

2021 Survey of Michigan Nurses

Survey Summary Report

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Prepared by the
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Introduction

The Survey of Michigan Nurses has been supported by the Michigan Department of Health and Human Services (MDHHS) annually since 2004 to gather information about the supply of and demand for nurses in Michigan. Information gathered from this survey is used to inform state and local decision-making about the recruitment, education, and employment status of the nurse population.

This survey includes questions that primarily focus on: 1) license type and educational background; 2) employment status, including current practice setting; 3) length of time in practice and plans to continue practicing as a nurse; and 4) demographic information.

Methodology

The MDHHS-Office of Nursing Safety and Workforce Planning (ONP) contracted with the Michigan Public Health Institute (MPHI) to revise the annual Survey of Michigan Nurses, collect and analyze the data, and report findings to nursing stakeholders in a variety of formats. In partnership with the MDHHS-ONP, MPHI held a meeting with nursing-stakeholders in November of 2020 to discuss revisions to the 2020 survey instrument that would be incorporated into the 2021 edition. Most notably, there were optional questions added to the end of the survey related to experiences of workplace violence that were first added to the 2020 survey and reviewed by stakeholders. A copy of the 2021 Survey of Michigan Nurses can be found in Appendix A.

Historically, nurses licensed in Michigan were divided into two cohorts, based upon the year in which they first received their license, and each cohort has renewed their license every two years. Nurses scheduled to renew their license were sent an electronic notification from the Michigan Department of Licensing and Regulatory Affairs (LARA) informing them of their license renewal period along with instructions for beginning the online renewal process. In previous years, the notification included an invitation to complete the Survey of Michigan Nurses which was available through two online options. The first option was to click on a survey link located at the end of the license renewal online process. The second option was to use the survey's direct URL address listed on the notification. In 2017, postcard reminders from LARA included instructions on how to complete the survey online by clicking a link at the end of the licensure renewal process or a direct URL to the survey. In 2018 and in 2019, the link to the nursing licensure survey was moved to the confirmation of re-licensure sent to nurses following completion of the re-licensure process. In 2019, LARA revised the licensure renewal process to a new electronic system that sends a generic email notification to everyone who needs to renew their license, regardless of the type of license. Because of this updated licensure renewal process, the 2019 survey link was sent to all nursing licensees in a separate email from LARA. In 2020 and 2021, MPHI used the email addresses provided by LARA for all licensed nurses recorded in their licensure system to send electronic invites to complete the survey. Nursing associations and organizations were also notified about the survey and reminded nurses to complete the annual survey by using the emailed survey link or completing the survey through a general link. LARA also sent email reminders to nurses to complete the survey.

The survey was administered from February 9 to March 31 in 2021. This timeframe was planned because it somewhat overlapped with the survey period in previous years as well as allowed ample time for nursing associations to inform members about the survey. However, the actual response rate may have been affected by the advent of COVID-19 in Michigan in March of 2020 and the impact of it on the nursing workforce, particularly in southeast Michigan. Nurses were not required to go through the license renewal process to take the survey. Therefore, it's possible that nurses not renewing their license also completed the survey.

SURVEY RESPONDENTS & RESPONSE RATES

A total of 38,242 nurses participated in the 2021 Survey of Michigan Nurses, which is slightly lower than the 40,821 nurses who completed the 2020 survey. There was a similar response rate to the 2021 survey as to 2020 due to a similar dissemination method where survey links were emailed directly to registered nurses, LARA emailed reminders, and nursing associations sent reminders. The distribution of responding nurses by demographic characteristics is presented in Table 1. Respondents were instructed to select all races that apply to them.

Table 1. Demographic Characteristics of Survey Respondents

Demographics	RN= 33,958		LPN= 4,284	
	n	Estimate	n	Estimate
Age				
<25 years	382	1.1%	44	1.0%
25 to 34 years	4,205	12.4%	457	10.7%
35 to 44 years	5,904	17.4%	864	20.2%
45 to 54 years	6,215	18.3%	842	19.7%
55 to 64 years	7,616	22.4%	902	21.1%
65 to 74 years	5,831	17.2%	637	14.9%
75+ years	898	2.6%	65	1.5%
Unknown	2,907	8.6%	473	11.0%
Gender				
Female	29,365	86.5%	3,699	86.3%
Male	2,858	8.4%	261	6.1%
Unknown	1,735	5.1%	324	7.6%
Race				
White	28,589	84.2%	2,760	64.4%
Black	1,984	5.8%	1,016	23.7%
American Indian	427	1.3%	94	2.2%
Asian/ Pacific Islander	1,039	3.1%	90	2.1%
Other	814	2.4%	148	3.5%
Unknown	1,933	5.7%	346	8.1%
Hispanic or Latino				
Yes	646	1.9%	106	2.5%
No	31,373	92.4%	3,824	89.3%
Unknown	1,939	5.7%	354	8.3%
Arabic or Chaldean				
Yes	442	1.3%	27	0.6%
No	31,539	92.9%	3,896	90.9%
Unknown	1,977	5.8%	361	8.4%
Region				
Upper Peninsula	832	2.5%	208	4.9%
Northwest LP	1,211	3.6%	122	2.8%
Northeast LP	515	1.5%	108	2.5%
West/West Central	4,629	13.6%	630	14.7%
East Central	1,451	4.3%	207	4.8%
East	2,290	6.7%	343	8.0%
South Central	1,209	3.6%	118	2.8%
Southwest	1,953	5.8%	250	5.8%
Southeast	3,270	9.6%	322	7.5%
Detroit Metro	9,710	28.6%	1,238	28.9%
MI, Unknown Region	3,797	11.2%	258	6.0%
Outside MI	1,624	4.8%	183	4.3%

Demographics	RN= 33,958		LPN= 4,284	
	n	Estimate	n	Estimate
Unknown	3,510	10.3%	627	14.6%

Advanced practice registered nurses (APRNs) were identified by asking only RNs about their national certification and LARA certification status (see Appendix A to see survey questions). The national APRN certification denotes passage of an approved graduate educational program and associated national certification exam at the time of completion of the survey. The specialty certification from LARA denotes completion of a qualifying educational program and national certification exam as well as both registered nurse licensure and advanced practice nursing certification with LARA at the time of completion of the survey.

In Table 2, below, the demographics are presented for licensed nurses who indicated they have passed a national certification exam for national certification as an NP, NMW, CNS or NA (reported as Completed National AP Certification). The second column shows those who in addition to having passed a national AP certification exam, have obtained certification from LARA (reported as LARA-certified APRNs), allowing them to be recognized and practice as a certified APRN or nurse anesthetist in Michigan. As shown, the majority of licensed nurses having passed national AP certification exam are also certified by LARA (78.4% or higher). Among all RNs, nurses who have passed an AP certification exam are most commonly 35 to 44 years old (12.0%); of those licensed nurses, 93.3 percent indicated they also have an APRN or nurse anesthetist certification from LARA. As the age of nurses who have passed an AP certification exam increases, the percentage of licensed nurses with a LARA certification decreases. Male APRNs are slightly more common than female (12.6% and 8.3% respectively). Arabic or Chaldean (13.4%), Asian Pacific Islander (9.3%), and white (8.7%) were the most common races and ethnicities for licensed nurses that passed a national AP certification exam.

Table 2. Demographics of APRNs who Completed National AP Certification & LARA-Certified APRNs

Demographics	Completed National AP Certification n=33,958	LARA-Certified APRNs n=3,273
Age		
<25 years	0.0%	*
25 to 34 years	8.3%	93.1%
35 to 44 years	12.0%	93.3%
45 to 54 years	9.6%	92.9%
55 to 64 years	7.6%	90.6%
65+ years	6.5%	86.4%
Gender		
Female	8.3%	91.5%
Male	12.6%	95.1%
Race		
White	8.7%	92.1%
Black	8.0%	91.2%
American Indian	5.6%	99.9%
Asian/ Pacific Islander	9.3%	90.4%
Other Race	8.9%	91.0%
Hispanic or Latino		
Yes	7.0%	93.2%
No	8.7%	91.9%
Arabic or Chaldean		

Demographics	Completed National AP Certification n=33,958	LARA-Certified APRNs n=3,273
Yes	13.4%	92.9%
No	8.6%	91.9%
Region of Residence		
Upper Peninsula	7.3%	93.3%
Northwest LP	8.5%	90.2%
Northeast LP	7.4%	91.6%
West/West Central	6.9%	91.8%
East Central	7.5%	95.4%
East	6.2%	92.7%
South Central	9.3%	92.0%
Southwest	9.1%	94.8%
Southeast	9.9%	94.9%
Detroit Metro	10.0%	93.5%
Unknown MI Region	9.1%	92.8%
Outside MI	8.7%	80.8%
Region of Employment		
Upper Peninsula	7.5%	95.7%
Northwest LP	9.4%	88.0%
Northeast LP	8.7%	96.1%
West/West Central	7.4%	92.4%
East Central	9.7%	96.4%
East	9.2%	95.1%
South Central	11.1%	94.4%
Southwest	10.8%	96.2%
Southeast	11.4%	95.0%
Detroit Metro	10.8%	95.0%
Unknown MI Region	7.0%	91.7%
Outside MI	10.1%	78.4%

Data Analysis

Once data collection concluded, data from the online survey tool was imported into statistical software, SPSS, and run through numerous data cleaning and validation analyses to identify out-of-range or missing values. One of the initial analyses included comparing the license type, age, and place of residence of nurses who completed the survey to that of the total nurse population based on the state's nurse licensure data provided by LARA. A summary of the state's nurse licensure data can be found at www.minurse.org, under "Licensure Data & Mapping."

Results from this analysis showed some differences in the distribution of nurses who completed the survey compared to the overall nurse population (Table 3 on the following page). A set of weighting variables was created to increase the degree to which the survey results are representative of the overall nurse population.

Table 3. Comparison of Survey Respondents to All Nurses Licensed in Michigan

Characteristics	RNs				LPNs			
	Nurse Population		Survey Participants		Nurse Population		Survey Participants	
	#	%	#	%	#	%	#	%
Total	164,077	-	33,958	-	23,655	-	4,284	-
Age								
<25 years	4,494	2.7%	382	1.1%	487	2.1%	44	1.0%
25 to 34 years	33,228	20.3%	4,205	12.4%	4,236	17.9%	457	10.7%
35 to 44 years	34,327	20.9%	5,904	17.4%	5,190	21.9%	864	20.2%
45 to 54 years	33,641	20.5%	6,215	18.3%	4,835	20.4%	842	19.7%
55 to 64 years	35,531	21.7%	7,616	22.4%	5,142	21.7%	902	21.1%
65 to 74 years	19,422	11.8%	5,831	17.2%	2,933	12.4%	637	14.9%
75+ years	2,778	1.7%	898	2.6%	379	1.6%	65	1.5%
Unknown	656	0.4%	2,907	8.6%	453	1.9%	473	11.0%
Region								
Eastern/Central/Western UP	4,288	2.6%	832	2.5%	1,512	6.4%	208	4.9%
Northwest LP	5,142	3.1%	1,211	3.6%	593	2.5%	122	2.8%
Northeast LP	2,602	1.6%	515	1.5%	698	3.0%	108	2.5%
West/West Central	20,962	12.8%	4,629	13.6%	3,461	14.6%	630	14.7%
East Central	8,080	4.9%	1,451	4.3%	1,491	6.3%	207	4.8%
East	12,802	7.8%	2,290	6.7%	2,142	9.1%	343	8.0%
South Central	5,792	3.5%	1,209	3.6%	712	3.0%	118	2.8%
Southwest	10,053	6.1%	1,953	5.8%	1,603	6.8%	250	5.8%
Southeast	16,210	9.9%	3,270	9.6%	2,116	8.9%	322	7.5%
Detroit Metro	54,057	32.9%	9,710	28.6%	7,879	33.3%	1,238	28.9%
MI, Unknown Region	31	0.0%	1,624	4.8%	2	0.0%	183	4.3%
Non-Michigan	24,058	14.7%	3,797	11.2%	1,446	6.1%	258	6.0%
Unknown Region	-	-	1,467	4.3%	-	-	297	6.9%
LARA-certified APRN (Advanced Practitioner Registered Nurse)								
Nurse Practitioner	10,687	6.5%	2,213	6.5%	-	-	-	-
Anesthetist	2,981	1.8%	498	1.5%	-	-	-	-
Midwife	487	0.3%	126	0.4%	-	-	-	-
Clinical Specialist	246	0.1%	146	0.4%	-	-	-	-

Results of the 2021 Survey of Michigan Nurses

All percentages reported in this section are presented as weighted estimates that reflect Michigan’s overall nurse population. Data weights were calculated and applied to the 2016 through 2021 survey results so comparisons between these six years can be made in cases where the survey questions were the same. However, comparing 2018 results with either of the two previous years should be done with some caution as the response rates for 2018 were considerably lower than previous years. Survey results from 2016 to 2020 cannot be compared with survey results from years prior to 2016, which were not presented as weighted estimates. In addition to weighted estimates, 95-percent confidence intervals were calculated for selected results. Results where the accompanying confidence intervals do not overlap can be considered statistically significant.

Call out boxes with discussion and interpretation of findings are included throughout the report with feedback from diverse stakeholders and trends over time (comparing to 2017 data where available). To see complete reports from previous years, visit www.minurse.org.

EDUCATION

RN and LPN nurses were asked their highest level of nursing education (Table 4) and non-nursing education (Table 5). The highest level of nursing education for 48.6 percent of RNs is a bachelor's degree in nursing and 30.9 percent hold an associate degree in nursing as their highest level of education. Almost all LPNs (93.8%) reported an LPN diploma/certificate being their highest level of nursing education. Over half of RNs and LPNs, 63.2 percent and 65.8 percent respectively, responded that non-nursing education was not applicable as shown in Table 4. See Appendix D, Tables 56 and 57 for a comparison from 2017 to 2021 by race and ethnicities of nurses and education.

Table 4. Highest Level of Nursing-Related Education

Education Level	RN = 33,792		LPN = 4,276	
	Estimate	95% CI	Estimate	95% CI
LPN diploma/certificate	0.0%	(0.0%, 0.0%)	93.8%	(93.0%, 94.5%)
RN diploma in nursing	5.3%	(5.1%, 5.5%)	0.5%	(0.3%, 0.8%)
Associate degree in nursing	30.9%	(30.4%, 31.4%)	4.6%	(4.0%, 5.3%)
Bachelor's degree in nursing	48.6%	(48.1%, 49.1%)	0.9%	(0.7%, 1.2%)
Master's degree in nursing	13.1%	(12.7%, 13.5%)	0.1%	(0.0%, 0.2%)
Doctorate in Nursing Practice (DNP)	1.4%	(1.3%, 1.5%)	0.0%	(0.0%, 0.1%)
Doctor of Nurse Anesthesia (DNAP)	0.1%	(0.1%, 0.1%)	0.0%	(0.0%, 0.1%)
Doctor of Philosophy in Nursing (PhD)	0.5%	(0.4%, 0.6%)	0.0%	(0.0%, 0.1%)
Other doctoral degree in nursing	0.1%	(0.1%, 0.1%)	0.0%	(0.0%, 0.1%)

Table 5. Highest Level of Non-Nursing Education

Education Level	RN = 33,561		LPN = 4,207	
	Estimate	95% CI	Estimate	95% CI
Non-nursing associate degree	14.5%	(14.1%, 14.9%)	25.0%	(23.7%, 26.3%)
Non-nursing bachelor's degree	15.9%	(15.5%, 16.3%)	7.0%	(6.3%, 7.8%)
Non-nursing master's degree	5.7%	(5.5%, 6.0%)	1.8%	(1.4%, 2.2%)
Non-nursing doctoral degree	0.7%	(0.6%, 0.8%)	0.4%	(0.2%, 0.6%)
Not applicable	63.2%	(62.7%, 63.7%)	65.8%	(64.4%, 67.2%)

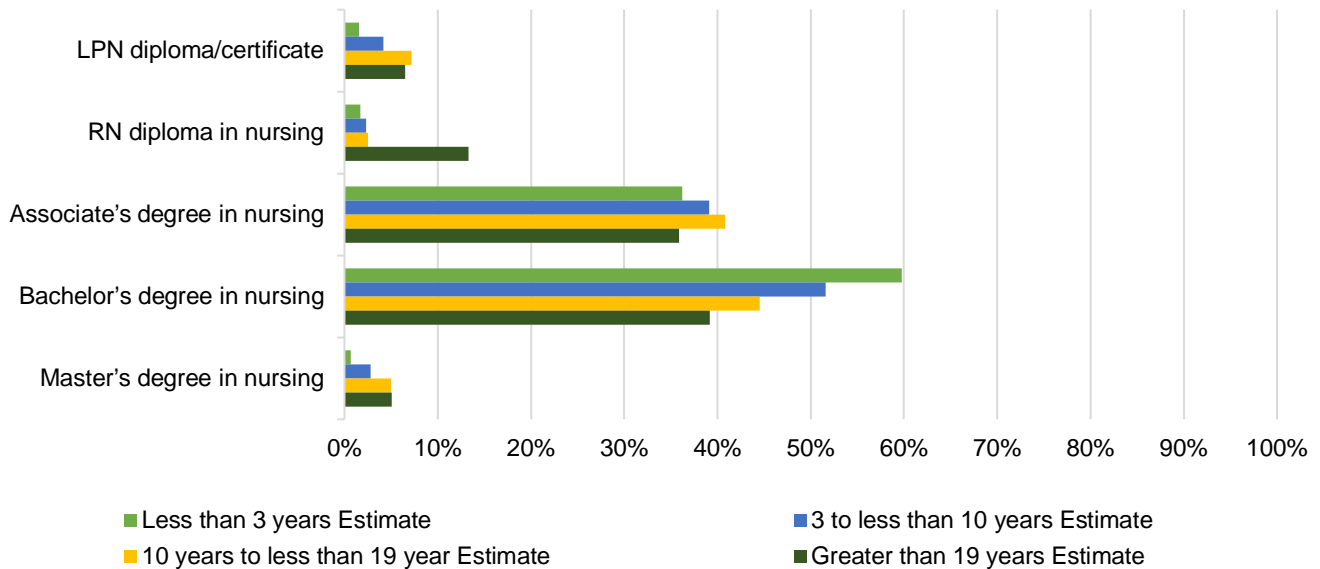
RNs were asked to select which level of degree/certificate qualified them for their first nursing license. As shown in Table 6, 44.5 percent of RNs started with a bachelor's degree in nursing. Almost 4 percent of RNs indicated that they attained a master's degree in nursing to qualify for their initial application for nursing licensure. These are most likely individuals receiving non-clinical degrees or out-of-state pre-licensure, nursing master's programs qualifying them to sit for the registered nurse licensure exam, since clinical graduate nursing programs in Michigan require registered nursing licensure as a criterion for participation at clinical sites.

Table 6. Educational Background that Qualified for First Nursing License

Education Level	RN = 33,926	
	Estimate	95% CI
LPN diploma/certificate	5.4%	(5.2%, 5.6%)
RN diploma in nursing	8.4%	(8.1%, 8.7%)
Associate degree in nursing	38.0%	(37.5%, 38.5%)
Bachelor's degree in nursing	44.5%	(44.0%, 45.0%)
Master's degree in nursing	3.7%	(3.5%, 3.9%)

The type of degree/certificate that first qualified respondents to apply for a nursing license was also compared to how long they have been working. LPNs were not asked which degree qualified them for their first license, so only RNs are reported. As shown in Figure 1 (on the following page), RNs had mostly completed a pre-licensure bachelor's degree in nursing (39.2-59.8%) as their first nursing license regardless of how long they've been working. The next most common degree was an associate degree in nursing regardless of how long they've been working (35.9-40.8%).

Figure 1. Number of Years Working Compared to First Nursing License



The majority of nurses who responded to the survey indicated they were not currently enrolled in a nursing education program (89.4% for RNs and 79.1% for LPNs). Of those who indicated they were enrolled, they were asked if they were currently enrolled in a program to obtain an ADN, Bachelor of Science in Nursing (BSN), Master of Science in Nursing (MSN), Doctor of Nursing Practice (DNP), Doctor of Nurse Anesthesia (DNAP), or Doctor of Philosophy in Nursing (PhD) degree (Table 7). Most RNs are enrolled in a program to obtain an MSN (49.3%) with the next most common program being DNP (36.5%). The majority of LPNs are enrolled in a program to earn an ADN (87.8%) while 13.9 percent are enrolled in a program to obtain a BSN. See Appendix D, Table 58 for a comparison from 2017 to 2021 by race and ethnicities of nurses and their current enrollment.

Table 7. Current Enrollment in Nursing Educational Programs

Degree	RN= 3,040		LPN= 791	
	Estimate	95% CI	Estimate	95% CI
Associate's Degree in Nursing (ADN)	*	*	87.8%	(85.3%, 89.9%)
Bachelor of Science in Nursing (BSN)	0.6%	(0.4%, 0.9%)	13.9%	(11.7%, 16.5%)
Master of Science in Nursing (MSN)	49.3%	(47.5%, 51.1%)	0.4%	(0.1%, 1.1%)
Doctor of Nursing Practice (DNP)	36.5%	(34.8%, 38.2%)	0.2%	(0.0%, 0.8%)
Doctor of Nurse Anesthesia (DNAP)	12.6%	(11.5%, 13.8%)	0.0%	(0.0%, 0.5%)
Doctor of Philosophy in Nursing (PhD)	1.9%	(1.5%, 2.4%)	0.0%	(0.0%, 0.5%)

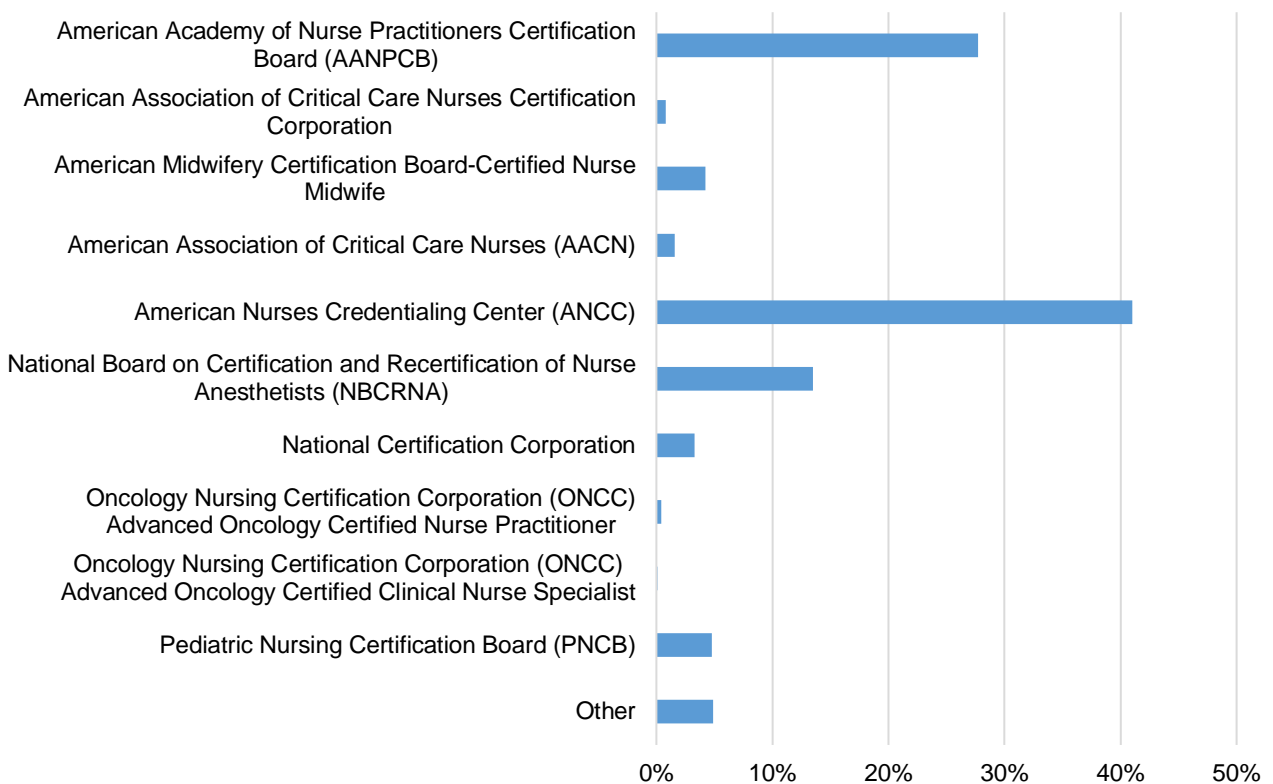
RNs who indicated they were enrolled in a program to earn MSN or DNP degrees were asked if the program was designed to earn a specialty certification (Table 8). Among the enrolled nurses, 59.3 percent of RNs are currently enrolled in nurse practitioner educational programs and 6.0 percent are enrolled in nurse anesthetist educational programs. See Appendix D, Table 59 for a comparison from 2017 to 2021 by race and ethnicities of nurses and their current enrollment in a specialty certification program.

Table 8. Current Enrollment in Educational Programs Associated with AP National Nursing Specialty Certification Exams

Certification	RN= 1,351	
	Estimate	95% CI
Nurse Practitioner	59.3%	(56.7%, 61.9%)
Nurse Midwife	3.2%	(2.4%, 4.3%)
Nurse Anesthetist	6.0%	(4.9%, 7.4%)
Clinical Nurse Specialist	4.5%	(3.5%, 5.7%)
Other	27.0%	(24.7%, 29.4%)

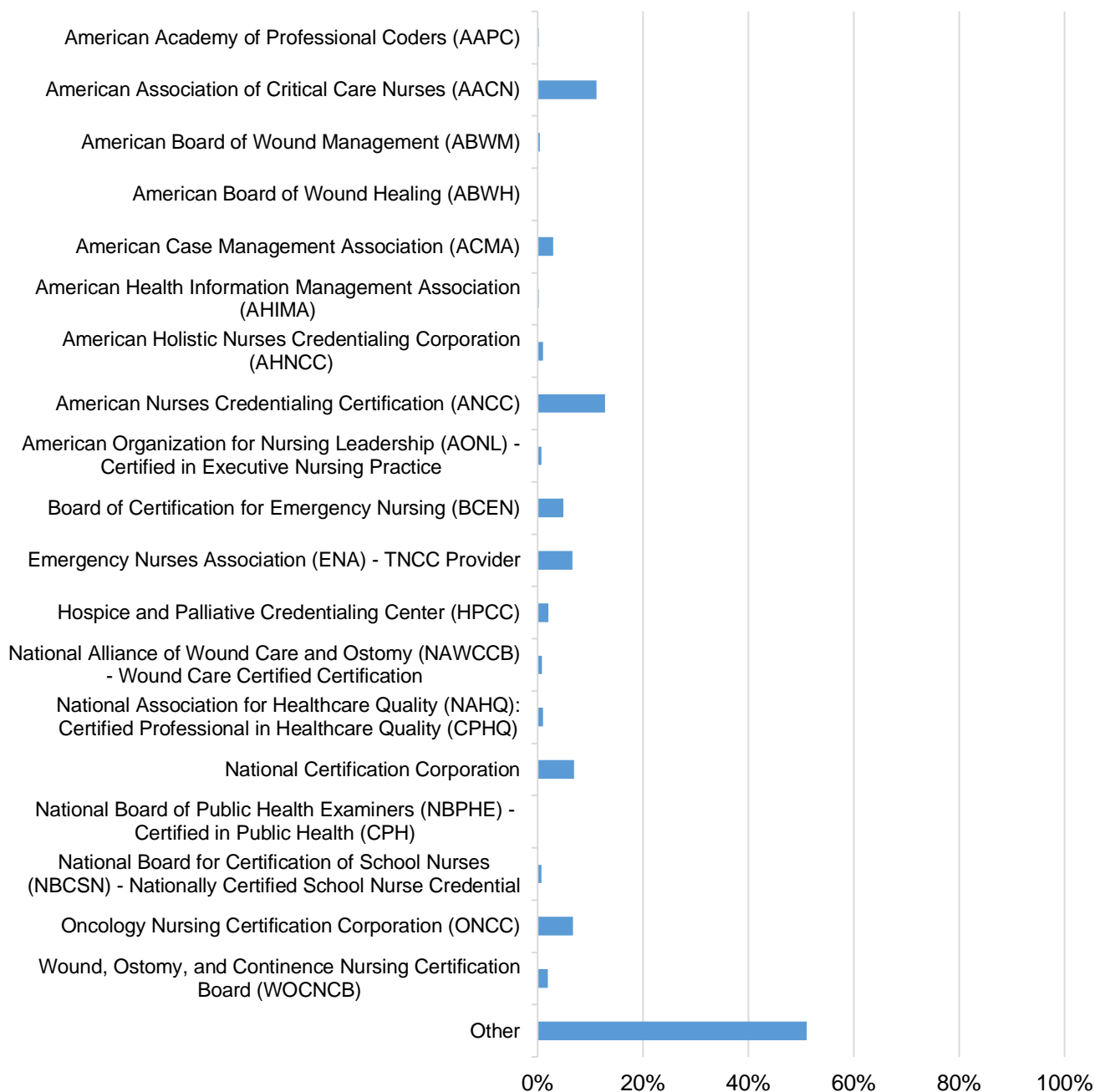
Almost all individuals who had completed advanced practice educational programs (96.5%) indicated they hold national certification as an advanced practice nurse. The results in Figure 2 below show the distribution of additional national nursing certifications among nationally certified advanced practiced nurses. Forty-one percent held an American Association of Critical Care Nurses (AACN) certification, and 27.7 percent have a certification from American Academy of Nurse Practitioners Certification Board (AANPCB). To see the specific certifications APRNs hold from each of these organizations, see Appendix 2.

Figure 2. Completed National AP Certifications



The majority of RNs indicated they did not hold a national certification in a specialty role outside of AP (84.9%). Those who indicated they did hold a national certification in a specialty role outside of AP are shown in Figure 3 (on the following page). About half of the respondents (51.1%) responded they held a national certification that was not listed. Thirteen percent of RNs held an American Nurses Credentialing Certification (ANCC), and 11.2 percent held an American Association of Critical Care Nurses (AACN). To see the specific additional certifications national AP certified nurses hold from each of these organizations, see Appendix 3.

Figure 3. National Specialty Certifications Outside of AP



EMPLOYMENT

Nurses were asked their current employment status to determine the size and characteristics of the workforce. Information was collected on positions requiring a nursing license, on temporary leave from a position requiring a nursing license, in a field other than nursing, as well as nurses who are volunteering, unemployed seeking and not seeking work as a nurse, or retired. Most RNs and LPNs, 63.5 percent and 58.5 percent respectively, are currently employed full-time in a position that requires a nurse license (Table 9).

