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Ambulatory Care Nursing Research Priorities: A National AAACN Study

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Research

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Ambulatory care, ambulatory care nursing, research priorities, professional organizations.

BRIEF ABSTRACT
The American Academy of Ambulatory Care Nursing (AAACN) conducted a national study to understand top nursing research priorities from the perspectives of ambulatory care nurses in diverse roles and settings. These priorities provide the foundation for the association's national research agenda to move the specialty forward.

ABSTRACT
Background: Ambulatory care nursing has continued to expand. With its expansion, ambulatory care nursing teams often include registered nurses, advanced practice nurses (nurse practitioners and clinical nurse specialists), and licensed practical nurses. However, the body of knowledge needed to guide their practice in diverse ambulatory care settings has not kept pace with the growth of ambulatory care.

Purpose: This study aimed to evaluate whether research priorities varied between nurse experts and the greater ambulatory care nursing population, and between nursing credential types, specific roles, and ambulatory practice environments. Using the diverse perspectives of ambulatory care nurses and findings from a scoping review, an additional aim of this study focused on setting a national research agenda.

Methods: A sequential cross-sectional descriptive design was used to disseminate online structured surveys. Survey 1 was administered to nurse experts. Survey 2 was administered to nurses practicing in ambulatory care settings. In both surveys, nurses were asked to rate the importance of ambulatory care nursing research categories on a 4-point Likert scale from not important (1) to very important (4). Survey findings and gaps in scoping review coverage were utilized to calculate research priorities.

Results: Ambulatory care nursing research priority mean ratings ranged from 2.94 to 3.85 (Survey 1) and 2.78 to 3.23 (Survey 2). Experts in Survey 1 rated six priority categories as significantly more important for advancing ambulatory care nursing research than the larger sample of practicing nurses: Acute conditions, ambulatory nurse sensitive indicators, care coordination, chronic conditions, person-centered care, and patient wellness and prevention ($p < 0.05$). In addition, some significant differences in priority ratings were found between nursing

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Nursing practice has traditionally focused on the provision of care to patients admitted to hospitals or other facilities. There is an old saying – the only reason someone is admitted to the hospital is because they need nursing care. The shift to ambulatory care has been underway since 1985 with the introduction of diagnostic-related groups (DRGs)

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credential types (registered nurse [RN], nurse practitioner [NP], licensed practical nurse [LPN]), roles, and practice environments. National ambulatory care nursing research priorities include care coordination, medication management, telehealth, workforce development, ambulatory care nurse-sensitive indicators, informatics, person-centered care, patient wellness and prevention, specialty population health, and leadership.

Conclusion: A comprehensive research agenda for AAACN and the greater ambulatory care nursing workforce should use these priorities to drive investment and focus on research to advance the science for the ambulatory care nursing specialty.

(Vladeck, 1984). The passage of the Affordable Care Act also accelerated the movement of care delivery to the outpatient ambulatory care environment (Manchikanti et al., 2011). From 1980 to 2019, outpatient visits tripled, while hospital admissions remained flat. In 2019, 900 million ambulatory care visits totaled $879 billion in health care expenditures (Centers for Disease Control and Prevention, 2023). Advances in minimally invasive procedures and payor pressure in the growth of at-risk contracts and value-based care are creating further incentives for lower-cost ambulatory sites of care (Kumar & Parthasarathy, 2020). Growing use of technology, such as remote patient monitoring and wearable devices, telemedicine and telemonitoring in the home through hospital at-home models, and patient engagement in electronic health records and other digitally enabled experiences have shown positive impacts on health management, reduced hospitalizations, shorter length of stays, and readmissions (American Hospital Association, 2023; Coffey et al., 2022; Conley et al., 2016; Margosian et al., 2025; Roberts et al., 2023). Through these changes in technology and payment structures, the health care system has been incentivized to make this shift to ambulatory care.

As patient care shifted out of hospitals, more registered nurses (RNs) and licensed practical nurses (LPNs) have transitioned to practicing in ambulatory care settings. Of the 3.3 million RN jobs in the United States, 19% were in the ambulatory care environment. The proportion of LPNs in U.S. ambulatory care settings is even larger at 26%, with 657,200 LPN positions (U.S. Bureau of Labor Statistics, 2022). From 2010 to 2017, nurse practitioners (NPs) in the United States more than doubled, with 88.9% of respondents in a national survey indicating they were certified in primary care (Hnath et al., 2023). Clinical nurse specialists (CNSs) also provide direct and indirect care in ambulatory care settings, serving in leadership, education, or research roles to improve the quality of care (U.S. Bureau of Labor Statistics, 2022).

Per the policy recommendations put forth in the "Vital Directions for Health and Healthcare," the National Academy of Medicine has called for a more intense focus on value-based care and an increase in care provided in the home (Shrank et al., 2021). These are two areas central to ambulatory care nursing. The revitalization of primary care has also brought team-based care to the forefront (Flinter et al., 2017; National Academies of Sciences, Engineering, and Medicine [NASEM], 2021a), yet it also brings cultural and practice transformation considerations with expanded clinical duties and division of labor between RNs and LPNs. This growing emphasis on team-based care recognizes the importance of nurses in various roles practicing in collaboration with other members of the health care team to coordinate care and improve outcomes of patients in outpatient settings (Coleman & Reid, 2013; Flinter et al., 2017; Mitchell et al., 2019; NASEM, 2021b; Reiss-Brennan et al., 2016). The Future of Nursing 2020-2030 (NASEM, 2021b) also calls for educational institutions and health systems to empower new and practicing nurses – LPNs, RNs, advanced practice registered nurses (APRNs), and those with doctoral degrees – to lead change in health care.

The American Academy of Ambulatory Care Nursing (AAACN) is the primary nursing association supporting nursing leaders and frontline nurses in outpatient and community settings. AAACN (n.d.) defines ambulatory care nursing as:

> ...a specialized field focused on providing care in outpatient settings, supporting individuals, families, and communities across all stages of life. These nurses play a critical role in primary and specialty care, ensuring patients receive high-quality, coordinated support without hospitalization.

In the literature, ambulatory care nursing is further defined as:

> ...a broad specialty that extends across diverse care settings providing care coordination and management to prevent gaps in health, avoid injury, promote disease prevention, restore health, and manage chronic illness and end-of-life needs, while ensuring the safety of care delivery and

> optimizing health outcomes and cost containment. (Mobley et al., 2023 pp. 2-3).

This definition demonstrates the breadth and heterogeneity of this environment.

Background

The American Academy of Ambulatory Care Nursing (AAACN) has long recognized ambulatory care nurses' evolving roles and has acted over its history to advance inquiry into practice. In the early 1990s, over half of AAACN's members indicated research would benefit them, a research committee was formed, and a study was conducted to obtain research priorities in ambulatory care nursing (AAACN, 2023; D'Angelo, 1993; Moore, 1991). A 1997 collaboration with the American Nurses Association (ANA) produced a reference document on ambulatory care nurses' roles, functions, and competencies, including research skills (AAACN & ANA, 1997). In visioning a future, it called for ambulatory care nurses to define new roles and practices, develop datasets, evaluate and research outcomes, and publish results.

Through annual reviews of research, research forums at annual conferences, research awards for novice and experienced researchers, and publications, AAACN continued to build a research foundation. In 2005, AAACN prioritized steps to increase recognition of nurse value, and noting a dearth of research literature, initiated a member survey and called for research to substantiate ambulatory care nurses' intrinsic knowledge of their value (Conway-Phillips, 2006). In 2013, AAACN implemented a task force to identify, define, and test ambulatory care nurse-sensitive indicators (NSIs) that resulted in a landmark report (Mastal et al., 2016). Through AAACN-sponsored task forces and expert panels, organizational partnerships, published position statements, scope of practice documents, and core curriculums, the critical need for research to continue building evidence is highlighted. Increasingly through Board and member support, AAACN is allocating additional resources to further drive a research agenda and generate new knowledge to advance practice and achieve health outcomes.

