to introducing ACP, others adopted a cautious 'watching and waiting' strategy, remaining alert to patients' cues and facilitating discussions when considered appropriate.

Also, Llewellyn et al. (2018) highlighted the critical role of timing in successful ACP discussions. This went beyond merely having sufficient time and involved identifying the optimal moment. Participants emphasised the importance of recognising the 'right moment' or the 'window of opportunity' for ACP (Llewellyn et al. 2018, 4). This process was metaphorically described by Boot and Wilson (2014) as 'tightrope walking' (p. 10), acknowledging the delicate balance between perceived risks to the patient or the nurse–patient relationship and the risk of missing the chance to engage in ACP. Initiating ACP conversations thus involved balancing the CNSs' personal perspectives, emotions, competencies and past experiences alongside organisational norms that could either support or hinder ACP (Boot and Wilson 2014; Llewellyn et al. 2018).

Underscoring the important role of NPs in facilitating timely and meaningful ACP, Jennings et al. (2019) revealed that almost all deceased individuals in a dementia care program guided by NPs with a focus on ACP had at least one documented goals-of-care conversation within the last 6 months of life. In Vellani et al.'s (2021) pandemic study, NPs highlighted their usual practice of conducting ACP and goals-of-care discussions at the time of long-term care admission and regularly thereafter. However, due to the pandemic, there was a substantial rise in the urgency and frequency of these conversations, necessitating adjustments to routines in order to meet increased needs.

4.3.2.3 | Balancing the Role of Family Involvement. Our analysis revealed that the APNs' involvement in ACP extended beyond patient relationships to also include family involvement (Boot and Wilson 2014; Llewellyn et al. 2018; Mullaney et al. 2016; Vellani et al. 2021). The interactions between NPs, patients and their families provided the opportunity for shared decision-making and care planning (Dyar et al. 2012; Howell et al. 2014; Vellani et al. 2021). Caprio, Rollins, and Roberts (2012) emphasised the importance of discussing the MOST form with both patients and families. Boot and Wilson (2014) recognised families as important collaborators, providing valuable insights into patients' situations and preferences. During the pandemic, NPs faced increased responsibilities for communicating with families due to the heightened risk of sudden declines in residents' conditions (Vellani et al. 2021). Vellani et al.'s (2021) respondents emphasised how this communication acted as a vital connection to families. They underscored that shared decision-making in implementing care plans, involving patients whenever possible, was a key component of the collaborative process.

Howell et al. (2014) interviewed CNSs and highlighted the importance of family involvement when patients were receiving palliative care at home. They described how patients and their families were encouraged to openly discuss end-of-life preferences, with CNSs providing supportive information to facilitate ACP as well as organising '*just in case*' drugs (Howell et al. 2014, 251). In Mullaney et al.'s study (2016), NPs shed light on their use of a mortality risk assessment process during family meetings to foster collaboration and engagement. This approach helped families better comprehend their relative's complex medical conditions. In a study on homebased palliative care, Mitchell et al. (2016) evaluated the pilot of an NP-led and GP-supported care provision program. They found that NPs, by coordinating care and facilitating formal case conferences with GPs, contributed to a more integrated follow-up process that actively involved family caregivers. This approach appeared to enhance overall patient care and make end-of-life situations at home more feasible. Similarly, Mullaney et al. (2016) emphasised the importance of involving families, noting that these discussions offer an opportunity to provide comprehensive explanations of the patient's condition.

Despite the clear benefits of family involvement (Boot and Wilson 2014; Dyar et al. 2012; Howell et al. 2014; Vellani et al. 2021), Boot and Wilson (2014) also emphasised that family dynamics could possibly negatively impact the ACP process and prove challenging. For example, the CNSs reported ethical dilemmas when families strongly articulated views that they perceived as conflicting with the patients' wishes or as not aligned with the patients' best interest.

4.3.2.4 | Enhancing Effective Communication and Shared Decision Making. The APNs ACP practices also involved focusing effective communication. In the study by Caprio, Rollins, and Roberts (2012), almost all respondents recognised the value of the MOST form in enhancing communication of treatment preferences between physicians, patients and families. Moreover, they noted its positive impact on communication within healthcare settings, including among healthcare professionals and between hospitals and nursing homes.

Mitchell et al. (2016) highlighted how structured assessment forms empowered APNs to address challenging questions with patients. This enabled the collection of vital information that might otherwise be overlooked. The importance of ACP and end-of-life communication was underscored by Payongayong et al. (2022). Their study revealed that APNs demonstrated a moderate level of commitment to their professional responsibility regarding end-of-life communication. In the observational study by Howell et al. (2014) about NP–patient interactions in community palliative care, communication techniques emerged as a central theme. NPs described their approach, which included employing various questioning strategies; exchanging information; providing explanations, support and reassurance; using active listening and assisting patients with summarising their thoughts.