Table 9. Current Employment Status

Employment	RN= 33,958		LPN= 4,284	
	Estimate	95% CI	Estimate	95% CI
Actively employed in nursing or in a position that requires a nurse license full-time	63.5%	(63.0%, 64.0%)	58.5%	(57.0%, 60.0%)
Actively employed in nursing or in a position that requires a nurse license part-time	10.8%	(10.5%, 11.1%)	9.7%	(8.8%, 10.6%)
Actively employed in nursing or in a position that requires a nurse license on a per-diem basis	5.0%	(4.8%, 5.2%)	4.7%	(4.1%, 5.4%)
On temporary medical leave from a position that requires a nurse license	1.1%	(1.0%, 1.2%)	1.9%	(1.5%, 2.4%)
On temporary non-medical leave from a position that requires a nurse license	0.3%	(0.2%, 0.4%)	0.7%	(0.5%, 1.0%)
Actively employed in a field other than nursing	2.6%	(2.4%, 2.8%)	4.8%	(4.2%, 5.5%)
Unemployed, volunteer status only	1.2%	(1.1%, 1.3%)	1.4%	(1.1%, 1.8%)
Unemployed, seeking work as a nurse	2.0%	(1.9%, 2.2%)	5.0%	(4.4%, 5.7%)
Unemployed, not seeking work as a nurse	3.2%	(3.0%, 3.4%)	3.8%	(3.3%, 4.4%)
Retired	10.3%	(10.0%, 10.6%)	9.7%	(8.8%, 10.6%)

Among all licensed nurses in Michigan, 79.3 percent of RNs and 72.8 percent of LPNs are currently employed as a nurse (Table 10). The percentage of RNs who are currently employed as a nurse tends to decrease as age increases. Nurses who are 65 years and older are the least likely to be currently employed. Male RNs and LPNs are more likely to be currently employed as a nurse than female RNs. RNs living in the southwest region of Michigan are employed at the highest levels (81.1%), while LPNs living in the southeast region of Michigan are employed at the highest levels (79.7%).

Table 10. Percentage of Nurses Who are Employed in Nursing by Demographic Characteristics

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Total	33,958	79.3%	(78.9%, 79.7%)	4,284	72.8%	(71.4%, 74.1%)
Age						
<25 years	382	96.1%	(93.7%, 97.6%)	44	81.8%	(68.0%, 90.5%)
25 to 34 years	4,205	91.2%	(90.3%, 92.0%)	457	86.2%	(82.7%, 89.1%)
35 to 44 years	5,904	89.5%	(88.7%, 90.3%)	864	82.8%	(80.1%, 85.2%)
45 to 54 years	6,215	90.0%	(89.2%, 90.7%)	842	81.1%	(78.3%, 83.6%)
55 to 64 years	7,616	75.4%	(74.4%, 76.4%)	902	69.8%	(66.7%, 72.7%)
65+ years	6,729	32.4%	(31.3%, 33.5%)	702	31.0%	(27.7%, 34.5%)
Gender						
Female	29,365	78.8%	(78.3%, 79.3%)	3,699	72.4%	(70.9%, 73.8%)
Male	2,858	84.2%	(82.8%, 85.5%)	261	75.8%	(70.3%, 80.6%)

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Race & Ethnicity						
White	28,589	78.8%	(78.3%, 79.3%)	2,760	69.3%	(67.6%, 71.0%)
Black	1,984	83.1%	(81.4%, 84.7%)	1,016	80.8%	(78.3%, 83.1%)
Hispanic or Latino	646	86.9%	(84.1%, 89.3%)	106	83.7%	(75.5%, 89.5%)
Arabic or Chaldean	442	80.2%	(76.2%, 83.6%)	27	68.9%	(50.0%, 83.1%)
Other*	2,222	81.7%	(80.0%, 83.3%)	321	75.3%	(70.3%, 79.7%)
Residence						
Upper Peninsula	832	77.3%	(74.3%, 80.0%)	208	72.6%	(66.2%, 78.2%)
Northwest LP	1,211	75.5%	(73.0%, 77.8%)	122	58.5%	(49.6%, 66.9%)
Northeast LP	515	70.0%	(65.9%, 73.8%)	108	65.9%	(56.6%, 74.2%)
West/West Central	4,629	80.5%	(79.3%, 81.6%)	630	69.8%	(66.1%, 73.3%)
East Central	1,451	79.7%	(77.6%, 81.7%)	207	73.2%	(66.8%, 78.8%)
East	2,290	80.4%	(78.7%, 82.0%)	343	71.1%	(66.1%, 75.6%)
South Central	1,209	80.0%	(77.7%, 82.2%)	118	69.6%	(60.8%, 77.2%)
Southwest	1,953	81.1%	(79.3%, 82.8%)	250	72.4%	(66.6%, 77.6%)
Southeast	3,270	78.9%	(77.5%, 80.3%)	322	79.7%	(75.0%, 83.7%)
Detroit Metro	9,710	80.0%	(79.2%, 80.8%)	1,238	75.6%	(73.1%, 77.9%)
Michigan Residence**	1,624	84.6%	(82.8%, 86.3%)	183	77.4%	(70.8%, 82.9%)
Non-Michigan Residence	3,797	75.4%	(74.0%, 76.7%)	258	67.3%	(61.4%, 72.7%)

* Includes individuals who indicated they were American Indian, Asian/PI, or Other race.

**Includes individuals who indicated they live in Michigan but did not provide a zip code.

Table 11 below shows the demographics of nurses who indicated they are currently employed in nursing. The ages of employed RNs and LPNs are fairly, evenly distributed between 25 to 64 years old (20.7-23.7% and 21.3-25.4% respectively). Most RNs (90.3%) and LPNs (92.9%) are female. The majority of RNs and LPNs are also white (88.1% and 64.4% respectively).

Table 11. Demographic Characteristics of Employed Nurses in the Nursing Field

Demographics	RN = 25,472		LPN = 3,032	
	Estimate	95% CI	Estimate	95% CI
Age				
<25 years	3.3%	(3.1%, 3.5%)	2.4%	(1.9%, 3.0%)
25 to 34 years	23.4%	(22.9%, 23.9%)	21.6%	(20.2%, 23.1%)
35 to 44 years	23.7%	(23.2%, 24.2%)	25.4%	(23.9%, 27.0%)
45 to 54 years	23.4%	(22.9%, 23.9%)	23.2%	(21.7%, 24.7%)
55 to 64 years	20.7%	(20.2%, 21.2%)	21.3%	(19.9%, 22.8%)
65+ years	5.6%	(5.3%, 5.9%)	6.1%	(5.3%, 7.0%)
Gender				
Female	90.3%	(89.9%, 90.7%)	92.9%	(91.9%, 93.8%)
Male	9.7%	(9.3%, 10.1%)	7.1%	(6.2%, 8.1%)
Race				
White	88.1%	(87.7%, 88.5%)	64.4%	(62.7%, 66.1%)
Black	6.3%	(6.0%, 6.6%)	29.7%	(28.1%, 31.4%)
Other	7.3%	(7.0%, 7.6%)	8.0%	(7.1%, 9.0%)
Hispanic or Latino				
Yes	2.4%	(2.2%, 2.6%)	3.3%	(2.7%, 4.0%)
No	97.6%	(97.4%, 97.8%)	96.7%	(96.0%, 97.3%)
Arabic or Chaldean				
Yes	1.6%	(1.5%, 1.8%)	0.7%	(0.5%, 1.1%)
No	98.4%	(98.2%, 98.5%)	99.3%	(98.9%, 99.5%)

The distribution of where nurses live and work with respect to Michigan's 10 Regions is shown in Table 12. The highest proportion of RNs live and work (30.8% and 28.8%, respectively) in the Detroit Metro region. The Detroit Metro region also has the highest proportion of LPNs living and working within this region, comparable to RNs (33.7% and 32.8% respectively).

Table 12: Region of Residency & Employment among Michigan Nurses

Region	RNs				LPNs			
	Place of Residency		Place of Employment		Place of Residency		Place of Employment	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Upper Peninsula	2.6%	(2.4%, 2.8%)	2.5%	(2.3%, 2.7%)	5.4%	(4.6%, 6.3%)	5.3%	(4.5%, 6.2%)
Northwest LP	3.5%	(3.3%, 3.7%)	3.4%	(3.2%, 3.6%)	2.4%	(1.9%, 3.0%)	2.3%	(1.8%, 2.9%)
Northeast LP	1.3%	(1.2%, 1.5%)	1.3%	(1.2%, 1.4%)	2.5%	(2.0%, 3.1%)	2.3%	(1.8%, 2.9%)
West/West Central	15.6%	(15.1%, 16.1%)	14.9%	(14.5%, 15.3%)	15.1%	(13.8%, 16.5%)	14.3%	(13.1%, 15.6%)
East Central	4.6%	(4.3%, 4.9%)	4.6%	(4.3%, 4.9%)	5.2%	(4.4%, 6.1%)	5.3%	(4.5%, 6.2%)
East	7.4%	(7.1%, 7.7%)	5.9%	(5.6%, 6.2%)	8.4%	(7.4%, 9.5%)	6.2%	(5.4%, 7.1%)
South Central	3.8%	(3.6%, 4.0%)	3.8%	(3.6%, 4.0%)	2.9%	(2.3%, 3.6%)	2.9%	(2.3%, 3.6%)
Southwest	6.3%	(6.0%, 6.6%)	6.3%	(6.0%, 6.6%)	6.3%	(5.5%, 7.3%)	5.8%	(5.0%, 6.7%)
Southeast	10.3%	(9.9%, 10.7%)	11.4%	(11.0%, 11.8%)	9.2%	(8.2%, 10.3%)	9.2%	(8.2%, 10.3%)
Detroit Metro	30.8%	(30.2%, 31.4%)	28.8%	(28.2%, 29.4%)	33.7%	(32.0%, 35.5%)	32.8%	(31.1%, 34.5%)
Outside MI	3.3%	(3.1%, 3.5%)	6.5%	(6.2%, 6.8%)	3.2%	(2.6%, 3.9%)	7.9%	(7.0%, 8.9%)

Nurses employed outside of Michigan were asked the reason for being employed outside the state (Table 13). While the majority of respondents indicated they live out of state (57.5% RNs and 60.5% LPNs), 21.0 percent of RNs and 20.2 percent of responding LPNs indicated they were employed outside of Michigan because their employer is located in another state.

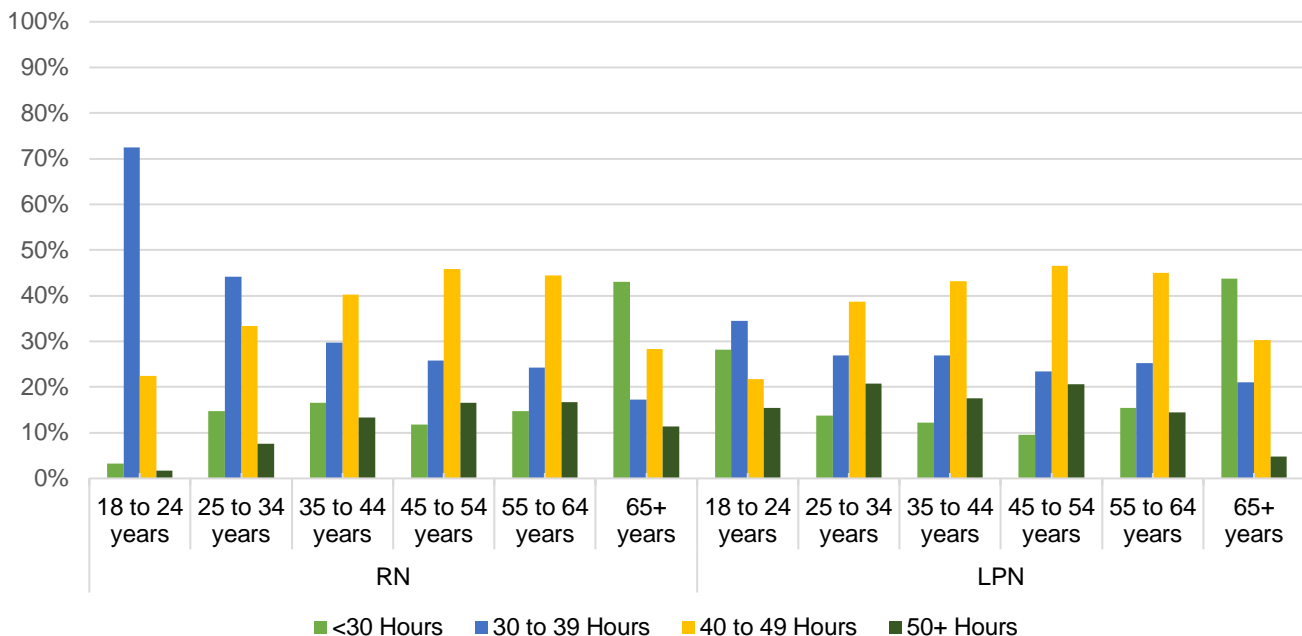
Table 13. Reason Primary Place of Employment is Outside of Michigan

Reason	RN = 2,848		LPN = 175	
	Estimate	95% CI	Estimate	95% CI
Living out of state	57.5%	(55.7%, 59.3%)	60.5%	(53.1%, 67.4%)
Semi-retired	1.2%	(0.9%, 1.7%)	0.0%	(0.0%, 2.1%)
Taking care of home and family	2.6%	(2.1%, 3.3%)	10.4%	(6.7%, 15.8%)
School	0.9%	(0.6%, 1.3%)	5.2%	(2.8%, 9.6%)
Difficulty finding a nursing position	2.9%	(2.3%, 3.6%)	3.3%	(1.5%, 7.1%)
Scope of practice regulation is more favorable outside of Michigan	2.7%	(2.2%, 3.4%)	2.3%	(0.9%, 5.7%)
Travel nurse	14.3%	(13.1%, 15.6%)	19.8%	(14.6%, 26.3%)

Reason	RN = 2,848		LPN = 175	
	Estimate	95% CI	Estimate	95% CI
Provide telehealth/call center	11.8%	(10.7%, 13.0%)	5.0%	(2.6%, 9.3%)
Employer is in another state	21.0%	(19.5%, 22.5%)	20.2%	(14.9%, 26.8%)
Military	2.0%	(1.5%, 2.6%)	1.4%	(0.4%, 4.5%)
Other (please specify)	8.2%	(7.2%, 9.3%)	9.7%	(6.1%, 15.0%)

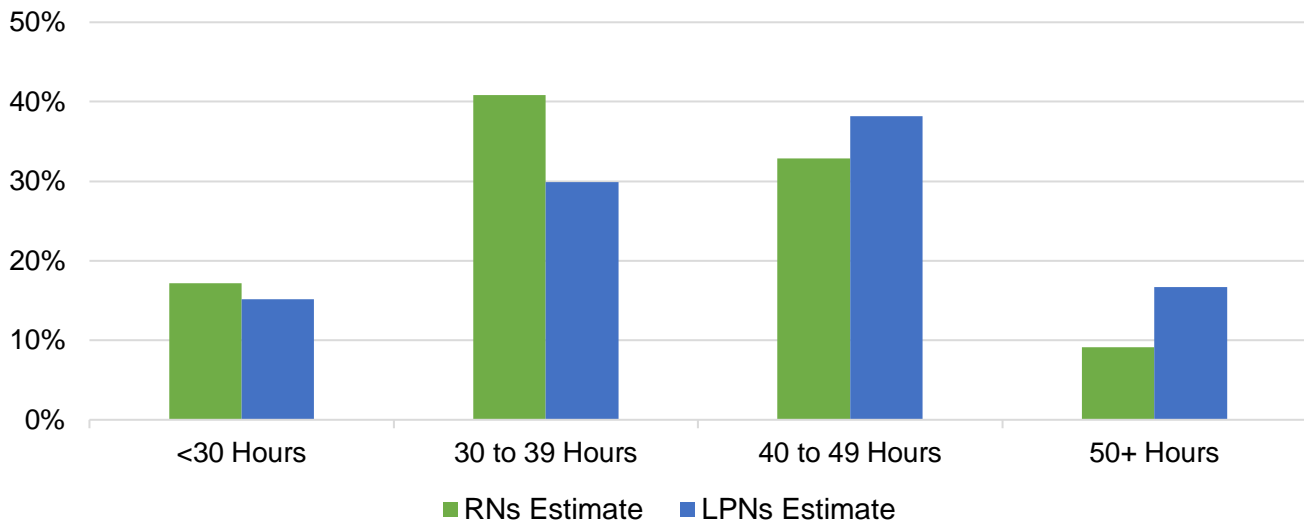
Both RNs and LPNs who stated they are working as a nurse were asked to indicate how many hours per week they work in nursing or a related area (Figure 4). RN nurses between 35-64 years old are most likely to work between 40-49 hours per week while LPN nurses between 25-64 years old are most likely to work 40-49 hours per week. On the other hand, nurses who are 65 years of age or older are most likely to work fewer than 30 hours per week in nursing or a related area. The majority of RNs 18-34 years old work 30-39 hours per week (44.2-72.5%). See Appendix D, Table 60 for a comparison from 2017 to 2021 by race and ethnicities of nurses and hours worked per week.

Figure 4. Hours Worked per Week by Age



Nurses who work in positions that provide direct care (included staff nurses, school health nurses K-12, and APRNs) and their hours worked per week are reported in Figure 5 on the following page. The majority of RNs work 30 to 39 hours per week (40.8%) while the majority of LPNs work 40 to 49 hours per week (38.2%) in direct care positions.

Figure 5. Hours Worked per Week by Direct Care Nurses



Nurses currently working in the nursing field were asked to indicate how many different nursing positions they hold (Table 14). Currently, most of the RNs and LPNs only have one nursing position, 85.5 percent and 85.1 percent respectively.

Table 14. Number of Currently Employed Nursing Positions

Number of Positions	RN = 25,375		LPN = 3,004	
	Estimate	95% CI	Estimate	95% CI
1 Position	85.5%	(85.1%, 85.9%)	85.1%	(83.8%, 86.3%)
2 Position	12.4%	(12.0%, 12.8%)	12.7%	(11.6%, 13.9%)
3+ Positions	2.2%	(2.0%, 2.4%)	2.3%	(1.8%, 2.9%)

Most commonly, RNs (35.3%) have been working as a nurse for 20 or more years. Almost one third (31.4%) of LPNs have been working as a nurse for three to less than 10 years, and over one quarter (28.0%) have been working for 20 or more years. Additionally, 11.9 percent of RNs have been working for less than three years compared to 17.8 percent of LPNs (Table 15). See Appendix D, Table 61 for a comparison from 2017 to 2021 by race and ethnicities of nurses and years practicing as a nurse.

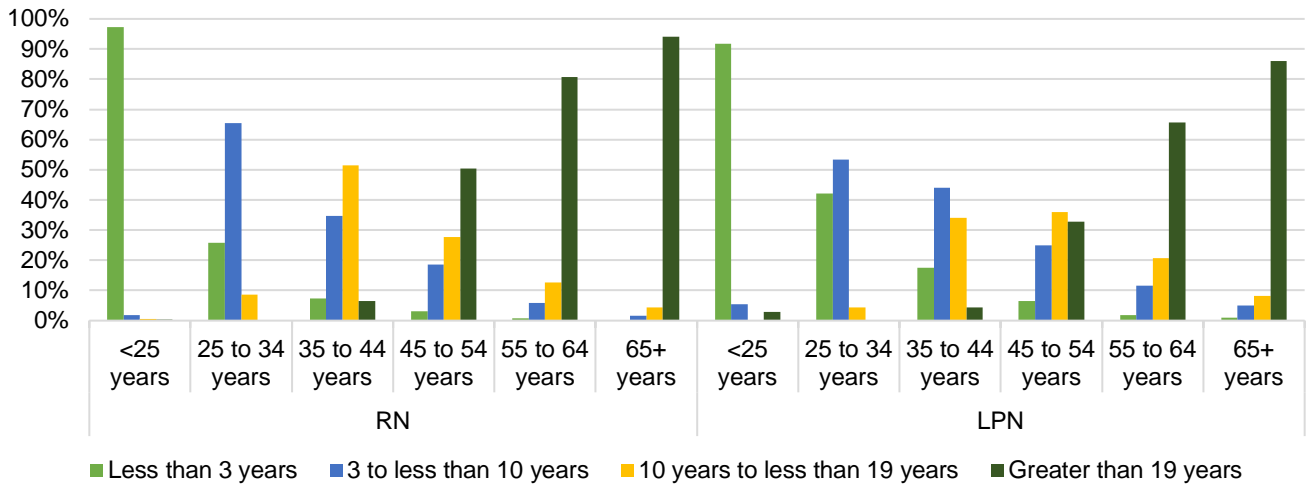
Table 15. Number of Years Working as a Nurse (RN and LPN)

Years	RN= 24,781		LPN= 2,895	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	11.9%	(11.5%, 12.3%)	17.8%	(16.4%, 19.2%)
3 to less than 10 years	29.2%	(28.6%, 29.8%)	31.4%	(29.7%, 33.1%)
10 to less than 20 years	23.6%	(23.1%, 24.1%)	22.8%	(21.3%, 24.4%)
20 or more years	35.3%	(34.7%, 35.9%)	28.0%	(26.4%, 29.7%)

The number of years working was also compared to the age of the nurse (Figure 6 on the following page). Almost all of RNs and LPNs who have been working less than three years are 18 to 24 years old (97.3% and 91.7% respectively). RNs and LPNs working three to less than 10 years are mostly between 25 to 34 years old (65.5% and 53.3% respectively). RNs 35 to 44 years old tend to have 10 to 19 years nursing experience (51.4%) while LPNs in the same age category have three to less than 10

years' experience (44.1%). Both RNs and LPNs over 45 years old have more than 19 years of nursing experience.

Figure 6. Number of Years Working as a Nurse Compared to Age (RN and LPN)

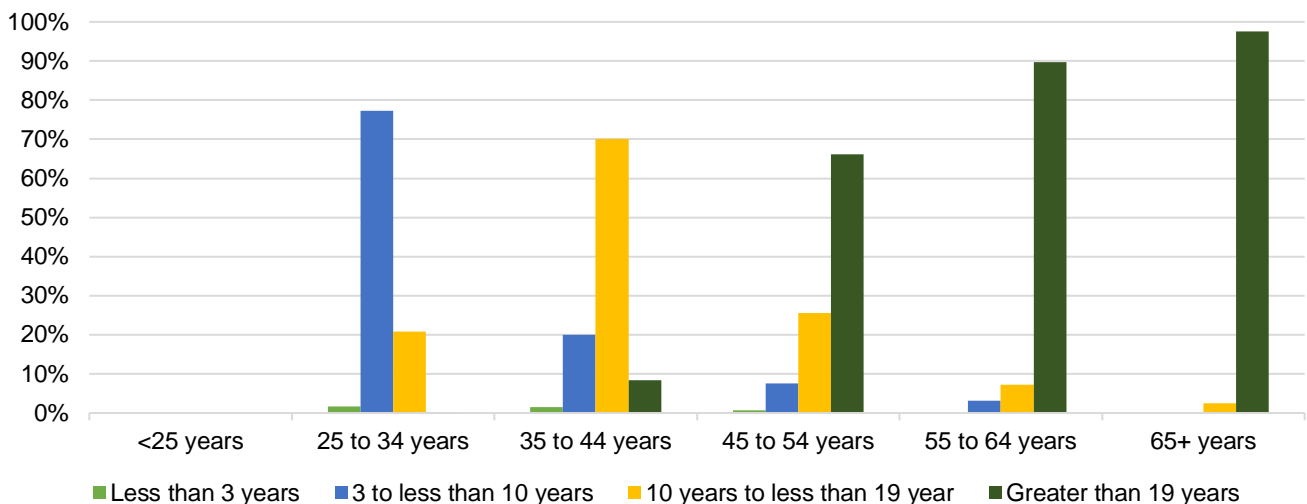


The number of years nationally certified APRNs have been working was also measured as a subset of RNs. Forty-one percent of APRNs have been working as a nurse for 20 or more years (Table 16). The number of years APRNs have been working was also compared to their age (Figure 4). The percentage of APRNs working three to less than 10 years are mostly between 25 and 34 years old (77.2%) while most APRNs 35 to 44 years old have been working for 10 to less than 19 years (70.1%). APRNs 45 years or older are most likely to have worked as a nurse for 20 or more years (66.1-97.5%).

Table 16. Number of Years Working as a Nurse (Completed National AP Certification only)

Years	APRN= 2,758	
	Estimate	95% CI
Less than 3 years	1.0%	(0.7%, 1.4%)
3 to less than 10 years	24.4%	(22.8%, 26.0%)
10 to less than 20 years	33.6%	(31.8%, 35.3%)
20 or more years	41.1%	(39.3%, 42.9%)

Figure 7. Number of Years Working as a Nurse Compared to Age (Completed National AP Certification only)



Of those nurses who indicated they had been working as a nurse less than three years, they were asked to indicate how prepared they felt when entering the nursing workforce (Table 17). Most RNs and LPNs (50.5% and 61.3% respectively) felt adequately prepared. The next most common response for both RNs (33.5%) and LPNs (28.7%) was they did not have enough clinical time prior to entering the nursing workforce, which is slightly higher than responses in 2020 (29.6% RNs and 22.5% LPNs found on www.minurse.org). New nurses also felt they did not have enough skills lab or simulation time in comparison to 2020 (15.3% RNs and 15.0% LPNs).

Steering Committee Discussion

COVID-19 impacted the availability and quality of clinical placement sites which in turn limited nursing student time in clinical placements.

Table 17. Preparedness for Entering Nursing Workforce

Level of Preparedness	RN= 2,104		LPN= 422	
	Estimate	95% CI	Estimate	95% CI
Adequately prepared	50.5%	(48.4%, 52.6%)	61.3%	(56.6%, 65.8%)
Not enough classroom time	2.0%	(1.5%, 2.7%)	3.6%	(2.2%, 5.8%)
Not enough clinical time	33.5%	(31.5%, 35.5%)	28.7%	(24.6%, 33.2%)
Not enough skills lab/simulation time	18.1%	(16.5%, 19.8%)	18.1%	(14.7%, 22.1%)
Not enough critical thinking/prioritization practice	21.0%	(19.3%, 22.8%)	9.4%	(7.0%, 12.6%)
Other	2.2%	(1.7%, 2.9%)	1.0%	(0.4%, 2.5%)

The regional breakdown was provided for those nurses who had been working as a nurse less than three years and felt adequately prepared to enter the workforce (Table 18). The most common region for RNs who felt adequately prepared to enter the nursing workforce was the Northwest Lower Peninsula (61.8%), followed by East (56.9%). RNs reported slightly less adequately prepared nurses in the East Central region from last year (61.5%) to this year (49.0%) as well as South Central (59.8% in 2020 and 46.8% in 2021) and Southeast (58.1% in 2020 and 51.2% in 2021). The most common region for LPNs who felt adequately prepared to enter the nursing workforce was the Southeast (69.2%), followed by Detroit Metro (63.7%). Last year, 78.5 percent of new nurse LPNs in the Southeast region felt adequately prepared which was much higher than this year's new nurses. LPNs in West/West Central also felt less prepared this year when compared to last year (64.4% in 2020 and 58.1% in 2021).

Steering Committee Discussion

COVID-19 rates peaked in the Southeast region during the springtime as nursing graduates entered the workforce. The pandemic may have impacted these findings.

Table 18. Adequate Preparedness for Entering Nursing Workforce by Region

Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Upper Peninsula	45	46.0%	(32.3%, 60.3%)	11	26.6%	(15.9%, 41.0%)
Northwest LP	83	61.8%	(51.0%, 71.5%)	*	*	*
Northeast LP	*	*	*	*	*	*
West/West Central	336	51.4%	(46.1%, 56.7%)	36	58.1%	(52.8%, 63.3%)

Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
East Central	85	49.0%	(38.6%, 59.4%)	*	*	*
East	107	56.9%	(47.4%, 65.9%)	*	*	*
South Central	67	46.8%	(35.4%, 58.6%)	*	*	*
Southwest	124	41.5%	(33.2%, 50.3%)	21	52.6%	(43.9%, 61.2%)
Southeast	213	51.2%	(44.5%, 57.8%)	36	69.2%	(62.7%, 75.0%)
Detroit Metro	687	50.9%	(47.2%, 54.6%)	175	63.7%	(60.0%, 67.2%)

Nurses who indicated they had been working as a nurse less than three years were also asked about finding employment and satisfaction with orientation at their employment site (Table 19). Most RNs (34.8%) felt it was easy to find a nursing position while most LPNs (48.2%) felt it was very easy to find a nursing position. RNs felt neutral about finding a nursing position in their preferred practice area (30.6%) while LPNs indicated it was very easy for them to find a nursing position in their preferred practice area (32.0%). Thirty-seven percent of RNs participated in a residency program at the end of their nursing educational program that helped ease their transition to practice. Over half of the RNs and LPNs were satisfied or highly satisfied with the orientation at their place of employment (65.9% and 46.5% respectively).

Table 19. Finding Employment for Nurses Entering Workforce

	RN = 2,107		LPN = 424	
	Estimate	95% CI	Estimate	95% CI
Difficulty Finding a Nursing Position				
Very difficult	1.5%	(1.1%, 2.1%)	0.0%	(0.0%, 0.9%)
Difficult	9.9%	(8.7%, 11.2%)	2.5%	(1.4%, 4.5%)
Neutral	27.3%	(25.4%, 29.2%)	19.5%	(16.0%, 23.5%)
Easy	34.8%	(32.8%, 36.9%)	29.9%	(25.7%, 34.4%)
Very easy	26.5%	(24.7%, 28.4%)	48.2%	(43.5%, 53.0%)
Difficulty Finding a Nursing Position in Preferred Practice Area				
Very difficult	10.2%	(9.0%, 11.6%)	4.9%	(3.2%, 7.4%)
Difficult	23.1%	(21.4%, 24.9%)	11.9%	(9.2%, 15.3%)
Neutral	30.6%	(28.7%, 32.6%)	25.5%	(21.6%, 29.9%)
Easy	24.1%	(22.3%, 26.0%)	25.6%	(21.7%, 30.0%)
Very easy	12.0%	(10.7%, 13.5%)	32.0%	(27.7%, 36.6%)
Had a Residency Placement as Part of Nursing Program				
Yes	36.6%	(34.6%, 38.7%)	11.9%	(9.2%, 15.3%)
No	63.4%	(61.3%, 65.4%)	88.1%	(84.7%, 90.8%)
Satisfaction with Orientation at Place of Employment				
Very dissatisfied	3.4%	(2.7%, 4.3%)	8.7%	(6.4%, 11.8%)
Dissatisfied	10.0%	(8.8%, 11.4%)	13.1%	(10.2%, 16.6%)
Neutral	20.8%	(19.1%, 22.6%)	31.6%	(27.4%, 36.2%)
Satisfied	48.6%	(46.5%, 50.7%)	30.7%	(26.5%, 35.2%)
Very satisfied	17.3%	(15.7%, 19.0%)	15.8%	(12.6%, 19.6%)

To assist in projecting the supply of nurses in the future, nurses who are currently working were asked to indicate how many more years they plan to continue working as a nurse (Table 20 on the following page). Most RNs (59.5%) and LPNs (56.6%) estimated that they will continue working as a nurse for more than 10 years. A much smaller percentage of RNs (5.7%) and LPNs (5.1%) plan to work as a nurse for fewer than two additional years. See Appendix D, Table 62 for a comparison from 2017 to 2021 by race and ethnicities of nurses and their plans to continue working as a nurse.