With its recently updated vision to create a "*healthier world through nursing excellence, leadership, and innovation, revolutionizing healthcare*," AAACN seeks to rapidly advance holistic and evidence-based patient care and advocate for ambulatory care nurses' essential roles in health care (AAACN, 2023). Despite the burgeoning growth of ambulatory care nursing, the research and science have not kept abreast with its growth nor evolution (Dorsey et al., 2022; Garcia et al., 2024; Morgan-Gorman et al., 2024; Varghese et al., 2024). In 2022, the AAACN Board of Directors hired its first Nurse Scientist and chartered the reformation of a research committee to drive the strategic goal of building the science of ambulatory care nursing. The Board recognized the specialty lacked evidence depth on various approaches used in ambulatory care settings, such as care coordination, telephone triage, expanded telehealth services, and nurse-led interventions to impact patient outcomes (Haimi & Wheeler, 2024; Misra et al., 2020). Once the nurse scientist was on board, a research committee was established in 2023 to address "the critical need to expand the body of knowledge to guide ambulatory nursing practice, education and administration" and to build the research agenda for ambulatory care nursing (Varghese et al., 2024, p. 9). This committee soon embarked on a study to determine research priorities to guide the advancement of ambulatory care nursing science. As Rosenzweig and colleagues (2024) advocated, research priorities are foundational because they help define an organization; reflect an organization's mission, values, and goals; and direct the funding mission of the organization. Research priorities should reflect current practice but also consider how the specialty is evolving to orient the organization to the future.

Multiple examples of research priority determination studies are available in the literature. These studies focused on identifying research priorities for 1) the general nursing population through ANA (2023); 2) specialty nursing organizations, including the American Association of Critical-Care Nurses (Lindquist et al., 1993), American Association of Neuroscience Nurses (AANN) (Hinkle et al., 2022), American Nephrology Nurses Association (ANNA) (Lewis et al., 1999), American Society of PeriAnesthesia Nurses (ASPAN) (Mamaril et al., 2009), Emergency Nurses Foundation (ENF) (Gillespie et al., 2024), Oncology Nurses Society (ONS) (Rosenzweig et al., 2024), Rehabilitation Nursing Foundation (RNF) (Gordon et al., 1996); 3) specific nursing roles with the National Association of Clinical Nurse Specialists (NACNS) (Foster et al., 2018), the National Association of Pediatric Nurse Practitioners (NAPNAP) (Sawin et al., 2012), and the American Organization of Nurse Leaders (AONL) (Chipps et al., 2021); 4) unique populations focused on Veterans (Struwe et al., 2018); and 5) the National Institutes of Health (NIH) (2021).

Many of these studies used a staged approach to determine research priorities. These stages involved first scanning the literature to identify gaps in knowledge, considering previously identified priorities and those of related organizations, and then in Delphi-style vetting topics with invited experts and/or the broader membership. Many studies first vetted topics with experts, while others first shared topics with the membership. Nurses rated topics according to their perceived importance on Likert scales (i.e., not important to extremely important, strongly disagree to strongly agree, no support to strong support). They provided input on other topics for consideration in open-ended items. While most studies sampled experts and the membership, the order and scope of their involvement varied, as noted by Sawin and colleagues (2012).

A number of these organizations, including AANN (Hinkle et al., 2022), NACNS (Foster et al., 2018), NIH (2021), NAPNAP (Sawin et al., 2012), and ONS (Rosenzweig et al., 2024), identified research priorities for the next 3- to 5-year period to highlight where new knowledge was most urgently needed. Most organizations reported research priorities as a general list of the top five to eight topics. A few organizations organized priorities as clinical or professional practice topics (NAPNAP), broad categories for VA practice (Struwe et al., 2018), or according to level of CNS expertise (e.g., student, master's, DNP, or PhD-prepared CNS). Additionally, NAPNAP compared mean importance ratings of the priorities by NPs' specialty area (e.g., acute care, primary care, specialty care) and practice setting (inpatient versus outpatient), and found significantly different perceptions on some topics. These findings reinforced that the issues NPs experience more frequently in certain settings can lead to perceptions of greater importance. In summary, these methods indicate other organizations were interested in exploring research priority importance between experts and organizational members, and comparing perceptions of nurses in different specialties and settings.

Specific Aims

The AAACN Research Committee aimed to identify research priorities that provide high value to nurses and leaders caring for patients in the ambulatory care environment. By identifying these priorities, AAACN is poised to support and accelerate research investigations that generate relevant knowledge needed to address gaps experienced in the field (Varghese et al., 2024). As a result, this study aimed to identify the top ambulatory care nursing research priorities for 2025-2030. Three specific aims guided this research:

1. **Specific Aim 1:** To identify top research priorities for ambulatory care nursing as a specialty.
   a. *Hypothesis*: Research topic priorities will vary between ambulatory care nurse experts and the greater ambulatory care nurse population.
2. **Specific Aim 2:** To explore top research priorities for ambulatory care nursing by nursing credential, nursing role, and practice environment.
   a. *Hypothesis*: Research topic priorities identified by ambulatory care nurses will vary based on nurse credential type, specific roles, and practice environments.
3. **Specific Aim 3:** To craft a national agenda of key research priorities for the ambulatory care nursing specialty.

This article summarizes the research process, findings, and significance of a national cross-sectional descriptive survey to identify and describe top research priorities for the specialty, and delineate any differences by ambulatory care nurse role and practice environment.

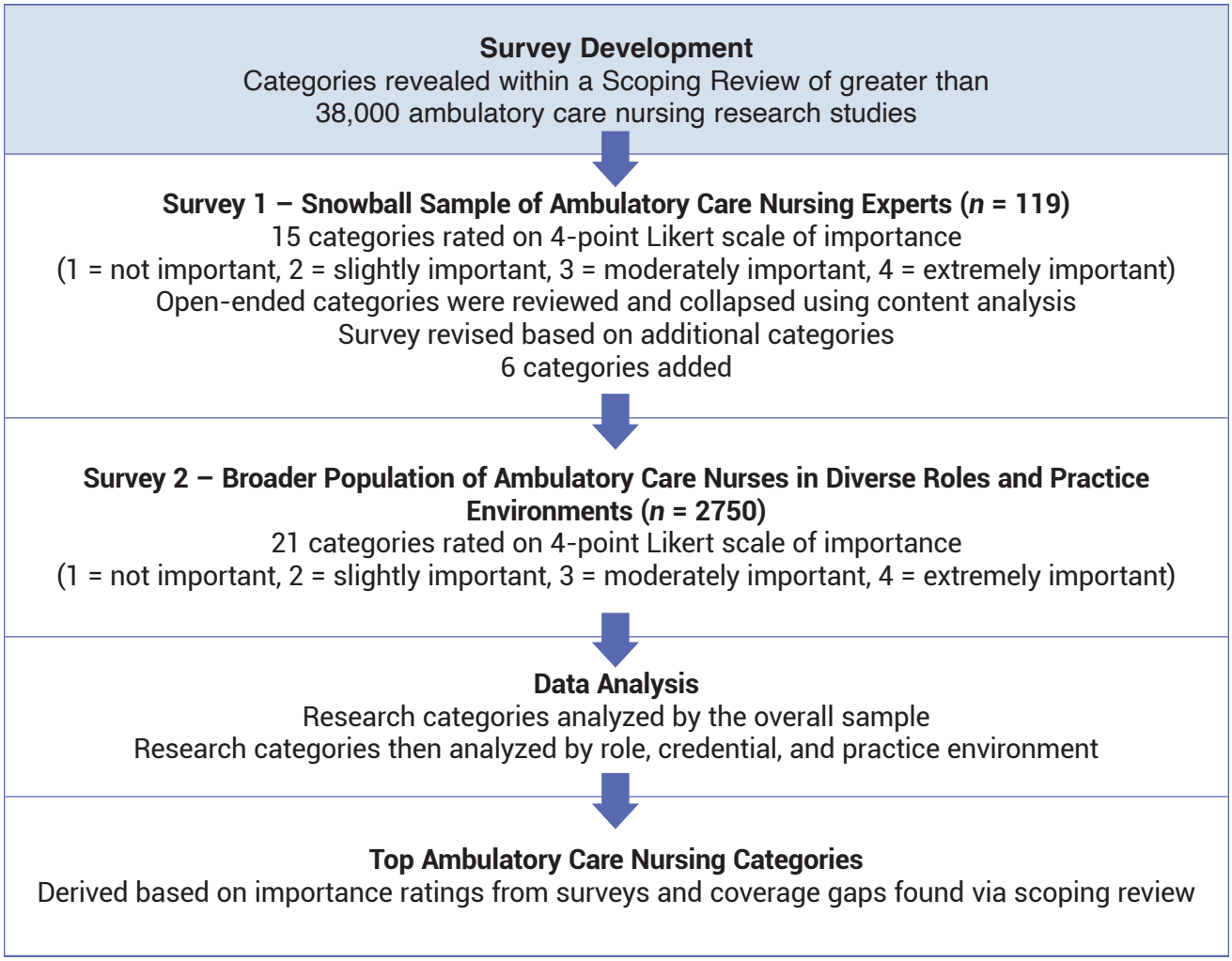
Methods

A sequential cross-sectional descriptive design was used to conduct online structured surveys using Qualtrics[XM]. These surveys were first conducted with experts in ambulatory care nursing (Survey 1), and then with the broader population of ambulatory care nurses in clinical, education, and administrative roles (Survey 2) (see Figure 1). The Institutional Review Board of the New York Institute of Technology approved this study.