4.3.3 | Facilitators and Barriers Influencing APNs' Involvement in ACP

The analysis revealed several facilitators and barriers influencing APNs' involvement in ACP. These were related to both system, organisation, workflow and education-related facilitators and barriers.

4.3.3.1 | Facilitators for APNs' Involvement

4.3.3.1.1 | Organisational Support and Education. Rietze et al. (2016) found that having an ACP policy in place facilitated NPs' involvement in ACP and indicated that organisational support was a key facilitator for engaging NPs in ACP practices. This finding was corroborated by Ersek et al. (2018). Additionally, Dube, McCarron, and Nannini (2015) demonstrated that NPs who had received formal education or continuing education courses on end-of-life care were more involved in ACP discussions compared to those without such training, further highlighting the importance of specialised education as a key facilitator for effective ACP practices among APNs.

4.3.3.1.2 | Effective Time Management and Timing. Several studies highlighted that effective time management and precise timing are crucial facilitators for ACP. Arnett et al. (2017) found that identifying and allocating the appropriate time for ACP are crucial facilitators. They highlighted that established workflow processes, which dictate the review of ACP upon admission to long-term care facilities, were key in structuring the timing for these discussions. Similarly, Caprio, Rollins, and Roberts (2012) demonstrated that the timing of completing MOST forms, specifically at nursing home admission and during routine care meetings, facilitated ACP. Mullaney et al. (2016) further underscored the significance of timing by demonstrating how the initiation of ACP conversations was strategically timed based on mortality risk assessments in nursing homes. They found that high-risk patients typically engaged in discussions after 9.05 days, moderate-risk after 12.4 days and low-risk after 15.75 days. This strategic timing, based on patient risk, allowed NPs to prioritise patient visits, especially in situations with multiple patients, thus allowing them to attend to care more effectively and promoting their ACP involvement. Furthermore, Dube, McCarron, and Nannini (2015) reported that having more time available was a facilitating influence allowing NPs to be involved more thoroughly in ACP discussions.

4.3.3.2 | Barriers to APNs' Involvement in ACP

4.3.3.2.1 | Lack of Guidelines and Support. Ersek et al. (2018) explored stakeholders' perspectives on institutional care interventions that incorporated ACP processes for NPs. They found that lack of clear guidelines and anchoring at the organisational level presented significant barriers to ACP. They interviewed NPs who reported frequent dismissal of their ACP recommendations by physicians, as well as low engagement or opposition from nursing home leadership, underscoring a widespread lack of support.

In the study by Arnett et al. (2017), respondents also raised the lack of guidelines or policies about ACP as well as confusion around how and when to bill for ACP, as a barrier for effective processes. They found that 62% of their respondents either lacked or were unsure of the guidelines for when to review ACP documentation with patients. They also discussed how it was difficult to isolate ACP counselling from routine care, resulting in confusion and uncertainty. This concern was shared by the respondents of Llewellyn et al. (2018) as well as Dube, McCarron, and Nannini (2015). While they understood the core principles of ACP in terms of early discussion, future care and end-of-life, they struggled to distinguish it from their regular work. Llewellyn et al. (2018) also highlighted the lack of clarity in role distribution as a potential barrier. Rietze et al. (2016) found that only 14% of the 101 NPs they surveyed stated they had a policy about ACP, thus acting as a barrier to their engagement in ACP.

4.3.3.2.2 | Time Constraints and Organisational Procedures. Some studies also underscored the potential barriers posed by the time-consuming nature of ACP and the absence of dedicated moments for patient involvement (Dube, McCarron, and Nannini 2015; Llewellyn et al. 2018; Rietze et al. 2016). Llewellyn et al. (2018) noted that in busy healthcare settings, ACP was easily deprioritised, especially if clear routines for when ACP should be conducted were not established. Similarly, the cross-sectional study by Rietze et al. (2016) identified limited protected time as a barrier to ACP involvement, along with unclear roles and organisational procedures. Time constraints were also reported as a barrier in the study by Dube, McCarron, and Nannini (2015), where a shortage of time hindered NPs' involvement in ACP discussions.