Table 20. Plans to Continue Working as a Nurse (RN and LPN)

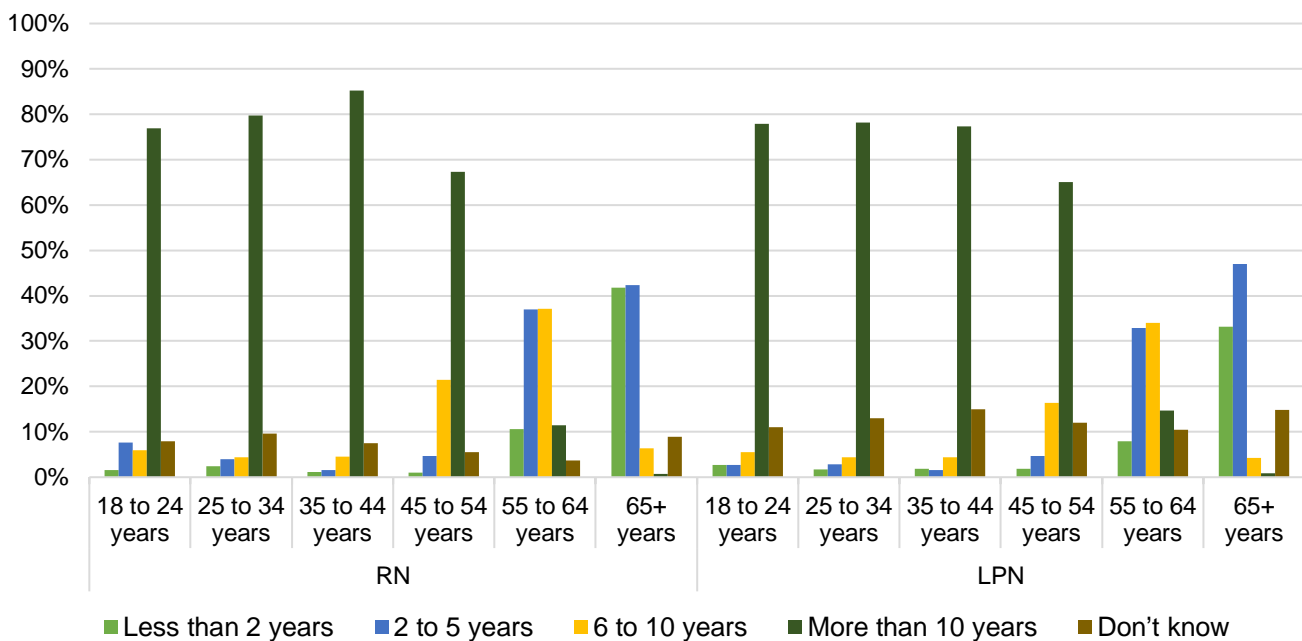
Years	RN= 24,739		LPN= 2,878	
	Estimate	95% CI	Estimate	95% CI
Less than 2 years	5.7%	(5.4%, 6.0%)	5.1%	(4.4%, 6.0%)
2 to 5 years	12.7%	(12.2%, 13.1%)	12.0%	(10.8%, 13.2%)
6 to 10 years	15.3%	(14.9%, 15.8%)	13.5%	(12.3%, 14.8%)
More than 10 years	59.5%	(58.9%, 60.1%)	56.6%	(54.8%, 58.4%)
Don't know	6.9%	(6.6%, 7.2%)	12.8%	(11.7%, 14.1%)

While more than half of all RNs and LPNs indicated that they planned to continue working as a nurse for 10 years or more, responses varied based upon the age of the responding nurse (Figure 8). Most RNs (42.4%) and LPNs (47.0%) who are aged 65 or older indicated that they plan to continue working as a nurse for five or fewer years. RNs between the ages of 55 and 64 were equally likely to continue working for two to five years (37.0%) or six to 10 more years (37.1%), and LPNs 55 to 64 years old were most likely to continue working six to 10 more years (34.0%). Nurses younger than 55 years old most frequently indicated that they plan to continue practicing as a nurse for more than 10 years.

Trends Over Time

When comparing responses to the 2017 survey (found on www.minurse.org), the plans to continue are fairly similar across the age groups and type of nurse. However, 24.1 percent LPNs 65 years and older in 2017 responded they plan to retire in less than two years which increased over time to 28.5 percent in 2020 and 33.1 percent this year. The respondents indicating they didn't know how long they plan to continue practicing nursing is comparable from 2017 to 2021 as well. The rates of nurses younger than 65 years are the same over the years (2017,

Figure 8. Plans to Continue to Practice Nursing (in years) by Age (RN and LPN)



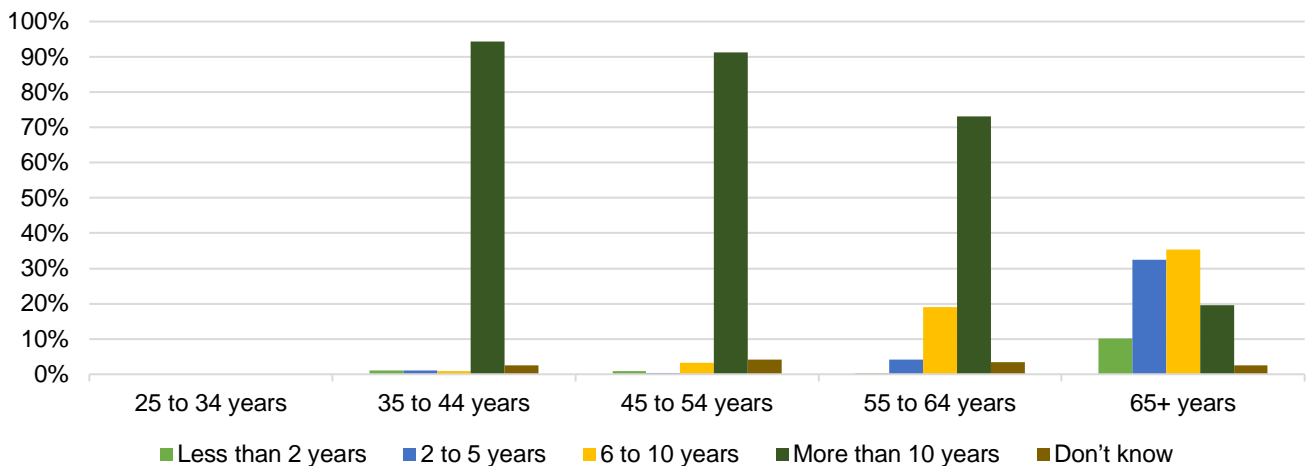
Whether nationally certified APRNs plan to continue working as a nurse was also measured as a subset of RNs. Sixty-nine percent of APRNs estimated that they will continue working as a nurse for more than 10 years, while 4.7 percent plan to work as a nurse for fewer than two additional years (Table 21). APRNs plans to continue working was also compared to their age (Figure 9 on the following page). APRNs aged 55 or older indicated that they plan to continue working as a nurse for five or fewer years. The APRNs 54 years or younger plan to continue working for more than 10 years. There aren't any 18- to 34-year old

APRNs reported which makes it difficult to compare to non-APRN nurse distribution.

Table 21. Plans to Continue Working as a Nurse (Completed National AP Certification only)

Years	APRN= 2,756	
	Estimate	95% CI
Less than 2 years	4.7%	(4.0%, 5.6%)
2 to 5 years	9.9%	(8.8%, 11.1%)
6 to 10 years	13.0%	(11.8%, 14.3%)
More than 10 years	68.8%	(67.0%, 70.5%)
Don't know	3.6%	(3.0%, 4.4%)

Figure 9. Plans to Continue to Practice Nursing (in years) by Age (Completed National AP Certification only)



The regional breakdown was also provided for the nurses who plan to stop working in five or less years (Table 22). For RNs, the most common region for nurses to stop working in five or less years is in the Northwest Lower Peninsula, South Central, and Detroit metro (24.3%, 21.3%, and 20.9% respectively). For LPNs, the most common region for nurses to stop working in five or less years is in the Northwest Lower Peninsula, Upper Peninsula, and East (35.7%, 26.8%, and 27.0% respectively).

Table 22. Plans to Work 5 Years or Less by Region

Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Upper Peninsula	560	17.6%	(14.7%, 21.0%)	138	26.8%	(20.1%, 34.7%)
Northwest LP	763	24.3%	(21.4%, 27.5%)	67	35.7%	(25.3%, 47.7%)
Northeast LP	295	19.5%	(15.4%, 24.4%)	54	20.8%	(12.1%, 33.4%)
West/West Central	3,153	17.3%	(16.0%, 18.7%)	365	22.3%	(18.3%, 26.8%)
East Central	1,033	17.6%	(15.4%, 20.0%)	131	24.4%	(17.8%, 32.4%)
East	1,306	16.8%	(14.9%, 18.9%)	158	27.0%	(20.7%, 34.4%)
South Central	852	21.3%	(18.7%, 24.2%)	72	14.7%	(8.3%, 24.7%)

Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Southwest	1,401	19.9%	(17.9%, 22.1%)	139	18.9%	(13.3%, 26.2%)
Southeast	2,523	19.4%	(17.9%, 21.0%)	226	18.2%	(13.7%, 23.7%)
Detroit Metro	6,352	20.9%	(19.9%, 21.9%)	758	14.5%	(12.2%, 17.2%)
Lives in Michigan	2,079	20.6%	(18.9%, 22.4%)	234	21.3%	(16.5%, 27.0%)
Lives Outside of Michigan	2,649	20.1%	(18.6%, 21.7%)	156	16.3%	(11.3%, 22.9%)

Among those who indicated that they plan to stop working in five years or less were asked their reason for leaving nursing (Table 23). Of those planning to leave nursing in the next five years, most RNs and LPNs (80.5% and 80.0%, respectively) plan to retire in five years or less. The next most common reason for leaving nursing was because it was too stressful or the workload was too much for both RNs and LPNs (21.0% and 22.1%, respectively).

Trends Over Time

In 2020, there were significantly more RNs planning to retire (84.5% compared to 80.5%). Nurses leaving nursing due to stress and workload have also increased from 2020 (RNs 16.3% and LPNs 19.9%). COVID-19 may have impacted nurses' reasons for leaving in the next five years. Nurses planning to leave due to violence or safety issues is similar to the number in 2020 (4.5% for RNs and LPNs).

Table 23. Reasons for Leaving Nursing for those Leaving Nursing in Less than 5 Years

Reason	RN= 5,686		LPN= 560	
	Estimate	95% CI	Estimate	95% CI
Retiring	80.5%	(79.4%, 81.5%)	80.0%	(76.5%, 83.1%)
Care for home or family	5.3%	(4.7%, 5.9%)	4.0%	(2.7%, 6.0%)
Enrolled in education program	4.6%	(4.1%, 5.2%)	5.1%	(3.5%, 7.2%)
Difficulty finding a nursing position	0.6%	(0.5%, 0.9%)	0.4%	(0.1%, 1.4%)
Too stressful/Workload	21.9%	(20.8%, 23.0%)	22.1%	(18.8%, 25.7%)
Difficulties with EMR/new technology	1.3%	(1.1%, 1.7%)	0.7%	(0.2%, 1.7%)
Violence/safety issues	4.2%	(3.7%, 4.7%)	3.7%	(2.4%, 5.6%)
Relocating/moving to another area	3.2%	(2.8%, 3.7%)	3.5%	(2.2%, 5.3%)
Other (please specify) *	2.1%	(1.8%, 2.5%)	1.4%	(0.7%, 2.8%)

*Other includes reasons such as family care, not enjoying the profession and/or needing a change, a few mentioned concerns about COVID-19.

Nurses who made a change in employment setting in the past three years were asked to indicate what type of change they made (Table 24 on the following page). More than half of RNs (61.5%) and LPNs (61.2%) have not made an employment change in the past three years. Of the RNs who made an employment change, the most common change was a change in location but staying in the same care

setting (31.5%). The next largest percentage (28.6%) indicated that they made some other type of change in employment. LPNs were also most likely (36.7%) to change locations but stay in the same care setting, with the next most common being some other type of change in employment (25.5%). See Appendix D, Table 63 for a comparison from 2017 to 2021 by race and ethnicities of nurses and change in employment.

Trends Over Time

Similar trends of change in employment were seen in 2020 during the COVID-19 pandemic. However, 2017 showed significantly less RNs and LPNs making a change in employment (80.1% and 81.8% respectively). Of those who made a change in employment in 2017, the majority went from an inpatient to outpatient setting (32.7% RNs and 23.7% LPNs) and from direct to non-direct care (25.9% RNs and 22.4% LPNs).

Table 24. Change in Employment Setting

Change in Employment Setting	RN= 24,474		LPN= 2,846	
	Estimate	95% CI	Estimate	95% CI
Did not make a change	61.5%	(60.9%, 62.1%)	61.2%	(59.4%, 63.0%)
Made a change	38.5%	(37.9%, 39.1%)	38.8%	(37.0%, 40.6%)
Of those who made a change:				
<i>An inpatient setting to a community-based setting?</i>	12.9%	(12.2%, 13.6%)	10.1%	(8.4%, 12.0%)
<i>A community-based setting to an inpatient setting?</i>	4.2%	(3.8%, 4.6%)	4.5%	(3.4%, 5.9%)
<i>A primary care setting (e.g., family practice, general medicine) to a specialty care setting?</i>	4.4%	(4.0%, 4.8%)	5.9%	(4.6%, 7.5%)
<i>A specialty care setting to a primary care setting?</i>	2.9%	(2.6%, 3.3%)	3.9%	(2.9%, 5.2%)
<i>A sub-acute care setting to an acute care setting?</i>	3.5%	(3.1%, 3.9%)	3.1%	(2.2%, 4.3%)
<i>An acute care setting to a sub-acute care setting?</i>	3.7%	(3.3%, 4.1%)	2.8%	(2.0%, 4.0%)
<i>A direct patient care setting to a non-direct patient care setting?</i>	12.2%	(11.5%, 12.9%)	8.1%	(6.6%, 9.9%)
<i>A non-direct patient care setting to a direct patient care setting?</i>	4.1%	(3.7%, 4.5%)	5.6%	(4.4%, 7.1%)
<i>I changed locations but stayed in the same care setting.</i>	28.3%	(27.4%, 29.2%)	32.1%	(29.4%, 34.9%)
<i>Some other type of change in employment.</i>	33.3%	(32.3%, 34.3%)	34.8%	(32.0%, 37.7%)

PRACTICE SETTING

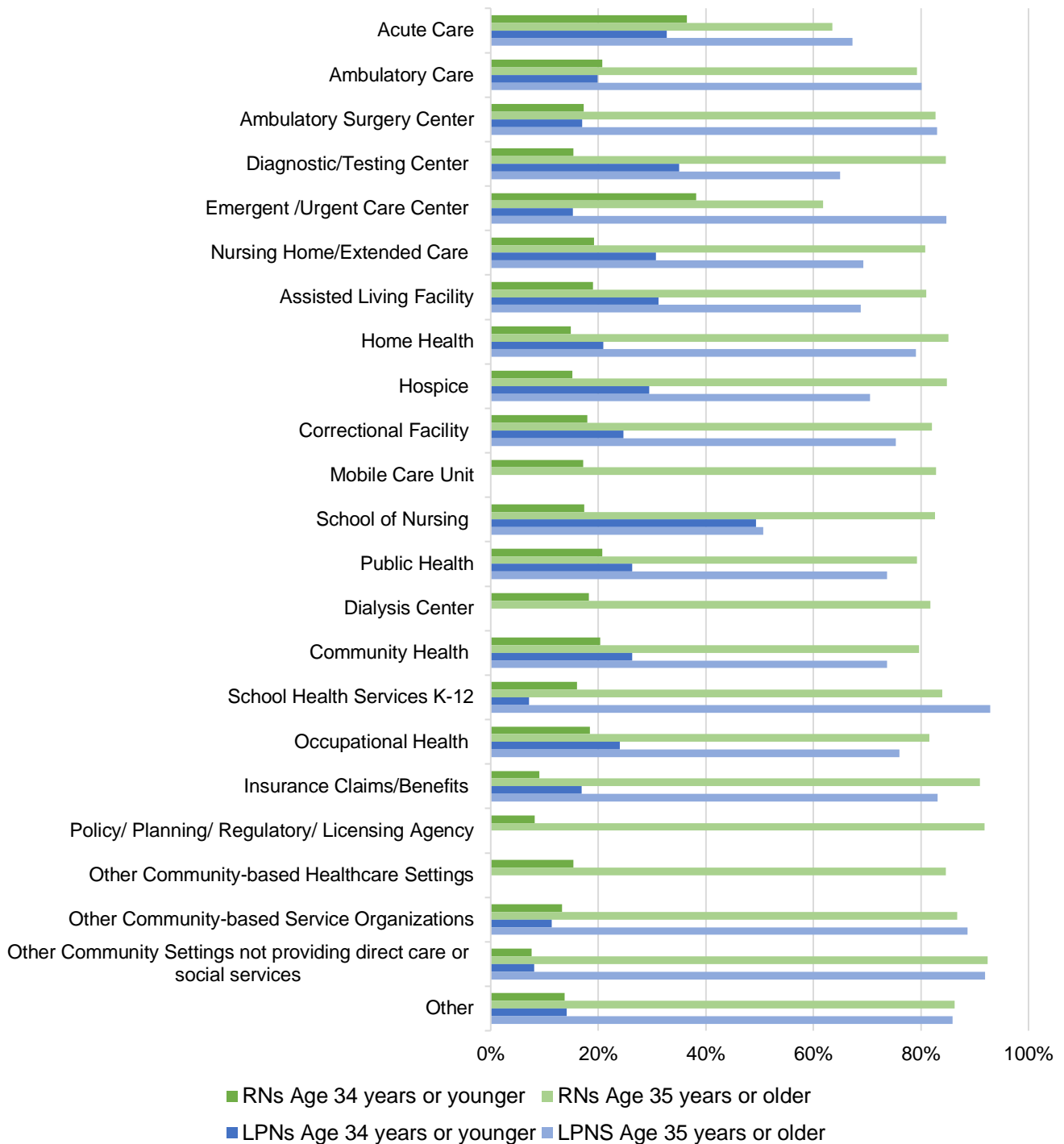
Slightly over half of RNs (52.9%) work in acute care while about half of LPNs (50.9%) work in nursing homes or extended care (Table 25). The next most common setting for RNs was ambulatory care (14.5%) and LPNs was home health (14.9%). See Appendix D, Table 64 for a comparison from 2017 to 2021 by race and ethnicities of nurses and their employment setting.

Table 25. Practice Setting

Setting	RN = 25,173		LPN = 2,975	
	Estimate	95% CI	Estimate	95% CI
Acute Care	52.9%	(52.3%, 53.5%)	9.7%	(8.7%, 10.8%)
Ambulatory Care	14.5%	(14.1%, 14.9%)	13.6%	(12.4%, 14.9%)
Ambulatory Surgery Center	4.6%	(4.3%, 4.9%)	1.0%	(0.7%, 1.4%)
Diagnostic/Testing Center	0.5%	(0.4%, 0.6%)	1.0%	(0.7%, 1.4%)
Emergent /Urgent Care Center	3.2%	(3.0%, 3.4%)	0.7%	(0.5%, 1.1%)
Nursing Home/Extended Care	6.5%	(6.2%, 6.8%)	50.9%	(49.1%, 52.7%)
Assisted Living Facility	1.0%	(0.9%, 1.1%)	11.0%	(9.9%, 12.2%)
Home Health	5.3%	(5.0%, 5.6%)	14.9%	(13.7%, 16.2%)
Hospice	3.1%	(2.9%, 3.3%)	4.3%	(3.6%, 5.1%)
Correctional Facility	0.8%	(0.7%, 0.9%)	3.1%	(2.5%, 3.8%)
Mobile Care Unit	0.2%	(0.2%, 0.3%)	0.2%	(0.1%, 0.4%)
School of Nursing	4.0%	(3.8%, 4.2%)	1.5%	(1.1%, 2.0%)
Public Health	2.7%	(2.5%, 2.9%)	1.9%	(1.5%, 2.5%)
Dialysis Center	1.5%	(1.4%, 1.7%)	0.6%	(0.4%, 0.9%)
Community Health	2.4%	(2.2%, 2.6%)	3.6%	(3.0%, 4.3%)
School Health Services K-12	1.2%	(1.1%, 1.3%)	1.6%	(1.2%, 2.1%)
Occupational Health	1.1%	(1.0%, 1.2%)	1.4%	(1.0%, 1.9%)
Insurance Claims/Benefits	3.1%	(2.9%, 3.3%)	1.3%	(1.0%, 1.8%)
Policy/ Planning/ Regulatory/ Licensing Agency	0.3%	(0.2%, 0.4%)	0.2%	(0.1%, 0.4%)
Other Community-based Healthcare Settings	1.7%	(1.5%, 1.9%)	2.4%	(1.9%, 3.0%)
Other Community-based Service Organizations	0.6%	(0.5%, 0.7%)	0.5%	(0.3%, 0.8%)
Other Community Settings not providing direct care or social services	1.9%	(1.7%, 2.1%)	1.4%	(1.0%, 1.9%)
Other	6.1%	(5.8%, 6.4%)	4.1%	(3.4%, 4.9%)

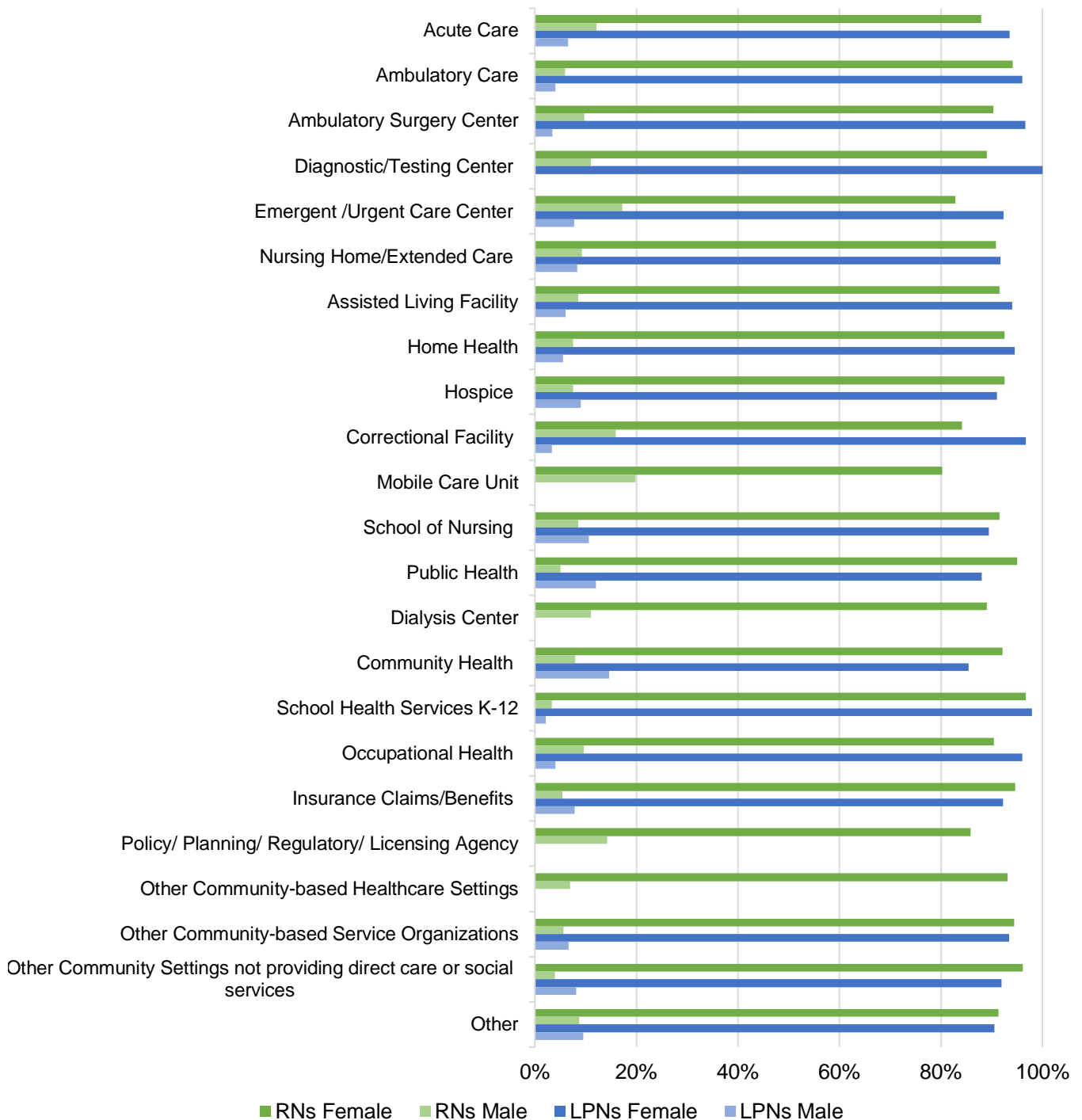
The age of RNs and LPNs within each setting was also analyzed (Figure 10 shows the percentage of nurses in each age category within that setting) showing predominantly nurses age 35 or older working in each setting. RNs and LPNs are more likely to be 35 years or older in every setting. LPNs in the school of nursing setting are almost equally split across the age groups (41% younger than 34 years, and 51% are 35 years or older).

Figure 10. Nurses Within Settings by Age



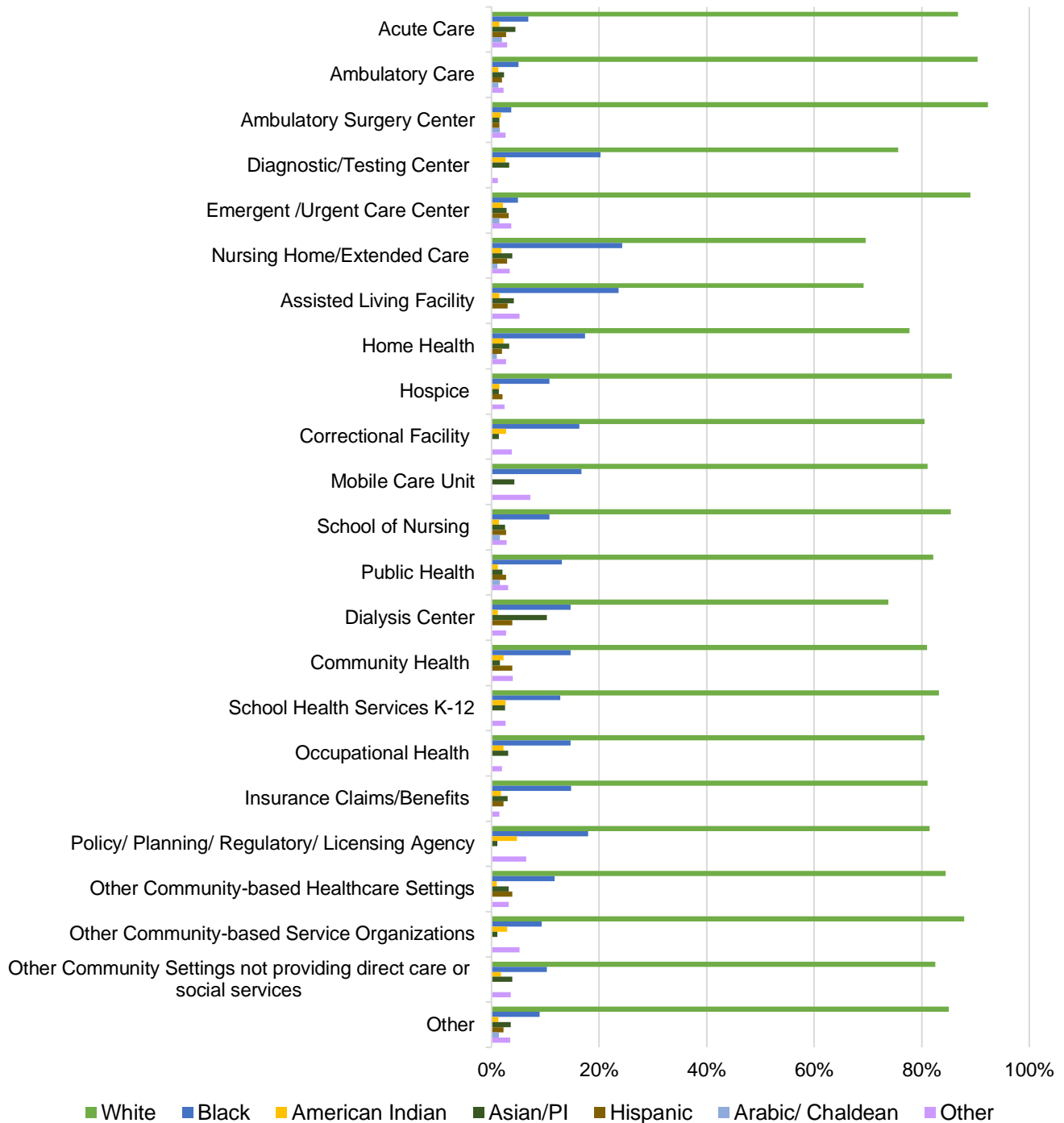
The gender of RNs and LPNs within each setting was also analyzed (Figure 11) showing predominantly females nurses working in each setting (80% or higher for both RNs and LPNs). The most common settings for male RNs are in the mobile care unit (19.8%) and emergent urgent care (17.2%). Male LPNs were most commonly in community health (14.6%) and public health (12.0%).

Figure 11. Male and Female Nurses Within Settings



The race and ethnicity of all nurses within each setting was also analyzed (Figure 12) showing predominantly white nurses working in each setting (70% or higher for all nurses). Black or African American nurses most commonly work in nursing homes (24.3%) or assisted living (23.6%). American Indian nurses most commonly work in policy planning (4.7%); Asian Pacific Islander and Hispanic nurses most commonly work in dialysis centers (10.3% and 3.9% respectively); and Arabic or Chaldean nurses most commonly work in acute care (1.9%).

Figure 12. Race and Ethnicity Within Settings for All Nurses



The setting breakdown was also provided for those nurses who plan to stop working in five or less years (Table 26). For RNs, the most common settings (20.0% or higher) for nurses to stop working in five or less years is in ambulatory care, ambulatory surgery centers, diagnostic centers, assisted living facilities, school of nursing, public health, community health, school health services K-12, occupational health, insurance claims, policy and planning, other community based healthcare settings, and other community-based service organizations (see *Appendix A* for the survey tool and definitions of settings). For LPNs, the most common settings (20.0% or higher) for nurses to stop working in five or less years is in acute care, ambulatory care, ambulatory surgery center, and other community-based healthcare settings.