Sample

Sample-size targets were selected in consultation with a biostatistician and accounted for the diversity of the target population. For Survey 1, a sample of 120 ambulatory registered nurse experts was targeted to yield a minimum of 20 respondents per role category for the planned analysis. These experts were defined according to Benner's Novice to Expert Theory (Benner, 1984) and included nurses with at least 5 years of experience in one of these six ambulatory care nursing roles: 1) advanced practice nurses (CNSs and NPs), 2) clinical educators/professional development specialists, 3) nurse scientists, 4) quality/risk/informatics nurses, 5) nurse managers, and 6) senior leaders/nursing directors. These roles were believed to be experts due to their

Figure 1.
Research Priority Survey



broader perspective of the ambulatory care nursing specialty than a direct care RN.

For Survey 2, a goal of 1,500 ambulatory care nurses was identified to reflect the diversity of the ambulatory care nursing specialty. Thus, a mixed or broad sample was desired to allow investigators to evaluate differences in priority ratings by key characteristics, including role, ambulatory care environment, and nursing credential type. All ambulatory care nurses (RN, LPN, NP, CNS) were eligible to participate regardless of AAACN membership if they were currently working in an ambulatory care environment. In addition to RNs and APRNs, LPNs were recruited for the study because they are a vital member of the ambulatory care nursing team. Thus, RNs and LPNs were eligible to participate if they were currently filling one of the following roles: 1) clinical care (e.g., staff nurse, clinic nurse, care coordinator, charge nurse, advanced practice nurse (i.e., CNS or NP), 2) education (e.g., clinical educator, professional development specialist, nursing faculty), 3) quality (e.g., quality specialist, risk manager), 4) research (e.g., nurse scientist), or leadership (e.g., nurse manager or director, chief nursing officer).

Recruitment

Participants were recruited using a combined purposive and snowball approach for both surveys. For the expert survey, members of the AAACN Research Committee utilized their professional networks to invite participants through email and professional online forums. To increase external validity, personal professional networks were expanded using LinkedIn. Senior leaders in ambulatory care nursing were identified by searching for profiles of individuals with current position titles that included

phrases like "nursing director ambulatory care," "nursing director outpatient," and "chief nursing officer outpatient ambulatory." When individuals were identified, a request to connect was sent with a message explaining AAACN was working on generating a research agenda for ambulatory care and was preparing to launch a survey of ambulatory care nursing experts with an expected 15-minute completion time. For the general second survey, an e-blast communication was sent to all AAACN members. Recruitment information was posted on AAACN online forums and social media accounts. Research Committee members also posted study information to LinkedIn to reach a broader audience of ambulatory care nurses. Participants were explicitly informed that no identifying information, including IP addresses, was being collected. Consent was implied by completing the survey.

Ambulatory Care Nursing Research Priorities Survey

Survey 1. Content for the expert survey was informed by a large scoping review conducted by the AAACN Research Committee, which also enlisted volunteer involvement in the review. Approximately 30 AAACN members who volunteered attended a training session to ensure interrater reliability in extraction of data from 38,027 ambulatory care nursing articles indexed in PubMed. Inclusion criteria for publications to be reviewed in the scoping review were: 1) publication dates from 2013 to 2023, 2) study location from the Commonwealth Fund report high income countries list (Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, United States) and literature reviews that include publications from these countries, 3) empirical work, and 4) categories relevant to nurses in "ambulatory care" or "community nursing" (Shear & Hutti, 2024). Details of the scoping review methodology are outlined in a companion article by Varghese and Shear (2024). Specific results of the scoping review are forthcoming.

Khalil and colleagues (2025) discussed the role of scoping reviews in informing research priorities. Scoping reviews usually ask broad questions, which allow researchers to map the existing evidence and its multiple levels of evidence. This map can help identify gaps that need to be addressed; prioritize research topics for future investigations, including types of designs, important contextual factors, equity issues, interventions, and outcome measures; and engage experts and other stakeholders in the research process.

Fifteen priority topic categories emerged from the scoping review and were embedded in Survey 1. These categories, listed alphabetically, included:

1. Acute conditions.
2. NSIs.
3. Care coordination.
4. Chronic conditions.
5. Health services research.
6. Healthy work environment.
7. Holistic care.
8. Informatics.
9. Medication management.
10. Person-centered care.
11. Patient wellness and prevention.
12. Public health nursing.
13. Specialty population health.
14. Telehealth.
15. Workforce development.

Before survey distribution, the survey was pilot tested with 10 ambulatory care nurses. The purpose of this pilot was to determine the clarity of the items and the time it took to complete the survey. Slight modifications were made to the survey based on this pilot. For instance, the survey was created for viewing on mobile devices or computers. Based on pilot feedback, modifications were made in the Qualtrics platform to enhance visibility of the item related to ranking the top priority categories.

After pilot testing was complete, the survey was sent to the snowball expert sample previously described. These experts were asked to rate the ambulatory care nursing priority categories on a 4-point scale (i.e., 1 = not important, 2 = slightly important, 3 = moderately important, 4 = extremely important). A 4-point scale was used to avoid response bias and decrease ambiguity in response. In this section, experts were also given a free-text box to add any additional topics not listed. Experts were then asked to select their top three topic priorities most important to their current practice environment. Two team members of the Research Committee (KS & EF) conducted content analysis of free-text responses. They shared those results with the entire research team to determine what survey changes were needed. Six categories were added to Survey 2 before administration, including: burnout, interprofessional communication, leadership, policy evaluation, political advocacy, and retention.

Survey 2. The second survey was then administered to the overall sample of ambulatory care nurses. These nurses were asked to rate 21 ambulatory care nursing categories on the same 4-point scale from not important (1) to extremely important (4), with no option to include free-text categories.

In both surveys, participants were asked a series of demographic questions. These items included current role, organization type, ambulatory care environment, nursing credential type, age range of population served, geographic region, AAACN membership status, military status, highest level of education, years of overall experience, years of experience in ambulatory care nursing, age, gender, and ethnicity.

Crafting a Research Agenda

Ambulatory care nursing research priorities were identified based on survey ratings and scoping review coverage representation. This method involved three steps. Step one involved calculating the percentage of moderately to extremely important ratings for each category in Surveys 1 and 2. In step two, a scoping reverse coverage score was used to identify how the priority categories were covered in the literature. This coverage score was derived by calculating the percentage of coverage each category received in the total studies reviewed. For instance, if a category represented 5% of the total articles included, it received a reversed coverage score of 95%. This scoring was added to ensure AAACN's research agenda adequately addresses gaps in knowledge. In the final step, a priority score was calculated for each category based on an equal weighting average of scores from Survey 1 (where available), Survey 2, and scoping reverse coverage.

Data Analysis

Data were downloaded from Qualtrics into an Excel® file and then analyzed in SPSS® Version 22. The rate of missing data was very low (< 0.1%). Descriptive statistics were used to describe the sample using frequencies and means. Means and standard deviations (SDs) were calculated for each ambulatory care research category. Means were used to identify the importance of each topic for the overall samples in Surveys 1 and 2, and by role and practice environment in Survey 2.