4.3.3.2.3 | Structural and System-Related Barriers. Certain structural and system-related factors were pointed out as considerable barriers in some studies (Arnett et al. 2017; Caprio, Rollins, and Roberts 2012; Dube, McCarron, and Nannini 2015). Arnett et al. (2017) highlighted a structural barrier regarding electronic journal systems' inadequacy for storing documents used in ACP documentation. Their study revealed that only about two-thirds of practices could electronically store patients' ACP documents, and only half were capable of systematically transferring these documents to other healthcare settings. Similarly, Dube, McCarron, and Nannini (2015) found that NPs who

were not involved in ACP discussions cited system factors as a barrier. Caprio, Rollins, and Roberts (2012) further identified system-related barriers to ACP, including challenges due to inadequate systems for the electronic transfer of ACP documents when patients transitioned between services. This raised concerns regarding potential loss of documentation or its perceived irrelevance during treatment decisions upon admission. While internal adherence to documentation was trusted, doubts remained about hospital staff's adherence in the absence of clear systems.

4.3.3.2.4 | Lack of Training and Education. Training and education were also found to influence ACP practices, were insufficient skills and training acted as a barrier to APNs' involvement. Arnett et al. (2017) found that some respondents believed they needed to improve their skills regarding ACP discussions. Others felt that their skills needed significant improvement or were lacking entirely, thus posing a barrier to successful ACP discussions. To systematically integrate ACP into practice, they identified staff training, dedicated ACP facilitators and patient education resources as primary needs. Similarly, Dube, McCarron, and Nannini (2015) emphasised the importance of additional training to facilitate ACP practices. Most of the NPs responded that additional training would enhance their ability to conduct ACP discussions.

5 | Discussion

To our knowledge, this is the first literature review on the role of APNs in ACP for older persons. The findings presented here suggest that APNs play a key role in initiating and conducting ACP, either independently or as part of a team depending on the healthcare setting. Their clinical expertise and strong patient relationships enable them to align care with patient preferences and medical needs. Their contributions include facilitating discussions about treatment preferences and prognoses as well as completing documentation such as POLST. The studies reviewed were from the United States, United Kingdom, Australia and Canada, where APN roles are well established, however, their roles and responsibilities vary widely. This review can help guide the development of APN roles in ACP for older persons, especially in countries where their responsibilities are less defined.

5.1 | Person-Centred, Holistic and Competent Care in ACP for Older Persons Performed by APNs

Effective ACP discussions should take a comprehensive approach, including conversations about prognosis and providing patients with the education needed to make informed end-of-life decisions (Rietjens et al. 2017; Sudore et al. 2017). These discussions require a deep understanding of pathophysiology and personalised treatment options, particularly for older patients with complex conditions. The results of this study indicate that APNs, with their advanced medical expertise, are well equipped to handle these challenging conversations, using strong relationships, timing, communication and shared decision-making to guide the process. This review underscores the importance of timing ACP discussions, which may be particularly crucial for older persons, as these conversations often need to be revisited to align with their evolving health needs (Frechman et al. 2020). APNs' close proximity to patients enables them to identify the optimal moments for discussing future care perspectives, thus fostering relationships and cultivating trust, both of which are core aspects of person-centred and holistic care. Their nursing background, coupled with advanced education in pathophysiology, pharmacology and physical examination, equips them with the knowledge necessary to address the specific challenges faced by older patients. Conducting meaningful ACP conversations is particularly time-consuming and often necessitates multiple discussions with patients and their relatives (Vanderhaeghen et al. 2019). The close relationships APNs build with patients and families uniquely position them to have follow-up conversations when the patients are ready.

Our findings suggest that POLST forms completed by APNs often recommend less intensive treatment and contain fewer errors compared to those completed by physicians, likely because of the thorough, ongoing discussions APNs have with their patients. This is consistent with Laurant et al. (2018) who found that APNs generally spend more time with patients during consultations than physicians do, whereas Swan et al. (2015) reported that patients under APN care needed fewer consultations over time (Laurant et al. 2018; Swan et al. 2015). A recent review by Deschodt et al. (2024) also showed that APN consultations for patients with complex conditions were of equal or better quality compared to those by physicians. This suggests that APNs could play a crucial role in making healthcare services more sustainable—especially for older persons needing ACP in home care and nursing homes—as the healthcare system adapts to future needs. This approach can improve access to health care and bring specialised medical care closer to patients.

