

2019 Survey of Michigan Nurses

Survey Summary Report

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**Office of Nursing Programs
Michigan Department of Health and Human Services**

**Prepared by the
Michigan Public Health Institute**



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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 Programs 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 – Office of Nursing Programs, MPHI held a stakeholder meeting with nurse-leaders in November of 2018 to discuss revisions to the 2018 survey instrument that would be incorporated into the 2019 edition. A copy of the *2019 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. Prior to 2017, surveys were also mailed to all nurses scheduled to renew their license during that year, giving nurses an option to complete the survey by mail or online. In 2018 and again 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. Due to the low response rate, the link to the licensure survey was also circulated through nursing professional organizations in Michigan as well as a second email notification from LARA.

The license renewal period spanned from January 1 to March 31, 2019. An additional 60-day grace period allowed for license renewals to take place as late as May 30, 2019. Since the survey was completed prior to confirmation of email, contact information that occurred during the 2019 re-licensure, the survey administration period was expanded beyond this interval and ran from January 8, 2019, to July 31, 2019. This extended time allowed the survey link to be circulated through both professional organizations and send a second email blast from LARA following completion of the 2019 renewal period. 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 17,714 nurses participated in the 2019 Survey of Michigan Nurses, which is significantly higher than the 4,137 nurses who completed the 2018 survey. The higher response rate for the 2019 survey may be attributed to the link to the survey being sent twice during the survey administration period from LARA, the significant amount of early, communication to licensed nurses about the change in process that occurred in 2019 and the fact that it was the second year that the link was no longer imbedded in the licensure renewal process. The distribution of responding nurses by demographic characteristics are presented in Table 1. Respondents were instructed to select all races that apply to them.

Table 1: Demographic Characteristics of Survey Respondents

Demographics	RN= 15,896		LPN= 1,818	
	n	Estimate	n	Estimate
Age				
<25 years	224	1.4%	17	0.9%
25 to 34 years	2,548	16.0%	240	13.2%
35 to 44 years	2,725	17.1%	328	18.0%
45 to 54 years	2,827	17.8%	344	18.9%
55 to 64 years	3,946	24.8%	466	25.6%
65 to 74 years	2,221	14.0%	203	11.2%
75+ years	269	1.7%	20	1.1%
Unknown	1,136	7.1%	200	11.0%
Gender				
Female	13,791	86.8%	1,548	85.1%
Male	1,306	8.2%	105	5.8%
Unknown	799	5.0%	165	9.1%
Race				
White	13,593	85.5%	1,259	69.3%
Black or African American	780	4.9%	323	17.8%
American Indian or Alaska Native	163	1.0%	29	1.6%
Asian	409	2.6%	29	1.6%
Native Hawaiian or Pacific Islander	42	0.3%	2	0.1%
Middle Eastern (Arab/Chaldean/Other)	118	0.7%	5	0.3%
Other	215	1.4%	43	2.4%
Unknown	914	5.7%	174	9.6%
Ethnicity				
Hispanic or Latino	299	1.9%	41	2.3%
Not Hispanic or Latino	14,610	91.9%	1,583	87.1%
Unknown	987	6.2%	194	10.7%
Prosperity Region				
Upper Peninsula	344	2.2%	94	5.2%
Northwest LP	584	3.7%	54	3.0%
Northeast LP	244	1.5%	45	2.5%
West/West Central	2,390	15.0%	324	17.8%
East Central	690	4.3%	101	5.6%
East	1,048	6.6%	144	7.9%
South Central	572	3.6%	42	2.3%
Southwest	928	5.8%	105	5.8%
Southeast	1,473	9.3%	123	6.8%
Detroit Metro	4,529	28.5%	467	25.7%
MI, Unknown Region	665	4.2%	66	3.6%
Outside MI	665	4.2%	66	3.6%
Unknown	1,755	11.0%	97	5.3%

Data Analysis

Once data collection concluded, data from the online survey tool were 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 the State of Michigan 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 2, below and continued on the next 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 2. Comparison of Survey Respondents to All Nurses Licensed in Michigan

Characteristics	RNs				LPNs			
	Nurse Population		Survey Participants		Nurse Population		Survey Participants	
	#	%	#	%	#	%	#	%
Total	155,199	-	15,896	-	22,434	-	1,818	-
Age								
<25 years	3,493	2.3%	224	1.4%	393	1.8%	17	0.9%
25 to 34 years	31,067	20.0%	2,548	16.0%	3,859	17.2%	240	13.2%
35 to 44 years	32,312	20.8%	2,725	17.1%	4,967	22.1%	328	18.0%
45 to 54 years	32,678	21.1%	2,827	17.8%	4,692	20.9%	344	18.9%
55 to 64 years	35,113	22.6%	3,946	24.8%	5,275	23.5%	466	25.6%
65 to 74 years	17,952	11.6%	2,221	14.0%	2,870	12.8%	203	11.2%
75+ years	2,560	1.6%	269	1.7%	372	1.7%	20	1.1%
Unknown	24	0.0%	1,136	7.1%	6	0.0%	200	11.0%
Prosperity Region								
Eastern/Central/Western UP	4,130	2.7%	344	2.2%	1,491	6.6%	94	5.2%
Northwest LP	4,954	3.2%	584	3.7%	582	2.6%	54	3.0%
Northeast LP	2,504	1.6%	244	1.5%	681	3.0%	45	2.5%
West/West Central	20,214	13.0%	2,390	15.0%	3,399	15.2%	324	17.8%
East Central	7,826	5.0%	690	4.3%	1,450	6.5%	101	5.6%
East	11,883	7.7%	1,048	6.6%	2,012	9.0%	144	7.9%
South Central	5,468	3.5%	572	3.6%	652	2.9%	42	2.3%
Southwest	9,737	6.3%	928	5.8%	1,519	6.8%	105	5.8%
Southeast	16,499	10.6%	1,473	9.3%	2,111	9.4%	123	6.8%
Detroit Metro	51,467	33.2%	4,529	28.5%	7,270	32.4%	467	25.7%
MI, Unknown Region	-	-	665	4.2%	-	-	66	3.6%
Non-Michigan	20,517	13.2%	1,755	11.0%	1,267	5.6%	97	5.3%
Unknown Region	-	-	674	4.2%	-	-	156	8.6%
APRN								
Nurse Practitioner	9,478	6.1%	1,098	6.9%	-	-	-	-
Anesthetist	2,830	1.8%	210	1.3%	-	-	-	-
Midwife	453	0.3%	89	0.6%	-	-	-	-
Clinical Specialist	222	0.1%	408	2.6%	-	-	-	-

Results of the 2019 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, 2017, 2018, and 2019 survey results so comparisons between these four 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 2019 cannot be compared with survey results from years prior to 2016 which were not presented as weighted estimates. In addition to weighted estimates, 95% confidence intervals were calculated for selected results. Results where the accompanying confidence intervals do not overlap can be considered statistically significant.

EDUCATION

RN and LPN nurses were asked their highest level of education in nursing education (Table 3) and non-nursing education (Table 4). The highest level of nursing education for 46.0% of RNs is a bachelor's degree in nursing and 32.0% hold an associate's degree in nursing as their highest level of education. Almost all LPNs (94.2%) reported an LPN diploma/certificate being their highest level of nursing education. Over half of RNs and LPNs, 62.9% and 66.8% respectively, responded that non-nursing education was not applicable as shown in Table 4.

Table 3: Highest Level of Nursing-Related Education

Education Level	RN = 15,865		LPN = 1,812	
	Estimate	95% CI	Estimate	95% CI
LPN diploma/certificate	*	*	94.2%	(93.0%, 95.1%)
RN diploma in nursing	6.7%	(6.3%, 7.0%)	*	*
Associate's degree in nursing	32.0%	(31.3%, 32.8%)	5.0%	(4.1%, 6.1%)
Bachelor's degree in nursing	46.0%	(45.2%, 46.8%)	*	*
Master's degree in nursing	13.1%	(12.5%, 13.6%)	*	*
Doctorate in Nursing Practice (DNP)	1.4%	(1.2%, 1.6%)	*	*
Doctor of Nurse Anesthesia (DNAP)	0.0%	(0.0%, 0.1%)	*	*
Doctor of Philosophy in Nursing (PhD)	0.8%	(0.6%, 0.9%)	*	*
Other doctoral degree in nursing	0.1%	(0.0%, 0.1%)	*	*

Table 4: Highest Level of Non-Nursing Education

Education Level	RN = 15,381		LPN = 1,795	
	Estimate	95% CI	Estimate	95% CI
Non-nursing associate's degree	13.4%	(12.8%, 13.9%)	24.3%	(22.4%, 26.3%)
Non-nursing bachelor's degree	15.9%	(15.4%, 16.5%)	6.4%	(5.4%, 7.6%)
Non-nursing master's degree	6.8%	(6.5%, 7.2%)	2.1%	(1.5%, 2.9%)
Non-nursing doctoral degree	1.0%	(0.9%, 1.2%)	0.4%	(0.2%, 0.8%)
Not applicable	62.9%	(62.1%, 63.6%)	66.8%	(64.6%, 68.9%)

Nurses were asked to select which level of degree/certificate qualified them for their first nursing license. As shown in Table 5, 46.0% of RNs started with a bachelor's degree in nursing. Almost all LPNs applied for an LPN diploma/certificate (94.2%) as their first license. A little over thirteen 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 since clinical graduate nursing programs require licensure as a criterion for participation at clinical sites.