Average standard deviation across all items was 0.81 (range = 0.78 to 0.86). Per Cohen (1988), if two scores differ by half a standard deviation, this value can be used to evaluate if meaningful differences exist. Thus, a difference in ratings of 0.40 was used to indicate significant differences between the research priority categories ($p < 0.05$). This method to analyze statistical significance was used because multiple comparisons of 15 roles and 10 practice environments would increase the rate of a Type 1 error (Stommel & Dontje, 2014).

Results

Description of the Sample

The samples for the two surveys included 119 registered nurse experts in Survey 1 and 2,790 ambulatory care nurses in Survey 2. It is important to note nurse experts recruited for Survey 1 may also have responded to Survey 2. For both surveys, over half of the respondents are AAACN members with geographic representation across all states. Table 1 outlines characteristics of both samples.

Among the broader ambulatory sample (Survey 2), representation was observed for all roles, types of organizations, ambulatory care environments, military statuses, and patient populations served. Most respondents were female, Caucasian, not Hispanic or Latino, and under age 55 years. More nurses held a baccalaureate degree in nursing. Over half of this sample had 10 years or fewer of ambulatory care nursing experience or nursing experience across all practice settings (see Table 1).

Specific Aim 1: Ambulatory Care Nursing Research Priorities

Comparison of Priorities from Nurse Experts (Survey 1) and the Greater Ambulatory Care Nurse Population (Survey 2)

On a 4-point scale, average importance ratings across categories ranged from 2.94 to 3.85 (Survey 1) and 2.70 to 3.23 (Survey 2). Significant differences were found between responses on Survey 1 and Survey 2 for six priority categories ($p < 0.05$). These categories (listed in alphabetical order) included acute conditions (Survey 1 mean = 3.17, *SD* = 0.77; Survey 2 mean = 2.78, *SD* = 0.87), ambulatory care NSIs (Survey 1 mean = 3.62, *SD* = 0.61; Survey 2 mean = 2.94, *SD* = 0.75), care coordination (Survey 1 mean = 3.85, *SD* = 0.36; Survey 2 mean = 3.08, *SD* = 0.78), chronic conditions (Survey 1 mean = 3.70, *SD* = 0.53; Survey 2 mean = 3.06, *SD* = 0.75), person-centered care (Survey 1 mean = 3.60, *SD* = 0.67; Survey 2 mean = 3.19, *SD* = 0.80), and patient wellness and prevention (Survey 1 mean = 3.65, *SD* = 0.61; Survey 2 mean = 3.23, *SD* = 0.77). In each case, the ambulatory care nursing experts in Survey 1 rated these categories as significantly more important for advancing ambulatory care nursing research than the broader sample of ambulatory care nurses (see Table 2).

Table 1.
Sample Characteristics for Survey 1 and Survey 2

	Survey 1 (*N* = 119 RNs)		Survey 2 (*N* = 2489 RNs)	
	n	%	*n*	%
AAACN Member (Yes)	93	78.2	1314	55.1
Nursing Credential				
RN	104	87.4	2050	82.4
APRN (CNS and NP)	15	12.6	439	17.6
Type of Organization				
Ambulatory-care only (non-federally qualified health center)	7	5.9	462	18.6
College/university	13	10.9	529	21.3
Federally qualified health center	3	2.5	521	20.9
Health system with acute (hospital) and ambulatory (clinic) care	72	60.5	863	34.7
Military treatment facility	6	5.0	201	8.1
National health care organization	0	0.0	162	6.5
National nursing organization	1	0.8	161	6.5
Veterans Administration health care facility	10	8.4	133	5.3
Other	14	11.8	33	1.3
Current Role				
Ambulatory chief nursing officer	N/A	N/A	299	12.5
Care coordinator/navigator	N/A	N/A	307	12.8
Clinical nurse specialist (Survey 1 in Advanced Practice Nurse)	15	12.6	254	10.6
Clinical education/Professional development specialist	23	19.3	217	9.1
COO/CEO	N/A	N/A	101	4.2
Discharge planner	N/A	N/A	99	4.1
Group practice manager	N/A	N/A	83	3.5
Informatics nurse	N/A	N/A	88	3.7
Nurse manager	14	11.8	311	13.0
Nurse practitioner (Survey 1 in Advanced Practice Nurse)	N/A	N/A	96	4.0
Nurse scientist	11	9.2	79	3.3
Patient educator	N/A	N/A	46	1.9
Quality specialist/Risk manager	N/A	N/A	56	2.3
Senior leader/Nursing director	49	41.2	112	4.7
Staff/Clinical nurse	N/A	N/A	246	10.4
Miscellaneous (consultant, informatics, quality)	7	5.6	N/A	N/A
Current Ambulatory Care Environment				
Primary care	42	35.3	379	15.9
Specialty care	31	26.1	714	30.0
Home health	0	0.0	250	10.5
Urgent care	0	0.0	195	8.2
K-12	0	0.0	112	4.7
Nursing school	6	5.0	200	8.4

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Table 1. (continued)
Sample Characteristics for Survey 1 and Survey 2

	Survey 1 (*N* = 119 RNs)		Survey 2 (*N* = 2489 RNs)	
	n	%	*n*	%
Current Ambulatory Care Environment (continued)				
Correctional	0	0.0	82	3.4
Procedural center (infusion, dialysis, etc.)	2	1.7	118	5.0
Community	1	0.8	92	3.9
System-wide	36	30.5	89	3.7
Other	42	35.3	151	6.3
Patient Population Served				
Adults	34	29.1	698	29.6
Geriatrics (age 65+ years)	4	3.4	222	9.4
Pediatrics	12	10.3	209	8.9
Mixed ages	67	57.3	1229	52.1
Years of Ambulatory Care Nursing Experience				
< 1 year	N/A	N/A	70	2.9
1-5 years	N/A	N/A	626	26.4
6-10 years	31	26.1	837	35.2
11-20 years (Survey 1); 11-15 years (Survey 2)	40	33.6	431	18.1
16-20 years	N/A	N/A	220	9.3
21-25 years	N/A	N/A	117	4.9
> 20 years (Survey 1) or > 26 years (Survey 2)	48	40.3	74	3.1
Years of Nursing Experience Across Practice Settings				
< 1 year	N/A	N/A	46	1.9
1-5 years	N/A	N/A	523	22.1
6-10 years	3	2.5	745	31.5
11-20 years (Survey 1); 11-15 years (Survey 2)	26	22.0	443	18.7
16-20 years	N/A	N/A	238	10.1
21-25 years	N/A	N/A	124	5.2
> 20 years (Survey 1) or > 26 years (Survey 2)	89	75.4	249	10.5
Military Status				
Active duty	5	4.2	20.6	20.6
National Guard	0	0.0	34.9	34.9
Military reserves	0	0.0	44.5	44.5
Highest Level of Nursing Education				
Associate Degree in Nursing	1	0.8	491	21.9
Baccalaureate in Nursing	13	10.9	786	35.0
Master of Science in Nursing	58	48.7	505	22.5
Doctorate (DPN, DNSc, PhD, etc.)	47	39.5	463	20.6

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Table 1. (continued)
Sample Characteristics for Survey 1 and Survey 2

	Survey 1 (*N* = 119 RNs)		Survey 2 (*N* = 2489 RNs)	
	n	%	*n*	%
Gender				
Male (cis or trans)	4	3.4	710	29.8
Female (cis or trans)	108	90.8	1481	62.1
Gender fluid or non-binary	0	0.0	67	2.8
Unsure or questioning	0	0.0	61	2.6
Prefer to self-describe	2	1.7	16	0.7
Prefer not to answer	5	4.2	51	2.1
Ethnicity				
Asian	6	5.0	207	8.3
Black	7	5.9	307	12.3
Hispanic	1	0.8	432	17.4
Native American or Alaskan Native	1	0.8	402	16.2
White	99	83.2	1285	51.6
Prefer not to answer	7	5.9	62	2.5
Hispanic or Latino (Yes)	1	0.8	609	25.8
Age				
18-24 years	0	0.0	75	3.1
24-34 years[1]	10	9.0	525	21.9
35-44 years[2]	32	28.8	726	30.3
45-54 years[3]	33	29.7	623	26.0
55-64 years[4]	30	27.0	343	14.3
65-74 years	0	0.0	90	3.8
75 years or older[5]	6	5.4	6	0.3
Prefer not to answer	0	0.0	5	0.2
State of Practice				
Alabama	2	1.7	98	4.3
Alaska	2	1.7	101	4.5
Arizona	7	5.9	100	4.4
Arkansas	3	2.5	88	3.9
California	1	0.8	169	7.5
Colorado	5	4.2	120	5.3
Connecticut	5	4.2	98	4.3
Delaware	2	1.7	79	3.5
Florida	3	2.5	85	3.7
Georgia	2	1.7	106	4.7
Hawaii	1	0.8	66	2.9
Idaho	1	0.8	69	3.0
Illinois	5	4.2	83	3.7
Indiana	5	4.2	64	2.8
Iowa	1	0.8	67	3.0
Kansas	4	3.4	52	2.3