Table 26. Plans to Work 5 Years or Less by Setting

Setting	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Acute Care	11371	15.6%	(14.9%, 16.3%)	237	21.9%	(17.1%, 27.6%)
Ambulatory Care	3489	20.7%	(19.4%, 22.1%)	372	26.6%	(22.4%, 31.3%)
Ambulatory Surgery Center	1141	22.7%	(20.4%, 25.2%)	28	36.0%	(20.9%, 54.4%)
Diagnostic/Testing Center	116	22.6%	(15.9%, 31.0%)	20	*	*
Emergent /Urgent Care Center	683	10.3%	(8.2%, 12.8%)	19	*	*
Nursing Home/Extended Care	1482	15.9%	(14.1%, 17.8%)	1,201	14.9%	(13.0%, 17.0%)
Assisted Living Facility	240	22.5%	(17.7%, 28.2%)	268	17.7%	(13.6%, 22.7%)
Home Health	1297	19.6%	(17.5%, 21.8%)	366	19.6%	(15.9%, 24.0%)
Hospice	748	19.5%	(16.8%, 22.5%)	104	14.1%	(8.7%, 22.1%)
Correctional Facility	189	17.3%	(12.6%, 23.3%)	79	13.9%	(7.9%, 23.2%)
Mobile Care Unit	47	*	*	4	*	*
School of Nursing	1002	24.0%	(21.5%, 26.7%)	38	*	*
Public Health	668	27.6%	(24.3%, 31.1%)	43	*	*
Dialysis Center	337	12.0%	(9.0%, 15.9%)	18	*	*
Community Health	602	24.8%	(21.5%, 28.4%)	92	17.5%	(11.1%, 26.5%)
School Health Services K-12	288	22.1%	(17.7%, 27.2%)	44	*	*
Occupational Health	293	24.3%	(19.7%, 29.5%)	38	*	*
Insurance Claims/Benefits	795	23.9%	(21.1%, 27.0%)	36	*	*
Policy/ Planning/ Regulatory/ Licensing Agency	81	29.1%	(20.3%, 39.8%)	3	*	*
Other Community-based Healthcare Settings	419	24.1%	(20.3%, 28.4%)	61	28.9%	(19.0%, 41.3%)
Other Community-based Service Organizations	168	34.4%	(27.6%, 41.9%)	12	*	*
Other Community Settings not providing direct care or social services	466	24.1%	(20.4%, 28.2%)	36	*	*
Other	1526	28.0%	(25.8%, 30.3%)	107	30.2%	(22.3%, 39.5%)

POSITION AND ROLE

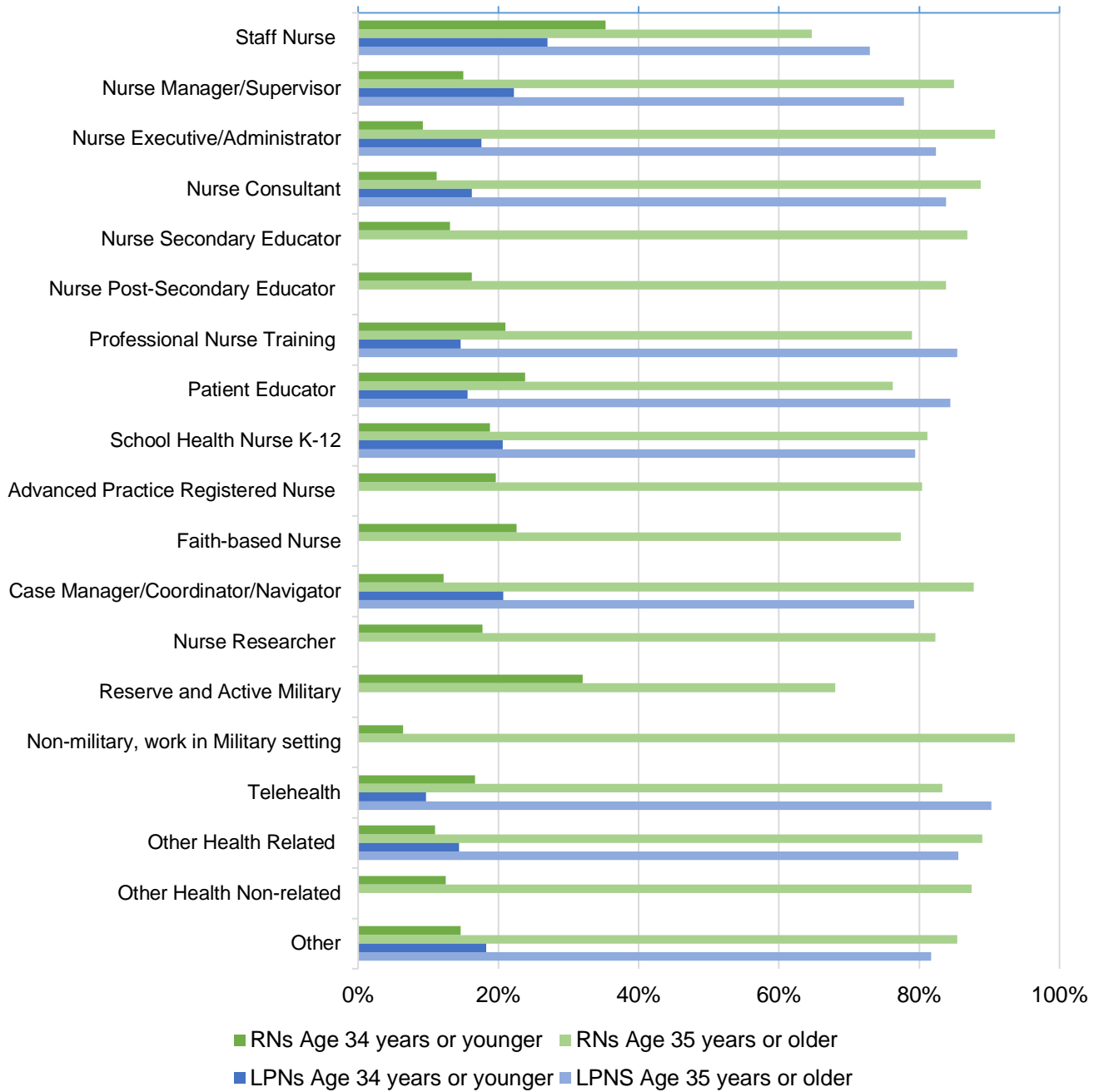
Most RNs and LPNs work as staff nurses (63.3% and 75.7% respectively; Table 27). The next most common positions for RNs are case manager (10.6%) and nurse manager (8.4%). The next most common position for LPNs is also nurse manager (14.4%). All respondents who were employed were asked this question and could select APRN if appropriate (see Appendix A for the survey tool and definition of APRN provided in question 32).

Table 27. Position and Role

Position	RN = 21,669		LPN = 2,584	
	Estimate	95% CI	Estimate	95% CI
Staff Nurse	63.3%	(62.7%, 63.9%)	75.7%	(74.1%, 77.2%)
Nurse Manager/Supervisor	8.4%	(8.1%, 8.7%)	14.4%	(13.2%, 15.7%)
Nurse Executive/Administrator	4.5%	(4.3%, 4.8%)	2.8%	(2.3%, 3.5%)
Nurse Consultant	2.2%	(2.0%, 2.4%)	1.0%	(0.7%, 1.4%)
Nurse Secondary Educator	0.7%	(0.6%, 0.8%)	0.4%	(0.2%, 0.7%)
Nurse Post-Secondary Educator	3.0%	(2.8%, 3.2%)	0.3%	(0.2%, 0.6%)
Professional Nurse Training	1.8%	(1.6%, 2.0%)	0.8%	(0.5%, 1.2%)
Patient Educator	3.2%	(3.0%, 3.4%)	3.2%	(2.6%, 3.9%)
School Health Nurse K-12	1.0%	(0.9%, 1.1%)	1.7%	(1.3%, 2.2%)
Advanced Practice Registered Nurse	8.3%	(8.0%, 8.6%)	0.0%	(0.0%, 0.1%)
Faith-based Nurse	0.3%	(0.2%, 0.4%)	0.7%	(0.5%, 1.1%)
Case Manager/Coordinator/Navigator	10.6%	(10.2%, 11.0%)	4.5%	(3.8%, 5.3%)
Nurse Researcher	0.7%	(0.6%, 0.8%)	0.0%	(0.0%, 0.1%)
Reserve and Active Military	0.2%	(0.2%, 0.3%)	0.0%	(0.0%, 0.1%)
Non-military, work in Military setting	0.2%	(0.2%, 0.3%)	0.6%	(0.4%, 0.9%)
Telehealth	3.0%	(2.8%, 3.2%)	2.2%	(1.7%, 2.8%)
Other Health Related	4.1%	(3.9%, 4.4%)	6.5%	(5.7%, 7.4%)
Other Health Non-related	0.2%	(0.2%, 0.3%)	0.3%	(0.2%, 0.6%)
Other	2.3%	(2.1%, 2.5%)	2.8%	(2.3%, 3.5%)

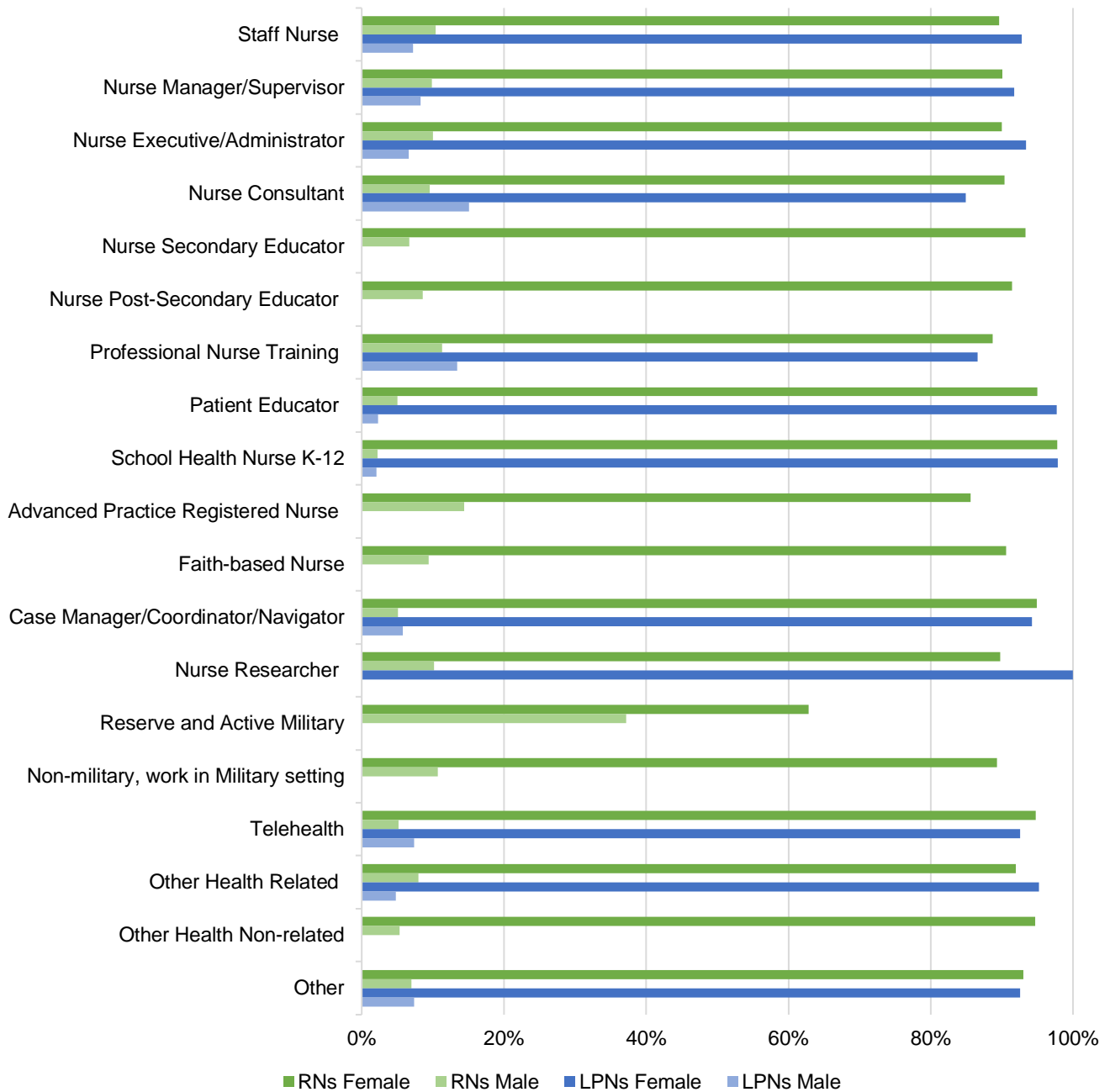
The age of RNs and LPNs within each position was also analyzed (Figure 13 shows the percentage of nurses in each age category within that position) showing fewer nurses 34 years of age or younger working in each position (60% or higher were 35 years of age or older). Both RNs and LPNs working as staff nurses were commonly 34 years of age or younger (35.0% and 27.1% respectively). Manager or supervisor (22.2%) and school health nurse positions K-12 (21.0%) were also commonly held by LPNs 34 years or younger. Reserve and active military (31.7%) and patient educator positions (24.3%) were commonly held by RNs aged 34 years or younger.

Figure 13. Nurses Within Positions by Age



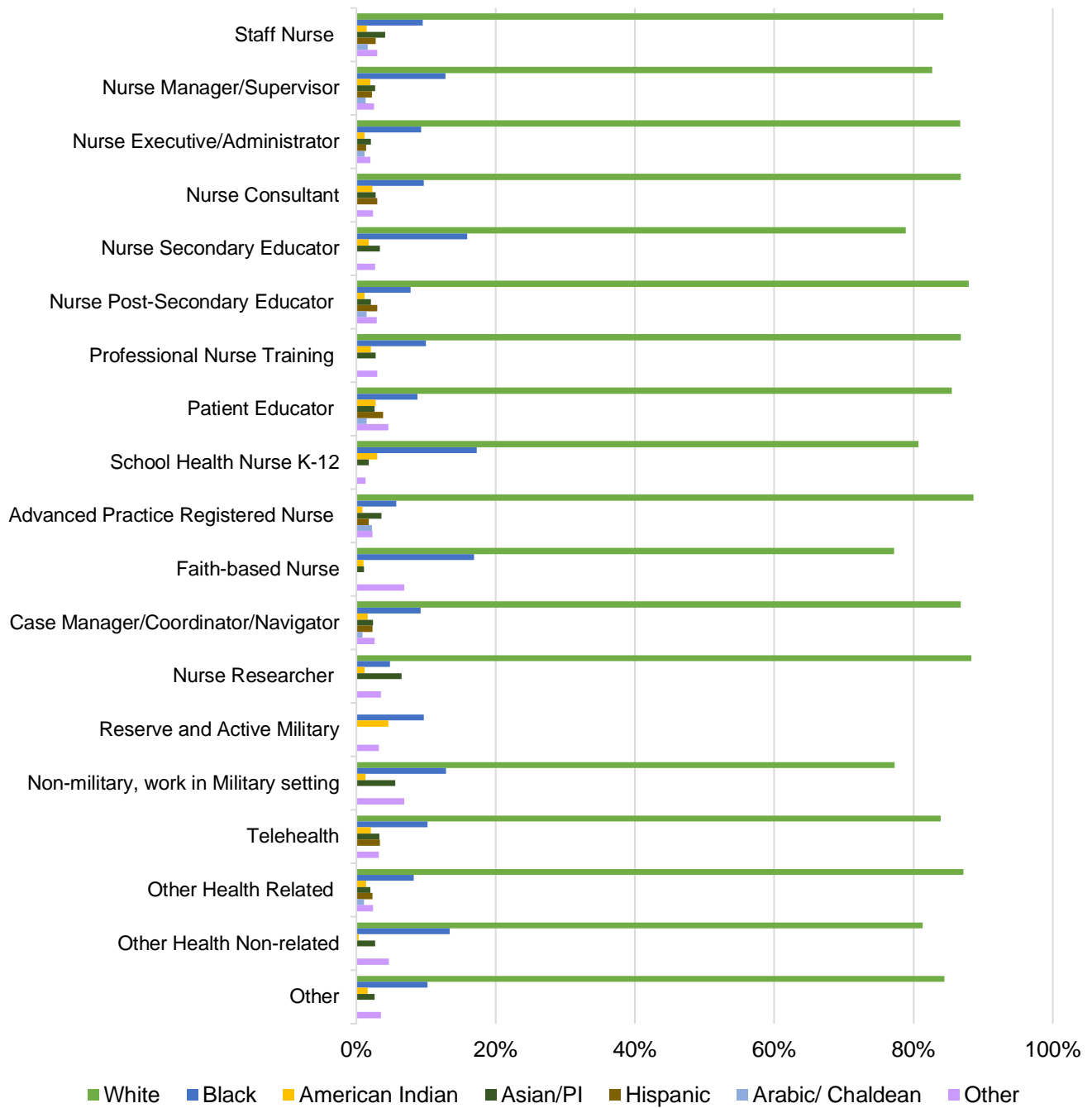
The gender of RNs and LPNs within each position was also analyzed (Figure 14) showing predominantly female nurses in each position (60% or higher). Male RNs were common in reserve or active military (37.2%) and APRNs (14.4%) positions while male LPNs were common as nurse consultants (15.1%) and in professional nurse training positions (13.4%).

Figure 14. Male and Female Nurses Within Positions



The race and ethnicity of all nurses within each position was also analyzed (Figure 15) showing predominantly white nurses in each position (70% or higher). Black nurses commonly held school health nurse K-12 (17.3%), faith-based (16.9%), and nurse secondary educator (15.9%) positions. American Indian nurses were more common in reserve and active military than in other positions (4.6%); Asian Pacific Islander nurses were more common in nurse researcher than other positions (6.5%); Hispanic nurses were more common in patient educator than in other positions (3.8%); and Arabic or Chaldean nurses were more common in APRN positions (2.2%).

Figure 15. Race and Ethnicity Within Positions for All Nurses



The position breakdown was also provided for those nurses who plan to stop working in five or less years (Table 28). For RNs, the most common position for nurses to stop working in five or less years are those in faith-based nursing, nurse researcher, nurse consultant positions, and nurse post-secondary educators (39.1%, 26.8%, 26.6%, and 25.3% respectively). For LPNs, the most common positions for nurses to stop working in five or less years are those in telehealth and nurse executive or administrative positions (22.9% and 22.6%).

Table 28. Plans to Work 5 Years or Less by Position

Position	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Staff Nurse	13576	17.0%	(16.4%, 17.6%)	1,847	17.9%	(16.2%, 19.7%)
Nurse Manager/Supervisor	1979	17.6%	(16.0%, 19.3%)	365	13.9%	(10.7%, 17.8%)
Nurse Executive/Administrator	1154	23.7%	(21.3%, 26.2%)	73	22.6%	(14.5%, 33.4%)
Nurse Consultant	588	26.6%	(23.2%, 30.3%)	28	*	*
Nurse Secondary Educator	176	24.9%	(19.1%, 31.8%)	13	*	*
Nurse Post-Secondary Educator	783	25.3%	(22.4%, 28.5%)	9	*	*
Professional Nurse Training	424	20.5%	(16.9%, 24.6%)	22	*	*
Patient Educator	744	21.2%	(18.4%, 24.3%)	82	15.7%	(9.4%, 25.1%)
School Health Nurse K-12	230	22.1%	(17.2%, 27.9%)	46	19.2%	(10.4%, 32.8%)
Advanced Practice Registered Nurse	2236	14.6%	(13.2%, 16.1%)	1	*	*
Faith-based Nurse	74	39.1%	(28.8%, 50.5%)	15	*	*
Case Manager/Coordinator/Navigator	2588	21.8%	(20.3%, 23.4%)	109	20.5%	(14.0%, 29.0%)
Nurse Researcher	176	26.8%	(20.8%, 33.8%)	2	*	*
Reserve and Active Military	40	*	*	0	*	*
Non-military, work in Military setting	58	18.6%	(10.7%, 30.4%)	15	*	*
Telehealth	730	21.5%	(18.7%, 24.6%)	65	22.9%	(14.4%, 34.5%)
Other Health Related	1037	34.0%	(31.2%, 36.9%)	173	33.2%	(26.6%, 40.5%)
Other Health Non-related	59	25.7%	(16.3%, 38.1%)	9	*	*
Other	575	24.4%	(21.1%, 28.1%)	74	28.4%	(19.4%, 39.5%)

Of the nurses who indicated they were in a faith-based nursing position, they were asked the types of activities performed as part of their role, 45.1% of RNs and 56.2% of LPNs are in a paid faith-based position (Table 29 on the following page, noting small sample size). About half of RNs and LPNs work specifically in a faith-based setting (51.7% and 50.4% respectively) and almost half provide one-on-one teaching (44.9% and 48.8% respectively). Almost half (46.4%) of the RNs offer community health professional guest speakers, health education, or support groups.

Table 29. Faith-Based Nurses

	RNs = 93		LPNs = 20	
	Estimate	95% CI	Estimate	95% CI
Paid Faith-Based Position				
Yes	45.1%	(35.4%, 55.2%)	56.2%	(35.3%, 75.1%)
Please identify any of the following activities you perform as part of your faith-based nurse role (Mark ALL that apply).				
Home visits	21.1%	(14.0%, 30.5%)	26.4%	(12.1%, 48.3%)
One-on-one teaching	44.9%	(35.2%, 55.0%)	48.8%	(28.9%, 69.1%)
Offering community health professional guest speakers, health education or support groups	46.4%	(36.6%, 56.5%)	13.2%	(4.3%, 34.0%)
Discharge planning or care transition follow-up	25.1%	(17.4%, 34.8%)	14.0%	(4.7%, 34.9%)
Provision of health screenings	34.3%	(25.4%, 44.4%)	9.0%	(2.4%, 28.9%)
Work at a faith-based setting	51.7%	(41.7%, 61.6%)	50.4%	(30.3%, 70.4%)
Working on the phone or computer out of your home	36.1%	(27.1%, 46.2%)	20.5%	(8.4%, 42.1%)
Coordination of health fairs or large screening events provided by other professionals	27.4%	(19.4%, 37.2%)	14.0%	(4.7%, 34.9%)
Other	20.1%	(13.2%, 29.4%)	25.4%	(11.4%, 47.3%)

Nurses who indicated they were school-based nurses were also asked questions about their specific settings and certifications (Table 30). Most RNs and LPNs work in general education (72.6% and 65.3% respectively) and most do not have a school nurse certification (71.0% and 75.6% respectively).

Table 30. School-Based Nurses

	RNs = 264		LPNs = 60	
	Estimate	95% CI	Estimate	95% CI
Do you work in any of these settings in your role as a school health nurse K-12?				
General education	72.6%	(66.9%, 77.6%)	65.3%	(52.7%, 76.1%)
Special education	65.9%	(60.0%, 71.4%)	45.6%	(33.6%, 58.1%)
None of these	7.5%	(4.9%, 11.3%)	16.0%	(8.8%, 27.3%)
Do you have a Michigan Department of Education (MDE) school nurse certification?				
Yes	22.6%	(18.0%, 28.0%)	9.5%	(4.3%, 19.5%)
No	71.0%	(65.3%, 76.1%)	75.6%	(63.4%, 84.7%)
Unsure	6.4%	(4.0%, 10.0%)	14.9%	(8.0%, 26.0%)

SPECIALTIES

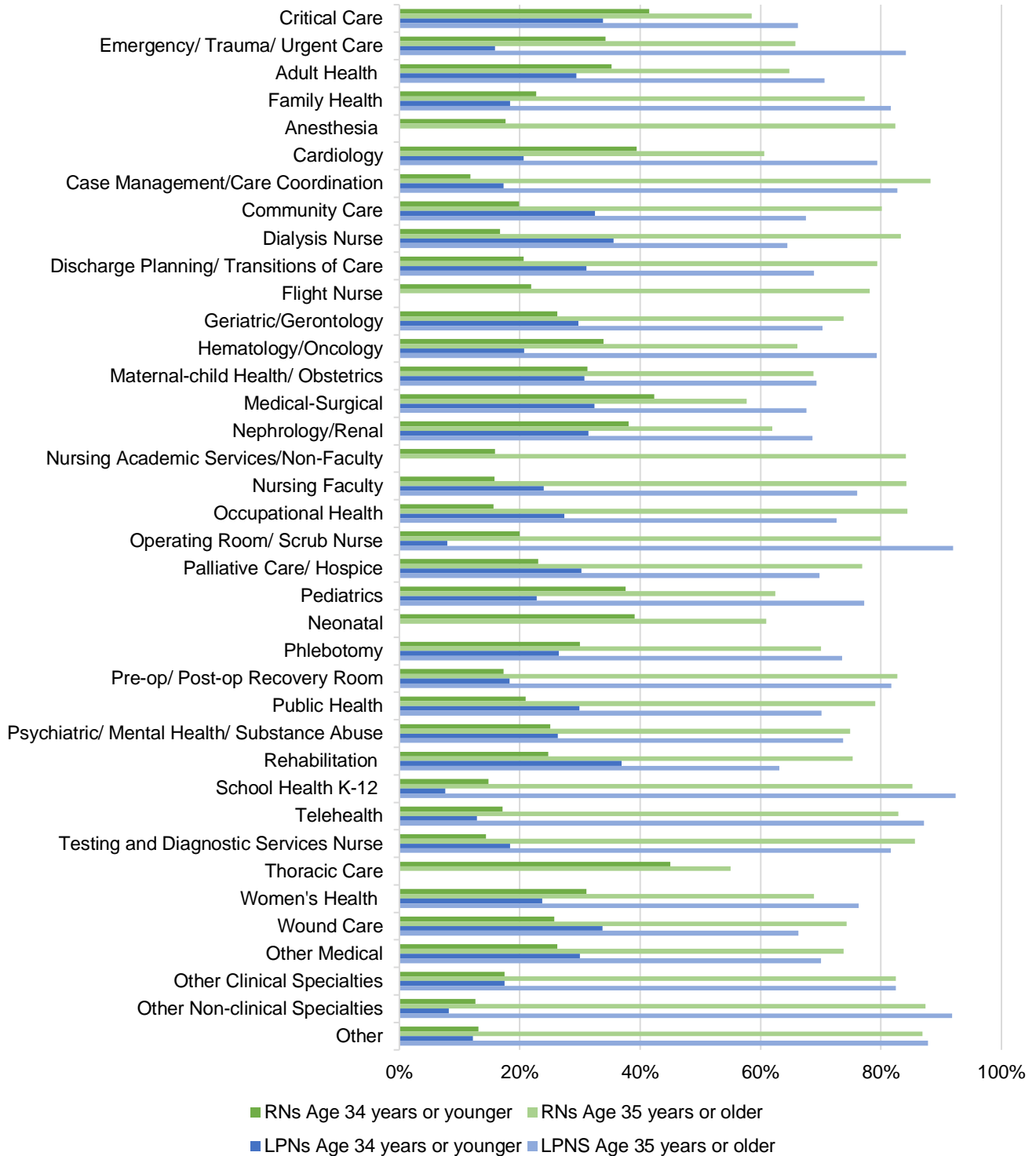
The specialties for nurses are reported in Table 31. RNs are most commonly in adult health (20.3%), medical-surgical (16.4%), and critical care (16.1%) specialties. The most common specialties for LPNs are adult health (39.3%), geriatric or gerontology (39.3%), and rehabilitation (17.7%).