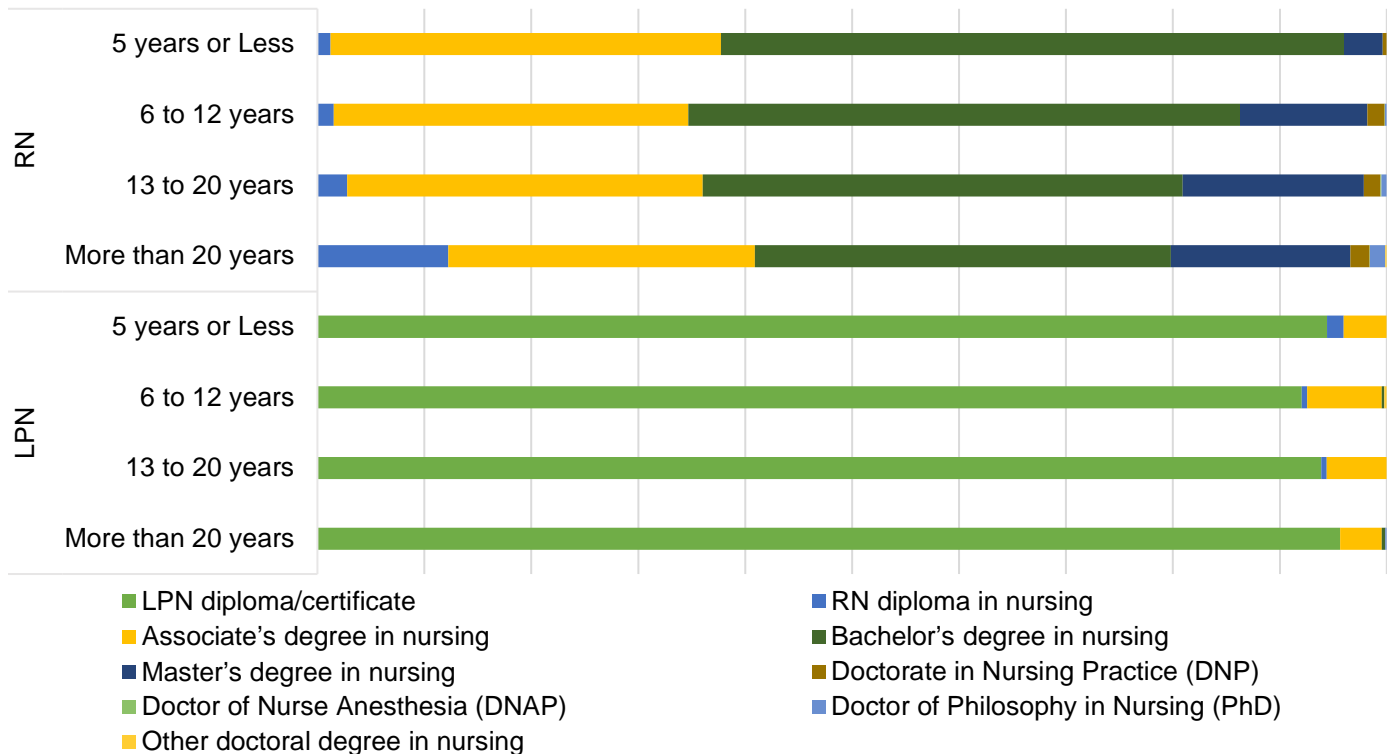
Table 5: Educational Background that Qualified for First Nursing License

Education Level	RN = 15,865		LPN = 1,812	
	Estimate	95% CI	Estimate	95% CI
LPN diploma/certificate	0.0%	(0.0%, 0.0%)	94.2%	(93.0%, 95.1%)
RN diploma in nursing	6.7%	(6.3%, 7.0%)	*	*
Associate's degree in nursing	32.0%	(31.3%, 32.8%)	5.0%	(4.1%, 6.1%)
Bachelor's degree in nursing	46.0%	(45.2%, 46.8%)	*	*
Master's degree in nursing	13.1%	(12.5%, 13.6%)	*	*
Doctorate in Nursing Practice (DNP)	1.4%	(1.2%, 1.6%)	*	*
Doctorate of Nurse Anesthesia (DNAP)	0.0%	(0.0%, 0.1%)	*	*
Doctor of Philosophy in Nursing (PhD)	0.8%	(0.6%, 0.9%)	*	*
Other doctorate degree in nursing	0.1%	(0.0%, 0.1%)	*	*

*Survey respondents were not given these education levels because they had previously indicated they were LPNs.

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. As shown in Figure 1, RNs had mostly completed a pre-licensure bachelor's degree in nursing (38.9-58.3%) as their first nursing license regardless of how long they've been working. Almost all LPNs (92.0-95.6%) entered nursing after completing a pre-licensure LPN diploma/certificate, with a much smaller portion (3.9-7.0%) having indicated completion of an ADN program to qualify for LPN licensure. It is assumed these are nurses who obtained their LPN midway through a ladder associate's degree nursing program that incorporated a LPN step out option.

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



RNs indicated if they currently held specialty certification as a nurse practitioner, nurse anesthetist, nurse midwife, or clinical nurse specialist (Table 6). The results show 5.2% of RNs hold certification as nurse practitioners and 1.0% are clinical nurse specialists.

Table 6: Current Specialty Certifications in Michigan

Certification	n= 15,896	
	Estimate	95% CI
Nurse Anesthetist	1.0%	(0.9%, 1.2%)
Nurse Midwife	0.4%	(0.3%, 0.5%)
Nurse Practitioner	5.2%	(4.9%, 5.6%)
Clinical Nurse Specialist	1.9%	(1.7%, 2.2%)

Nurses who responded to the survey were also 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). It is estimated that 5.4% of RNs and 2.0% of LPNs are currently enrolled in a program to earn a BSN, while 3.8% of RNs are enrolled in a program to obtain an MSN. Twelve and three tenths percent of LPNs are currently enrolled in a program to earn an ADN.

Table 7: Current Enrollment in Nursing Educational Programs

Degree	RN= 15,896		LPN= 1,818	
	Estimate	95% CI	Estimate	95% CI
Associate's Degree in Nursing (ADN)	0.1%	(0.0%, 0.1%)	12.3%	(10.9%, 13.9%)
Bachelor of Science in Nursing (BSN)	5.4%	(5.0%, 5.7%)	2.0%	(1.4%, 2.7%)
Master of Science in Nursing (MSN)	3.8%	(3.5%, 4.1%)	*	*
Doctor of Nursing Practice (DNP)	1.5%	(1.3%, 1.7%)	*	*
Doctor of Philosophy in Nursing (PhD)	0.2%	(0.1%, 0.2%)	*	*
Not Enrolled	0.2%	(0.2%, 0.3%)	0.1%	(0.0%, 0.3%)

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, 79.7% of RNs are currently enrolled to become nurse practitioners and 9.7% are enrolled to become clinical nurse specialists.

Table 8: Educational Preparation to Earn Specialty Certification

Certification	RN= 631	
	Estimate	95% CI
Nurse Practitioner	79.7%	(76.4%, 82.7%)
Nurse Midwife	3.7%	(2.5%, 5.4%)
Nurse Anesthetist	6.9%	(5.2%, 9.1%)
Clinical Nurse Specialist	9.7%	(7.6%, 12.2%)

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, 64.1% and 62.6% respectively, are currently employed full-time in a position that requires a nurse license (Table 9).

Table 9: Current Employment Status

Employment	RN= 15,896		LPN= 1,818	
	Estimate	95% CI	Estimate	95% CI
Actively employed in nursing or a position that requires a nurse license full-time	64.1%	(63.4%, 64.9%)	62.6%	(60.4%, 64.8%)
Actively employed in nursing or a position that requires a nurse license part-time	12.1%	(11.6%, 12.6%)	11.9%	(10.5%, 13.5%)
Actively employed in nursing or a position that requires a nurse license on a per-diem basis	5.0%	(4.7%, 5.3%)	3.5%	(2.7%, 4.4%)
On temporary medical leave from a position that requires a nurse license	0.8%	(0.7%, 1.0%)	*	*
On temporary non-medical leave from a position that requires a nurse license	0.3%	(0.2%, 0.3%)	*	*
Actively employed in a field other than nursing	2.7%	(2.4%, 2.9%)	4.7%	(3.8%, 5.8%)
Working in nursing only as a volunteer	0.9%	(0.8%, 1.1%)	*	*
Unemployed, seeking work as a nurse	1.8%	(1.6%, 2.0%)	3.7%	(2.9%, 4.6%)
Unemployed, not seeking work as a nurse	2.7%	(2.5%, 3.0%)	3.0%	(2.3%, 3.8%)
Retired	9.6%	(9.1%, 10.0%)	8.3%	(7.1%, 9.7%)

Among all licensed nurses in Michigan, 81.3% of RNs and 78.0% of LPNs are currently employed as a nurse (Table 10, below and continued onto next page). 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 West/West Central region of Michigan are employed at the highest levels (84.0%), while LPNs living in the Southeast region of Michigan are employed at the high levels (83.4%).

Table 10: Percentage of Nurses Who are Employed by Demographic Characteristics

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Total	15,896	81.3%	(80.7%, 81.9%)	1,818	78.0%	(76.1%, 79.9%)
Age						
<25 years	224	96.4%	(94.0%, 98.8%)	17	82.4%	(64.3%, 100.5%)
25 to 34 years	2,548	92.9%	(91.9%, 93.9%)	240	89.6%	(85.7%, 93.4%)
35 to 44 years	2,725	91.6%	(90.6%, 92.7%)	328	87.8%	(84.3%, 91.3%)
45 to 54 years	2,827	90.3%	(89.3%, 91.4%)	344	85.5%	(81.7%, 89.2%)
55 to 64 years	3,946	76.8%	(75.4%, 78.1%)	466	72.1%	(68.0%, 76.2%)
65+ years	2,490	38.0%	(36.1%, 39.9%)	223	47.6%	(41.0%, 54.1%)
Gender						
Female	13,791	80.7%	(80.0%, 81.4%)	1,548	77.9%	(75.9%, 80.0%)
Male	1,306	87.2%	(85.3%, 89.0%)	105	79.8%	(72.2%, 87.5%)

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Race						
White	13,593	80.7%	(80.1%, 81.4%)	1,259	75.7%	(73.3%, 78.1%)
Black or African American	780	85.9%	(83.4%, 88.3%)	323	88.2%	(84.6%, 91.7%)
Other	895	86.0%	(83.8%, 88.3%)	106	79.5%	(71.8%, 87.2%)
Ethnicity						
Hispanic or Latino	299	88.2%	(84.6%, 91.9%)	41	82.8%	(71.3%, 94.4%)
Not Hispanic or Latino	14,610	81.1%	(80.5%, 81.7%)	1,583	78.1%	(76.0%, 80.1%)
Residency						
Upper Peninsula	344	79.5%	(75.3%, 83.8%)	94	80.1%	(72.1%, 88.2%)
Northwest LP	584	75.8%	(72.3%, 79.3%)	54	69.7%	(57.4%, 81.9%)
Northeast LP	244	76.5%	(71.2%, 81.8%)	45	70.5%	(57.2%, 83.9%)
West/West Central	2,390	84.0%	(82.5%, 85.5%)	324	76.9%	(72.3%, 81.5%)
East Central	690	82.6%	(79.8%, 85.4%)	101	73.5%	(64.9%, 82.1%)
East	1,048	82.7%	(80.4%, 85.0%)	144	76.4%	(69.5%, 83.4%)
South Central	572	82.1%	(79.0%, 85.2%)	42	72.7%	(59.2%, 86.2%)
Southwest	928	80.4%	(77.8%, 82.9%)	105	79.6%	(71.9%, 87.3%)
Southeast	1,473	79.8%	(77.8%, 81.9%)	123	83.4%	(76.8%, 90.0%)
Detroit Metro	4,529	82.2%	(81.1%, 83.3%)	467	80.7%	(77.1%, 84.3%)
Michigan Resident*	13,467	79.3%	(78.6%, 80.0%)	1,565	78.2%	(76.2%, 80.3%)
Non-Michigan Resident	1,755	75.6%	(73.6%, 77.6%)	97	65.0%	(55.5%, 74.5%)

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

Table 11 below shows the demographics of those currently employed nurses. The age of employed RNs and LPNs are fairly, evenly distributed between 25 to 64 years old (21.4-23.5% and 19.8-24.9% respectively). Most RNs (90.6%) and LPNs (93.5%) are female.