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Table 1. (continued)
Sample Characteristics for Survey 1 and Survey 2

	Survey 1 (*N* = 119 RNs)		Survey 2 (*N* = 2489 RNs)	
	n	%	*n*	%
State of Practice (continued)				
Kentucky	3	2.5	71	3.1
Louisiana	1	0.8	15	0.7
Maine	1	0.8	13	0.6
Maryland	3	2.5	10	0.4
Massachusetts	4	3.4	13	0.6
Michigan	4	3.4	18	0.8
Minnesota	3	2.5	16	0.7
Mississippi	1	0.8	4	0.2
Missouri	8	6.7	46	2.0
Montana	2	1.7	7	0.3
Nebraska	1	0.8	3	0.1
Nevada	1	0.8	4	0.2
New Hampshire	1	0.8	11	0.5
New Jersey	2	1.7	5	02
New Mexico	15	12.6	10	0.4
New York	2	1.7	34	1.5
North Carolina	5	4.2	18	0.8
North Dakota	7	5.9	7	0.3
Ohio	4	3.4	40	1.5
Oklahoma	2	1.7	32	1.4
Oregon	2	1.7	51	2.2
Pennsylvania	7	5.9	29	1.3
Rhode Island	3	2.5	16	0.7
South Carolina	1	0.8	19	0.8
South Dakota	5	4.2	21	0.9
Tennessee	5	4.2	26	1.1
Texas	2	1.7	56	2.5
Utah	3	2.5	21	0.9
Vermont	2	1.7	26	1.1
Virginia	1	0.8	43	1.9
Washington	1	0.8	45	2.0
West Virginia	5	4.2	16	0.7
Wisconsin	5	4.2	63	2.8
Wyoming	1	0.8	13	0.6
Outside U.S.	0	0.0	1	0.0

Notes: Broader age categories were used in Survey 1:
[1] 30-39 years.
[2] 40-49 years.
[3] 50-59 years.
[4] 60-69 years.
[5] > 70 years.
APRN = advanced practice registered nurse, CNS = critical nurse specialist, NP = nurse practitioner, RN = registered nurse, CEO = chief executive officer, COO = chief operating officer.

Table 2.
Comparison of Survey 1 and Survey 2 Importance Ratings of Ambulatory Care Nursing Research Categories* (Listed in Alphabetical Order)

Ambulatory Care Nursing Research Categories	Survey 1: RN Nurse Experts (*N* = 119 RNs and APRNs)		Survey 2: Ambulatory Care RNs (*N* = 2489 RNs and APRNs)	
	Mean (*SD*)	Ranking	Mean (*SD*)	Ranking
Acute Conditions	3.17 (0.77)	8	2.78 (0.87)	14
Ambulatory Care Nurse-Sensitive Indicators	3.62 (0.61)	4	2.94 (0.75)	12
Burnout	N/A	—	2.85 (0.78)	13
Care Coordination	3.85 (0.36)	1	3.08 (0.78)	6
Chronic Conditions	3.70 (0.53)	2	3.06 (0.75)	7
Health Services Research	3.02 (0.77)	10	2.97 (0.80)	10
Healthy Work Environment	3.43 (0.79)	7	3.16 (0.78)	4
Holistic Care	3.11 (0.81)	9	3.06 (0.77)	7
Informatics	3.39 (0.76)	6	3.04 (0.79)	8
Interprofessional Communication	N/A	—	3.19 (0.83)	5
Leadership	N/A	—	3.12 (0.72)	5
Medication Management	3.46 (0.70)	5	3.17 (0.77)	3
Patient Wellness and Prevention	3.65 (0.61)	3	3.23 (0.77)	1
Person-Centered Care	3.60 (0.67)	5	3.19 (0.80)	2
Policy Evaluation	N/A	—	3.02 (0.81)	9
Political Advocacy	N/A		2.96 (0.85)	11
Public Health/Community Nursing	2.94 (0.87)	—	3.06 (0.81)	7
Retention	N/A	—	3.19 (0.79)	2
Specialty/Population Health (i.e., mental health, pediatrics, older adult)	3.36 (0.71)	_	3.14 (0.81)	3
Telehealth	3.46 (0.70)	5	3.12 (0.80)	5
Workforce Development	3.45 (0.71)	6	3.16 (0.78)	4

* Rated on 4-point Likert scale from not important to very important; N/A = not applicable.
Notes: APRN = advance practice registered nurse, RN = registered nurse.

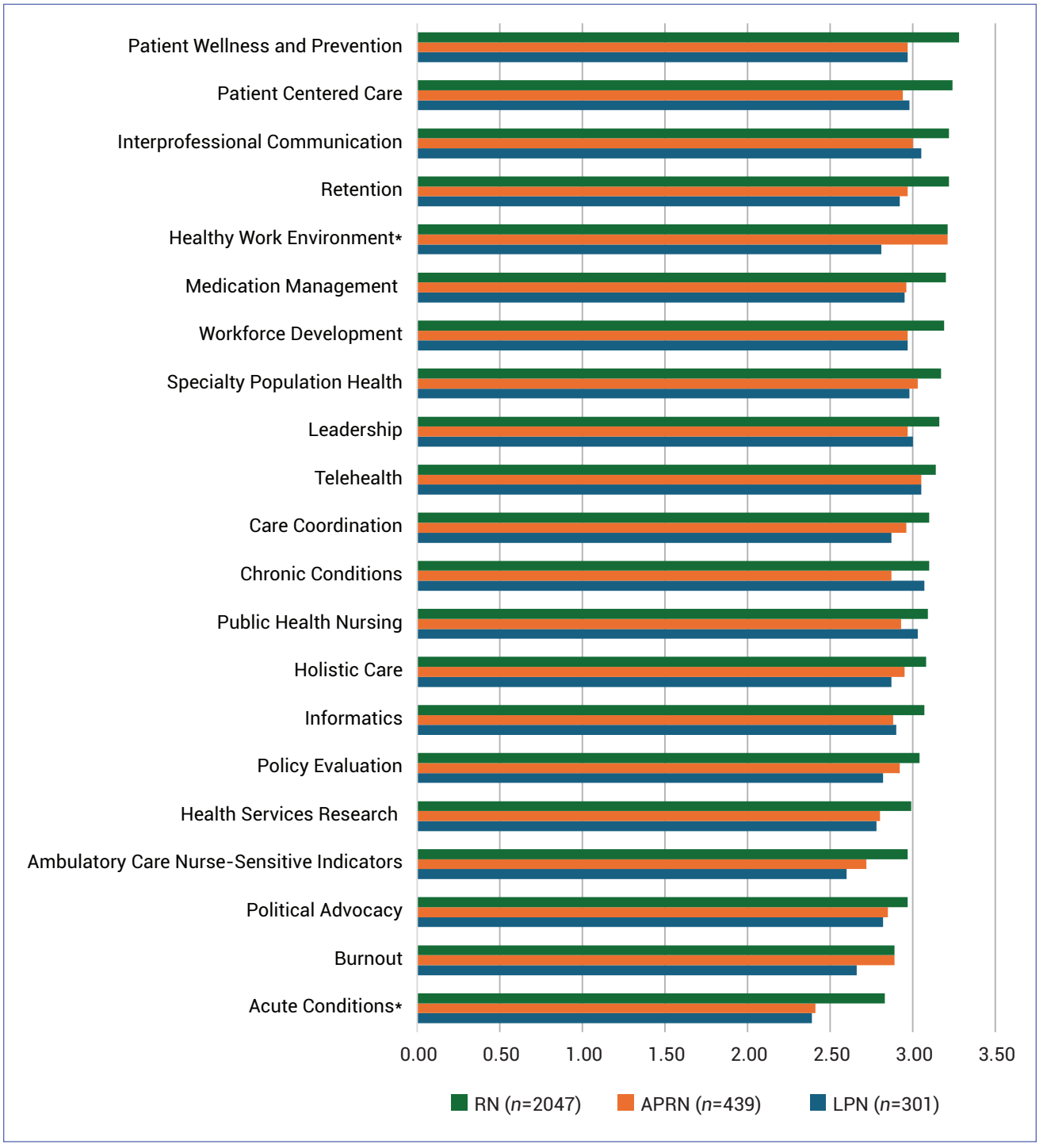
Specific Aim 2: Comparison of Priorities by Nursing Credential Type, Role, and Practice Environment