Table 31. Specialties

Specialty	RNs= 25,173		LPNs= 2,975	
	%	95% CI	%	95% CI
Critical Care	16.1%	(15.7%, 16.6%)	3.3%	(2.7%, 4.0%)
Emergency/ Trauma/ Urgent Care	9.9%	(9.5%, 10.3%)	2.1%	(1.6%, 2.7%)
Adult Health	20.3%	(19.8%, 20.8%)	39.3%	(37.6%, 41.1%)
Family Health	5.4%	(5.1%, 5.7%)	9.4%	(8.4%, 10.5%)
Anesthesia	2.6%	(2.4%, 2.8%)	0.3%	(0.2%, 0.6%)
Cardiology	8.8%	(8.5%, 9.2%)	1.9%	(1.5%, 2.5%)
Case Management/Care Coordination	9.4%	(9.0%, 9.8%)	4.4%	(3.7%, 5.2%)
Community Care	3.9%	(3.7%, 4.1%)	6.1%	(5.3%, 7.0%)
Dialysis Nurse	1.8%	(1.6%, 2.0%)	1.2%	(0.9%, 1.7%)
Discharge Planning/ Transitions of Care	2.1%	(1.9%, 2.3%)	2.8%	(2.3%, 3.5%)
Flight Nurse	0.2%	(0.2%, 0.3%)	0.1%	(0.0%, 0.3%)
Geriatric/Gerontology	9.4%	(9.0%, 9.8%)	39.3%	(37.6%, 41.1%)
Hematology/Oncology	4.3%	(4.1%, 4.6%)	1.1%	(0.8%, 1.5%)
Maternal-child Health/ Obstetrics	5.9%	(5.6%, 6.2%)	1.1%	(0.8%, 1.5%)
Medical-Surgical	16.4%	(15.9%, 16.9%)	5.6%	(4.8%, 6.5%)
Nephrology/Renal	2.7%	(2.5%, 2.9%)	1.4%	(1.0%, 1.9%)
Nursing Academic Services/Non-Faculty	0.7%	(0.6%, 0.8%)	0.3%	(0.2%, 0.6%)
Nursing Faculty	3.0%	(2.8%, 3.2%)	2.9%	(2.4%, 3.6%)
Occupational Health	1.2%	(1.1%, 1.3%)	1.2%	(0.9%, 1.7%)
Operating Room/ Scrub Nurse	4.6%	(4.3%, 4.9%)	0.7%	(0.5%, 1.1%)
Palliative Care/ Hospice	3.9%	(3.7%, 4.1%)	6.3%	(5.5%, 7.2%)
Pediatrics	5.6%	(5.3%, 5.9%)	5.9%	(5.1%, 6.8%)
Neonatal	2.3%	(2.1%, 2.5%)	0.2%	(0.1%, 0.4%)
Phlebotomy	0.8%	(0.7%, 0.9%)	2.6%	(2.1%, 3.2%)
Pre-op/ Post-op Recovery Room	6.4%	(6.1%, 6.7%)	1.2%	(0.9%, 1.7%)
Public Health	4.0%	(3.8%, 4.2%)	3.3%	(2.7%, 4.0%)
Psychiatric/ Mental Health/ Substance Abuse	5.4%	(5.1%, 5.7%)	6.7%	(5.9%, 7.7%)
Rehabilitation	4.3%	(4.1%, 4.6%)	17.7%	(16.4%, 19.1%)
School Health K-12	1.2%	(1.1%, 1.3%)	1.5%	(1.1%, 2.0%)
Telehealth	3.5%	(3.3%, 3.7%)	2.5%	(2.0%, 3.1%)
Testing and Diagnostic Services Nurse	0.5%	(0.4%, 0.6%)	0.9%	(0.6%, 1.3%)
Thoracic Care	1.7%	(1.5%, 1.9%)	0.1%	(0.0%, 0.3%)
Women's Health	2.2%	(2.0%, 2.4%)	1.2%	(0.9%, 1.7%)
Wound Care	3.7%	(3.5%, 3.9%)	12.8%	(11.6%, 14.0%)
Other Medical	2.6%	(2.4%, 2.8%)	3.6%	(3.0%, 4.3%)
Other Clinical Specialties	4.5%	(4.3%, 4.8%)	4.4%	(3.7%, 5.2%)
Other Non-clinical Specialties	2.2%	(2.0%, 2.4%)	1.4%	(1.0%, 1.9%)
Other	3.8%	(3.6%, 4.0%)	3.4%	(2.8%, 4.1%)

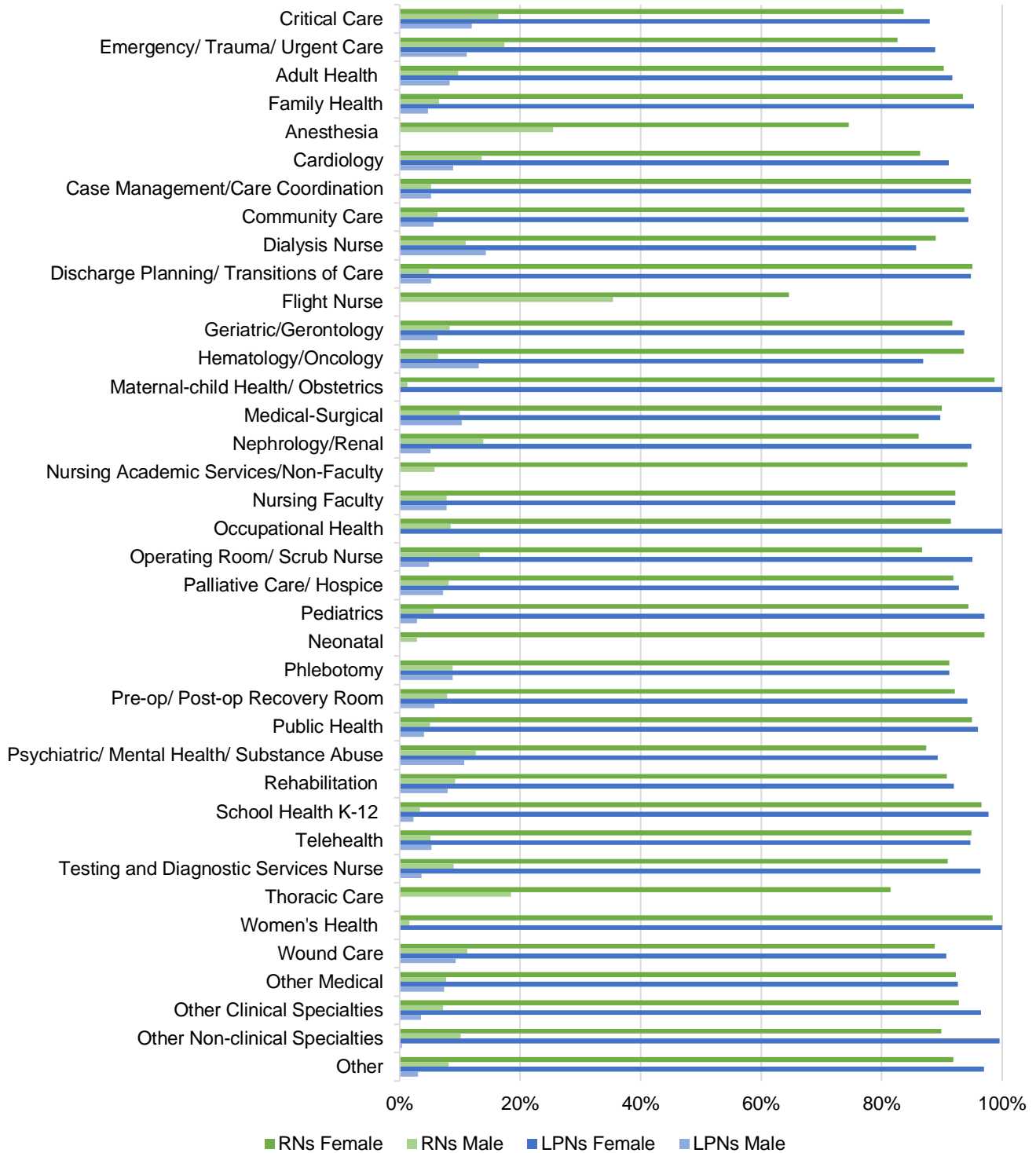
The age of RNs and LPNs within each specialty was also analyzed (Figure 16 shows the percentage of nurses in each age category within that specialty) showing nurses 35 or older working in each specialty (60% or higher). RNs 34 years or younger were most common in thoracic care (45.2%) and medical-surgical (42.8%). LPNs were most likely to be 35 years or older within each specialty.

Figure 16. Nurses Within Specialties by Age



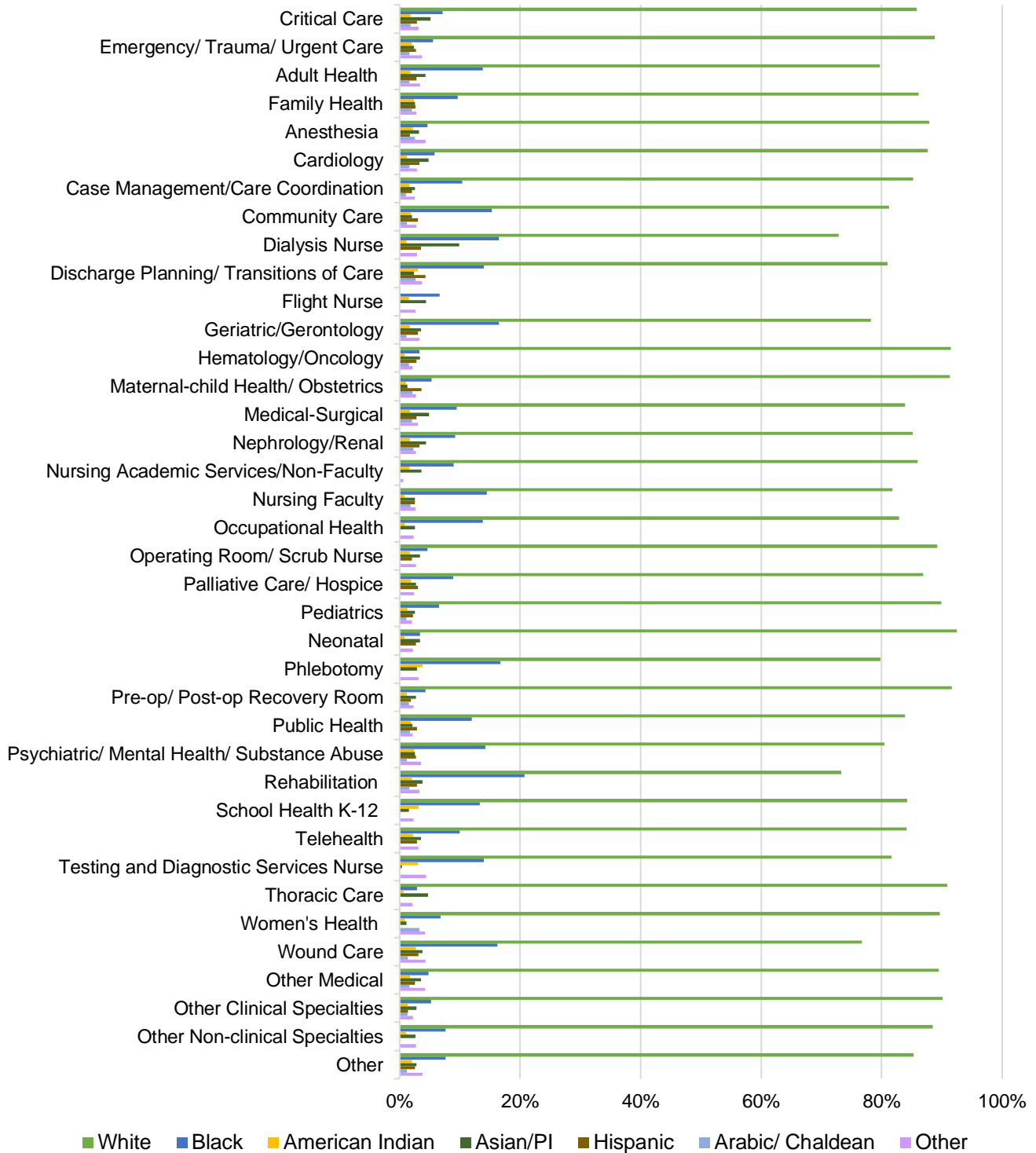
The gender of RNs and LPNs within each specialty was also analyzed (Figure 17). While female nurses were most common within each specialty (50% or higher), male RNs were most common as flight nurses (35.4%) or anesthesia (35.5%), and male LPNs were most common in dialysis care (14.3%) as compared to within other specialties.

Figure 17. Male and Female Nurses Within Specialties



The race and ethnicity of RNs and LPNs within each specialty was also analyzed (Figure 18) showing more white nurses working within each specialty (60% or higher). African American nurses commonly worked in rehabilitation (20.7%) while Asian Pacific Islander nurses commonly worked in dialysis (9.9%).

Figure 18. Race and Ethnicity Within Specialties for All Nurses



The specialty breakdown was also provided for those nurses who plan to stop working in five or less years (Table 32). For RNs, the most common specialty for nurses to stop working in five or less years are those in public health (26.5%), nursing faculty (25.4%), and testing diagnostic services (24.6%). For LPNs, the most common specialty for nurses to stop working in five or less years are those in cardiology (26.3%), family health (25.1%), and pediatrics (24.1%). Other specialties with over 20.0 percent or higher with nurses planning to stop working in less than five years include: case management, community care, nursing academic, nursing faculty, occupational health, operating room, pediatrics, phlebotomy, recovery room, public health, school health K-12, telehealth, and testing services.

Table 32. Plans to Work 5 Years or Less Within Each Specialty

Specialty	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Critical Care	3308	15.7%	(14.5%, 17.0%)	74	19.4%	(12.0%, 29.8%)
Emergency/ Trauma/ Urgent Care	2153	12.6%	(11.3%, 14.1%)	50	19.2%	(10.6%, 32.1%)
Adult Health	4409	15.0%	(14.0%, 16.1%)	941	16.4%	(14.2%, 18.9%)
Family Health	1295	15.6%	(13.7%, 17.7%)	252	25.1%	(20.1%, 30.8%)
Anesthesia	660	18.2%	(15.4%, 21.3%)	5	*	*
Cardiology	1857	14.2%	(12.7%, 15.9%)	46	26.3%	(15.8%, 40.5%)
Case Management/Care Coordination	2305	22.4%	(20.7%, 24.1%)	115	19.0%	(12.9%, 27.1%)
Community Care	963	23.3%	(20.7%, 26.1%)	144	17.1%	(11.8%, 24.1%)
Dialysis Nurse	423	12.3%	(9.5%, 15.8%)	34	*	*
Discharge Planning/ Transitions of Care	511	17.1%	(14.1%, 20.6%)	61	*	*
Flight Nurse	50	*	*	3	*	*
Geriatric/Gerontology	2085	15.9%	(14.4%, 17.5%)	942	14.0%	(11.9%, 16.4%)
Hematology/Oncology	951	17.3%	(15.0%, 19.8%)	29	*	*
Maternal-child Health/ Obstetrics	1299	16.2%	(14.3%, 18.3%)	32	*	*
Medical-Surgical	3349	12.8%	(11.7%, 14.0%)	133	18.0%	(12.4%, 25.4%)
Nephrology/Renal	565	12.5%	(10.0%, 15.5%)	33	*	*
Nursing Academic Services/Non-Faculty	177	22.6%	(17.1%, 29.3%)	10	*	*
Nursing Faculty	783	25.4%	(22.5%, 28.6%)	72	17.5%	(10.4%, 27.9%)
Occupational Health	308	24.9%	(20.4%, 30.0%)	28	*	*
Operating Room/ Scrub Nurse	1106	21.4%	(19.1%, 23.9%)	19	*	*
Palliative Care/ Hospice	899	17.5%	(15.2%, 20.1%)	148	9.8%	(6.0%, 15.7%)
Pediatrics	1201	15.5%	(13.6%, 17.7%)	147	24.1%	(17.9%, 31.6%)
Neonatal	511	19.0%	(15.8%, 22.6%)	4	*	*
Phlebotomy	177	19.8%	(14.6%, 26.3%)	62	20.2%	(12.1%, 31.8%)
Pre-op/ Post-op Recovery Room	1536	21.5%	(19.5%, 23.6%)	30	*	*
Public Health	966	26.5%	(23.8%, 29.4%)	76	13.5%	(7.6%, 23.0%)
Psychiatric/ Mental Health/ Substance Abuse	1290	18.7%	(16.7%, 20.9%)	149	17.0%	(11.8%, 23.8%)
Rehabilitation	953	14.9%	(12.8%, 17.3%)	402	12.8%	(9.9%, 16.4%)
School Health K-12	281	25.6%	(20.9%, 31.0%)	43	*	*
Telehealth	860	20.7%	(18.1%, 23.5%)	74	22.1%	(14.2%, 32.8%)

Specialty	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Testing and Diagnostic Services Nurse	131	24.6%	(18.0%, 32.6%)	22	*	*
Thoracic Care	341	14.7%	(11.3%, 18.9%)	3	*	*
Women's Health	500	17.1%	(14.1%, 20.6%)	33	*	*
Wound Care	826	12.0%	(10.0%, 14.4%)	295	13.9%	(10.4%, 18.3%)
Other Medical	592	16.7%	(13.9%, 19.9%)	90	18.0%	(11.4%, 27.2%)
Other Clinical Specialties	1106	23.2%	(20.8%, 25.8%)	117	31.0%	(23.3%, 39.9%)
Other Non-clinical Specialties	553	24.7%	(21.3%, 28.5%)	36	*	*
Other	958	29.8%	(27.0%, 32.8%)	85	33.7%	(24.6%, 44.3%)

WORKPLACE VIOLENCE

The 2020 survey was the first year to ask nurses about their experiences with workplace violence. All questions were optional for respondents, and definitions were provided for each term used in the question (see questions 57–63 in Appendix A). Further analysis was performed this year to determine what could be impacting the rates of workplace violence such as determining if there is a correlation with the setting, role, or specialty given a small portion of nurses (4.2% of RNs and 3.7% of LPNs) indicated they were planning to leave nursing in less than five years due to violence or safety issues (previously reported in Table 23).

Basic Demographics

About one-third (34.2%) of RNs and one-quarter (23.6%) of LPNs reported experiencing workplace violence in the past year (Table 33). Younger nurses are experiencing workplace violence at higher rates, specifically RNs under 35 years old and LPNs under 25 years old. Male nurses also tended to experience more workplace violence (41.1% RNs, 25.3% LPNs). American Indian nurses also experienced higher rates of workplace violence (43.6% RNs and 35.2% LPNs). Nurses who have been practicing less than 10 years also experienced higher rates of workplace violence, especially RNs. The percent of nurses who reported experiencing workplace violence does not vary greatly geographically by residence or employment.

Table 33. Demographics of those Nurses who Experienced Workplace Violence in the Past Year (2021)

Characteristics	RNs	LPNs
Total	34.2%	23.6%
Age		
<25 years	48.8%	44.5%
25 to 34 years	45.9%	24.9%
35 to 44 years	37.6%	25.9%
45 to 54 years	29.7%	22.1%
55 to 64 years	24.9%	22.0%
65+ years	15.2%	12.2%
Gender		
Female	33.5%	23.5%
Male	41.1%	25.3%

Characteristics	RNs	LPNs
Ethnicity		
Hispanic or Latino	40.5%	23.4%
Arabic or Chaldean	31.7%	*
Race		
White	35.1%	27.6%
Black	24.6%	14.7%
American Indian	43.6%	35.2%
Asian/ Pacific Islander	28.8%	17.7%
Other	43.3%	31.3%
Employment Region		
Eastern/Central/Western UP	39.0%	24.6%
Northwest LP	34.8%	25.7%
Northeast LP	33.5%	33.0%
West/West Central	36.9%	24.2%
East Central	34.7%	31.9%
East	37.3%	31.5%
South Central	40.5%	36.5%
Southwest	42.7%	27.7%
Southeast	34.5%	24.4%
Detroit Metro	32.7%	17.7%
Outside of MI	22.7%	21.0%
Unknown MI Region	34.1%	23.7%
Region of Residence		
Upper Peninsula	37.4%	24.5%
Northwest LP	34.8%	26.7%
Northeast LP	32.4%	31.3%
West/West Central	37.1%	24.1%
East Central	34.6%	30.5%
East	37.3%	33.4%
South Central	42.6%	35.6%
Southwest	41.7%	30.3%
Southeast	34.0%	23.7%
Detroit Metro	32.8%	17.5%
Non-Michigan Residence	22.7%	21.0%
Unknown MI Region	37.9%	19.4%
Practicing as a Nurse		
Less than 3 years	47.3%	24.9%
3 to less than 10 years	43.5%	23.7%
10 years to less than 19 year	33.1%	25.9%
Greater than 19 years	22.8%	20.5%

Comparison of those who experienced workplace violence in 2020 to 2021 is shown in Table 34 on the following page. Younger nurses and nurses with less experience have continued to experience higher rates of workplace violence, which then decreases with age. Specifically, younger LPNs (less than 25 years of age) experienced much more workplace violence in 2021 compared to 2020 (44.5% compared to 23.9%). American Indian LPNs experienced an increase in workplace violence in 2021 (35.2% compared to 19.4%).

Table 34. Demographics of those Nurses who Experienced Workplace Violence (2020-2021)

Characteristics	2020		2021	
	RNs	LPNs	RNs	LPNs
Total	35.6%	25.1%	34.2%	23.6%
Age				
<25 years	53.9%	23.9%	48.8%	44.5%
25 to 34 years	46.5%	25.1%	45.9%	24.9%
35 to 44 years	38.0%	27.8%	37.6%	25.9%
45 to 54 years	32.1%	23.0%	29.7%	22.1%
55 to 64 years	27.6%	28.0%	24.9%	22.0%
65+ years	17.5%	14.5%	15.2%	12.2%
Gender				
Female	34.9%	24.8%	33.5%	23.5%
Male	42.4%	27.9%	41.1%	25.3%
Ethnicity				
Hispanic or Latino	38.8%	26.6%	40.5%	23.4%
Arabic or Chaldean	37.1%	29.0%	31.7%	*
Race				
White	36.6%	27.7%	35.1%	27.6%
Black	26.5%	19.9%	24.6%	14.7%
American Indian	44.8%	19.4%	43.6%	35.2%
Asian/ Pacific Islander	27.8%	20.9%	28.8%	17.7%
Other	39.0%	25.2%	43.3%	31.3%
Employment Region				
Eastern/Central/Western UP	35.1%	27.0%	39.0%	24.6%
Northwest LP	37.4%	21.7%	34.8%	25.7%
Northeast LP	35.3%	24.6%	33.5%	33.0%
West/West Central	38.4%	27.5%	36.9%	24.2%
East Central	38.8%	34.0%	34.7%	31.9%
East	39.9%	29.9%	37.3%	31.5%
South Central	41.8%	33.8%	40.5%	36.5%
Southwest	41.9%	30.7%	42.7%	27.7%
Southeast	34.3%	25.8%	34.5%	24.4%
Detroit Metro	35.4%	21.1%	32.7%	17.7%
Outside of MI	24.1%	19.5%	22.7%	21.0%
Unknown MI Region	37.1%	19.8%	34.1%	23.7%
Region of Residence				
Upper Peninsula	33.7%	26.7%	37.4%	24.5%
Northwest LP	37.7%	19.1%	34.8%	26.7%
Northeast LP	34.4%	22.9%	32.4%	31.3%
West/West Central	38.9%	27.7%	37.1%	24.1%
East Central	39.9%	31.1%	34.6%	30.5%
East	39.3%	33.7%	37.3%	33.4%
South Central	41.1%	33.6%	42.6%	35.6%
Southwest	40.2%	29.2%	41.7%	30.3%
Southeast	35.2%	26.1%	34.0%	23.7%
Detroit Metro	34.9%	20.4%	32.8%	17.5%
Non-Michigan Residence	24.6%	21.1%	22.7%	21.0%

Characteristics	2020		2021	
	RNs	LPNs	RNs	LPNs
Unknown MI Region	40.5%	21.2%	37.9%	19.4%
Practicing as a Nurse				
Less than 3 years	50.1%	22.3%	47.3%	24.9%
3 to less than 10 years	43.4%	26.7%	43.5%	23.7%
10 years to less than 19 year	34.2%	26.4%	33.1%	25.9%
Greater than 19 years	25.2%	23.4%	22.8%	20.5%

The care setting where nurses experienced the most workplace violence was in emergent or urgent care for RNs (59%) and correctional facilities for LPNs (34%; Table 35). Most nurses work in acute care (previously reported in Table 26) where 45% of RNs and 26% of LPNs experience workplace violence.

Table 35. Nurses who Experienced Workplace Violence by Care Setting (2021, top settings in descending order by RNs)

Setting	RN= 25,472		LPN= 3,032	
	n	Estimate	n	Estimate
Emergent /Urgent Care Center	11,701	59%	*	*
Correctional Facility	3,580	54%	378	34%
Acute Care*	1,162	45%	29	26%
Nursing Home/Extended Care	125	32%	25	28%
Community Health*	710	31%	19	23%
Dialysis Center	1,532	30%	*	*
School of Nursing	243	30%	288	18%
Public Health	1,342	29%	414	24%
Assisted Living Facility	773	28%	114	27%
Diagnostic/Testing Center	196	27%	82	16%
Mobile Care Unit	55	27%	*	0%
Hospice	1,032	27%	39	21%
Occupational Health	679	25%	51	19%
Ambulatory Care*	346	24%	16	19%
Ambulatory Surgery Center	625	24%	98	16%

*Acute care and community health definitions may be found in *Appendix A*.

The positions where nurses experienced the most workplace violence were staff nurse for RNs (42%) and patient educators for LPNs (29%; Table 36 on the following page). Thirty-five percent of RNs and 26% of LPNs experienced workplace violence as nurse managers, which was a common position for nurses although there are not many LPNs in nurse manager positions (previously reported in Table 28). The majority of RNs and LPNs are in a staff nurse position (n=14,063 and n=2,000 respectively) and also experience higher rates of workplace violence (42% and 25% respectively).

Table 36. Nurses who Experienced Workplace Violence by Position (2021, top positions in descending order by RNs)

Position	RN= 25,472		LPN= 3,032	
	n	Estimate	n	Estimate
Staff Nurse	14063	42%	2000	25%
Non-military, work in Military setting	58	40%	*	**
Nurse Manager/Supervisor	2000	35%	381	26%
Professional Nurse Training	439	32%	21	14%
Nurse Post-Secondary Educator	801	31%	*	**
Patient Educator	771	30%	86	29%
Nurse Secondary Educator	180	28%	*	**
Advanced Practice Registered Nurse	2244	25%	*	*
Faith-based Nurse	80	24%	*	*
Nurse Executive/Administrator	1151	23%	77	27%
Nurse Consultant	601	22%	28	26%
Reserve and Active Military	43	21%	43	21%
Case Manager/Coordinator/Navigator	2640	21%	131	22%
Nurse Researcher	181	20%	*	0%
School Health Nurse K-12	240	20%	50	12%

The specialties where nurses experienced the most workplace violence for RNs was emergency care (61%) while LPNs were in psychiatric or mental health specialties (42%; Table 37). Adult health was a common specialty for nurses (previously reported in Table 31) where 41 percent of RNs and 27 percent of LPNs experience workplace violence. Over half of RNs (55%) experienced workplace violence in thoracic care while only 1.7 percent reported working in that specialty area. Common specialties that experienced higher rates of workplace violence include adult health (RN n=4,557 and LPN n=1,027) and geriatric or gerontology (RN n=2,183 and LPN n=1,021).

Table 37. Nurses who Experienced Workplace Violence by Specialty (2021, top specialties in descending order by RNs)

Specialty	RN= 25,472		LPN= 3,032	
	n	Estimate	n	Estimate
Emergency/ Trauma/ Urgent Care	2,223	61%	58	30%
Thoracic Care	348	55%	*	*
Psychiatric/ Mental Health/ Substance Abuse	1,328	53%	175	42%
Nephrology/Renal	580	51%	36	31%
Medical-Surgical	3,497	49%	148	29%
Critical Care	3,441	49%	85	29%
Cardiology	1,906	48%	51	27%
Phlebotomy	185	48%	70	21%
Wound Care	849	41%	321	30%
Adult Health	4,557	41%	1027	27%
Geriatric/Gerontology	2,183	39%	1021	29%
Rehabilitation	986	36%	440	32%
Palliative Care/ Hospice	934	36%	158	29%
Hematology/Oncology	982	36%	30	27%
Women's Health	510	33%	33	22%
Discharge Planning/ Transitions of Care	504	32%	75	28%
Public health	993	23%	89	25%

Understanding Workplace Violence by Specialty

To understand which nurses are experiencing the most workplace, further analysis was performed using the most common specialties as the context variable. The specialty where nurses experienced workplace violence was then compared to nurses' age, gender, and race/ethnicity since those demographic variables showed the most variations when analyzing workplace violence.

We found that nurses 34 years or younger tended to experience workplace violence at higher rates compared to nurses 35 years or older. Table 38 below shows the top specialties where nurses 34 years and younger experienced the most workplace violence. The specialties with the largest difference in workplace violence experienced by age are thoracic care (difference of 24.1%) and palliative care (difference on 20.4%).

Table 38. Age of Nurses who Experienced Workplace Violence by Specialty (2021, top specialties)

Specialty	Age 34 and Younger = 9,376		Age 35 and Older = 36,979	
	n	Estimate	n	Estimate
Emergency/ Trauma/ Urgent Care	533	65.7%	1604	57.0%
Thoracic Care	115	67.7%	221	43.6%
Psychiatric/ Mental Health/ Substance Abuse	245	63.5%	1175	47.9%
Nephrology/Renal	165	60.3%	425	43.0%
Medical-Surgical	1,079	57.2%	2374	42.3%
Critical Care	1,033	53.7%	2303	44.0%
Cardiology	533	59.2%	1319	40.1%
Phlebotomy	51	51.4%	193	36.3%
Wound Care	226	39.9%	897	37.0%
Adult Health	1,277	50.2%	4022	32.5%
Geriatric/Gerontology	586	43.6%	2478	32.5%
Rehabilitation	279	34.6%	1092	35.1%
Palliative Care/ Hospice	174	50.4%	872	30.0%
Hematology/Oncology	232	47.2%	734	30.1%
Women's Health	112	45.4%	405	26.7%
Discharge Planning/ Transitions of Care	85	42.1%	472	28.5%
Public health	147	36.7%	870	19.6%

Male nurses tended to experience more workplace violence in comparison to female nurses across specialties (Table 39). Male nurses commonly experienced violence in critical care (33.2%) and emergency or trauma (24.4%), while both female and male nurses commonly experienced violence in adult health (26.5% and 23.2% respectively).

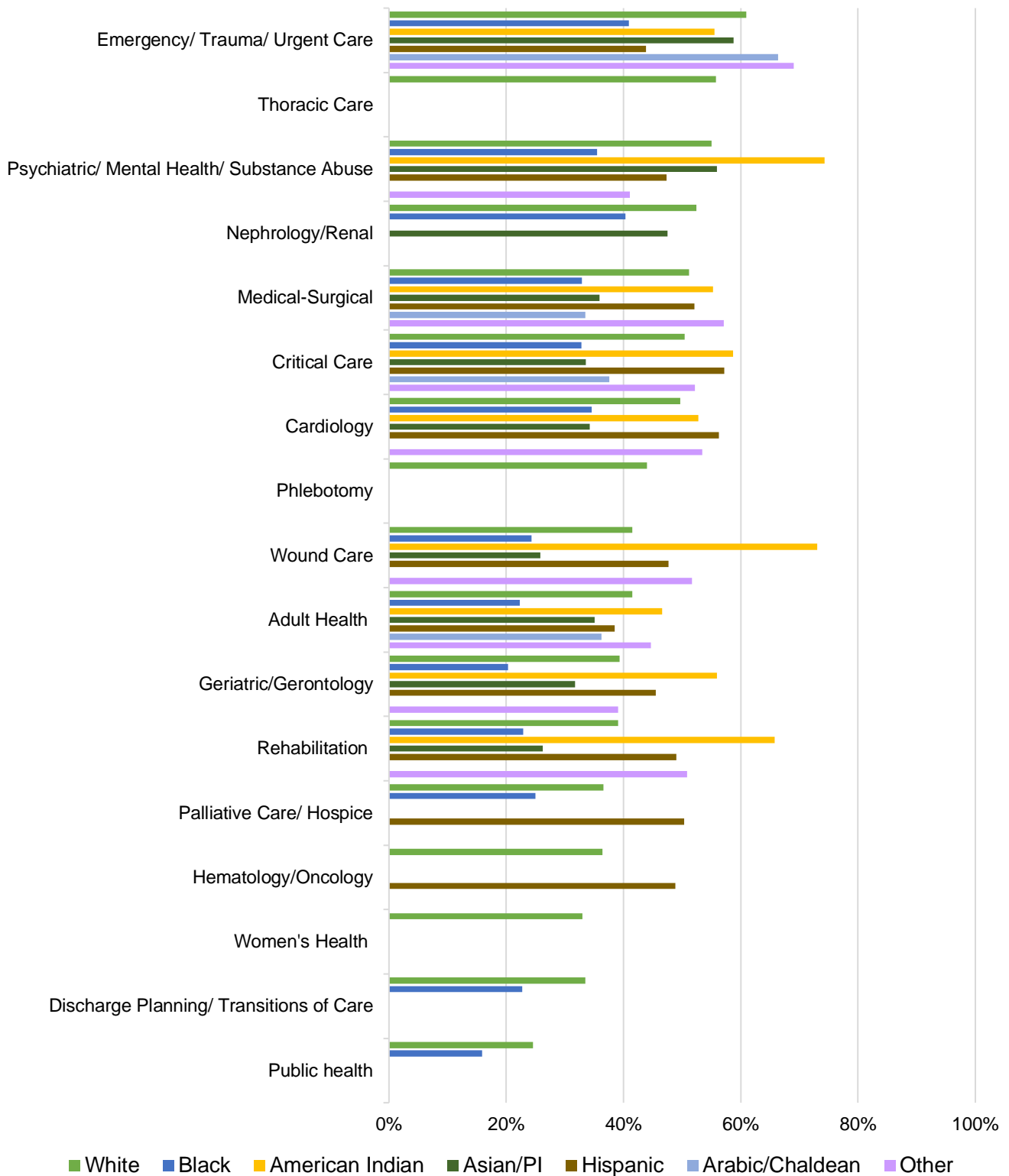
Table 39. Gender of Nurses who Experienced Workplace Violence by Specialty (2021, top specialties)

Specialty	Females n=24,253		Males n=2,495	
	Estimate	95% CI	Estimate	95% CI
Emergency/ Trauma/ Urgent Care	15.3%	(14.9%, 15.8%)	24.4%	(22.8%, 26.1%)
Thoracic Care	2.2%	(2.0%, 2.4%)	4.8%	(4.0%, 5.7%)
Psychiatric/ Mental Health/ Substance Abuse	8.6%	(8.3%, 9.0%)	10.6%	(9.5%, 11.9%)

Specialty	Females n=24,253		Males n=2,495	
	Estimate	95% CI	Estimate	95% CI
Nephrology/Renal	3.7%	(3.5%, 3.9%)	4.6%	(3.8%, 5.5%)
Medical-Surgical	22.7%	(22.2%, 23.2%)	19.9%	(18.4%, 21.5%)
Critical Care	19.7%	(19.2%, 20.2%)	33.2%	(31.4%, 35.1%)
Cardiology	11.1%	(10.7%, 11.5%)	14.3%	(13.0%, 15.7%)
Phlebotomy	1.3%	(1.2%, 1.5%)	1.3%	(0.9%, 1.8%)
Wound Care	5.4%	(5.1%, 5.7%)	5.2%	(4.4%, 6.1%)
Adult Health	26.5%	(25.9%, 27.1%)	23.2%	(21.6%, 24.9%)
Geriatric/Gerontology	14.4%	(14.0%, 14.8%)	9.0%	(7.9%, 10.2%)
Rehabilitation	6.3%	(6.0%, 6.6%)	4.7%	(3.9%, 5.6%)
Palliative Care/ Hospice	4.5%	(4.2%, 4.8%)	3.6%	(2.9%, 4.4%)
Hematology/Oncology	4.4%	(4.1%, 4.7%)	3.8%	(3.1%, 4.6%)
Women's Health	2.2%	(2.0%, 2.4%)	0.6%	(0.4%, 1.0%)
Discharge Planning/ Transitions of Care	2.3%	(2.1%, 2.5%)	0.9%	(0.6%, 1.4%)
Public health	2.9%	(2.7%, 3.1%)	1.5%	(1.1%, 2.1%)

Workplace violence experienced by race and ethnicity within each of the top specialties for all nurses is reported in Figure 19 (on the following page). Nurses who identified as American Indian experience workplace violence at higher rates in many settings (50-74% with n ≤ 101 in each setting). Nurses who identified as Hispanic also experienced workplace violence at higher rates in many settings (38-57% with n ≤ 152 in each setting). Nurses identifying as Asian Pacific Islander experienced workplace violence in many settings as well (25-59% with n ≤ 175). Nurses who identify as white experienced workplace violence slightly more than those who identify as Black across the settings.