Table 11: Demographic Characteristics of Employed Nurses

Demographics	RN = 11,936		LPN = 1,283	
	Estimate	95% CI	Estimate	95% CI
Age				
<25 years	2.7%	(2.4%, 3.0%)	1.8%	(1.2%, 2.7%)
25 to 34 years	22.9%	(22.1%, 23.6%)	19.8%	(17.7%, 22.0%)
35 to 44 years	23.5%	(22.7%, 24.3%)	24.9%	(22.6%, 27.4%)
45 to 54 years	23.4%	(22.7%, 24.2%)	22.9%	(20.7%, 25.3%)
55 to 64 years	21.4%	(20.6%, 22.1%)	21.7%	(19.6%, 24.1%)
65+ years	6.2%	(5.8%, 6.6%)	8.8%	(7.4%, 10.5%)
Gender				
Female	90.6%	(90.1%, 91.1%)	93.5%	(92.1%, 94.8%)
Male	9.4%	(8.9%, 9.9%)	6.5%	(5.2%, 7.9%)
Race				
White	90.2%	(89.6%, 90.7%)	73.9%	(71.5%, 76.3%)
Black	5.5%	(5.1%, 5.9%)	22.7%	(20.5%, 25.1%)
Other	6.4%	(6.0%, 6.9%)	6.4%	(5.2%, 7.8%)
Hispanic or Latino	2.3%	(2.0%, 2.6%)	2.7%	(1.9%, 3.7%)
Not Hispanic or Latino	97.7%	(97.4%, 98.0%)	97.3%	(96.3%, 98.1%)

The distribution of where nurses live and work with respect to Michigan's 10 Prosperity Regions is shown in Table 12. The highest proportion of RNs live work (33.4%) in the Detroit Metro region. While the Detroit Metro region also has the highest proportion of LPNs living and working within this region, the percentages are somewhat higher (35.6% and 37.0% respectively) than RNs.

Table 12: Prosperity Region of Residency & Employment among Michigan Nurses

Prosperity 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%	(2.3%, 2.9%)	2.7%	(2.4%, 3.0%)	7.2%	(5.9%, 8.8%)	7.0%	(5.7%, 8.5%)
Northwest LP	3.0%	(2.7%, 3.3%)	2.9%	(2.6%, 3.3%)	2.4%	(1.7%, 3.4%)	2.8%	(2.0%, 3.8%)
Northeast LP	1.5%	(1.3%, 1.8%)	1.4%	(1.2%, 1.6%)	2.9%	(2.1%, 4.0%)	2.4%	(1.7%, 3.4%)
West/West Central	13.4%	(12.8%, 14.1%)	13.5%	(12.8%, 14.1%)	15.7%	(13.7%, 17.8%)	14.9%	(13.0%, 17.0%)
East Central	5.1%	(4.7%, 5.5%)	5.3%	(4.9%, 5.8%)	6.4%	(5.2%, 7.9%)	5.6%	(4.5%, 7.0%)
East	7.8%	(7.3%, 8.3%)	6.3%	(5.9%, 6.8%)	9.2%	(7.7%, 11.0%)	8.1%	(6.8%, 9.8%)
South Central	3.5%	(3.2%, 3.9%)	3.8%	(3.4%, 4.1%)	2.9%	(2.1%, 4.0%)	3.1%	(2.3%, 4.2%)
Southwest	6.2%	(5.8%, 6.6%)	6.2%	(5.8%, 6.7%)	7.1%	(5.8%, 8.7%)	7.3%	(6.0%, 8.9%)
Southeast	10.4%	(9.9%, 11.0%)	12.2%	(11.6%, 12.8%)	10.7%	(9.1%, 12.5%)	10.6%	(9.0%, 12.4%)
Detroit Metro	33.4%	(32.6%, 34.3%)	33.4%	(32.5%, 34.3%)	35.6%	(32.9%, 38.3%)	37.0%	(34.4%, 39.7%)
Outside MI	13.0%	(12.4%, 13.6%)	12.4%	(11.8%, 13.0%)	0.0%	(0.0%, 0.3%)	1.2%	(0.7%, 1.9%)

Among nurses who were working part-time or on a per diem basis, 53.9% of RNs and 36.2% of LPNs indicated that they do so because they are also taking care of the home and family (Table 13). However, 22.2% of RNs and 30.6% of LPNs are semi-retired. Only 3.8% of RNs indicated that they have had difficulty finding a full-time nursing position.

Table 13: Reasons for Not Working as a Nurse Full-Time

Reason	RN = 2,644		LPN = 269	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	53.9%	(52.0%, 55.7%)	36.2%	(30.7%, 42.1%)
Enrolled in education program	11.8%	(10.6%, 13.1%)	22.8%	(18.2%, 28.1%)
Difficulty finding a full-time nursing position	3.8%	(3.1%, 4.6%)	*	*
Prefer to work part-time or per diem basis	1.1%	(0.8%, 1.6%)	*	*
Semi-retired	22.2%	(20.7%, 23.8%)	30.6%	(25.4%, 36.4%)
Burned Out/Too Stressful	17.7%	(16.3%, 19.2%)	22.2%	(17.6%, 27.5%)
Disabled	0.4%	(0.2%, 0.7%)	1.8%	(0.7%, 4.1%)
Inadequate Salary	4.8%	(4.0%, 5.6%)	7.2%	(4.7%, 11.0%)
Other	9.8%	(8.8%, 11.0%)	8.6%	(5.8%, 12.6%)

Among those nurses who responded that they are unemployed and seeking work as a nurse, a follow-up question was asked about potential reasons why they are not currently employed as a nurse (Table 14). Most RNs and LPNs (35.4% and 39.1% respectively) are unemployed because they are taking care of home and family.

Table 14: Unemployed and Seeking Work as a Nurse

Unemployed and seeking work as a nurse	RN = 287		LPN = 59	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	35.4%	(30.1%, 41.1%)	39.1%	(27.7%, 51.9%)
Difficulty finding a full-time nursing position	21.5%	(17.1%, 26.6%)	11.7%	(5.8%, 22.4%)
Difficulty finding a part-time or on a per-diem basis nursing position	24.8%	(20.1%, 30.1%)	14.9%	(8.0%, 26.1%)
Semi-retired	13.6%	(10.1%, 18.0%)	3.1%	(0.8%, 11.1%)
Burned out/too stressful	10.2%	(7.2%, 14.2%)	5.5%	(2.0%, 14.5%)
Disabled	4.1%	(2.4%, 7.1%)	9.2%	(4.1%, 19.2%)
Inadequate salary	5.5%	(3.4%, 8.8%)	14.4%	(7.6%, 25.5%)
Other (please specify)	21.3%	(17.0%, 26.4%)	23.5%	(14.5%, 35.8%)

A follow-up question was also asked to licensed nurses who said they were unemployed and not seeking work as a nurse. Over half of the RNs and LPNs (61.0% and 50.2% respectively) responded they are unemployed and not seeking work as a nurse due to taking care of home and family (Table 15).

Table 15: Unemployed and Not Seeking Work as a Nurse

Unemployed and NOT seeking work as a nurse	RN = 408		LPN = 52	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	61.0%	(55.3%, 66.5%)	50.2%	(37.8%, 62.5%)
Enrolled in education program	8.0%	(5.4%, 11.7%)	0.0%	(0.0%, 6.1%)
Difficulty finding a full-time nursing position	0.5%	(0.1%, 2.2%)	0.0%	(0.0%, 6.1%)
Difficulty finding a part-time or on a per-diem basis nursing position	4.6%	(2.7%, 7.7%)	4.7%	(1.5%, 13.4%)
Semi-retired	14.8%	(11.2%, 19.4%)	9.4%	(4.2%, 19.5%)
Burned out/too stressful	19.2%	(15.1%, 24.2%)	16.0%	(8.8%, 27.4%)
Disabled	12.4%	(9.0%, 16.7%)	31.5%	(21.1%, 44.1%)
Inadequate salary	6.4%	(4.1%, 9.8%)	4.1%	(1.2%, 12.5%)
Other (please specify)	6.0%	(3.8%, 9.4%)	8.6%	(3.8%, 18.5%)

The distribution of where nurses are licensed was collected for state and country level in Table 16 on the following page. Most of the RNs and LPNs are licensed only in Michigan, 79.7% and 85.6% respectively. For those RNs and LPNs licensed out of state, the majority are licensed in Ohio (22.9% and 29.1% respectively). Over half (53.0%) of RNs who are licensed in another country are licensed in Canada.