APNs are uniquely positioned to balance medical and person-centred perspectives, respecting patient autonomy while providing expert guidance on treatment options. Their roles often overlap with those traditionally held by physicians, such as conducting medical assessments and prescribing treatments (Eriksson et al. 2018; Wheeler et al. 2022). This broad scope of practice allows APNs to engage in meaningful ACP discussions, educate patients and families and make informed decisions on life-sustaining measures, aligning care with patient preferences. Studies on ACP interventions in nursing homes show improved documentation of end-of-life preferences when staff are trained in ACP, though effects on family satisfaction and other outcomes are mixed (Hsieh et al. 2022; Ng et al. 2022). While these studies do not specifically focus on APNs, our review suggests that APNs' involvement in multidisciplinary teams could lead to better outcomes in ACP.

5.2 | Organisational and System Requirements Needed to Support the Role of APNs in ACP for Older Persons

The evolution of roles and responsibilities in health care is not solely based on knowledge, but also on societal mandates, expectations, and the rights linked to these roles. The rights and expectations associated with APNs are less well defined and vary between different countries (Poghosyan and Maier 2022; Wheeler et al. 2022). In countries such as Canada, Australia,

the United States and the United Kingdom, APNs commonly diagnose illnesses and prescribe medications—practices that are less widespread in many other nations (Wheeler et al. 2022). However, the role of APNs in ACP also varies across countries. In the United States, APNs with full practice authority independently lead ACP and complete POLST forms, improving patient satisfaction and clarity in care decisions (Constantine et al. 2018, 2021). By contrast, in regions with restrictive regulations, APNs must involve physicians in decision-making, highlighting the impact of regulatory barriers (Poghosyan and Maier 2022; Wheeler et al. 2022). Similarly, Canada expanded NPs' roles during the COVID-19 pandemic, enabling them to act as medical directors in long-term care settings (McGilton et al. 2023). In Europe, APNs in the United Kingdom and the Netherlands hold substantive roles in diagnosis and treatment, whereas Scandinavian countries, including Norway, Denmark, Sweden and Finland, impose stricter limitations that often confine APNs to supporting roles (Brownwood and Lafortune 2024; de Raeve et al. 2024). Meanwhile, countries such as Germany have yet to establish APN roles (Brownwood and Lafortune 2024). These variations not only reflect differing stages of APN role development but also underscore the potential for further growth as healthcare systems increasingly recognise their advanced expertise and contributions.

This review suggests that empowering APNs to play a central role in the ACP process can reduce hospitalizations and improve patient care for older persons. Countries with less clearly defined APN roles could benefit from adopting insights and best practices from nations where these roles are well established. However, such adaptations require careful consideration of local contexts, including regulatory, cultural and educational factors, to ensure that APNs' contributions are effectively integrated into the healthcare system. By learning from international experiences, countries can support the development and refinement of APN responsibilities in ACP for older persons, ultimately improving care quality and outcomes.

An essential element of high-quality ACP for patients with anticipated life-limiting conditions is the use of medical orders and POLST forms, which ensure that patients' end-of-life care preferences are documented and respected (Jennings et al. 2016). In some states in the United States, APNs are authorised to sign POLST forms, often working in collaboration with other healthcare professionals (Constantine et al. 2021). In the United States, the National POLST Paradigm Task Force recommends allowing APNs and physician assistants, alongside physicians, to sign these forms, with APNs authorised in most states (POLST, 2022). This underscores the significant decision-making authority APNs hold in ACP, positioning them closely alongside physicians in their roles.

However, as this review indicates, a significant barrier to fully leveraging APNs' potential in ACP is the lack of organisational support, along with challenges related to time management and task compensation structures. Additionally, APNs in specialised fields, such as dementia care or oncology, face complexities requiring tailored approaches. For instance, ACP with dementia patients involves addressing cognitive decline and surrogate decision-making (Jennings et al. 2019), whereas oncology patients face different end-of-life considerations, such as managing complex treatment regimens and navigating emotional decision-making processes (Dyar et al. 2012). These specialised scenarios underscore the need for role-specific training and resources to enable APNs to effectively address such challenges. Nevertheless, APNs consistently demonstrate their ability to deliver patient-centred care and enhance satisfaction through empathetic communication and holistic approaches.

None of the reviewed studies provided insights into how APNs can effectively contribute to ACP implementation within healthcare organisations. This gap is particularly noteworthy considering that APNs, who are highly educated with master's or doctoral degrees, possess the skills needed to lead service improvements through research, innovation and organisational training. Expanding APNs independent responsibility for completing POLST forms could address some of these barriers by reducing the burden on medical services and improving access to ACP. Evidence indicates that APNs, particularly in palliative care settings, are more proactive and precise in completing POLST forms, ensuring better adherence to patients' end-of-life preferences than when managed solely by physicians (Constantine et al. 2018). This demonstrates APNs' potential to uphold patient autonomy and enhance care quality. However, increased APN autonomy in managing POLST forms is not without challenges. Variations in training and experience may lead to inconsistencies (Hayes et al. 2017), while unclear role definitions within interdisciplinary teams can cause miscommunication (Poghosyan and Maier 2022). These issues highlight the need for standardised guidelines, comprehensive training, and effective interdisciplinary collaboration to ensure consistent, high-quality care.