Importance ratings for the research priorities were also analyzed by nursing credential type, primary role, and practice environment. Importance ratings by nursing credential type include RNs (n = 2047), APRNs (n = 439), and LPNs (n = 301) (see Figure 2). Two significant differences ($p < 0.05$) found were: 1) RNs rated acute conditions (mean = 2.83, *SD* = 0.87) as a more important research priority compared to LPNs (mean = 2.39, *SD* = 0.72) and APRNs (mean = 2.41, *SD* = 0.74); and 2) RNs (mean = 3.22, *SD* = 0.78) and APRNs (mean = 3.21, *SD* = 0.74) rated healthy work environment as a more important priority compared to LPNs (mean = 2.81, *SD* = 0.80).

Significant differences ($p < 0.05$) were seen in research priorities across roles. These differences included:

1. Staff/clinical nurses rated eight research priorities (listed alphabetically) more important than most other roles:
   - Acute conditions: Mean = 3.35, *SD* = 0.76 (versus means = 2.38 to 2.77, SDs = 0.67 to 0.92).
   - Burnout: Mean = 3.51, *SD* = 0.75 (versus means = 2.48 to 3.04, SDs = 0.59 to 0.78)

Figure 2.
Average Importance Ratings of Ambulatory Care Nursing Research Priorities by Nurse Credential (Survey 2)



* $p < 0.05$.
Notes: RN = registered nurse, APRN = advanced practice registered nurse, LPN = licensed practical nurse.

- Care coordination: Mean = 3.52, *SD* = 0.65 (versus means = 2.74 to 3.10, SDs = 0.67 to 0.94)
- Chronic conditions: Mean = 3.52, *SD* = 0.65 (versus means = 2.74 to 3.04, SDs = 0.58 to 0.85).
- Healthy work environment: Mean = 3.68, *SD* = 0.61 (versus means = 2.73 to 3.18, SDs = 0.61 to 0.89).
- Medication management: Mean = 3.53, *SD* 0.69 (versus means = 2.75 to 3.12, SDs = 0.60 to 0.85).
- Person-centered care: Mean = 3.68, *SD* = 0.60 (versus means = 2.76 to 3.37, SDs = 0.70 to 0.84).
- Patient wellness and prevention: Mean = 3.61, *SD* = 0.63 (versus means = 2.72-3.20, SDs = 0.61 to 0.86).

2. Ambulatory Chief Nursing Officers (CNOs) rated three research priorities as more important than most other roles (listed alphabetically):
   - Acute conditions: Mean = 3.23, *SD* = 0.91 (versus means = 2.38 to 2.77, SDs = 0.67 to 0.92).
   - Health services research: Mean = 3.41, *SD* = 0.80 (versus means = 2.60 to 3.00, SDs = 0.67 to 0.92).
   - Political advocacy: Mean = 3.35, *SD* = 0.87 (versus means = 2.69 to 2.94, SDs = 0.79 to 0.90).
3. Senior leaders/nursing directors rated one research priority as more important than most other roles:
   - Ambulatory care NSIs: Mean = 3.41, *SD* = 0.66 (versus means = 2.49 to 2.95, SDs = 0.55 to 0.79).

Conversely, care coordinators and patient educators rated some priorities as significantly less important than most other roles. Care coordinators rated several categories as less important, including:

- Ambulatory NSIs - Mean 2.49, SD = 0.77 (versus means 2.90-3.41, SDs 0.55-0.78)
- Interprofessional communication - Mean 2.73, SD 0.87 (versus means 3.13-3.60, SDs = 0.61-0.89)
- Person-centered care - Mean 2.72, SD 0.84 (versus means 3.17-3.61, SDs 0.70-0.84)
- Patient wellness and prevention - Mean 2.76, SD = 0.86 (versus means 3.13-3.68, SDs 0.61-0.86)
- Retention - Mean 2.73, SD = 0.83 (versus means 3.14-3.60, SDs = 0.64-0.83)
- Specialty population health - Mean 2.74, SD = 0.83 (versus means 3.16-3.40, SDs 0.71-0.85)
- Telehealth - Mean 2.72, SD = 0.79 (versus means 3.16-3.40, SDs = 0.66-0.90)

Patient educators rated retention as less important than most other roles, with a mean of 2.65 and SD of 0.74 (versus means 3.13-3.60, SDs 0.64-0.83).

Finally, importance ratings by practice environment revealed several significant differences ($p < 0.05$). Nurses responding from the system-wide practice environment perspective rated the following 12 research priorities as more important than nurses from most other practice environments (listed alphabetically):

- Acute conditions: Mean = 3.26, *SD* = 0.80 (versus means = 2.26 to 2.71, SDs = 0.66 to 0.96).
- Ambulatory care NSIs: Mean = 3.38; *SD* = 0.66 (versus means = 2.66 to 2.96, SDs = 0.66 to 0.83).
- Burnout: Mean = 3.55, *SD* = 0.67 (versus means = 2.59 to 3.03, SDs = 0.62 to 0.89).
- Care coordination: Mean = 3.58, *SD* = 0.64 (versus means = 2.86 to 3.16, SDs = 0.72 to 0.85).
- Chronic conditions: Mean = 3.47, *SD* = 0.62 (versus means = 2.91 to 3.06, SDs = 0.71 to 0.80).
- Healthy work environment: Mean = 3.68, *SD* = 0.51 (versus means = 2.91 to 3.24, SDs = 0.66 to 0.90).
- Interprofessional communication: Mean = 3.60, *SD* = 0.58 (versus means = 2.91 to 3.13, SDs = 0.76 to 0.88).
- Leadership: Mean = 3.56, *SD* = 0.64 (versus means = 2.86 to 3.10, SDs = 0.66 to 0.83).
- Person-centered care: Mean = 3.59, *SD* = 0.61 (versus means = 2.16 to 3.12, SDs = 0.67 to -0.89).
- Patient wellness and prevention: Mean = 3.54, *SD* = 0.62 (versus means = 2.88 to 3.05, SDs = 0.62 to 0.87).
- Retention: Mean = 3.59, *SD* = 0.56 (versus means = 2.94 to 3.14, SDs = 0.69 to 0.87).
- Workforce development: Mean = 3.47, *SD* = 0.62 (versus means = 3.00 to 3.05, SDs = 0.66 to 0.84).

Conversely, nurses practicing in primary care settings rated person-centered care (mean = 2.16, *SD* = 0.85) as a lower research priority compared to most other practice environments (means = 2.97 to 3.54, SDs = 0.67 to 0.89).