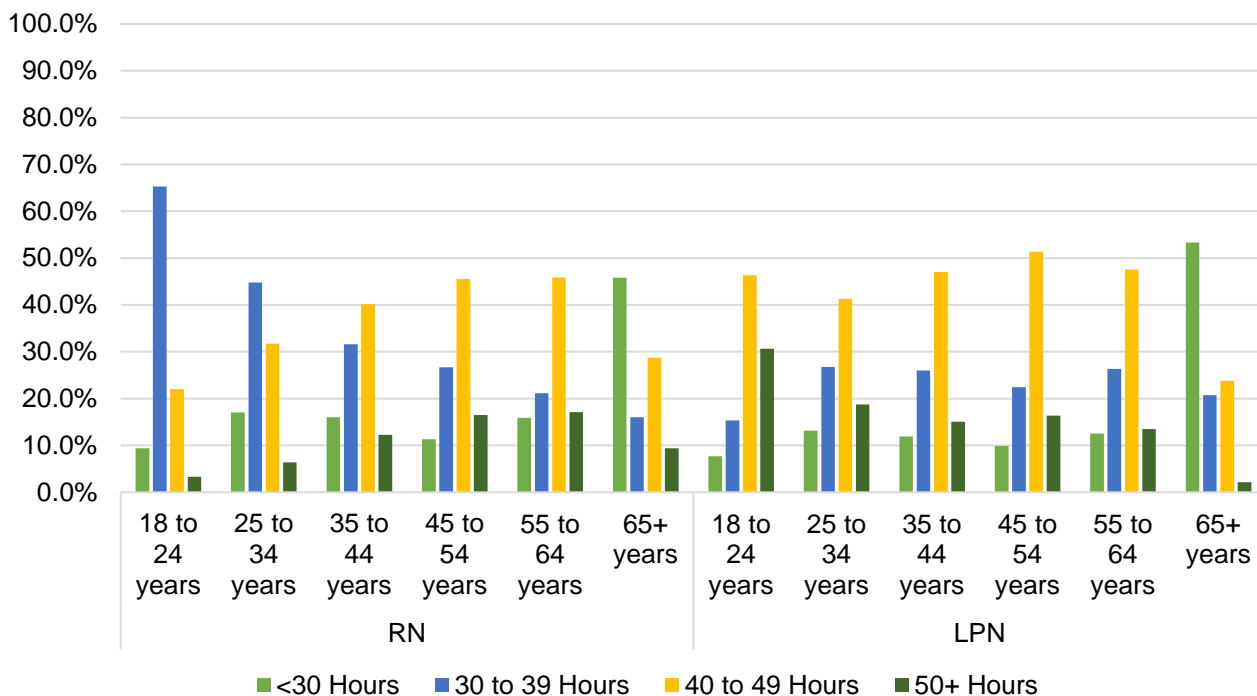
Table 16: Nurses Licensed Out of State or Country

Location	RN = 15,896		LPN = 1,818	
	Estimate	95% CI	Estimate	95% CI
Michigan Only	79.7%	(79.1%, 80.4%)	85.6%	(84.0%, 87.2%)
Other U.S. State*	18.7%	(18.1%, 19.3%)	14.0%	(12.5%, 15.6%)
Ohio	22.9%	(21.4%, 24.4%)	29.1%	(27.1%, 31.3%)
Indiana	18.3%	(16.9%, 19.7%)	13.0%	(11.5%, 14.6%)
Illinois	16.5%	(15.2%, 17.9%)	4.7%	(3.8%, 5.8%)
Wisconsin	11.8%	(10.7%, 13.0%)	10.2%	(8.9%, 11.7%)
Florida	20.3%	(18.9%, 21.8%)	14.1%	(12.6%, 15.8%)
Other Country*	2.3%	(2.0%, 2.5%)	*	*
Canada	53.0%	(47.9%, 58.1%)	*	*
Other State & Country	0.7%	(0.6%, 0.8%)	*	*

*Percentages include nurses who also reported being licensed in the Other U.S. States and Other Countries category.

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 2). In general, RNs and LPNs are more likely to work 40 to 49 hours per week in nursing or a related area in comparison to other weekly hours (45.9% and 51.4% respectively). RN and LPN nurses between 35-64 years old are most likely to work between 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.

Figure 2: Current Employment Status



Nurses currently working were asked to indicate how many different nursing positions they hold (Table 17). Currently, most of the RNs and LPNs only have one nursing position, 86.2% and 82.8% respectively.

Table 17: Number of Currently Employed Nursing Positions

Number of Positions	RN = 12,599		LPN = 1,413	
	Estimate	95% CI	Estimate	95% CI
1 Position	86.2%	(85.5%, 86.7%)	82.8%	(80.8%, 84.7%)
2 Position	11.9%	(11.4%, 12.5%)	14.7%	(13.0%, 16.7%)
3+ Positions	1.9%	(1.7%, 2.2%)	2.5%	(1.8%, 3.4%)

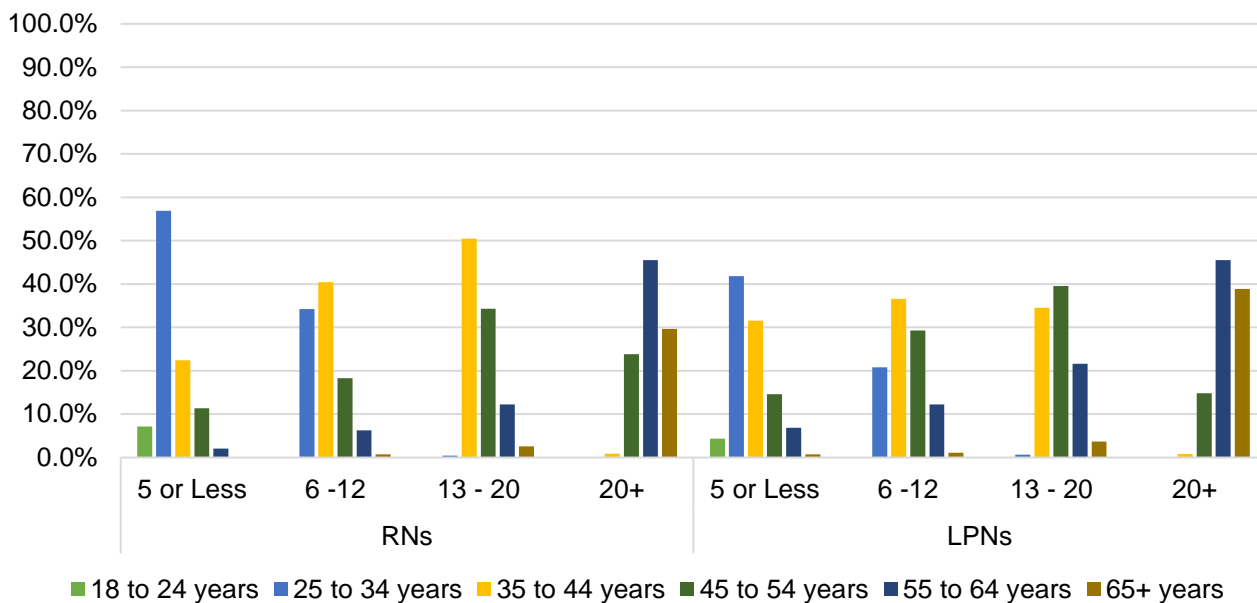
The number of years nurses were licensed is presented in Table 18. Most RNs (48.1%) and LPNs (37.3%) have been a licensed nurse for more than 20 years. Twenty-six and eight tenths percent of LPNs have been employed five years or less.

Table 18: Number of Years Been a Licensed Nurse (RN and LPN)

Years	RN = 15,290		LPN = 1,667	
	Estimate	95% CI	Estimate	95% CI
5 years or Less	18.9%	(18.3%, 19.5%)	26.8%	(24.6%, 28.9%)
6 to 12 years	20.3%	(19.6%, 20.9%)	24.1%	(22.1%, 26.2%)
13 to 20 years	12.8%	(12.2%, 13.3%)	11.8%	(10.3%, 13.4%)
More than 20 years	48.1%	(47.3%, 48.9%)	37.3%	(35.0%, 39.6%)

The number of years respondents have been a licensed nurse was also compared to the age of the nurse (Figure 3). In general, most RNs and LPNs 25 to 34 years old have been licensed five years or less while most 35 to 44 years old have been licensed six to twenty years. RNs and LPNs 55 years or older have been licensed 20 or more years.

Figure 3: Number of Years been a Licensed Nurse Compared to Age (RN and LPN)

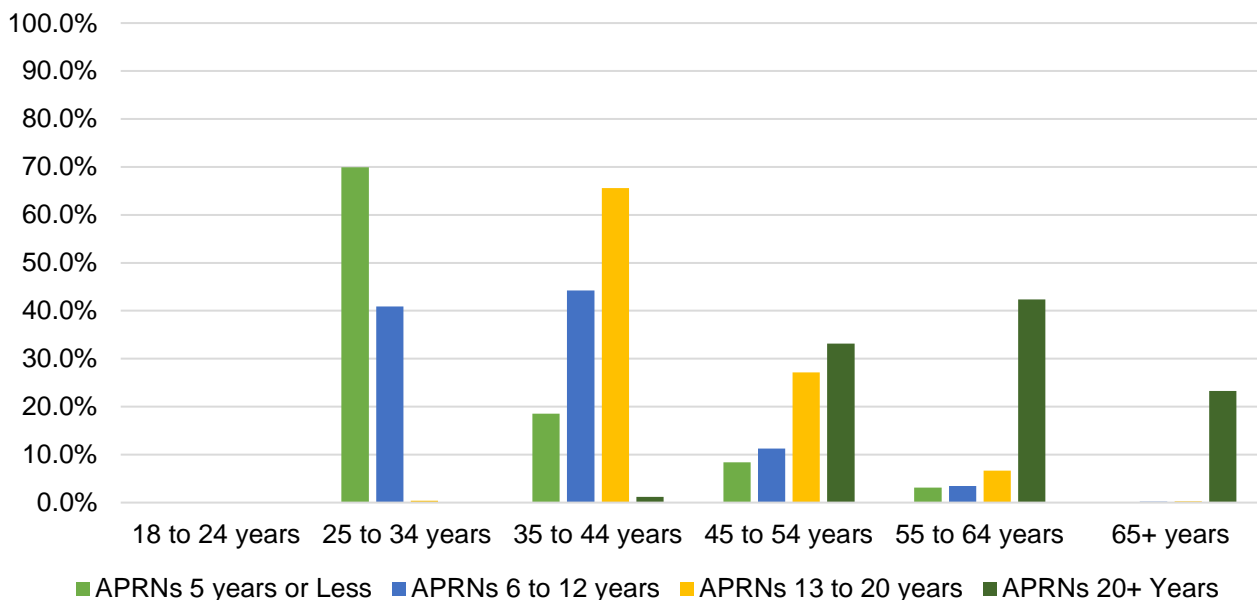


Advanced Practice Registered Nurses (APRNs) were measured as a subset of RNs. The majority of APRNs (50.9%) have also been licensed for more than 20 years (Table 19). Figure 4 compares the number of years APRNs have been a licensed nurse to their age. Most APRNs 25 to 34 years old have been licensed less than five years (69.9%), while those 35 to 44 years old have been licensed 13 to 20 years (65.6%), and APRNs 45 years or older have been licensed more than 20 years (23.3-42.4%).