By granting APNs greater autonomy in managing POLST forms and addressing organisational barriers, healthcare systems can better utilise APNs' expertise and person-centred approach. This would not only improve the implementation of ACP but also improve overall care quality and efficiency. Reducing physician workload and creating a more seamless, accessible process for patients and families are critical outcomes of such changes. Addressing these barriers is essential to fully realising the benefits that APNs can bring to ACP and to fostering a more effective, person-centred healthcare environment.

5.3 | Implications for Practice and Research

The role of APNs in ACP for older persons is significant, provided that organisational and legal support is established. Further clarification and development of this role can contribute to the advancement of sustainable healthcare services across various contexts. By leveraging the unique strengths of both NPs and CNSs, healthcare systems can deliver informed, compassionate and patient-centred care, ultimately improving outcomes and satisfaction in navigating complex healthcare decisions. To optimise their potential in ACP, it is crucial to address barriers such as inconsistent regulations, insufficient training and fragmented collaboration among providers. Standardising APN authority, enhancing training for complex ACP scenarios and fostering interdisciplinary collaboration are important steps.

Future research should focus on the following aspects related to the role and responsibilities for APNs in ACP for older persons:

(1) developing models for task sharing and task shifting that contribute to high-quality healthcare services for older persons, (2) identifying organisational systems and legal frameworks required to support APNs in expanding their roles within ACP, (3) assessing the economic impact of APNs taking a more prominent role in ACP and (4) evaluating healthcare outcomes for older persons and their families when APNs lead ACP processes.

5.4 | Limitations

To provide a comprehensive understanding of APNs' involvement in ACP, we included studies with diverse methodological designs. While the studies varied widely in terms of methodology and sample selection, most were of high quality, which is a strength of this review. However, the inclusion of studies that either focused specifically on APNs or included them as part of a larger sample of healthcare personnel introduced variability that made synthesis challenging. This variability might limit the consistency, comparability and generalizability of the findings.

Additionally, ACP implementation varies across healthcare settings, regions and nationalities concerning the legal rights, roles, responsibilities, scope of practice and regulatory frameworks for APNs. These differences could affect the understanding and outcomes of APNs' involvement, thus complicating the ability to draw definitive conclusions from the material.

While most studies focused on older populations, four examined the general population but were conducted in settings largely involving older persons. Though not exclusively tailored to elderly individuals, these studies offer valuable insights into the complexities of ACP for older persons.

Our review included peer-reviewed articles from electronic databases and published sources, excluding relevant grey literature that might have offered valuable insights into APNs' involvement in ACP. Despite our rigorous search methodologies, some studies may have been missed due to the nature of the search strings or the selection process, potentially leading to an incomplete representation of the available evidence. Furthermore, the decision to specifically search for 'advance care planning' rather than broader terms such as 'end-of-life care' or 'palliative care' may have influenced the findings by narrowing the scope of included studies.

6 | Conclusion

This study underscores the crucial role APNs can play for older persons, with the right training, in guiding patients and families through the ACP process while delivering high-quality care. APNs are well positioned to implement ACP by making informed decisions about care goals and medical orders. Their expertise and close patient relationships make them valuable members of interdisciplinary teams, aligning patient preferences with medical needs.

However, barriers such as time constraints, lack of role recognition, organisational challenges and inadequate training hinder their effectiveness. Addressing these obstacles through standardised training, clear legal frameworks and enhanced organisational support is essential to maximising APNs' potential in ACP. Understanding how different APN models influence ACP implementation and patient outcomes is equally important, as variations across countries highlight the need for context-sensitive strategies. Overcoming these challenges has the potential to significantly enhance the quality of care for older persons, ensuring that their preferences and goals are respected and integrated into medical decision-making.

Author Contributions

J.E.P., H.E., M.G.S., I.T. and L.H.F. Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. J.E.P., H.E., M.G.S., I.T. and L.H.F. were involved in drafting the manuscript or revising it critically for important intellectual content. J.E.P., H.E., M.G.S., I.T. and L.H.F. have given financial approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. J.E.P., H.E., M.G.S., I.T. and L.H.F. agreed to be accountable for all aspects of the work ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are openly available at Figshare: https://doi.org/10.23642/usn.27135015.v1.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.