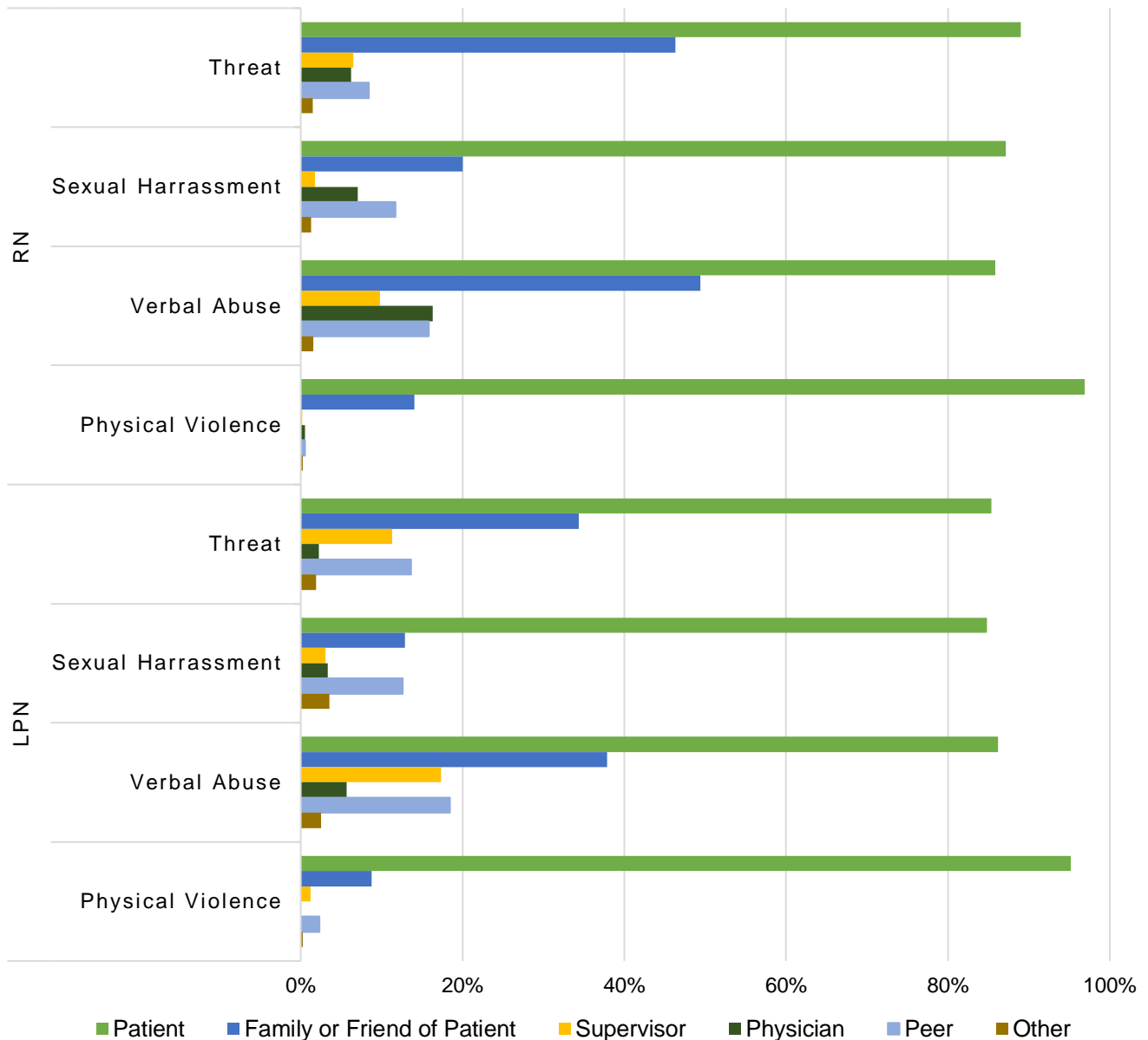
Figure 19. Race & Ethnicity of Nurses who Experienced Workplace Violence by Specialty (2021, top specialties)



Type of Violence & Perpetrator of Workplace Violence

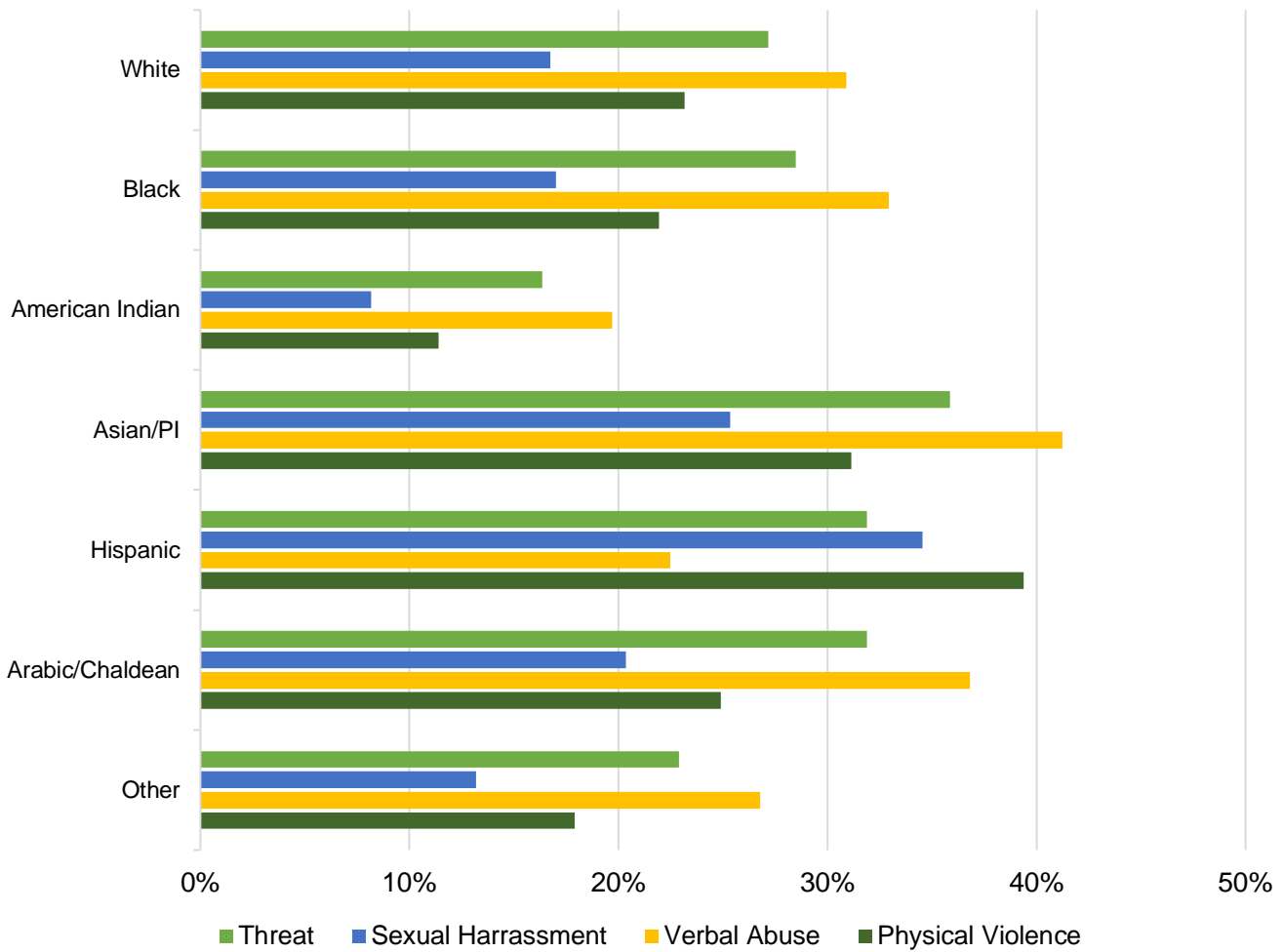
The perpetrator was compared to the type of violence nurses experienced (Figure 20). The patient is the most common perpetrator of all types of workplace violence, and then a family or friend of the patient is the next common perpetrator. There weren't any significant differences from 2020 and all data followed similar trends.

Figure 20. Perpetrator and Type of Violence Experienced by Nurses (2021)



The type of violence experienced by ethnicity for all nurses is reported in Figure 21 below. Verbal abuse and threats are the most common types of violence experienced overall. Asian Pacific Islander, Hispanic, and Arabic or Chaldean nurses experience all types of violence at the highest rates compared to other ethnicities.

Figure 21. Ethnicity and Type of Violence Experienced by Nurses (2021)



Because respondents indicated the most common perpetrator of workplace violence is the patient or a family/friend of the patient, understanding how supervisors, physicians, and peers are treating nurses across specialties was examined. The type of perpetrator for the top specialties where nurses experienced workplace violence was further analyzed by age (Table 40 on the following page shows the percentage of nurses in each age category within that specialty). Nurses 34 years or younger most commonly experience workplace violence from supervisors in hospice (27.1%), from physicians in thoracic care, critical care and cardiology (26.2%), women’s health (25.1%), from peers in public health and discharge planning (32.9%). Nurses 35 years or older experienced violence from peers in most specialties (thoracic care, nephrology, critical care, cardiology, phlebotomy, wound care, hematology, women’s health, and public health). Workplace violence experienced from supervisors was most

common in women’s health, public health, wound care, and hematology. Workplace violence experienced from physicians included women’s health, critical care, and thoracic care.

Table 40. Perpetrator of Workplace Violence Experienced by Specialty & Age

Specialty	Nurses 34 Years or Younger			Nurses 35 Years or Older		
	Supervisor	Physician	Peer	Supervisor	Physician	Peer
Emergency/ Trauma/ Urgent Care	11.1%	16.5%	17.9%	3.4%	13.6%	19.7%
Thoracic Care	*	31.3%	21.4%	*	25.0%	50.0%
Psychiatric/ Mental Health/ Substance Abuse	16.4%	6.8%	23.1%	6.5%	2.3%	6.1%
Nephrology/Renal	*	20.1%	7.7%	14.7%	0.0%	58.7%
Medical-Surgical	11.9%	14.0%	19.7%	11.1%	8.6%	17.2%
Critical Care	12.8%	26.2%	24.0%	14.6%	36.7%	37.8%
Cardiology	13.2%	25.7%	20.6%	17.8%	17.8%	29.7%
Phlebotomy	*	*	*	0.0%	0.0%	33.3%
Wound Care	22.1%	8.9%	17.3%	32.2%	0.0%	32.2%
Adult Health	17.2%	16.7%	21.7%	18.4%	13.1%	24.0%
Geriatric/Gerontology	21.0%	10.7%	18.0%	18.0%	0.0%	11.8%
Rehabilitation	18.5%	8.9%	23.4%	8.3%	0.0%	28.6%
Palliative Care/ Hospice	27.1%	17.2%	19.1%	15.6%	14.1%	7.8%
Hematology/Oncology	*	11.4%	7.8%	31.2%	0.0%	34.4%
Women's Health	*	25.1%	*	38.8%	50.0%	38.8%
Discharge Planning/ Transitions of Care	*	*	27.3%	0.0%	0.0%	0.0%
Public health	23.4%	20.4%	32.9%	32.4%	12.7%	28.1%

Female nurses experienced workplace violence from supervisors in public health (Table 41) and from physicians in thoracic care, critical care, cardiology, phlebotomy, women’s health, discharge planning, and public health; and from peers in critical care, phlebotomy, wound care, adult health, geriatrics, rehabilitation, palliative care, discharge planning, and public health. Male nurses experienced workplace violence from physicians in critical care and cardiology, and from peers in emergency, thoracic care, critical care, cardiology, wound care, adult health, and geriatrics.

Table 41. Perpetrator of Workplace Violence Experienced by Specialty & Gender

Specialty	Female			Male		
	Supervisor	Physician	Peer	Supervisor	Physician	Peer
Emergency/ Trauma/ Urgent Care	9.0%	15.1%	16.6%	11.3%	15.5%	20.0%
Thoracic Care	*	28.3%	17.4%	*		25.4%

Specialty	Female			Male		
	Supervisor	Physician	Peer	Supervisor	Physician	Peer
Psychiatric/ Mental Health/ Substance Abuse	12.1%	8.6%	20.6%	11.4%	9.8%	16.5%
Nephrology/Renal	6.4%	16.8%	16.7%	*	*	*
Medical-Surgical	7.8%	14.5%	16.2%	7.3%	11.5%	19.3%
Critical Care	9.8%	21.8%	20.0%	9.1%	23.4%	27.2%
Cardiology	7.9%	22.0%	19.4%	11.1%	20.1%	24.1%
Phlebotomy	12.4%	20.2%	24.7%	*	*	*
Wound Care	19.5%	13.8%	21.4%	*	*	22.2%
Adult Health	11.7%	15.1%	20.3%	11.6%	17.9%	25.1%
Geriatric/Gerontology	18.3%	12.1%	22.3%	13.5%	13.9%	25.2%
Rehabilitation	19.7%	8.4%	24.5%	*	*	*
Palliative Care/ Hospice	18.8%	15.3%	21.6%	*	*	*
Hematology/Oncology	8.2%	14.4%	19.1%	*	*	*
Women's Health	14.5%	26.2%	14.7%	*	*	*
Discharge Planning/ Transitions of Care	17.0%	21.1%	27.7%	*	*	*
Public health	22.5%	22.9%	32.3%	*	*	*

The most common specialty Hispanic nurses experienced workplace violence was in critical care, from physicians (30.5%) and peers (27.6%). Arabic or Chaldean nurses experienced workplace violence in adult health from peers (44.1%). White nurses most commonly experienced workplace violence in nursing academic services that are non-faculty from physicians (41.5%) and peers (48.6%). Black nurses most commonly experienced workplace violence in geriatrics from supervisors (30.6%) and peers (30.5%) as well as in critical care from peers (36.8%). American Indian nurses experience workplace violence in critical care from peers (44.8%) and in adult health from peers (33.3%). Asian Pacific Islander nurses most commonly experienced workplace violence from peers in geriatrics (39.0%) and critical care (27.0%). Data is not reported in a table/chart due to complexity.

The length of time missed from work was compared to the type of violence nurses experienced (no figure provided). As in 2020, the majority of nurses did not miss any work time due to the workplace violence experienced, and all data followed similar trends.

Reporting Workplace Violence

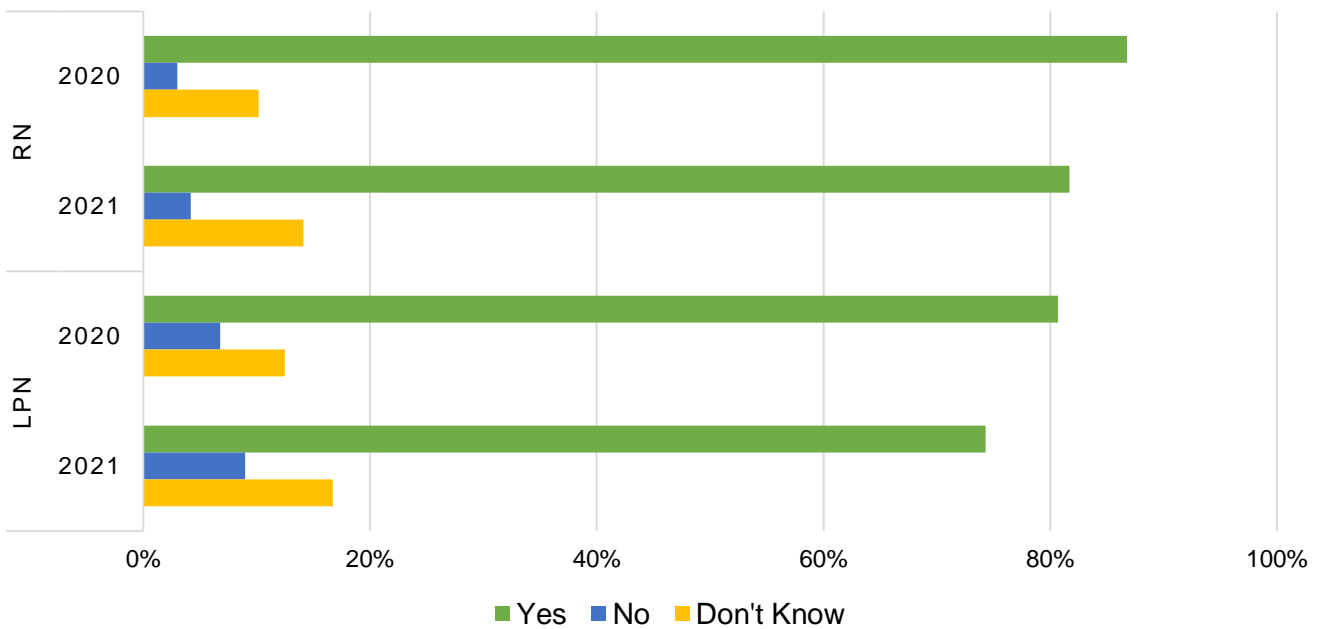
The knowledge of an organizational process to report workplace violence and if they reported the workplace violence incident(s) using this process is shown in Table 42 on the following page. Most RNs and LPNs were aware of an organizational reporting process (81.7% and 74.3% respectively) and a majority reported the workplace violence incident using their organizational reporting process (53.3% and 71.2% respectively). Public health nurses have shared that some of their organizations addressed workplace violence reporting during the safety or security training, and it is possible these individuals would respond “don’t know”.

Table 42. Reporting of Workplace Violence Incidence (2021)

	RN= 7,481		LPN= 607	
	Estimate	95% CI	Estimate	95% CI
Knowledge of Organizational Process for Reporting Workplace Violence				
Yes	81.7%	(80.8%, 82.6%)	74.3%	(70.7%, 77.6%)
No	4.2%	(3.8%, 4.7%)	9.0%	(7.0%, 11.6%)
Don't Know	14.1%	(13.3%, 14.9%)	16.7%	(13.9%, 19.9%)
Reported Workplace Violence Using Organizational Process				
Yes	53.3%	(52.1%, 54.6%)	71.2%	(66.9%, 75.2%)
No	46.7%	(45.4%, 47.9%)	28.8%	(24.8%, 33.1%)

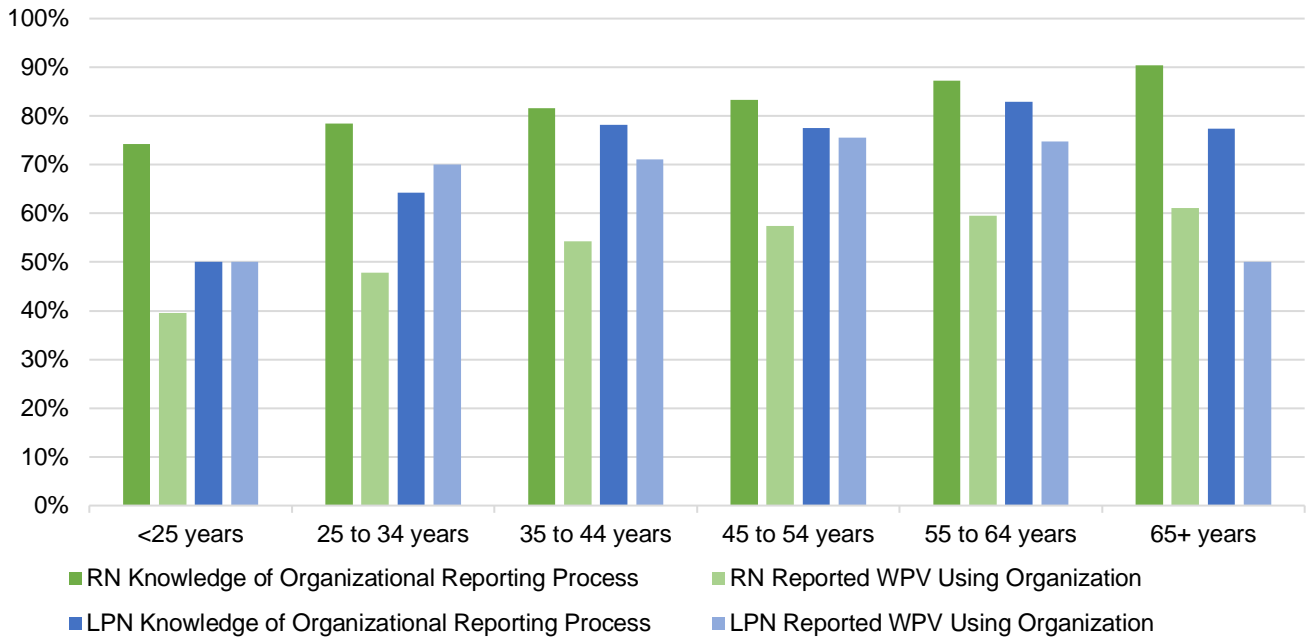
Nurses were also asked if they knew about an organizational reporting process of workplace violence incidents in 2020. Those results are compared with the 2021 findings in Figure 22 below (participants were not asked in 2020 if they reported the workplace violence incident through the organizational process). The percent of nurses aware of an organization reporting process for workplace violence decreased from 2020 to 2021 for both RNs and LPNs. The percent of nurses unsure if there is an organizational reporting process increased from 2020 to 2021.

Figure 22. Knowledge of Reporting Process of Workplace Violence Incidents through Organization (2020-2021)



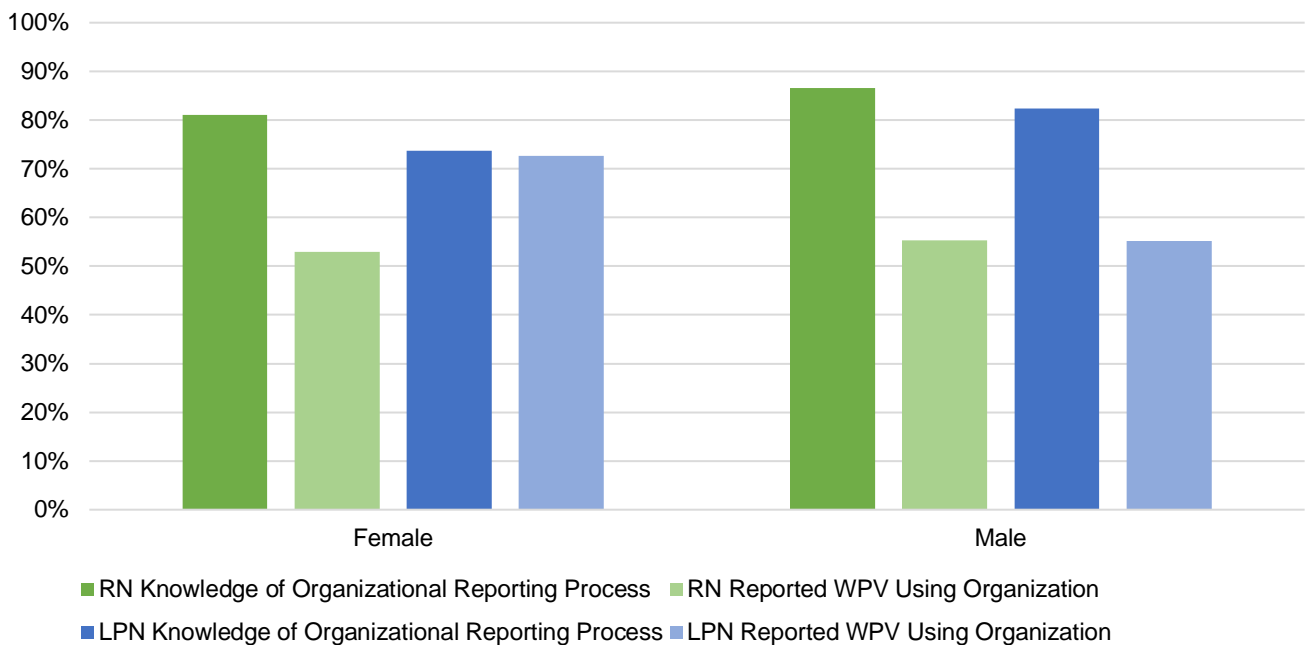
RNs tended to have more knowledge of their organization reporting process compared to LPNs across all age groups, with knowledge generally increasing with age for both RNs and LPNs (Figure 23 on the following page). RNs reporting workplace violence through their organization increase with age as well. LPNs from 25 to 64 years old report workplace violence at similar rates (70.0-74.8%).

Figure 23. Knowledge of Organizational Reporting Process & Use of WPV Reporting by Age



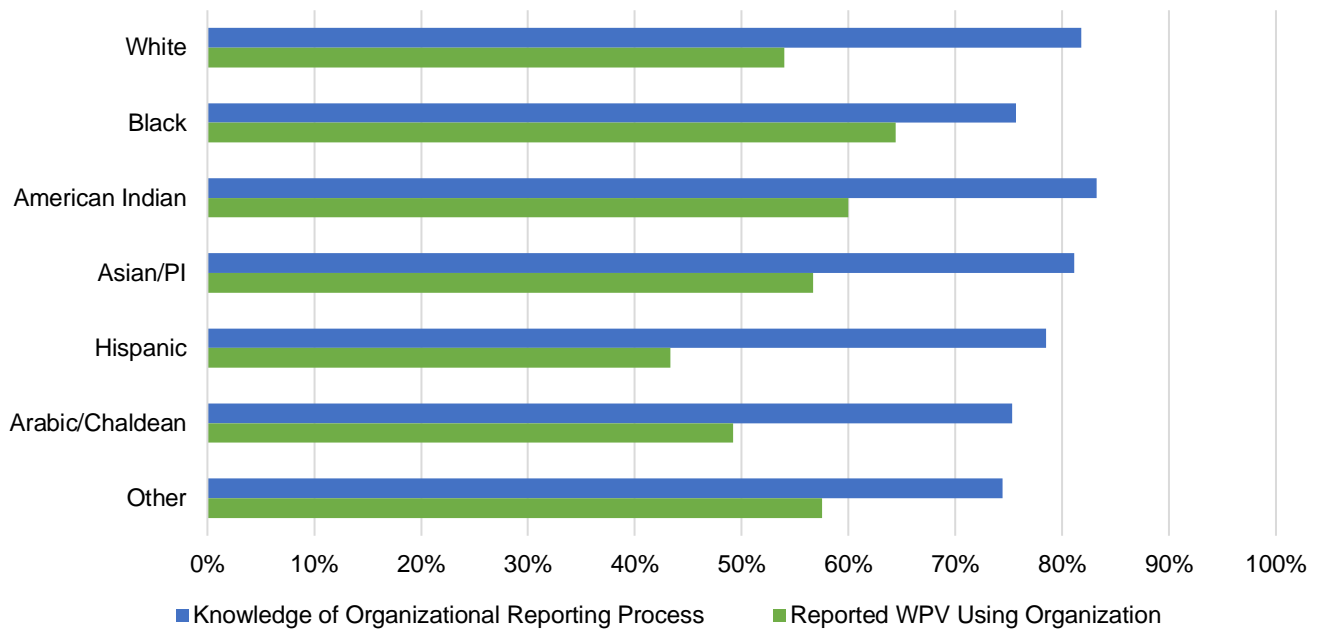
The distribution of knowledge of organization reporting and using the reporting process were similar when viewed by gender (Figure 24). Male nurses have slightly higher knowledge of reporting compared to female nurses, while male nurses are slightly less likely to report compared to female nurses.