Table 19: Number of Years Been a Licensed Nurse (APRN)

Years	APRN = 1,703	
	Estimate	95% CI
5 years or less	8.7%	(7.4%, 10.0%)
6 to 12 years	24.1%	(22.0%, 26.1%)
13 to 20 years	16.3%	(14.6%, 18.1%)
More than 20 years	50.9%	(48.5%, 53.3%)

Figure 4: Number of Years been a Licensed Nurse Compared to Age (APRN)



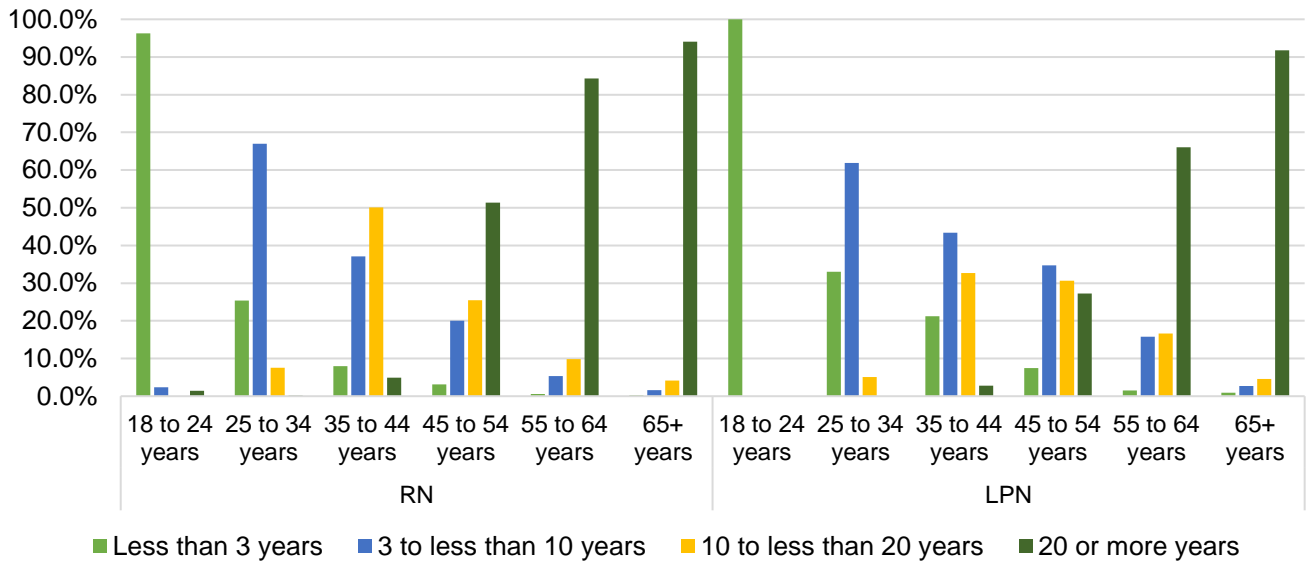
Most RNs (37.1%) have been working as a nurse for 20 or more years. Over one third (34.7%) of LPNs have been working as a nurse three to less than ten years, and almost one third (29.4%) have been working for 20 or more years. Conversely, 11.1% of RNs have been working for less than three years compared to 15.8% of LPNs (Table 20).

Table 20: Number of Years Working as a Nurse (RN and LPN)

Years	RN= 12,224		LPN= 1,317	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	11.1%	(10.5%, 11.7%)	15.8%	(13.8%, 17.7%)
3 to less than 10 years	30.0%	(29.2%, 30.8%)	34.7%	(32.1%, 37.2%)
10 to less than 20 years	21.8%	(21.1%, 22.5%)	20.2%	(18.0%, 22.4%)
20 or more years	37.1%	(36.2%, 37.9%)	29.4%	(26.9%, 31.8%)

The number of years working was also compared to the age of the nurse (Figure 5). Almost all of RNs and LPNs who have been working less than three years are 18 to 24 years old (96.3% and 100.0% respectively). RNs and LPNs working three to less than ten years are mostly between 25 to 34 years old (67.0% and 61.9% respectively).

Figure 5: Number of Years Working as a Nurse Compared to Age (RN and LPN)

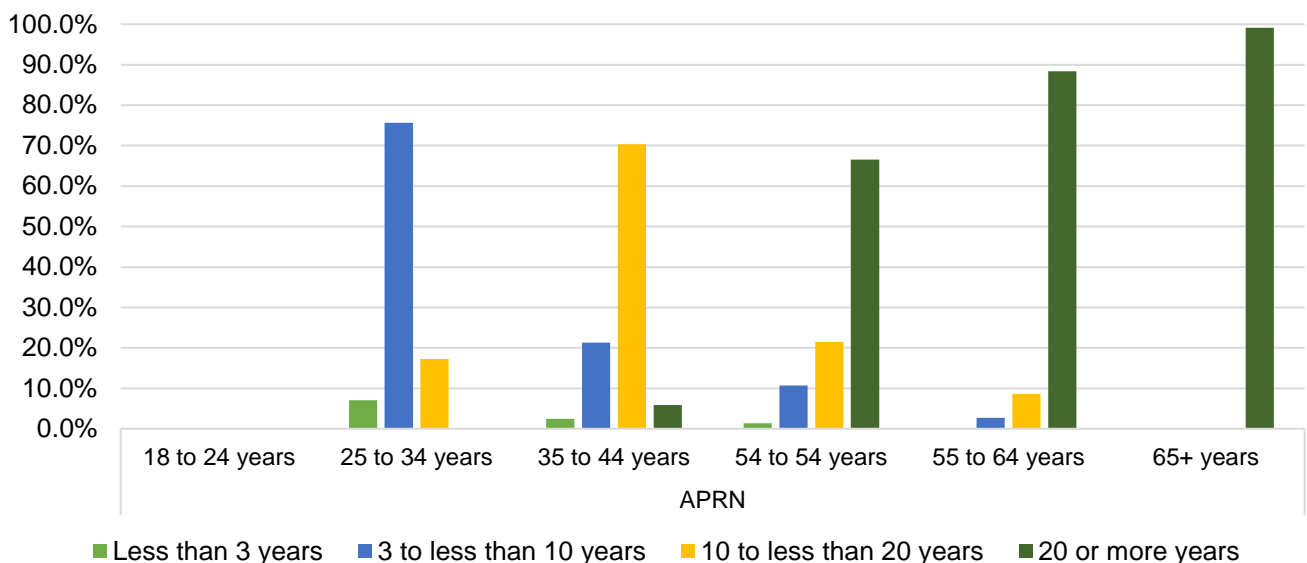


The number of years APRNs have been working was also measured as a subset of RNs. Forty-one and seven tenths percent of APRNs have been working as a nurse for 20 or more years (Table 21). The number of years APRNs have been working was also compared to their age (Figure 6). The percentage of APRNs working three to less than ten years are mostly between 25 and 34 years old (75.7%) while most APRNs 35 to 44 years old have been working for 10 to less than 20 years (70.4%). APRNs 54 years or older are most likely to have worked as a nurse for 20 or more years (88.4-99.1%).

Table 21: Number of Years Working as a Nurse (APRN)

Years	APRN= 1,479	
	Estimate	95% CI
Less than 3 years	2.5%	(01.7%, 03.3%)
3 to less than 10 years	24.5%	(22.3%, 26.7%)
10 to less than 20 years	31.4%	(29.0%, 33.7%)
20 or more years	41.7%	(39.1%, 44.2%)

Figure 6: Number of Years Working as a Nurse Compared to Age (APRN)



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 22). Most RNs and LPNs (51.6% and 64.7% respectively) felt adequately prepared. The next most common response for both RNs (32.9%) and LPNs (18.3%) was they did not have enough clinical time prior to entering the nursing workforce.

Table 22: Preparedness for Entering Nursing Workforce

Level of Preparedness	RN= 1,158		LPN= 190	
	Estimate	95% CI	Estimate	95% CI
Adequately prepared	51.6%	(48.7%, 54.4%)	64.7%	(57.7%, 71.2%)
Not enough classroom time	2.5%	(1.7%, 3.5%)	*	*
Not enough clinical time	32.9%	(30.3%, 35.7%)	18.3%	*
Not enough skills lab/simulation time	17.9%	(15.8%, 20.2%)	18.0%	(13.2%, 24.0%)
Not enough critical thinking/prioritization practice	25.5%	(23.1%, 28.1%)	11.0%	(7.3%, 16.2%)
Other	3.7%	(2.8%, 5.0%)	*	*

The prosperity 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 23). The most common prosperity region for RNs who felt adequately prepared to enter the nursing workforce were in East Central (60.7%), followed by Southwest (53.8%). The most common prosperity region for LPNs who felt adequately prepared to enter the nursing workforce were in the Upper Peninsula (73.4%), followed by Detroit Metro (67.4%).

Table 23. Adequately Preparedness for Entering Nursing Workforce by Prosperity Region

Prosperity Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Upper Peninsula	28	43.6%	(27.1%, 61.6%)	11	73.4%	(44.0%, 90.6%)
Northwest LP	35	51.4%	(35.5%, 66.9%)	*	*	*
Northeast LP	12	50.7%	(25.9%, 75.2%)	*	*	*
West/West Central	195	49.2%	(42.3%, 56.2%)	21	57.0%	(36.4%, 75.4%)
East Central	60	60.7%	(48.0%, 72.0%)	*	*	*
East	75	51.4%	(40.3%, 62.3%)	*	*	*
South Central	41	31.9%	(19.7%, 47.2%)	*	*	*
Southwest	51	53.8%	(40.3%, 66.7%)	6	43.7%	(15.1%, 77.2%)
Southeast	113	45.8%	(36.9%, 54.9%)	17	82.4%	(59.0%, 93.8%)
Detroit Metro	390	52.6%	(47.7%, 57.5%)	91	67.4%	(57.2%, 76.1%)
Lives in Michigan	1,080	50.9%	(47.9%, 53.9%)	179	66.4%	(59.2%, 72.9%)
Lives Outside of Michigan	62	63.8%	(51.4%, 74.7%)	6	31.3%	(8.7%, 68.4%)

Most retired RNs and LPNs indicated they had been working as a nurse 10 years or more (97.1% and 93.2% respectively) as shown in Table 24 below. A small percentage of RNs (2.5%) and LPNs (4.4%) had worked four to nine years before retiring.