Specific Aim 3: Crafting a National Agenda of Ambulatory Care Nursing Research Priorities

Through the two national research priority surveys and the scoping review, the Research Committee generated a comprehensive research agenda to assist AAACN in advancing its strategic goal of building the science to achieve value and demonstration of health. Equal weight averages of the ambulatory care nursing research categories (see Table 3) were calculated as described in the

Table 3.
Research Priority Determination of Ambulatory Care Nursing Categories*

Ambulatory Research Priority Category	Survey 1 (*N* = 119 RNs) Extremely and Moderately Important Ratings	Survey 2 (*N* = 2489 RNs) % Extremely and Moderately Important Ratings	Scoping Coverage† % Reversed (% Covered)	Priority %*
Care Coordination	100.0	74.9	97 (3)	90.6
Medication Management	91.6	77.5	95 (5)	88.0
Telehealth	89.9	74.6	94 (6)	86.2
Workforce Development	92.5	76.2	87 (13)	85.2
Ambulatory Care Nurse-Sensitive Indicators	93.2	70.1	92 (8)	85.1
Informatics	88.1	72.3	95 (5)	85.1
Person-Centered Care	92.5	74.7	86 (14)	84.4
Patient Wellness and Prevention	95.0	78.1	79 (21)	84.0
Specialty/Population Health (i.e., mental health, pediatrics, older adult)	89.9	73.2	89 (11)	84.0
Leadership	N/A	73.5	94 (6)	83.8
Holistic Care	79.0	72.3	99 (1)	83.4
Political Advocacy	N/A	66.9	99.6 (0.4)	83.3
Retention	N/A	79.3	87.2 (12.8)	83.3
Interprofessional Communication	N/A	77.0	88.8 (11.2)	82.9
Healthy Work Environment	86.5	61.6	98 (2)	82.0
Chronic Conditions	96.6	75.0	70 (30)	80.5
Public Health/Community Nursing	71.5	71.7	98 (2)	80.4
Policy Evaluation	N/A	72.3	85.5 (14.5)	78.9
Acute Conditions	80.9	54.3	99 (1)	78.1
Burnout	N/A	63.6	92.3 (7.7)	78.0
Health Services Research	76.3	68.6	63 (37)	69.3

* Priority for each topic was calculated by averaging the percentage of survey rating(s) where available and scoping reversed coverage.

Notes: N/A = Ambulatory care nursing priority category not included in Survey 1.
More than one ambulatory research priority category may have been represented in the studies from the scoping review, and thus, the overall percentage of scoping coverage for these categories is greater than 100%.
RN = registered nurse.

methodology section. Although all 21 topics were identified as key areas to advance ambulatory care nursing science from the nurse experts in Survey 1 and the greater ambulatory care nursing workforce from survey 2, and the international scoping review, the Research Committee deliberated on determining key research priorities. Recognizing if all categories were considered a priority, then none of them would stand out as an urgent gap, the committee discussed a cutoff based on the importance ratings and scoping review coverage. As a result of this discussion, the key nursing research priority categories focused on the first 10 categories (see Table 3):

1. Care coordination (90.6%).
2. Medication management (88.0%).
3. Telehealth (86.2%).
4. Workforce development (85.2%).
5. Ambulatory care NSIs (85.1%).
6. Informatics (85.1%).
7. Person-centered care (84.4%).
8. Patient wellness and prevention (84.0%).
9. Specialty population health (84.0%).
10. Leadership (83.8%).

Table 4.
Top Five Ambulatory Care Nursing Research Priorities by Registered Nurse (RN) Role* (*n*=2489†)

	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Direct Care Roles					
Care coordinator/ navigator (*n* = 307)	Chronic conditions	Patient wellness and prevention	Public health nursing	Medication management	Specialty population health Workforce development
Clinical nurse specialist (*n* = 254)	Care coordination Medication management Telehealth	Holistic care	Interprofessional communication Specialty population health Workforce development	Leadership Patient wellness and prevention Retention	Chronic conditions
Discharge planner (*n* = 99)	Patient wellness and prevention	Specialty population health	Public health nursing	Holistic care	Informatics Workforce development
Nurse practitioner (*n* = 96)	Retention	Workforce development	Interprofessional communication	Telehealth	Specialty population health
Patient educator (*n* = 46)	Care coordination	Medication management	Holistic care	Chronic conditions	Healthy work environment
Staff nurses (*n* = 246)	Person-centered care	Healthy work environment	Patient wellness and prevention Retention	Interprofessional communication	Care coordination

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Discussion

This national study of ambulatory care nursing research priorities set out to address an AAACN strategic goal of identifying key categories of utmost importance in advancing the unique body of knowledge for the ambulatory care nursing specialty. This study was conducted by the AAACN Research Committee, with one member (JV) serving as the principal investigator. An expert sample was recruited to rate an initial list of ambulatory care categories informed by a large scoping review on ambulatory care nursing research. A broader diverse sample of ambulatory care nurses within and outside AAACN circles then responded to a second survey to identify the importance of the ambulatory care nursing research categories.

In both samples (Survey 1 and Survey 2), ambulatory care nurses rated over three-quarters of the research categories as at least a moderately important priority. Despite some similarities in priority ratings, ambulatory care nurse experts in Survey 1 had a higher range of importance ratings across all categories compared to the broader ambulatory care nurse sample in Survey 2. Ambulatory care nursing experts rated six categories as higher in importance for deepening the body of ambulatory care nursing knowledge. These categories included person-centered care, patient wellness and prevention, ambulatory care NSIs, acute and chronic conditions, and care coordination. These differences are not surprising because nurse experts from advanced practice, education, administrative, and research roles possessed greater expertise in ambulatory care nursing by time spent in their professional role compared to direct care RNs practicing in one specific ambulatory care setting.

Significant differences in research priority ratings were observed among ambulatory care nurses based on credential type, role, and practice environment. Similar differences were documented by NAPNAP in their research priority determination study (Sawin et al., 2012). In this sample, RNs rated acute conditions of higher importance compared to LPNs and APRNs; however, it was their lowest-rated priority. RNs and APRNs rated healthy work environments of higher importance compared to LPNs. LPNs' lower ranking of the work environment could be due to LPNs not working with high acuity

Table 4. (continued)
Top Five Ambulatory Care Nursing Research Priorities by Registered Nurse (RN) Role* (*n*=2489†)

	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Non-Direct Roles					
Ambulatory CNO (*n* = 299)	Person-centered care	Workforce development	Holistic care	Patient wellness and prevention	Leadership
Clinical educator/ PDS (*n* = 217)	Interprofessional communication	Care coordination Patient wellness and prevention Retention	Chronic conditions	Medication management Specialty population health	Healthy work environment
COO/CEO (*n* = 101)	Telehealth	Workforce development	Person-centered care	Informatics	Specialty population health
Group practice manager (*n* = 83)	Patient wellness and prevention	Informatics	Interprofessional communication	Specialty population health	Retention Telehealth
Informatics nurse (*n* = 88)	Informatics	Retention	Patient wellness and prevention Workforce development	Chronic conditions Policy evaluation	Person-centered care
Nurse manager (*n* = 311)	Patient wellness and prevention	Person-centered care	Leadership	Workforce development	Retention
Nurse scientist (*n* = 79)	Telehealth	Workforce development	Healthy work environment	Chronic conditions	Patient wellness and prevention
Quality specialist/ Risk manager (*n* = 56)	Interprofessional communication	Retention	Medication management	Telehealth	Informatics
Senior leader/ Nursing director (*n* = 112)	Care coordination	Ambulatory care NSIs	Interprofessional communication	Retention	Person-centered care

* When more than one category is listed, the mean ratings were equivalent.
† 2394 of the 2489 RN respondents (96.2%) reported their current professional role in the demographic data section of the survey.
Notes: CEO = chief executive officer, CNO = chief nursing officer, COO = chief operating officer, NSI = nurse-sensitive indicator.

patients and having a more limited scope of practice than RNs and NPs. LPNs help provide more adequate staffing resources, reduce RNs' workloads and emotional exhaustion, and support more favorable nursing outcomes (Desir et al., 2024; Havaei et al., 2019).

Additionally, LPNs have reported increased diversity of tasks and role responsibilities more positively compared to RNs, who are expanding to more virtual tasks that create distance with patients in the work environment (Stewart et al., 2015). Further research related to LPNs' perception of the work environment is needed to understand this variation. Nursing regulatory organizations can play a part in these investigations.

Concerning role, staff/clinical nurses rated care coordination, medication management, and burnout as more important (see Table 4). These findings are not surprising because the staff nurse role involves medical management and care coordination. Stress and burnout may also be experienced because staff nurses are asked to do more with less (Cole, 2022; Kim et al., 2020; Lieneck et al., 2023). Ambulatory care CNOs and nursing directors/ senior leaders rated other categories, including acute conditions, health services research, political advocacy, and ambulatory care NSIs, as more important. Given financial pressures in today's cost-conscious environment, senior nurse leaders are pressured to demonstrate ambulatory care nurse value, further underscoring the need for advocacy, research, and outcome measurement to establish return on investment (Siaki et al., 2023).