Figure 24. Knowledge of Organizational Reporting Process & Use of WPV Reporting by Gender



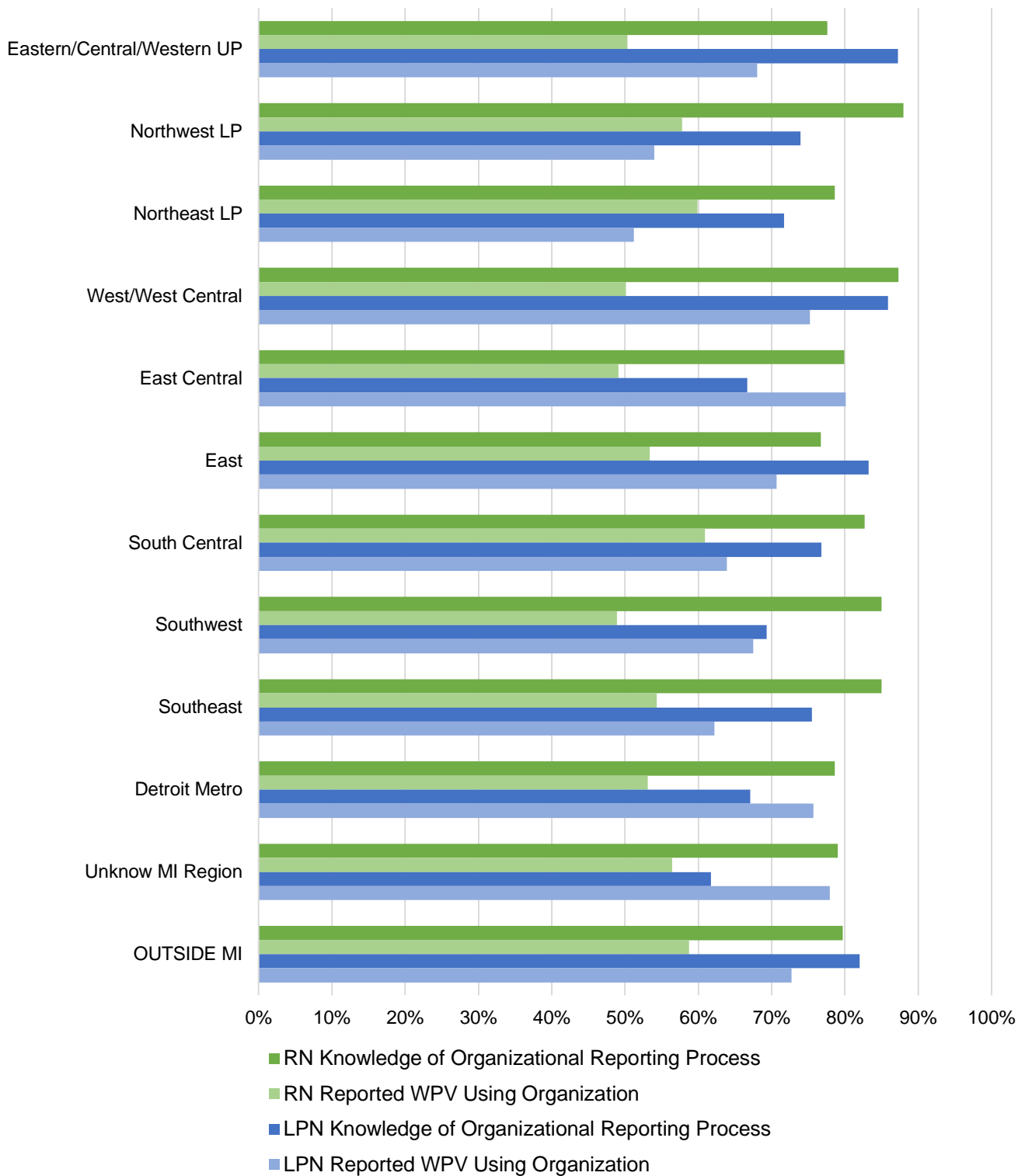
All race and ethnicities have similar knowledge of organizational reporting process (74.4-80.0%; Figure 25). Hispanic nurses are the least likely to report workplace violence (43.3%) with Black nurses the most likely to report experiences of it (64.4%).

Figure 25. Knowledge of Organizational Reporting Process & Use of WPV Reporting by Race & Ethnicity



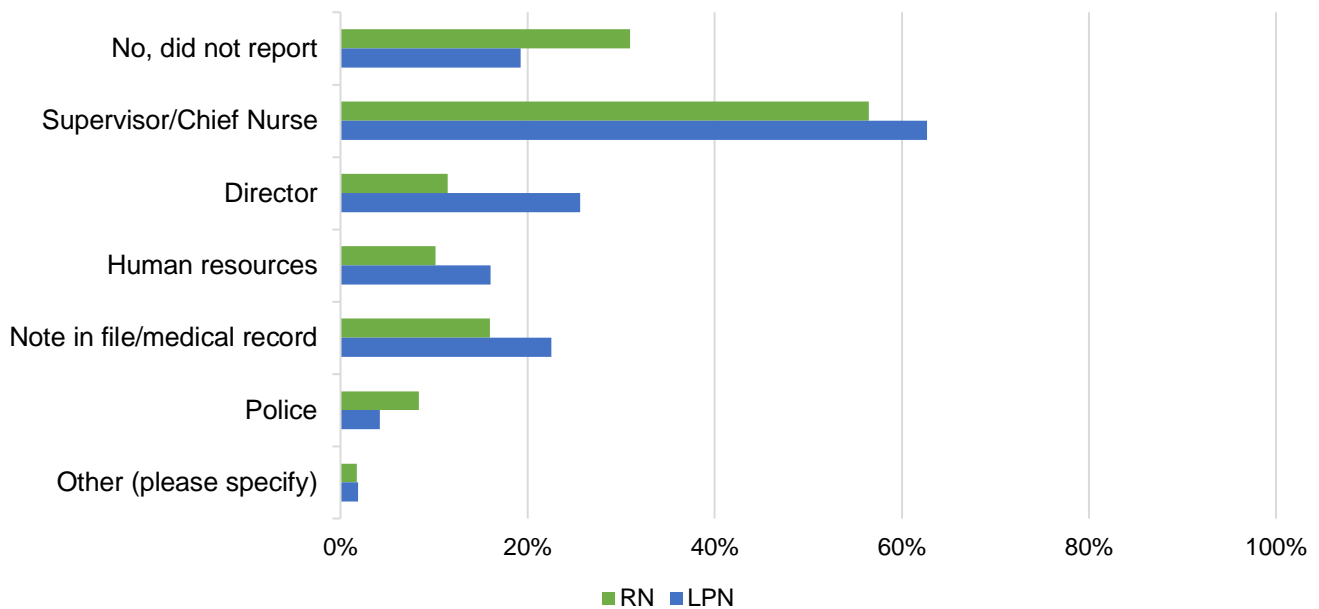
There's a variety of knowledge of organizational reporting processes and use of reports across employment regions (Figure 26 on the following page). RNs and LPNs are more likely to know about their organization's reporting process than reporting workplace violence using the organization's process.

Figure 26. Knowledge of Organizational Reporting Process & Use of WPV Reporting by Employment Region



Nurses were asked which types of methods were used to report workplace violence incidence as shown in Figure 27 below (this question was updated in 2021 and cannot be compared to 2020). Most RNs and LPNs report workplace violence incidents to their supervisor or chief nurse (56.4% and 62.7% respectively).

Figure 27. Methods of Reporting Workplace Violence Incidence (2021)



All nurses who experienced workplace violence by urban-rural employment classification show fairly even distribution of workplace violence experienced across the urban-rural regions. There was also an even distribution across urban-rural regions when analyzing their knowledge of reporting workplace violence and reporting workplace violence.

Conclusions of Workplace Violence

The extensive analysis of the workplace violence data explored what types of nurses and where they experienced workplace violence. The nursing population is mostly made up of nurses who are older, female, and white, yet they are not the most common nurses who experience workplace violence. Nurses 34 years or younger and male nurses tended to experience the most workplace violence. Minority race and ethnicities experienced higher rates of workplace violence in certain specialties.

A meeting was held with experts from a variety of practice settings to understand the data where the following discussion items for potential further exploration were noted:

- Male nurses may tend to volunteer or be asked to assist with more violent or physical situations;
- Stress from the COVID-19 possibly impacting workplace violence;
- Elderly patients tend to experience confusion in the evening which could correlate to the higher rates of workplace violence in geriatrics where younger nurses tend to work late night shifts by themselves;

- Condensed orientation covering a broad range of topics might present too much information at once to support new staff absorption of things less related to completion of tasks, so organizations might need to consider on-going trainings; and
- New nurses might have not yet learned early signs of agitation where more experienced nurses can draw on previous experience to recognize these signs and more quickly de-escalate situations before violence occurs.

While the above discussion items might start to explain the trends of workplace violence, more investigation is needed to truly understand why certain nurses are experiencing more workplace violence.

Additional Information

For additional information related to the 2021 Survey of Michigan Nurses results, past years' reports, and data produced from Michigan's nurse licensure data, please visit www.minurse.org. For questions or comments related to the content presented in this report, please contact Christopher Wojcik, Associate Program Director, Michigan Public Health Institute (cwojcik@mphi.org).

The rest of the report includes Appendices A-D: Appendix A provides a copy of the 2021 Survey of Michigan Nurses; Appendix B provides additional data on the specific national AP specialty certifications held by RNs; Appendix C provides additional data on the national specialty certifications outside of AP; and Appendix D provides a comparison of race and ethnicity breakdown of nurses' education, hours worked, years practicing, plans to continue working, change in employment, and employment setting.

Appendix A: 2021 Survey of Michigan Nurses Data Collection Tool

1. Are you a licensed practical nurse (LPN) or a registered nurse (RN)? (Mark ONE. If you are both an LPN and a RN, please select RN.)
 - a. LPN [Skip to #24]
 - b. RN
2. Are you certified as an advanced practice registered nurse (APRN)?
 - a. Yes
 - b. No [Skip to #11]
3. Do you have a national certification as an APRN from any of the following certifying bodies? (Mark ALL that apply).
 - a. No, I do not have a national certification as an APRN. [Skip to #10]
 - b. American Academy of Nurse Practitioners Certification Board (AANPCB) [Go to #4]
 - c. American Association of Critical Care Nurses Certification Corporation [Skip to #5]
 - d. American Midwifery Certification Board-Certified Nurse Midwife [Skip to #10]
 - e. American Association of Critical Care Nurses (AACN) [Skip to #6]
 - f. American Nurses Credentialing Center (ANCC) [Skip to #7]
 - g. National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA) [Skip to #10]
 - h. National Certification Corporation [Skip to #8]
 - i. Oncology Nursing Certification Corporation (ONCC) Advanced Oncology *Certified Nurse Practitioner* [Skip to #10]
 - j. Oncology Nursing Certification Corporation (ONCC) Advanced Oncology *Certified Clinical Nurse Specialist* [Skip to #11]
 - k. Pediatric Nursing Certification Board (PNCB) [Skip to #9]
 - l. Other [Skip to #10]
4. Please select which specialty certification(s) you have from **American Academy of Nurse Practitioners Certification Board AANPCB** (Mark ALL that apply).
 - a. Adult-Gerontology Primary Care Nurse Practitioner Certification
 - b. Emergency Nurse Practitioner Certification
 - c. Family Nurse Practitioner Certification
5. Please select which specialty certification(s) you have from **American Association of Critical Care Nurses Certification Corporation** (Mark ALL that apply).
 - a. Acute Care Nurse Practitioner
 - b. Acute Care Nurse Practitioner Certification Adult-Gerontology
6. Please select which specialty certification(s) you have from **American Association of Critical Care Nurses (AACN)** (Mark ALL that apply).
 - a. Acute Care Clinical Nurse Specialist-Adult-Gerontology (ACCNS-AG)
 - b. Acute Care Clinical Nurse Specialist – Neonatal (ACCNS-N)
 - c. Acute Care Clinical Nurse Specialist – Pediatric (ACCNS-P)
 - d. Acute/Critical Care Clinical Nurse Specialist -CCNS (Adult) renewal only
 - e. Acute/Critical Care Clinical Nurse Specialist- CCNS (Pediatric) renewal only
 - f. Acute/Critical Care Clinical Nurse Specialist- CCNS (Neonatal) renewal only
 - g. Acute Care Nurse Practitioner (Adult)-ACNPC (Adult) renewal only
 - h. Acute Care Nurse Practitioner (Adult-Gero)-ACNPC-AG (Adult-Gero)
7. Please select which specialty certification(s) you have from **American Nurses Credentialing Center (ANCC)** (Mark ALL that apply).

- a. Adult- Gerontology Acute Care Nurse Practitioner Certification (AGACNP-BC)
 - b. Adult-Gerontology Clinical Nurse Specialist Certification (AGCNS-BC)
 - c. Adult- Gerontology Primary Care Nurse Practitioner Certification (AGPCNP-BC)
 - d. Adult Nurse Practitioner Certification renewal only
 - e. Emergency Nurse Practitioner Certification renewal only
 - f. Family Nurse Practitioner Certification (FNP-BC)
 - g. Gerontological Nurse Practitioner Certification
 - h. Pediatric Primary Care Nurse Practitioner Certification retired
 - i. Psychiatric-Mental Health Nurse Practitioner (Across the Lifespan) Certification (PMHNP-BC)
 - j. Psychiatric-Mental Health Nurse Practitioner Certification renewal only
 - k. Public/Community Health Clinical Nurse Specialist renewal only
 - l. School Nurse Practitioner Certification renewal only
8. Please select which specialty certification(s) you have from **National Certification Corporation** (Mark ALL that apply).
- a. Neonatal Nurse Practitioner Certification
 - b. Women's Health Care Nurse Practitioner Certification
9. Please select which specialty certification(s) you have from **Pediatric Nursing Certification Board (PNCB)** (Mark ALL that apply).
- a. Certified Pediatric Nurse Practitioner - Acute Care
 - b. Certified Pediatric Nurse Practitioner - Primary Care
 - c. Pediatric Primary Care Mental Health Specialist
10. Do you also have a specialty certification by the Michigan Department of Licensing and Regulatory Affairs (LARA) in one of the four advanced practice registered nurse fields recognized by the Michigan Public Health Code?
- a. No, I do not have one.
 - b. Nurse Anesthetist
 - c. Nurse Midwife
 - d. Nurse Practitioner
 - e. Clinical Nurse Specialist
11. Do you hold national certification in a specialty role outside of advanced practice?
- a. Yes
 - b. No [[Skip to #23](#)]
12. Please select which certifying organization granted your **national specialty certification** from the list below. (Mark ALL that apply.)
- a. American Academy of Professional Coders (AAPC) [[Go to #13](#)]
 - b. American Association of Critical Care Nurses (AACN) [[Skip to #14](#)]
 - c. American Board of Wound Management (ABWM) [[Skip to #23](#)]
 - d. American Board of Wound Healing (ABWH) [[Skip to #23](#)]
 - e. American Case Management Association (ACMA) [[Skip to #23](#)]
 - f. American Health Information Management Association (AHIMA) [[Skip to #15](#)]
 - g. American Holistic Nurses Credentialing Corporation (AHNCC) [[Skip to #16](#)]
 - h. American Nurses Credentialing Certification (ANCC) [[Skip to #17](#)]
 - i. American Organization for Nursing Leadership (AONL) - Certified in Executive Nursing Practice [[Skip to #23](#)]
 - j. Board of Certification for Emergency Nursing (BCEN) [[Skip to #18](#)]
 - k. Emergency Nurses Association (ENA) - TNCC Provider [[Skip to #23](#)]
 - l. Hospice and Palliative Credentialing Center (HPCC) [[Skip to #19](#)]
 - m. National Alliance of Wound Care and Ostomy (NAWCCB) - Wound Care Certified Certification [[Skip to #23](#)]

- n. National Association for Healthcare Quality (NAHQ): Certified Professional in Healthcare Quality (CPHQ) [[Skip to #23](#)]
 - o. National Certification Corporation [[Skip to #20](#)]
 - p. National Board of Public Health Examiners (NBPHE) - Certified in Public Health (CPH) [[Skip to #23](#)]
 - q. National Board for Certification of School Nurses (NBCSN) - Nationally Certified School Nurse Credential [[Skip to #23](#)]
 - r. Oncology Nursing Certification Corporation (ONCC) [[Skip to #21](#)]
 - s. Wound, Ostomy, and Continence Nursing Certification Board (WOCNCB) [[Skip to #22](#)]
 - t. Other [[Skip to #23](#)]
13. Please select which specialty certification(s) you have from **American Academy of Professional Coders (AAPC)** (Mark ALL that apply).
- a. Certified Professional Medical Auditor
 - b. Instructor Certification
 - c. Medical Auditing Certification
 - d. Medical Billing Certification
 - e. Medical Coding Certification
 - f. Medical Compliance Certification
 - g. Medical Documentation Certification
 - h. Physician Practice Manager Certification
 - i. Instructor Certification
14. Please select which specialty certification(s) you have from **American Association of Critical Care Nurses (AACN)** (Mark ALL that apply).
- a. Acute/Critical Care Knowledge Professional
 - b. Acute/Critical Care Nursing
 - c. Cardiac Medicine
 - d. Cardiac Surgery
 - e. Critical Care RN (Neonatal)
 - f. Critical Care RN Knowledge Professional (Neonatal)
 - g. Progressive Care Knowledge Professional
 - h. Progressive Care Nursing
 - i. Tele-ICU Acute/Critical Care Nursing
15. Please select which specialty certification(s) you have from **American Health Information Management Association (AHIMA)** (Mark ALL that apply).
- a. Commission on Certification for Health Informatics and Information Management (CCHIIM)
 - b. Certified Coding Associate (CCA)
 - c. Certified Coding Specialist (CCS)
 - d. Certified Coding Specialist-Physician-based (CCS-P)
 - e. Certified Documentation Improvement Practitioner (CDIP)
 - f. Certified Health Data Analyst (CHDA)
 - g. Certified in Healthcare Privacy and Security (CHPS)
 - h. Registered Health Information Administrator (RHIA)
 - i. Registered Health Information Technician (RHIT)
16. Please select which specialty certification(s) you have from **American Holistic Nurses Credentialing Corporation (AHNCC)** (Mark ALL that apply).
- a. Advanced Holistic Nurse Board Certified
 - b. Advanced Practice Holistic Nurse Board Certified
 - c. Holistic Nurse Baccalaureate Board Certified
 - d. Holistic Nurse Board Certified

17. Please select which specialty certification(s) you have from **American Nurses Credentialing Certification (ANCC)** (Mark ALL that apply).
- a. Advanced Diabetes Management Certification
 - b. Ambulatory Care Nursing Certification (RN-BC)
 - c. Cardiac Vascular Nursing Certification (RN-BC)
 - d. Care Coordination and Transition Management
 - e. Gerontology Nursing Certification (RN-BC)
 - f. Informatics Nursing Certification (RN-BC)
 - g. Medical-Surgical Nursing Certification (RN-BC)
 - h. National Healthcare Disaster Certification (NHDP-BC)
 - i. Nursing Case Management Certification (RN-BC)
 - j. Nurse Executive Advanced Certification (NEA-BC)
 - k. Nurse Executive Certification (NE-BC)
 - l. Nursing Professional Development Certification (NPD-BC)
 - m. Pain Management Nursing Certification (RN-BC)
 - n. Psychiatric-Mental Health Nursing Certification (RN-BC)
 - o. Pediatric Nursing Certification (RN-BC)
 - p. Public Health Nurse Advanced (certificate retired)
18. Please select which specialty certification(s) you have from **Board of Certification for Emergency Nursing (BCEN)** (Mark ALL that apply).
- a. Certified Emergency Nurse
 - b. Certified Flight Registered Nurse
 - c. Certified Transport Registered Nurse
 - d. Trauma Certified Registered Nurse
19. Please select which specialty certification(s) you have from **Hospice and Palliative Credentialing Center (HPCC)** (Mark ALL that apply).
- a. Advanced Certified Hospice and Palliative Care Nurse
 - b. Certified Hospice and Palliative Care Administrator
 - c. Certified Hospice and Palliative Care Nurse
 - d. Certified Hospice and Palliative Licensed Nurse / Vocational Nurse
 - e. Certified Hospice and Palliative Nursing Assistant
 - f. Certified Hospice and Palliative Pediatric Nurse
 - g. Certified in Perinatal Loss Care
20. Please select which specialty certification(s) you have from **National Certification Corporation** (Mark ALL that apply).
- a. Inpatient Obstetric Nursing
 - b. Low Risk Neonatal Nursing
 - c. Maternal Newborn Nursing
 - d. Neonatal Intensive Care Nursing
21. Please select which specialty certification(s) you have from **Oncology Nursing Certification Corporation (ONCC)** (Mark ALL that apply).
- a. Advanced Oncology Certified Clinical Nurse Specialist
 - b. Blood & Marrow Transplant Certified Nurse
 - c. Certified Breast Care Nurse
 - d. Certified Pediatric Hematology-Oncology Nurse
 - e. Certified Pediatric Oncology Nurse
 - f. Advanced Oncology Certified Nurse
 - g. Oncology Certified Nurse

22. Please select which specialty certification(s) you have from **Wound, Ostomy, and Continence Nursing Certification Board (WOCNCB)** (Mark ALL that apply).
- Certified Wound Ostomy Continence Nurse
 - Certified Wound Ostomy Nurse
 - Certified Wound Care Nurse
 - Certified Ostomy Care Nurse
 - Certified Continence Care Nurse
 - Certified Foot Care Nurse
23. What type of nursing degree/credential qualified you for your first U.S. nursing license? (Mark ONE.)
- LPN diploma/certificate
 - RN diploma in nursing
 - Associate's degree in nursing
 - Bachelor's degree in nursing
 - Master's degree in nursing
24. What is your highest level of nursing education? (Mark ONE.)
- LPN diploma/certificate
 - RN diploma in nursing
 - Associate's degree in nursing
 - Bachelor's degree in nursing
 - Master's degree in nursing
 - Doctorate in Nursing Practice (DNP)
 - Doctor of Nurse Anesthesia (DNAP)
 - Doctor of Philosophy in Nursing (PhD)
 - Other doctoral degree in nursing
25. What is your highest level of non-nursing education? (Mark ONE)
- Non-nursing associate's degree
 - Non-nursing bachelor's degree
 - Non-nursing master's degree
 - Non-nursing doctoral degree
 - Not applicable
26. Are you currently enrolled in a program to obtain any of the following degrees? (Mark ALL that apply.)
- No – not enrolled **[Skip to #28]**
 - Associate's Degree in Nursing (ADN) **[Skip to #28]**
 - Bachelor of Science in Nursing (BSN) **[Skip to #28]**
 - Master of Science in Nursing (MSN)
 - Doctor of Nursing Practice (DNP)
 - Doctor of Nurse Anesthesia (DNAP)
 - Doctor of Philosophy in Nursing (PhD) **[Skip to #28]**
27. You indicated you are enrolled in a program to obtain an MSN or DNP, is the program designed to prepare you for specialty certification as a... (Mark ONE.)
- Nurse Practitioner
 - Nurse Midwife
 - Nurse Anesthetist
 - Clinical Nurse Specialist
 - Other
 - I am not enrolled in specialty certification.
28. What is your current employment status? (Mark ONE.)
- Actively employed in nursing or in a position that requires a nurse license full-time

- b. Actively employed in nursing or a position that requires a nurse license part-time
 - c. Actively employed in nursing or in a position that requires a nurse license on a per-diem basis
 - d. On temporary medical leave from a position that requires a nurse license
 - e. On temporary non-medical leave from a position that requires a nurse license
 - f. Actively employed in a field other than nursing [Skip to #50]
 - g. Unemployed, volunteer status only [Skip to #50]
 - h. Unemployed, seeking work as a nurse [Skip to #50]
 - i. Unemployed, not seeking work as a nurse [Skip to #50]
 - j. Retired [Skip to #50]
29. How many positions are you currently employed in as a nurse? (Mark ONE.)
- a. One
 - b. Two
 - c. Three or more
30. How many hours do you work during a typical week in all of your nursing positions? _____
31. Please identify the type of **setting** that most closely corresponds to your nursing practice position(s). (Mark ALL that apply.)
- a. Acute Care (i.e. hospital inpatient acute care, non-federal long-term hospital, non-federal psychiatric hospital, federal government hospital)
 - b. Ambulatory Care (i.e. adolescent, child, and university health services; outpatient specialty clinics; primary care offices, FQHCs; group practice/partnerships; dental practice)
 - c. Ambulatory Surgery Center
 - d. Diagnostic/Testing Center (i.e. free-standing testing center)
 - e. Emergent /Urgent Care Center i.e. free-standing urgent care
 - f. Nursing Home/Extended Care (i.e. long-term care; rehabilitation)
 - g. Assisted Living Facility
 - h. Home Health (i.e. health care provided in patient's home)
 - i. Hospice (i.e. in-home and facility based hospice care)
 - j. Correctional Facility (i.e. jail or prisons)
 - k. Mobile Care Unit
 - l. School of Nursing (i.e. college or university)
 - m. Public Health (i.e. state health dept; state mental health agency; city/county health dept)
 - n. Dialysis Center
 - o. Community Health (i.e. volunteer/official nursing services; community mental health center; substance abuse; community health center; family planning center; day care; rural health center; faith-based)
 - p. School Health Services K-12 (i.e. elementary or secondary schools; board of education)
 - q. Occupational Health (i.e. private industry, government)
 - r. Insurance Claims/Benefits (i.e. insurance company)
 - s. Policy/Planning/Regulatory/Licensing Agency (i.e. central/regional office of federal agency; state board of nursing; health planning agency; nurse workforce center)
 - t. Other Community-based Healthcare Settings
 - u. Other Community-based Service Organizations
 - v. Other Community Settings not providing direct care or social services (i.e. utilization review organization, healthcare support agencies, quality improvement)
 - w. Other

32. Please identify the **position title or role** that most closely corresponds to your nursing position(s) (Mark ALL that apply.)
- a. Staff Nurse (i.e. nurse in direct patient care who is responsible for the treatment and well-being of patients) [[Skip to #37](#)]
 - b. Nurse Manager/Supervisor (i.e. individual who has line management position with 24-hour accountability for a designated patient care services which may include operational responsibility for patient care delivery, fiscal and quality outcomes) [[Skip to #37](#)]
 - c. Nurse Executive/Administrator (involved with management and administration concerns. They provide leadership roles in operational planning, development of procedures and policies, personnel decisions, and administration of budgets in health delivery, academic and community service settings. [[Skip to #37](#)]
 - d. Nurse Consultant (A professional who provides advice or expertise in the field of nursing regarding such issues as nursing education, nurse staffing, nurse policy, etc.) [[Skip to #37](#)]
 - e. Nurse Secondary Educator (i.e. provide nursing education in faculty roles for early middle college and high school vocational tech programs) [[Skip to #37](#)]
 - f. Nurse Post-Secondary Educator (i.e. provide education in faculty roles to undergraduate and graduate student nurses) [[Skip to #37](#)]
 - g. Professional Nurse Training (i.e. nurse education of already licensed nurses in non-degree setting, non-degree courses) [[Skip to #37](#)]
 - h. Patient Educator (i.e. provide education to patients, members of the community) [[Skip to #37](#)]
 - i. School Health Nurse K-12 [[Skip to #35](#)]
 - j. Advanced Practice Registered Nurse (i.e. obtained state of Michigan certification to practice as an APRN in one of the four APRN roles: certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), clinical nurse specialist (CNS), or certified nurse practitioner (CNP).) [[Skip to #37](#)]
 - k. Faith-based Nurse [[Go to #33](#)]
 - l. Case Manager/Coordinator/Navigator (i.e. collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality cost-effective outcomes) [[Skip to #37](#)]
 - m. Nurse Researcher (i.e. primary role and/or title is to conduct research in the field of nursing) [[Skip to #37](#)]
 - n. Reserve and Active Military [[Skip to #37](#)]
 - o. Non-military, work in Military setting (i.e. veteran's hospital) [[Skip to #37](#)]
 - p. Telehealth [[Skip to #37](#)]
 - q. Other Health Related [[Skip to #37](#)]
 - r. Other Health Non-related [[Skip to #37](#)]
 - s. Other [[Skip to #37](#)]
33. Are you in a paid role as a **faith-based nurse**?
- a. Yes
 - b. No
34. Please identify any of the following activities you perform as part of your **faith-based nurse role** (Mark ALL that apply).
- a. Home visits [[Skip to #37](#)]
 - b. One-on-one teaching [[Skip to #37](#)]
 - c. Offering community health professional guest speakers, health education or support groups [[Skip to #37](#)]
 - d. Discharge planning or care transition follow-up [[Skip to #37](#)]

- e. Provision of health screenings [[Skip to #37](#)]
 - f. Work at a faith-based setting [[Skip to #37](#)]
 - g. Working on the phone or computer out of your home [[Skip to #37](#)]
 - h. Coordination of health fairs or large screening events provided by other professionals [[Skip to #37](#)]
 - i. Other
35. Do you work in any of these settings in your role as a **school health nurse K-12**? (Mark ALL that apply.)
- a. General education
 - b. Special education
 - c. None of these
36. Do you have a Michigan Department of Education (MDE) school nurse certification?
- a. Yes
 - b. No
 - c. Unsure
37. Please identify the **employment specialty** that most closely corresponds to your nursing practice position(s) (Mark ALL that apply).
- a. Critical Care (i.e. Critical care nurses deal specifically with human responses to life threatening problems)
 - b. Emergency/Trauma/Urgent Care (i.e. provide emergency care to patients of all ages. These nurses work to maintain vital signs and prevent complications and death.)
 - c. Adult Health (i.e. provision of nursing care to adult patients,)
 - d. Family Health (i.e. meet the healthcare needs of the individual and family)
 - e. Anesthesia (i.e. provide anesthesia and anesthesia-related care or management of pain)
 - f. Cardiology (i.e. provide nursing care and treatment for individuals with diagnosed or suspected heart diseases and conditions)
 - g. Case Management/Care Coordination
 - h. Community Care (i.e. delivery of nursing care to improve the health of an entire community; use of the nursing process and other processes to promote health and prevent illness in population groups in employment settings other than a public health department.)
 - i. Dialysis Nurse
 - j. Discharge Planning/Transitions of Care
 - k. Flight Nurse
 - l. Geriatric/Gerontology (i.e. nursing care of the elderly.)
 - m. Hematology/Oncology (i.e. provide nursing care and support for patients suspected of having or diagnosed with cancer.)
 - n. Maternal-child Health/Obstetrics (i.e. provide medical and surgical treatment to pregnant women and to mother and baby following delivery)
 - o. Medical-Surgical (i.e. provide diagnostic and therapeutic services to acutely ill patients for a variety of medical conditions, both surgical and non-surgical)
 - p. Nephrology/Renal (providing nursing care and treatment of individuals with diagnosed or suspected kidney disease)
 - q. Nursing Academic Services/Non-Faculty (i.e. simulation specialist, clinical placement coordinator, skills remediation, program coordinator/advisor, etc.)
 - r. Nursing Faculty (i.e. clinical and/or didactic faculty role at a college of nursing)
 - s. Occupational Health (i.e. provide on-the-job health care for the nation's workforce, striving to ensure workers' health, safety, and productivity)
 - t. Operating Room/Scrub Nurse
 - u. Palliative Care/Hospice
 - v. Pediatrics
 - w. Neonatal