Table 24: Number of Years Worked as a Nurse for Retired Nurses

Years	RN = 1,773		LPN = 143	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	0.4%	(0.2%, 0.8%)	2.4%	(0.9%, 6.4%)
4 to 9 years	2.5%	(1.9%, 3.4%)	4.4%	(2.1%, 9.1%)
10 years or more	97.1%	(96.2%, 97.7%)	93.2%	(87.8%, 96.3%)

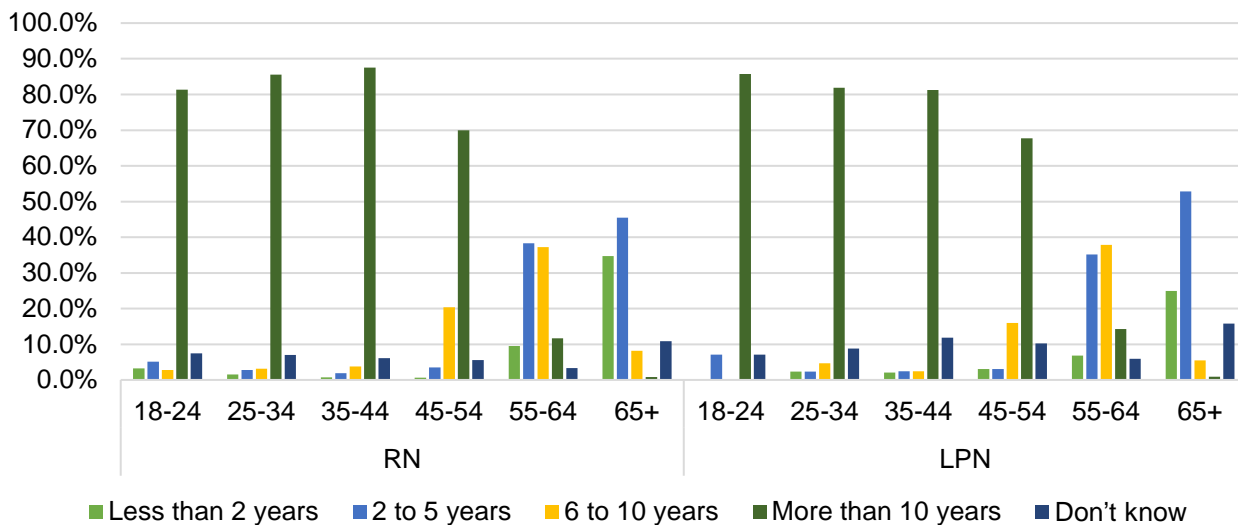
To assist in projecting the supply of nurses in the future, nurses who are currently working were asked to indicate for how many more years they plan to continue working as a nurse (Table 25). Most RNs (61.2%) and LPNs (56.7%) estimated that they will continue working as a nurse for more than 10 years. A much smaller percentage of RNs (4.9%) and LPNs (5.4%) plan to work as a nurse for fewer than two additional years.

Table 25: Plans to Continue Working as a Nurse (RN and LPN)

Years	RN= 12,213		LPN= 1,314	
	Estimate	95% CI	Estimate	95% CI
Less than 2 years	4.9%	(4.5%, 5.3%)	5.4%	(4.2%, 6.6%)
2 to 5 years	13.0%	(12.4%, 13.6%)	14.2%	(12.3%, 16.1%)
6 to 10 years	14.9%	(14.3%, 15.5%)	13.9%	(12.0%, 15.8%)
More than 10 years	61.2%	(60.4%, 62.1%)	56.7%	(54.0%, 59.4%)
Don't know	5.9%	(5.5%, 6.3%)	9.9%	(8.2%, 11.5%)

While more than half of all RNs and LPNs indicated they planned to continue working as a nurse for 10 years or more, responses varied based upon the age of the responding nurse (Figure 7). Most RNs (45.5%) and LPNs (52.8%) 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 most likely to continue working for two to five more years (38.3%), while LPNs 55 to 64 years old were most likely to continue working six to ten more years (37.8%). Nurses younger than 55 years old most frequently indicated that they plan to continue practicing as a nurse for more than 10 years.

Figure 7: Plans to Continue to Practice Nursing (in years) by Age (RN and LPN)

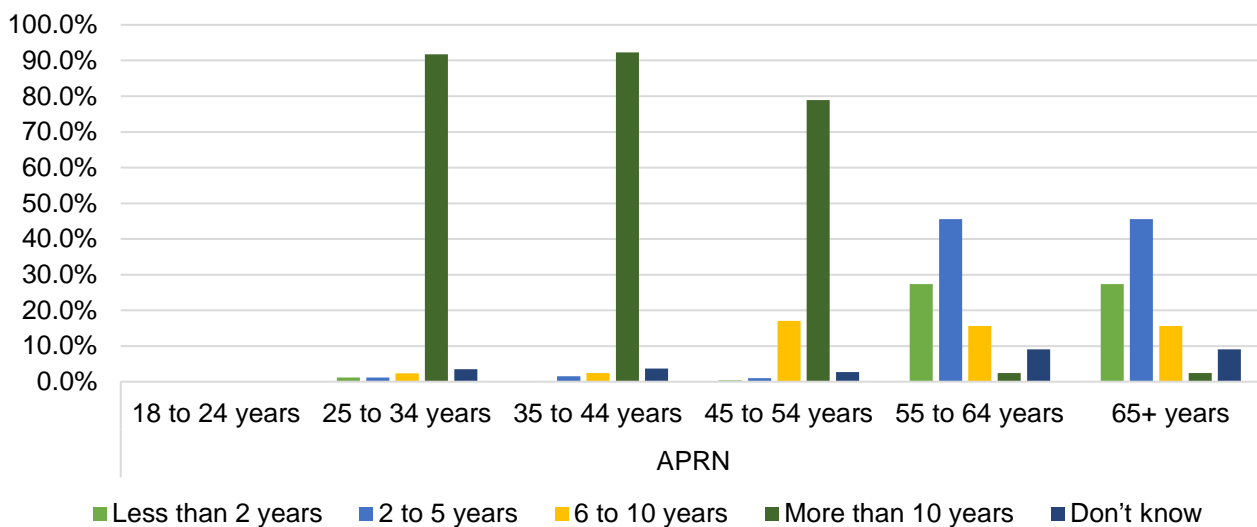


APRNs plan to continue working as a nurse was also measured as a subset of RNs. Sixty-eight and two tenths percent of APRNs estimated that they will continue working as a nurse for more than 10 years, while 3.9% plan to work as a nurse for fewer than two additional years (Table 26). APRNs plans to continue working was also compared to their age (Figure 8). APRNs aged 55 or older indicated that they plan to continue working as a nurse for five or fewer years (45.5%). The APRNs 54 years or younger plan to continue working for more than 10 years.

Table 26: Plans to Continue Working as a Nurse (APRN)

Years	APRN= 1,478	
	Estimate	95% CI
Less than 2 years	3.9%	(3.5%, 4.2%)
2 to 5 years	10.0%	(9.5%, 10.5%)
6 to 10 years	14.3%	(13.6%, 14.9%)
More than 10 years	68.2%	(67.4%, 69.0%)
Don't know	3.6%	(3.3%, 4.0%)

Figure 8: Plans to Continue to Practice Nursing (in years) by Age (APRN)



The prosperity region breakdown was also provided for those nurses who plan to stop working in five or less years. For RNs, the most common prosperity region for nurses to stop working in five or less years is in the Upper Peninsula (25.0%). For LPNs, the most common prosperity region for nurses to stop working in five or less years is in the Northwest Lower Peninsula (39.9%). See Table 27 below.

Table 27. Plans to Work 5 Years or Less by Prosperity Region

Prosperity Region	RNs			LPNs		
	N	%	95% CI	N	%	95% CI
Upper Peninsula	250	25.0%	(20.0%, 30.7%)	72	21.6%	(13.7%, 32.5%)
Northwest LP	402	23.3%	(19.4%, 27.7%)	37	39.9%	(25.8%, 55.9%)
Northeast LP	167	17.6%	(12.5%, 24.0%)	29	18.8%	(8.6%, 36.3%)
West/West Central	1,866	17.7%	(16.1%, 19.5%)	237	24.7%	(19.6%, 30.5%)
East Central	522	15.1%	(12.2%, 18.4%)	66	23.3%	(14.8%, 34.8%)
East	808	17.7%	(15.2%, 20.5%)	103	20.0%	(13.4%, 28.8%)
South Central	437	19.9%	(16.4%, 23.9%)	27	28.1%	(14.8%, 47.0%)
Southwest	678	20.3%	(17.4%, 23.5%)	76	16.9%	(10.1%, 26.8%)
Southeast	1,082	20.1%	(17.8%, 22.6%)	94	22.7%	(15.4%, 32.2%)
Detroit Metro	3,363	18.6%	(17.4%, 20.0%)	318	18.7%	(14.8%, 23.3%)
Lives in Michigan	10,065	19.0%	(18.3%, 19.8%)	1,101	21.6%	(19.3%, 24.1%)
Lives Outside of Michigan	1,250	19.5%	(17.4%, 21.8%)	57	22.0%	(13.2%, 34.4%)