On the other hand, care coordinators and patient educators rated categories, such as person-centered care, ambulatory care NSIs, and telehealth, as less

important. These findings may reflect robust patient-centered care models in their settings and delivery of care face-to-face or over the phone (versus telehealth visits). Furthermore, these nursing roles have a greater emphasis on ensuring patients receive the right care and educating them on prevention/wellness or disease management for their self-care.

For ambulatory care environment considerations (see Table 5), nurses who reported they work in a system rated more than half of the research priorities as more important than other ambulatory care settings. Nurses in system-wide roles or who work in a health care system may have a more global view of the ambulatory care environment, and thus, report priorities such as person-centered care, ambulatory care NSIs, healthy work environments, and workforce development of utmost importance. Perhaps these respondents practiced in a Magnet® or Pathways to Excellence® organization, which was not assessed in our surveys. Nurses in primary care settings assigned lower importance to person-centered care research, which could represent the widespread adoption of the patient-centered medical home model and less perceived need for research focus as a result.

In summary, these multiple different perceptions about the research priorities were expected because ambulatory care nursing is a highly diverse specialty. As a result, some research categories may be more relevant to nurses with various nursing credentials or those practicing in specific roles or practice environments. Furthermore, these perceptions reflect ambulatory care nurses in hundreds of different organizations. Thus, the significant differences in research priority importance may represent contextual factors within respondent organizations outside the scope of this research.

The national agenda of ambulatory care nursing research priorities reflects the broad perspectives of ambulatory care nurses and the current evidence from the scoping review. Within this new agenda, person-centered care, patient wellness and prevention, care coordination, and medication management were central clinical and care delivery-focused priorities. These emphases are not new within ambulatory care settings, and yet they continue to need more science to direct methods to improve patient-provider communication, patient education, patient activation/engagement, and care coordination, and effectively address social drivers of health.

Telehealth was another key priority. The COVID-19 pandemic required nurses and other health care providers to adopt new platforms to deliver care more quickly. More research is needed to test the best ways to implement this modality to achieve optimal patient outcomes in ambulatory care. Specialty population health, another key priority, continues to need more research to determine how to provide care effectively and efficiently to patients with various physical and mental health conditions across the lifespan, from pediatrics, adults, and geriatrics.

Ambulatory care NSIs are a critical identified priority for nurses and leaders to monitor the quality of care and demonstrate the value of ambulatory care nursing on clinical outcomes across diverse settings. This priority was echoed by Siaki and colleagues (2023), who, in their recent scoping review, recommended a formalized research agenda of the most critical NSIs for ambulatory care nursing practice. Research on ambulatory care NSIs can be guided by the NSI Industry Report (Start et al., 2024). Non-clinical research categories identified as priorities included informatics, leadership, and workforce development. Informatics research is critical to advance mobile health, clinical decision support, documentation, and automation issues, especially with the rapid growth of artificial intelligence (AI) use in health care. Ambulatory care leadership research needs to be strengthened in areas such as healthy work environments and retention of ambulatory care nurses. More workforce development research is needed to define best approaches to effectively transition nurses to enter the ambulatory care nursing workforce and continue to grow professionally throughout their careers.

To move this research agenda forward, AAACN will widely communicate the agenda within AAACN and the broader nursing community. Multiple venues will be used, such as informational webinars, e-blast communications, committees, and AAACN national conference meetings. Second, this research agenda is supported by the national grants program approved in 2024 by the AAACN Board of Directors. The first of its kind within the association, the grants program will fund priority areas to build the body of science for ambulatory care nursing practice. The research priorities reflect a balance of clinical (i.e., person-centered care, patient wellness and prevention, population health), care delivery (i.e., telehealth), quality of care (ambulatory care NSIs), informatics, leadership, and workforce development issues. Other funding agencies that support advancing ambulatory care nursing science, such as the American Nurses Credentialing Center, should consider using these priorities for funding future research.

Table 5.
Top 5 Ambulatory Care Nursing Research Priorities for Registered Nurse (RN) Respondents by Practice Environment* (*n* = 2489[+])

	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Primary Care (*n* = 379)	Person-centered care	Retention	Healthy work environment	Care coordination Patient wellness and prevention	Medication management
Specialty Care (*n* = 714)	Patient wellness and prevention		Retention	Leadership Medication management	Healthy work environment Interprofessional communication Specialty population health
Home Health (*n* = 250)	Workforce development	Patient wellness and prevention	Interprofessional communication	Specialty population health Telehealth	Health services research
Nursing School (*n* = 200)	Patient wellness and prevention	Medication management	Holistic care	Interprofessional communication Telehealth	Informatics
Urgent Care (*n* = 195)	Workforce development	Healthy work environment Medication management Patient wellness and prevention Person-centered care	Care coordination Interprofessional communication	Public health nursing	Chronic conditions Holistic care
Procedural Center (*n* = 118)	Medication management Person-centered care	Care coordination Patient wellness and prevention Retention	Holistic care Leadership	Healthy work environment	Chronic conditions Workforce development
K-12 (*n* = 112)	Holistic care	Telehealth	Political advocacy	Care coordination Interprofessional communication Patient wellness and prevention	Informatics
Community (*n* = 92)	Workforce development	Specialty population health	Medication management	Person-centered care	Care coordination
Correctional (*n* = 82)	Care coordination	Interprofessional communication	Informatics	Holistic care	Patient wellness and prevention
System-Wide (*n* = 89)	Healthy work environment	Interprofessional communication	Care coordination Person-centered care	Burnout Leadership	Patient wellness and prevention

* When more than one category is listed, the mean ratings were equivalent.
[+] 2231 of the 2489 RN respondents (89.6%) reported their current practice environment in the demographic data section of the survey.

At the local level, ambulatory care nurses and leaders must evaluate how priority categories in this new research agenda apply to their organizational context. This assessment may result in a variety of interventions that nest under the same research priority. As a result, research teams in health care organizations can select research priorities most relevant in their specific practice settings. By developing the evidence needed to inform practice at local ambulatory care sites, this research will also contribute to the broader ambulatory care nursing body of knowledge. AAACN also recommends schools of nursing use this new agenda by encouraging master's, DNP, and PhD/DNSC students to develop research proposals that align with these priorities to drive the ambulatory care nursing specialty forward.

Limitations

Several limitations are recognized in our study. First, our goal of recruiting 20 experts in each ambulatory care role category in Survey 1 was not achieved. Only two of the six roles had sample sizes over 20; these roles included clinical educators/professional development specialists and senior leaders/nursing directors. Sample sizes for the other roles ranged from 7 to 15 participants, and there was limited approximation of the true underlying distribution of responses.

In Survey 2, the use of social media facilitated recruitment of a large, broad sample of ambulatory care nurses. This recruitment strategy cast a wide net to encourage ambulatory care nurses who were not members of AAACN to participate because they would not receive information from AAACN e-blast communications about potential study participation. As a result, investigators did not have complete control over who chose to take the Qualtrics survey that was widely distributed. One main limitation of the study was that the Qualtrics survey did not include questions that would identify nonhuman responses. Thus, there was no confirmation bots responded to the survey.

The large sample was a strength of the study. However, respondents represented potentially hundreds of diverse ambulatory care organizations; thus, it is challenging to make strong conclusions on a single research priority list given the differences in research priority ratings from nurses in different roles and a variety of practice settings. Furthermore, nurse perceptions of topic importance may have been influenced by current happenings in each local environment or health system, such as organizational priorities or leadership changes.

Conclusion

This sequential cross-sectional descriptive study identified research priorities needed to advance science for the ambulatory care nursing specialty. Ambulatory care nurses, including LPNs, RNs, and APRNs practicing in diverse roles and practice environments, shared their perspectives on the importance of 21 ambulatory care nursing categories informed by a large scoping review conducted by AAACN's Research Committee. In the end, the 21 research categories were prioritized within broad research priority categories. Top research priorities listed in alphabetical order include ambulatory care NSIs, care coordination, informatics, leadership, medication management, patient wellness and prevention, person-centered care, specialty population health, telehealth, and workforce development.

The AAACN Board of Directors funded a new research grants program for 2025 to move science forward in these priority areas. Other funders should consider these funding priorities. Ambulatory care nurses and graduate students in various programs are encouraged to consider these priorities when identifying research categories to further contribute to this national research agenda to deepen the body of knowledge ambulatory care nursing needs to move our practice forward.

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