- x. Phlebotomy
- y. Pre-op/Post-op Recovery Room (i.e. provision of nursing care to patients in the period immediately prior to performance or immediately following an interventional or surgical procedure)
- z. Public Health (i.e. promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences. Public health nursing practice focuses on population health, with the goal of promoting health, and preventing disease and disability)
- aa. Psychiatric/Mental Health/Substance Abuse (i.e. aid and support the mental health of patients with acute or chronic psychiatric needs; pain management nurses who help regulate medications and provide care for those addicted to drugs or alcohol, or who are suffering from other types of substance abuse.)
- bb. Rehabilitation (i.e. provide physical and emotional support to patients and the families of patients with illnesses or disabilities that affect their ability to function normally and that may alter their lifestyle.)
- cc. School Health K-12 (i.e. dedicated to promoting the health and well-being of children of all ages in an academic environment.)
- dd. Telehealth
- ee. Testing and Diagnostic Services Nurse
- ff. Thoracic Care (i.e. patients receiving heart and pulmonary surgery)
- gg. Women's Health (i.e. provided care for women across the life cycle with emphasis on conditions that are particular to women)
- hh. Wound Care
- ii. Other Medical (i.e. dermatology, diabetic, allergy/immunology, infectious disease/ infection nurse, etc.)
- jj. Other Clinical Specialties
- kk. Other Non-clinical Specialties
- ll. Other

38. If you made a change in your employment setting within the past three years, what was the change (Mark ALL that apply)?
- a. I did not make an employment change in the past three years
 - b. An inpatient setting to a community-based setting
 - c. A community-based setting to an inpatient setting
 - d. A primary care setting (e.g., family practice, general medicine, internal medicine, or general pediatrics) to a specialty care setting
 - e. A specialty care setting to a primary care setting
 - f. A sub-acute care setting to an acute care setting
 - g. An acute care setting to a sub-acute care setting
 - h. A direct patient care setting to a non-direct patient care setting
 - i. A non-direct patient care setting to a direct patient care setting
 - j. I changed locations but stayed in the same care setting
 - k. I made some other type of employment change
39. In total, how long have you been employed as a practicing nurse? (Mark ONE.)
- a. Less than 3 years
 - b. 3 to less than 10 years [Skip to #45]
 - c. 10 years to less than 19 years [Skip to #45]
 - d. Greater than 19 years [Skip to #45]
40. How prepared did you feel when you entered the nursing workforce? (Mark ALL that apply.)
- a. Adequately prepared

- b. Not enough classroom time
 - c. Not enough clinical time
 - d. Not enough skills lab/simulation time
 - e. Not enough critical thinking/prioritization practice
 - f. Other (please specify)
41. How difficult was it to find a nursing position?
- a. Very difficult
 - b. Difficult
 - c. Neutral
 - d. Easy
 - e. Very easy
42. How difficult was it to find a nursing position in your preferred practice area?
- a. Very difficult
 - b. Difficult
 - c. Neutral
 - d. Easy
 - e. Very easy
43. Did you have a residency placement as part of your nursing program?
- a. Yes
 - b. No
44. How satisfied were you with the orientation at your place of employment?
- a. Very dissatisfied
 - b. Dissatisfied
 - c. Neutral
 - d. Satisfied
 - e. Very satisfied
45. To assist us in projecting the supply of nurses in the future, please tell us how much longer you plan to practice nursing. (Mark ONE.)
- a. Less than 2 years
 - b. 2 to 5 years
 - c. 6 to 10 years [Skip to #47]
 - d. More than 10 years [Skip to #47]
 - e. Don't know [Skip to #47]
46. Why are you planning on leaving nursing? (Mark ALL that apply.)
- a. Retiring
 - b. Care for home or family
 - c. Enrolled in education program
 - d. Difficulty finding a nursing position
 - e. Too stressful/Work load/Burned out
 - f. Difficulties with EMR/new technology
 - g. Violence/safety issues
 - h. Relocating/Moving to another area
 - i. Other (please specify)
47. Where is your primary place location of employment? (Mark ONE.)
- a. Michigan [Skip to #49]
 - b. Other state in the U.S.
 - c. Canada
 - d. Other nation

48. Why is your primary place location of employment not in Michigan? (Mark ALL that apply.)
- Living out of state
 - Semi-retired
 - Taking care of home and family
 - School
 - Difficulty finding a nursing position
 - Scope of practice regulation is more favorable outside of Michigan
 - Travel nurse
 - Provide telehealth/call center
 - Employer is located in another state
 - Military
 - Other (please specify)
49. What is the ZIP Code of your primary place of employment? _____
50. Where is your primary place of residence? (Mark ONE.)
- Michigan
 - Other state in the U.S.
 - Canada
 - Other nation
51. If you live in the U.S., what is the ZIP Code of your primary place of residence? _____
52. In what year were you born? _____
53. What is your gender? (Mark ONE.)
- Female
 - Male
54. Are you Hispanic or Latino?
- Yes
 - No
55. Are you Arabic, Chaldean, or of other Middle Eastern decent?
- Yes
 - No
56. What is your race? (Mark ALL that apply.)
- White
 - Black or African American
 - American Indian or Alaska Native
 - Asian
 - Native Hawaiian or Pacific Islander
 - Other

Workplace Violence Questions

The following questions ask you about your experiences with workplace violence. Violence in the workplace has become a serious concern for nurses because they have the highest risk among health professionals to become victims due to having the most interaction with patients. For the purpose of this survey, workplace violence is defined as the intentional use of physical force or emotional abuse, against an employee, that results in physical or emotional injury or consequences. This includes physical assault, threat, sexual harassment, and verbal abuse, which are defined as follows:

Threat - the use of words, gestures, or actions with the intent of intimidating, frightening, or harming (physically or otherwise).

Sexual harassment - any type of unwelcome sexual behavior (words or actions) that creates a hostile work environment.

Verbal abuse - when another person yells or swears at you, calls you names, or uses other words intended to control or hurt you.

Physical violence - when you are hit, slapped, kicked, pushed, choked, grabbed, sexually assaulted, or otherwise subjected to physical contact intended to injure or harm you.

Your responses are confidential and optional. All reporting will be in aggregate form.

57. In the past year, did you experience any workplace violence?

- a. Yes
- b. No **[Skip to end of survey]**
- c. Prefer not to answer **[Skip to end of survey]**

58. How often did you experience these types of workplace violence?

	Never 0 times	Rarely 1-3 times per year	Occasionally 4-8 times per year	Frequently 9 or more times per year
Threat				
Sexual harassment				
Verbal abuse				
Physical violence				

59. Who was responsible for the workplace violence against you? (Mark ALL that apply.)

	Patient	Family or Friend of Patient	Supervisor	Physician	Peer	Other	Not experienced
Threat							
Sexual harassment							
Verbal abuse							
Physical violence							

60. Have you missed any days of work as a result of the most recent workplace violence event?

- a. Yes
- b. No (skip to #65)

61. Please indicate the number of days you were absent from work as a result of the *most recent threat you experienced*.

- a. None
- b. < 1 day
- c. 1 day to < 3 days
- d. 3 days to < 7 days
- e. 7 days to < 14 days
- f. 14 days to < 1 month
- g. 1 month to < 3 months
- h. 3+ months

62. Please indicate the number of days you were absent from work as a result of the *most recent sexual harassment you experienced*.

- a. None

- b. < 1 day
 - c. 1 day to < 3 days
 - d. 3 days to < 7 days
 - e. 7 days to < 14 days
 - f. 14 days to < 1 month
 - g. 1 month to < 3 months
 - h. 3+ months
63. Please indicate the number of days you were absent from work as a result of the *most recent verbal abuse you experienced*.
- a. None
 - b. < 1 day
 - c. 1 day to < 3 days
 - d. 3 days to < 7 days
 - e. 7 days to < 14 days
 - f. 14 days to < 1 month
 - g. 1 month to < 3 months
 - h. 3+ months
64. Please indicate the number of days you were absent from work as a result of the *most recent physical violence you experienced*.
- a. None
 - b. < 1 day
 - c. 1 day to < 3 days
 - d. 3 days to < 7 days
 - e. 7 days to < 14 days
 - f. 14 days to < 1 month
 - g. 1 month to < 3 months
 - h. 3+ months
61. Is there a process for you to report workplace violence incidents through your organization?
- a. Yes
 - b. No [Skip to #67]
 - c. Don't know [Skip to #67]
62. Did you report workplace violence incidents using the organizational process?
- a. Yes
 - b. No
63. Did you report or make any of the following aware of workplace violence incidents?
- a. No, did not report
 - b. Supervisor/Chief Nurse
 - c. Director
 - d. Human resources
 - e. Note in file/medical record
 - f. Police
 - g. Other (please specify)

END OF SURVEY

Appendix B. National AP Specialty Certifications

Table 43. Specialty certification(s) from American Academy of Nurse Practitioners Certification Board AANPCB

Please select which specialty certification(s) you have from American Academy of Nurse Practitioners Certification Board AANPCB (Mark ALL that apply).	RNs = 793	
	Estimate	95% CI
Adult-Gerontology Primary Care Nurse Practitioner Certification	24.4%	(21.5%, 27.5%)
Emergency Nurse Practitioner Certification	0.5%	(0.2%, 1.3%)
Family Nurse Practitioner Certification	75.6%	(72.5%, 78.5%)

Table 44. Specialty certification(s) you have from American Association of Critical Care Nurses (AACN)

Please select which specialty certification(s) you have from American Association of Critical Care Nurses (AACN) (Mark ALL that apply).	RNs = 38	
	Estimate	95% CI
Acute Care Clinical Nurse Specialist - Adult-Gerontology (ACCNS-AG)	21.2%	(11.2%, 36.5%)
Acute Care Clinical Nurse Specialist – Neonatal (ACCNS-N)	2.9%	(0.5%, 13.9%)
Acute Care Clinical Nurse Specialist – Pediatric (ACCNS-P)	3.5%	(0.8%, 14.8%)
Acute/Critical Care Clinical Nurse Specialist - CCNS (Adult) renewal only	25.7%	(14.5%, 41.4%)
Acute/Critical Care Clinical Nurse Specialist- CCNS (Pediatric) renewal only	0.0%	(0.0%, 9.2%)
Acute/Critical Care Clinical Nurse Specialist- CCNS (Neonatal) renewal only	0.0%	(0.0%, 9.2%)
Acute Care Nurse Practitioner (Adult) - ACNPC renewal only	14.6%	(6.7%, 29.0%)
Acute Care Nurse Practitioner (Adult-Gero) - ACNPC-AG	35.9%	(22.6%, 51.8%)

Table 45. Specialty certification(s) from American Nurses Credentialing Center (ANCC)

Please select which specialty certification(s) you have from American Nurses Credentialing Center (ANCC) (Mark ALL that apply).	RNs = 1,350	
	Estimate	95% CI
Adult- Gerontology Acute Care Nurse Practitioner Certification (AGACNP-BC)	13.9%	(12.2%, 15.8%)
Adult-Gerontology Clinical Nurse Specialist Certification (AGCNS-BC)	5.9%	(4.8%, 7.3%)
Adult- Gerontology Primary Care Nurse Practitioner Certification (AGPCNP-BC)	9.7%	(8.2%, 11.4%)
Adult Nurse Practitioner Certification renewal only	14.9%	(13.1%, 16.9%)
Emergency Nurse Practitioner Certification renewal only	0.4%	(0.2%, 0.9%)
Family Nurse Practitioner Certification (FNP-BC)	47.2%	(44.5%, 49.9%)
Gerontological Nurse Practitioner Certification	1.5%	(1.0%, 2.3%)
Pediatric Primary Care Nurse Practitioner Certification renewal only	1.0%	(0.6%, 1.7%)
Psychiatric-Mental Health Nurse Practitioner (Across the Lifespan) Certification (PMHNP-BC)	7.0%	(5.8%, 8.5%)

Psychiatric-Mental Health Nurse Practitioner Certification renewal only	2.1%	(1.5%, 3.0%)
Public/Community Health Clinical Nurse Specialist renewal only	0.3%	(0.1%, 0.8%)

Table 46. Specialty certification(s) from National Certification Corporation

Please select which specialty certification(s) you have from National Certification Corporation (Mark ALL that apply).	RNs = 117	
	Estimate	95% CI
Neonatal Nurse Practitioner Certification	35.2%	(27.1%, 44.2%)
Women's Health Care Nurse Practitioner Certification	64.8%	(55.8%, 72.9%)

Table 47. Specialty certification(s) you have from Pediatric Nursing Certification Board (PNCB)

Please select which specialty certification(s) you have from Pediatric Nursing Certification Board (PNCB) (Mark ALL that apply).	RNs = 142	
	Estimate	95% CI
Certified Pediatric Nurse Practitioner - Acute Care	24.4%	(18.1%, 32.1%)
Certified Pediatric Nurse Practitioner - Primary Care	80.4%	(73.1%, 86.1%)
Pediatric Primary Care Mental Health Specialist	2.8%	(1.1%, 7.0%)

Appendix C. National Specialty Certifications Outside of AP

Table 48. specialty certification(s) from American Association of Critical Care Nurses (AACN)

Please select which specialty certification(s) you have from American Association of Critical Care Nurses (AACN) (Mark ALL that apply).	RNs = 490	
	Estimate	95% CI
Acute/Critical Care Knowledge Professional	12.6%	(9.9%, 15.8%)
Acute/Critical Care Nursing	74.6%	(70.6%, 78.3%)
Cardiac Medicine	5.4%	(3.7%, 7.8%)
Cardiac Surgery	4.0%	(2.6%, 6.1%)
Critical Care RN (Neonatal)	1.7%	(0.9%, 3.3%)
Critical Care RN Knowledge Professional (Neonatal)	0.3%	(0.1%, 1.3%)
Progressive Care Knowledge Professional	2.5%	(1.4%, 4.3%)
Progressive Care Nursing	14.2%	(11.4%, 17.6%)
Tele-ICU Acute/Critical Care Nursing	3.0%	(1.8%, 4.9%)

Table 49. specialty certification(s) you have from American Holistic Nurses Credentialing Corporation (AHNCC)

Please select which specialty certification(s) you have from American Holistic Nurses Credentialing Corporation (AHNCC) (Mark ALL that apply).	RNs = 44	
	Estimate	95% CI
Advanced Holistic Nurse Board Certified	15.9%	(7.9%, 29.4%)
Advanced Practice Holistic Nurse Board Certified	1.3%	(0.2%, 10.3%)
Holistic Nurse Baccalaureate Board Certified	47.8%	(33.8%, 62.1%)
Holistic Nurse Board Certified	35.0%	(22.6%, 49.8%)

Table 50. specialty certification(s) from American Nurses Credentialing Certification (ANCC)

Please select which specialty certification(s) you have from American Nurses Credentialing Certification (ANCC) (Mark ALL that apply).	RNs = 522	
	Estimate	95% CI
Advanced Diabetes Management Certification	0.8%	(0.3%, 2.0%)
Ambulatory Care Nursing Certification (RN-BC)	4.4%	(2.9%, 6.5%)
Cardiac Vascular Nursing Certification (RN-BC)	6.4%	(4.6%, 8.8%)
Care Coordination and Transition Management	0.6%	(0.2%, 1.7%)
Gerontology Nursing Certification (RN-BC)	8.8%	(6.7%, 11.5%)
Informatics Nursing Certification (RN-BC)	6.7%	(4.9%, 9.2%)
Medical-Surgical Nursing Certification (RN-BC)	18.8%	(15.7%, 22.4%)
National Healthcare Disaster Certification (NHDP-BC)	1.2%	(0.6%, 2.6%)
Nursing Case Management Certification (RN-BC)	3.6%	(2.3%, 5.6%)

Nurse Executive Advanced Certification (NEA-BC)	9.3%	(7.1%, 12.1%)
Nurse Executive Certification (NE-BC)	12.1%	(9.6%, 15.2%)
Nursing Professional Development Certification (NPD-BC)	8.6%	(6.5%, 11.3%)
Pain Management Nursing Certification (RN-BC)	4.5%	(3.0%, 6.6%)
Psychiatric-Mental Health Nursing Certification (RN-BC)	13.9%	(11.2%, 17.1%)
Pediatric Nursing Certification (RN-BC)	5.2%	(3.6%, 7.5%)
Public Health Nurse Advanced (certificate retired)	0.8%	(0.3%, 2.0%)

Table 51. specialty certification(s) from Board of Certification for Emergency Nursing (BCEN)

Please select which specialty certification(s) you have from Board of Certification for Emergency Nursing (BCEN) (Mark ALL that apply).	RNs = 234	
	Estimate	95% CI
Certified Emergency Nurse	88.4%	(83.7%, 91.9%)
Certified Flight Registered Nurse	12.7%	(9.0%, 17.6%)
Certified Transport Registered Nurse	1.1%	(0.3%, 3.4%)
Trauma Certified Registered Nurse	18.7%	(14.2%, 24.2%)

Table 52. specialty certification(s) from Hospice and Palliative Credentialing Center (HPCC)

Please select which specialty certification(s) you have from Hospice and Palliative Credentialing Center (HPCC) (Mark ALL that apply).	RNs = 111	
	Estimate	95% CI
Advanced Certified Hospice and Palliative Care Nurse	19.9%	(13.5%, 28.3%)
Certified Hospice and Palliative Care Administrator	0.6%	(0.1%, 4.4%)
Certified Hospice and Palliative Care Nurse	77.9%	(69.3%, 84.6%)
Certified Hospice and Palliative Licensed Nurse / Vocational Nurse	0.0%	(0.0%, 3.3%)
Certified Hospice and Palliative Nursing Assistant	0.0%	(0.0%, 3.3%)
Certified Hospice and Palliative Pediatric Nurse	1.6%	(0.4%, 6.0%)
Certified in Perinatal Loss Care	0.0%	(0.0%, 3.3%)

Table 53. specialty certification(s) from National Certification Corporation

Please select which specialty certification(s) you have from National Certification Corporation (Mark ALL that apply).	RNs = 274	
	Estimate	95% CI
Inpatient Obstetric Nursing	63.7%	(57.9%, 69.2%)
Low Risk Neonatal Nursing	5.0%	(3.0%, 8.3%)
Maternal Newborn Nursing	9.9%	(6.9%, 14.0%)
Neonatal Intensive Care Nursing	25.2%	(20.4%, 30.7%)

Table 54. specialty certification(s) from Oncology Nursing Certification Corporation (ONCC)

Please select which specialty certification(s) you have from Oncology Nursing Certification Corporation (ONCC) (Mark ALL that apply).	RNs = 324	
	Estimate	95% CI
Advanced Oncology Certified Clinical Nurse Specialist	0.7%	(0.2%, 2.3%)
Blood & Marrow Transplant Certified Nurse	5.1%	(3.2%, 8.1%)
Certified Breast Care Nurse	2.0%	(0.9%, 4.2%)
Certified Pediatric Hematology-Oncology Nurse	5.9%	(3.8%, 9.0%)
Certified Pediatric Oncology Nurse	1.5%	(0.6%, 3.5%)
Advanced Oncology Certified Nurse	1.6%	(0.7%, 3.6%)
Oncology Certified Nurse	87.9%	(83.9%, 91.0%)

Table 55. specialty certification(s) from Wound, Ostomy, and Continence Nursing Certification Board (WOCNCB)

Please select which specialty certification(s) you have from Wound, Ostomy, and Continence Nursing Certification Board (WOCNCB) (Mark ALL that apply).	RNs = 97	
	Estimate	95% CI
Certified Wound Ostomy Continence Nurse	36.3%	(27.4%, 46.2%)
Certified Wound Ostomy Nurse	31.8%	(23.4%, 41.6%)
Certified Wound Care Nurse	36.3%	(27.4%, 46.2%)
Certified Ostomy Care Nurse	3.8%	(1.4%, 9.7%)
Certified Continence Care Nurse	2.0%	(0.5%, 7.1%)
Certified Foot Care Nurse	4.7%	(1.9%, 10.9%)

Appendix D. Comparison from 2017 to 2021 by Race & Ethnicity

Table 56. Highest Level of Nursing Education 2017-21

Degree Level	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 31,591	N = 31,208	N = 3,145	N = 2,988	N = 507	N = 520	N = 1,243	N = 1,125	N = 650	N = 750	N = 183	N = 468	N = 527	N = 958
LPN diploma/certificate	12.0%	9.4%	32.8%	37.2%	19.7%	18.3%	5.9%	7.2%	15.4%	14.7%	*	5.9%	15.5%	15.1%
RN diploma in nursing	7.3%	5.0%	2.7%	2.5%	3.2%	2.6%	7.1%	4.0%	3.5%	1.7%	*	2.5%	7.3%	3.3%
Associate's degree in nursing	35.0%	28.7%	25.1%	21.7%	41.6%	32.5%	12.2%	12.5%	36.4%	31.1%	30.2%	23.6%	32.8%	30.5%
Bachelor's degree in nursing	36.0%	43.6%	27.2%	27.0%	29.8%	37.4%	64.5%	62.1%	37.5%	41.1%	51.0%	50.3%	36.3%	40.0%
Master's degree in nursing	8.9%	11.7%	10.7%	9.8%	4.7%	7.8%	9.0%	12.3%	6.7%	10.0%	9.3%	14.6%	7.6%	9.5%
Doctorate in Nursing Practice (DNP)	0.4%	1.2%	1.0%	1.4%	*	*	*	1.6%	*	*	*	*	*	*
Doctor of Nurse Anesthesia (DNAP)	*	0.1%	*	*	*	*	*	*	*	*	*	*	*	*
Doctor of Philosophy in Nursing (PhD)	0.4%	0.4%	0.5%	0.4%	*	*	*	*	*	*	*	*	*	*
Other doctoral degree in nursing	0.1%	0.0%	*	*	*	*	*	*	*	*	*	*	*	*

Table 57. Highest Level of Non-Nursing Education 2017-21

Degree Level	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2018	2021	2018	2021	2018	2021
	N = 31,106	N = 30,980	N = 3,120	N = 2,958	N = 494	N = 509	N = 1,222	N = 1,116	N = 645	N = 745	N = 184	N = 468	N = 517	N = 956
Non-nursing associate's degree	14.8%	15.5%	22.1%	21.4%	20.9%	25.4%	7.8%	8.8%	19.2%	17.2%	12.6%	15.2%	21.7%	19.2%
Non-nursing bachelor's degree	12.8%	14.8%	12.0%	11.8%	14.1%	13.9%	16.3%	21.2%	13.7%	14.3%	25.7%	22.7%	15.8%	18.2%
Non-nursing master's degree	4.0%	4.9%	6.7%	6.6%	4.5%	5.0%	4.5%	6.4%	2.9%	3.0%	*	3.5%	5.1%	5.5%
Non-nursing doctoral degree	0.5%	0.6%	0.9%	0.8%	*	*	1.3%	0.8%	*	*	*	*	*	*
Not applicable	67.9%	64.1%	58.3%	59.4%	60.2%	55.3%	70.0%	62.8%	63.7%	65.2%	58.6%	57.9%	56.3%	56.2%

Table 58. Current Enrollment in Nursing Educational Programs 2017-21

Degree Level	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 31,703	N = 31,349	N = 3,164	N = 3,000	N = 508	N = 521	N = 1,248	N = 1,129	N = 652	N = 752	N = 184	N = 469	N = 529	N = 962
No – not enrolled	89.0%	89.7%	76.6%	74.3%	81.2%	85.8%	87.4%	86.7%	82.4%	79.1%	71.7%	78.9%	79.5%	81.1%
Associate's Degree in Nursing (ADN)	1.8%	1.4%	8.4%	11.8%	5.3%	2.9%	*	1.4%	4.0%	4.5%	*	*	3.9%	4.1%
Bachelor of Science in Nursing (BSN)	5.5%	4.5%	8.6%	8.3%	8.9%	6.5%	5.8%	4.5%	7.4%	9.8%	13.0%	10.0%	10.6%	8.6%

Degree Level	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 31,703	N = 31,349	N = 3,164	N = 3,000	N = 508	N = 521	N = 1,248	N = 1,129	N = 652	N = 752	N = 184	N = 469	N = 529	N = 962
Master of Science in Nursing (MSN)	3.3%	3.3%	4.8%	3.6%	4.6%	3.0%	4.7%	4.6%	5.2%	4.8%	9.6%	6.3%	5.9%	5.2%
Doctor of Nursing Practice (DNP)	0.6%	1.1%	1.6%	1.8%	*	*	*	2.4%	*	2.0%	*	*	*	1.4%
Doctor of Nurse Anesthesia (DNAP)	*	0.2%	*	*	*	*	*	*	*	*	*	*	*	*
Doctor of Philosophy in Nursing (PhD)	0.1%	0.1%	0.3%	0.5%	*	*	*	*	*	*	*	*	*	*

Table 59. Current Enrollment to Earn Specialty Certification in Nursing 2017-21

Specialty	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 1,202	N = 1,168	N = 246	N = 154	N = 27	N = 23	N = 94	N = 70	N = 49	N = 47	N = 26	N = 38	N = 41	N = 58
Nurse Practitioner	55.4%	54.4%	61.2%	40.6%	50.0%	48.7%	61.3%	71.7%	59.1%	57.0%	65.6%	62.6%	66.2%	56.4%
Nurse Midwife	2.3%	2.3%	*	*	*	*	*	*	*	*	*	*	*	*
Nurse Anesthetist	5.0%	5.9%	*	*	*	*	*	*	*	*	*	*	*	*
Clinical Nurse Specialist	7.1%	4.4%	10.6%	*	*	*	15.6%	*	*	*	*	*	*	*
None of the above	30.2%	33.0%	28.2%	59.4%	50.0%	51.3%	23.1%	28.3%	40.9%	43.0%	34.4%	37.4%	33.8%	43.6%

Table 60. Hours worked per week 2017-21

	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 25,393	N = 21,432	N = 2,718	N = 2,117	N = 415	N = 347	N = 1,119	N = 837	N = 576	N = 585	N = 168	N = 335	N = 435	N = 667
<30 Hours	17.3%	16.1%	10.2%	10.8%	11.9%	12.2%	10.2%	13.1%	13.6%	15.9%	10.9%	16.4%	13.8%	13.4%
30 to 39 Hours	32.9%	31.8%	26.3%	26.0%	27.9%	27.7%	37.1%	35.5%	33.8%	32.7%	43.0%	37.1%	32.6%	32.4%
40 to 49 Hours	38.2%	39.5%	45.8%	40.7%	45.7%	40.3%	45.3%	40.1%	41.7%	36.5%	40.0%	34.1%	39.3%	38.8%
50+ Hours	11.6%	12.6%	17.7%	22.5%	14.5%	19.8%	7.4%	11.3%	10.9%	14.9%	6.1%	12.3%	14.3%	15.4%

Table 61. Years Practicing as a Nurse 2017-21

	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 25,307	N = 22,907	N = 2,690	N = 2,371	N = 418	N = 371	N = 1,110	N = 924	N = 567	N = 632	N = 166	N = 362	N = 434	N = 743
Less than 3 years	*	11.8%	*	17.9%	*	17.2%	*	18.8%	*	22.3%	*	23.6%	*	15.2%
3 to less than 10 years	*	28.9%	*	34.6%	*	30.9%	*	34.6%	*	37.2%	*	40.1%	*	31.6%
10+ years	*	59.2%	*	47.5%	*	51.9%	*	46.6%	*	40.5%	*	36.3%	*	53.2%

Table 62. Plans to Continue Working as a Nurse 2017-21

	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 24,014	N = 21,441	N = 2,358	N = 2,044	N = 389	N = 345	N = 1,006	N = 827	N = 532	N = 575	N = 151	N = 312	N = 391	N = 627
<=5 years	19.7%	20.1%	14.6%	14.6%	14.5%	16.7%	14.3%	13.7%	9.9%	12.7%	7.8%	20.7%	11.2%	19.7%
6+ years	80.3%	79.9%	85.4%	85.4%	85.5%	83.3%	85.7%	86.3%	90.1%	87.3%	92.2%	79.3%	88.8%	80.3%

Table 63. Change in Employment 2017-21

	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 25,535	N = 22,647	N = 2,731	N = 2,337	N = 419	N = 368	N = 1,129	N = 912	N = 577	N = 626	N = 168	N = 357	N = 439	N = 734
Made a Change	33.5%	38.6%	38.6%	40.9%	41.5%	43.6%	34.6%	34.9%	37.3%	43.6%	34.6%	42.4%	38.0%	38.1%

Table 64. Employment Setting 2017-21

Setting	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 25,497	N = 22,907	N = 2,725	N = 2,371	N = 418	N = 371	N = 1,127	N = 924	N = 577	N = 632	N = 168	N = 362	N = 439	N = 743
Provides direct care	85.6%	63.9%	85.1%	68.0%	90.4%	67.2%	92.0%	75.3%	89.7%	73.1%	93.6%	71.3%	89.7%	72.0%
Provides non-direct care	20.3%	24.7%	22.0%	22.7%	20.8%	27.1%	22.3%	20.3%	17.9%	21.9%	11.5%	21.5%	24.0%	25.7%
Nurse Administrator	4.3%	14.2%	3.2%	18.0%	*	17.3%	2.2%	10.1%	3.1%	11.6%	*	11.4%	*	11.7%
Nurse Faculty	1.5%	3.4%	2.9%	3.4%	*	3.3%	1.3%	2.3%	*	3.6%	*	3.2%	*	3.6%

Setting	White		Black		American Indian		Asian/ PI		Hispanic or Latino		Arabic or Chaldean		Other	
	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021	2017	2021
	N = 25,497	N = 22,907	N = 2,725	N = 2,371	N = 418	N = 371	N = 1,127	N = 924	N = 577	N = 632	N = 168	N = 362	N = 439	N = 743
Acute Care	48.2%	51.4%	36.0%	37.6%	47.7%	52.0%	65.1%	62.3%	53.7%	54.3%	61.4%	62.8%	49.1%	54.3%
Ambulatory Care	26.9%	20.4%	16.5%	9.8%	26.6%	18.5%	16.2%	11.2%	22.6%	13.6%	21.6%	16.9%	22.3%	16.2%
Nursing Care - LTC Facility	9.1%	10.0%	27.1%	32.7%	13.2%	15.3%	10.1%	13.3%	10.5%	14.1%	8.7%	8.7%	12.7%	15.7%
Assisted Living	2.3%	1.9%	6.0%	5.9%	3.8%	*	2.7%	2.6%	2.9%	2.7%	*	*	3.4%	4.4%
Home Health Care	6.2%	6.2%	9.2%	12.9%	5.2%	10.4%	6.1%	6.1%	6.8%	5.2%	*	4.7%	10.7%	6.9%
Hospice	3.4%	3.4%	2.8%	4.0%	5.5%	3.5%	1.1%	1.4%	2.9%	2.6%	*	*	3.7%	3.1%
Corrections System	0.8%	1.1%	1.4%	2.0%	*	*	1.6%	*	*	*	*	*	*	*
School of Nursing	2.0%	3.9%	1.4%	4.6%	*	3.8%	1.1%	2.7%	*	4.2%	*	4.2%	*	4.1%
Public or Community Health	0.6%	5.0%	*	7.8%	2.8%	5.4%	*	2.5%	*	6.8%	*	5.1%	*	6.6%
Insurance Company Health Plan	2.2%	2.9%	4.4%	5.0%	2.3%	3.7%	1.9%	2.6%	2.2%	2.7%	*	*	*	1.7%
Training, Traveling, Other	11.7%	8.8%	11.6%	10.8%	13.6%	11.2%	6.9%	9.7%	10.6%	12.1%	8.1%	8.6%	14.2%	11.0%

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