DIRECT CARE

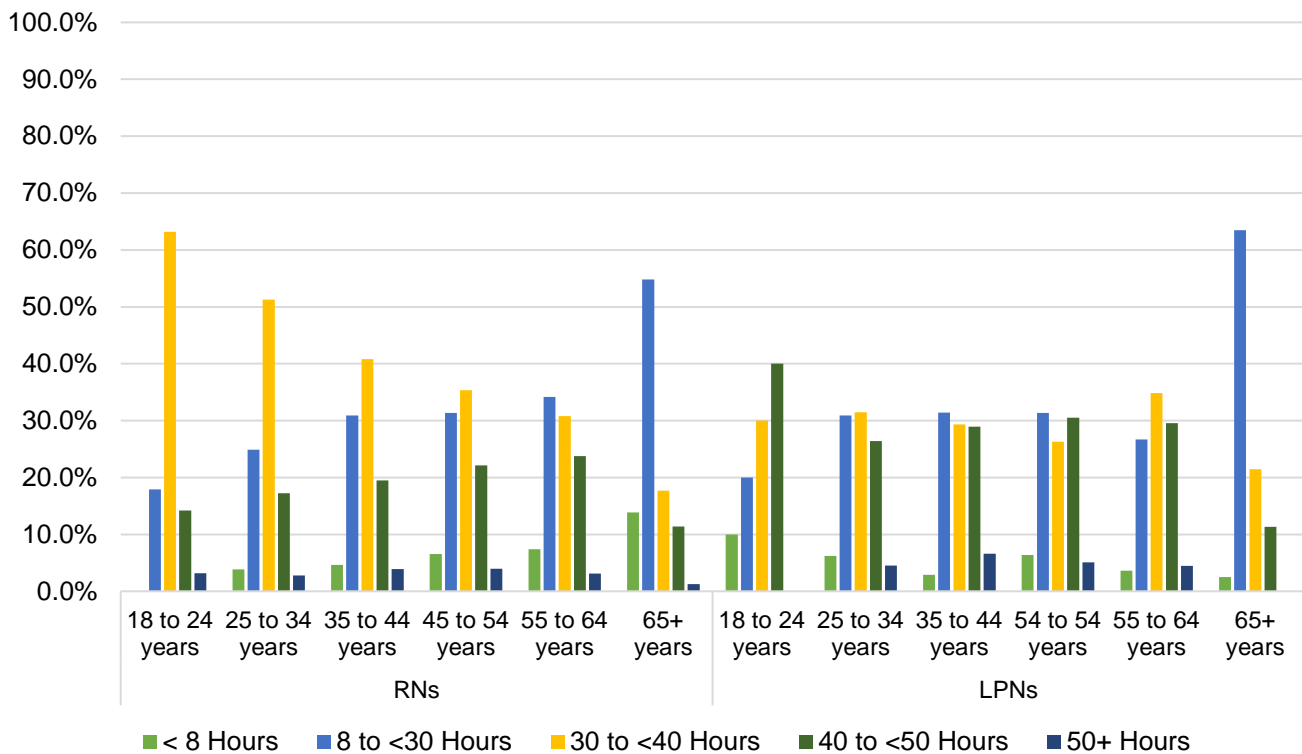
A large majority of RNs (78.0%) and LPNs (88.0%) provide direct care to patients and their families. When asked how many hours per week they provide direct care, 30.6% of RNs provide direct care services 8 to 29 hours per week, and 40.3% provide direct care services 30 to 39 hours per week (Table 28). However, LPNs provide direct care services almost evenly across 8 to 29 hours, 30 to 39 hours, and 40 to 49 hours per week (32.7%, 29.5%, and 27.7% respectively).

Table 28: Hours per Week Spent Providing Direct Care Services

Hours	RN= 8,729		LPN= 1,059	
	Estimate	95% CI	Estimate	95% CI
<8 Hours	5.6%	(5.2%, 6.1%)	4.6%	(3.4%, 5.9%)
8 to <30 Hours	30.6%	(29.6%, 31.6%)	32.7%	(29.9%, 35.6%)
30 to <40 Hours	40.3%	(39.3%, 41.3%)	29.5%	(26.8%, 32.3%)
40 to <50 Hours	19.7%	(18.9%, 20.5%)	27.7%	(25.0%, 30.4%)
50+ Hours	3.3%	(2.9%, 3.7%)	4.7%	(3.5%, 6.0%)

The number of hours RNs and LPNs provide direct care services was also compared to the age of the nurse, as seen in Figure 9. For the most part, the percentage of RNs providing direct patient care services for 30 to 39 hours per week tends to decrease with age; whereas the percentage of LPNs providing direct patient care services varies across ages.

Figure 9: Hours per Week Spent Providing Direct Care Services by Age



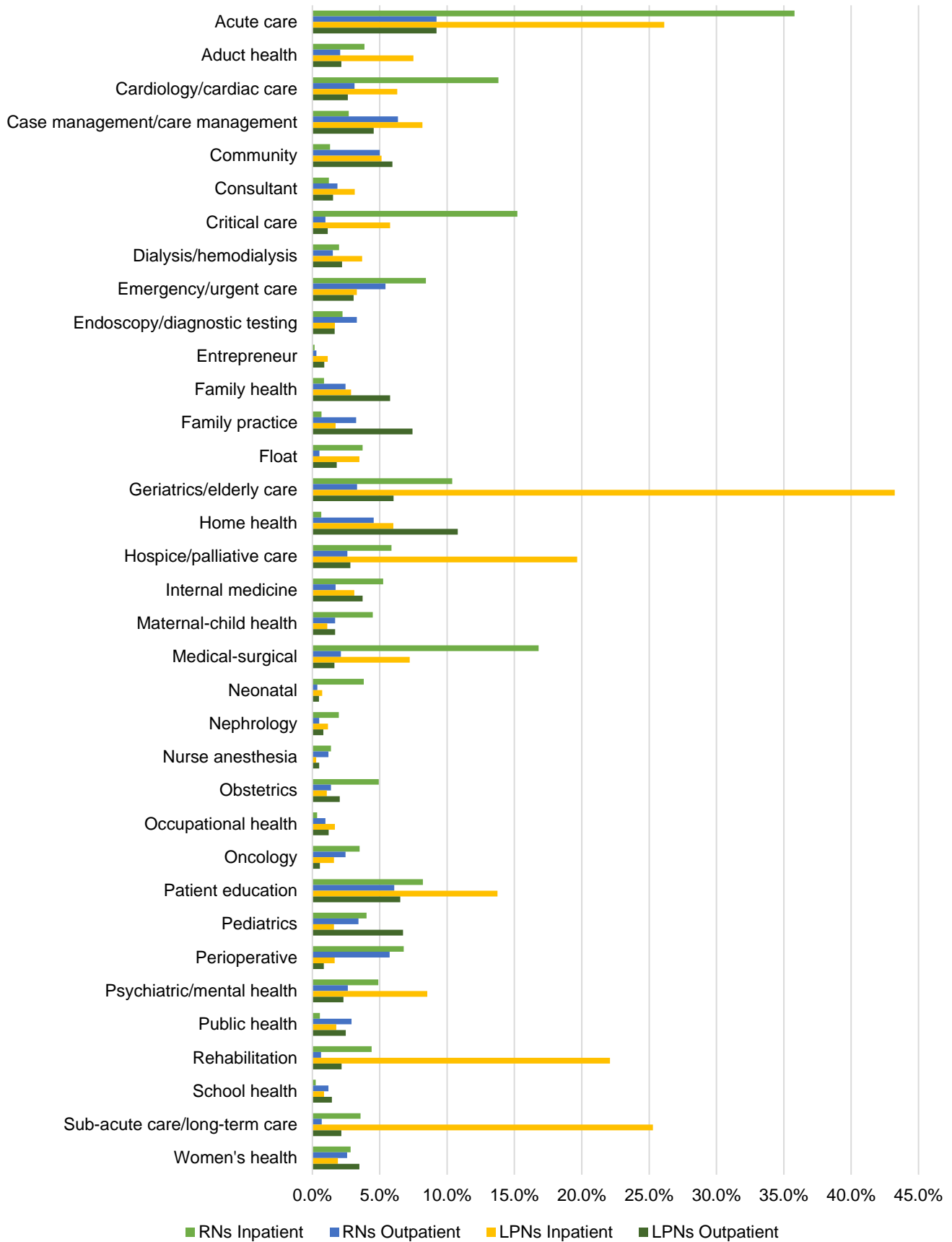
When looking at nurses currently employed and who plan to stop work in five or less years, nurses who provide direct care for eight or more hours per week (12.4% of RNs and 16.8% LPNs) are much less likely to plan on stopping work as a nurse in the next five years compared to nurses who provide direct care for less than eight hours or who do not provide direct care (27.0% of RNs and 29.9% of LPNs; Table 29).

Table 29: Plans to Stop Working in the Next Five Years by Nurses who Provide Direct Care

Provides Direct Care for 8+ Hours/Week	RNs= 8,147			LPNs= 778		
	n	Estimate	95% CI	n	Estimate	95% CI
Yes	5,039	12.4%	(11.7%, 13.2%)	577	16.8%	(14.1%, 19.4%)
No	3,108	27.0%	(26.0%, 27.9%)	201	29.9%	(26.7%, 33.1%)

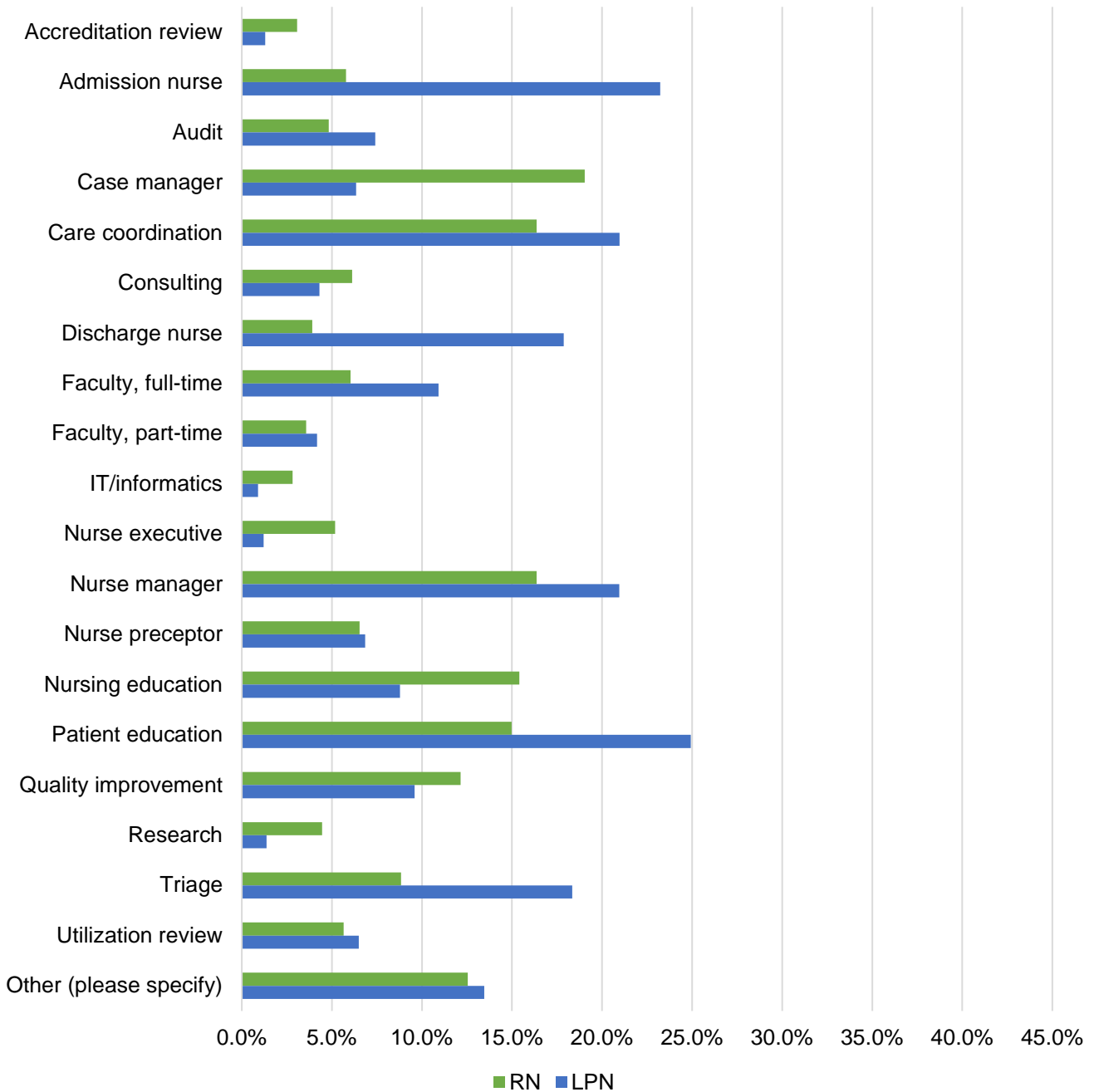
Licensed nurses who are employed as a nurse and provide direct patient care work in a wide variety of inpatient and outpatient practice areas (Figure 10 on the next page). There were a total of 9,769 RNs and 1,233 LPNs who answered this question. The most common RN practice setting is inpatient acute care (35.8%). The most common LPN practice setting is inpatient geriatrics/elderly care (43.2%)

Figure 10: Inpatient & Outpatient Practice Settings Providing Direct Care Services



Some licensed nurses who are employed in nursing do not provide direct patient care services as part of their main nursing role or provide non-direct care services as well as direct care (Figure 11). These nurses in non-direct care settings work in a variety of other roles including care coordination (16.4% of RNs and 21.0% of LPNs). Nineteen percent of RNs are case managers, while 24.9% of LPNs provide patient education.

Figure 11: Main Role Outside of Direct Patient Care



PRACTICE SETTING

Over half of both RNs and LPNs work in inpatient settings (58.0% and 54.7% respectively). Almost one third of RNs and LPNs work in outpatient settings (28.6% and 30.9% respectively). A much smaller percentage of respondents indicated they work in education settings (6.6% RNs and 3.4% LPNs), as shown in Table 30 below.

Table 30: Workplace Setting (Inpatient, Outpatient, and Education)

Workplace Setting	RN= 12,635		LPN= 1,420	
	Estimate	95% CI	Estimate	95% CI
Inpatient	58.0%	(57.1%, 58.8%)	54.7%	(52.1%, 57.3%)
Outpatient	28.6%	(27.9%, 29.4%)	30.9%	(28.5%, 33.3%)
Education	6.6%	(6.2%, 7.1%)	3.4%	(2.4%, 4.3%)
Other**	10.9%	(10.4%, 11.5%)	14.7%	(12.8%, 16.5%)

*Nurses may work in both inpatient and outpatient settings.

**Other was not a response option and was created from nurses who answered no to each of the above employment settings.

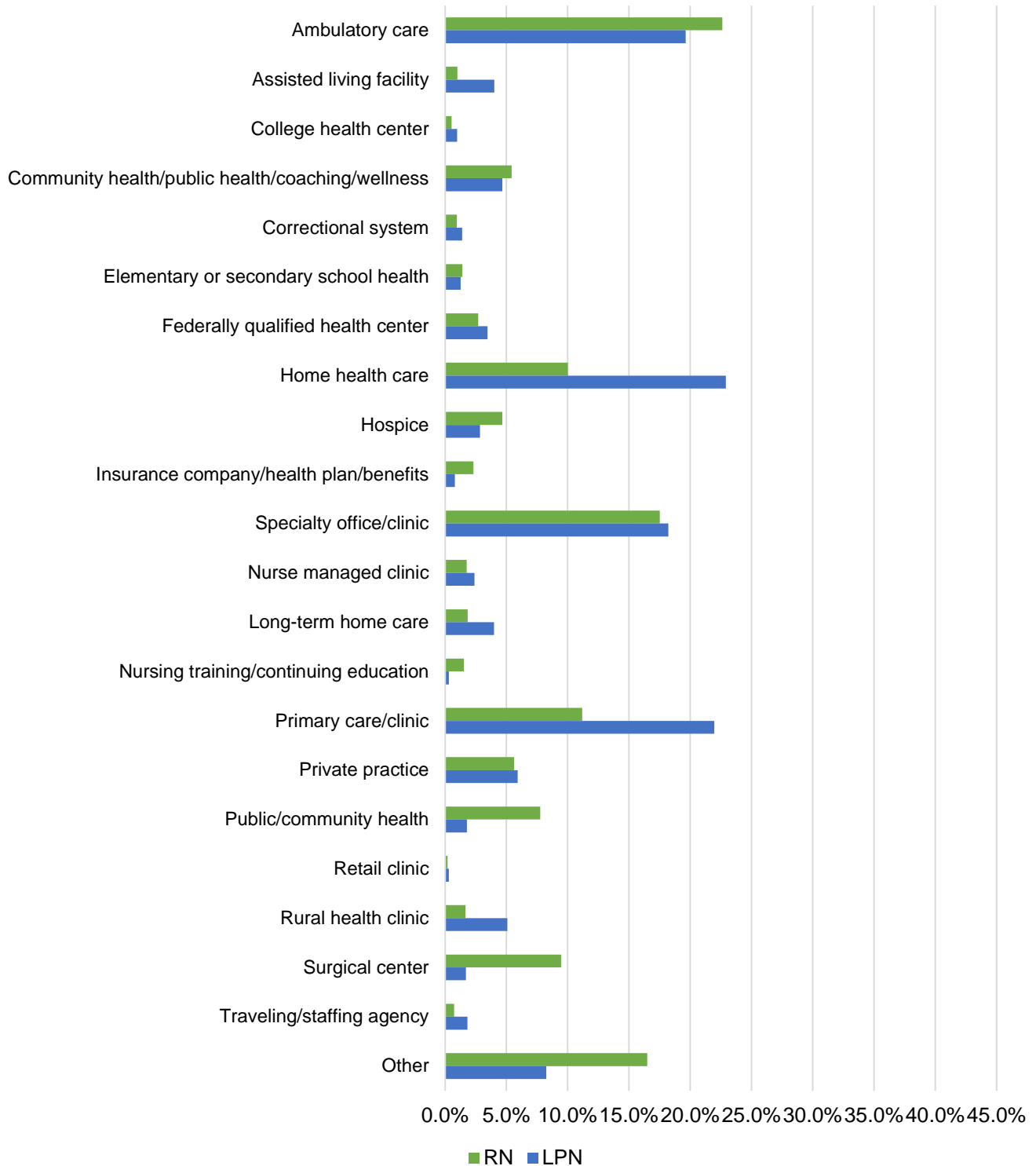
Within the inpatient settings, respondents were asked to identify which setting they are currently working in (Table 31). Most RNs (84.5%) working in an inpatient setting are at a hospital (acute care and acute rehabilitation). Alternatively, the majority of LPNs (71.3%) working in an inpatient setting are at a nursing home or long-term care facility.

Table 31: Inpatient Settings

Inpatient Settings	RN= 7,101		LPN= 771	
	Estimate	95% CI	Estimate	95% CI
Assisted living facility	1.1%	(0.8%, 1.3%)	16.2%	(13.7%, 18.9%)
Behavioral health facility/psychiatric	3.8%	(3.4%, 4.3%)	7.8%	(6.1%, 9.9%)
Correctional system	0.5%	(0.4%, 0.7%)	2.8%	(1.9%, 4.2%)
Hospital (acute care & acute rehabilitation)	84.5%	(83.6%, 85.3%)	10.7%	(8.7%, 13.1%)
Non-acute hospital	1.5%	(1.3%, 1.9%)	3.6%	(2.5%, 5.2%)
Nursing home/long-term care facility	7.5%	(6.9%, 8.2%)	71.3%	(68.0%, 74.4%)
Traveling/staffing agency	2.0%	(1.7%, 2.3%)	3.7%	(2.6%, 5.2%)
Other	4.2%	(3.7%, 4.7%)	8.2%	(6.4%, 10.3%)

Both RNs and LPNs are employed in a wide variety of outpatient practice settings. The largest percentage of RNs (22.6%) are estimated to be working in ambulatory care and LPNs (22.9%) are estimated to be working in a home health care (Figure 12). RNs (17.5%) are also likely to be employed in a specialty office or clinic. LPNs are likely to work in a primary care or clinic (22.0%).

Figure 12: Outpatient Practice Setting



Within the academia settings, the majority of RNs (33.6%) were in a faculty position while most LPNs (26.9%) were in a clinical or didactic position. The next most common academia settings for RNs were clinical or didactic (30.8%) and BSN educator (25.9%). The next most common academia settings for LPNs were faculty (9.8%) and adjunct positions (7.6%) as shown in Table 32 below.

Table 32. Academia Settings

Academia Settings	RN= 904		LPN= 48	
	Estimate	95% CI	Estimate	95% CI
ADN Educator	15.6%	(13.4%, 18.1%)	0.0%	(0.0%, 7.4%)
BSN Educator	25.9%	(23.1%, 28.8%)	0.0%	(0.0%, 7.4%)
CNS Educator	1.4%	(0.8%, 2.4%)	2.5%	(0.5%, 11.5%)
NP Educator	6.9%	(5.4%, 8.8%)	2.0%	(0.3%, 10.7%)
Other Educator	3.5%	(2.5%, 4.9%)	6.2%	(2.1%, 16.8%)
Simulations	17.7%	(15.4%, 20.3%)	7.8%	(3.0%, 18.9%)
Clinical/didactic	30.8%	(27.9%, 33.9%)	26.9%	(16.4%, 40.8%)
Dean/faculty chair	5.2%	(4.0%, 6.9%)	0.0%	(0.0%, 7.4%)
Faculty	33.6%	(30.6%, 36.7%)	9.8%	(4.1%, 21.4%)
Adjunct	19.3%	(16.9%, 22.0%)	7.6%	(2.9%, 18.7%)
Other	18.1%	(15.7%, 20.8%)	33.9%	(22.1%, 48.0%)

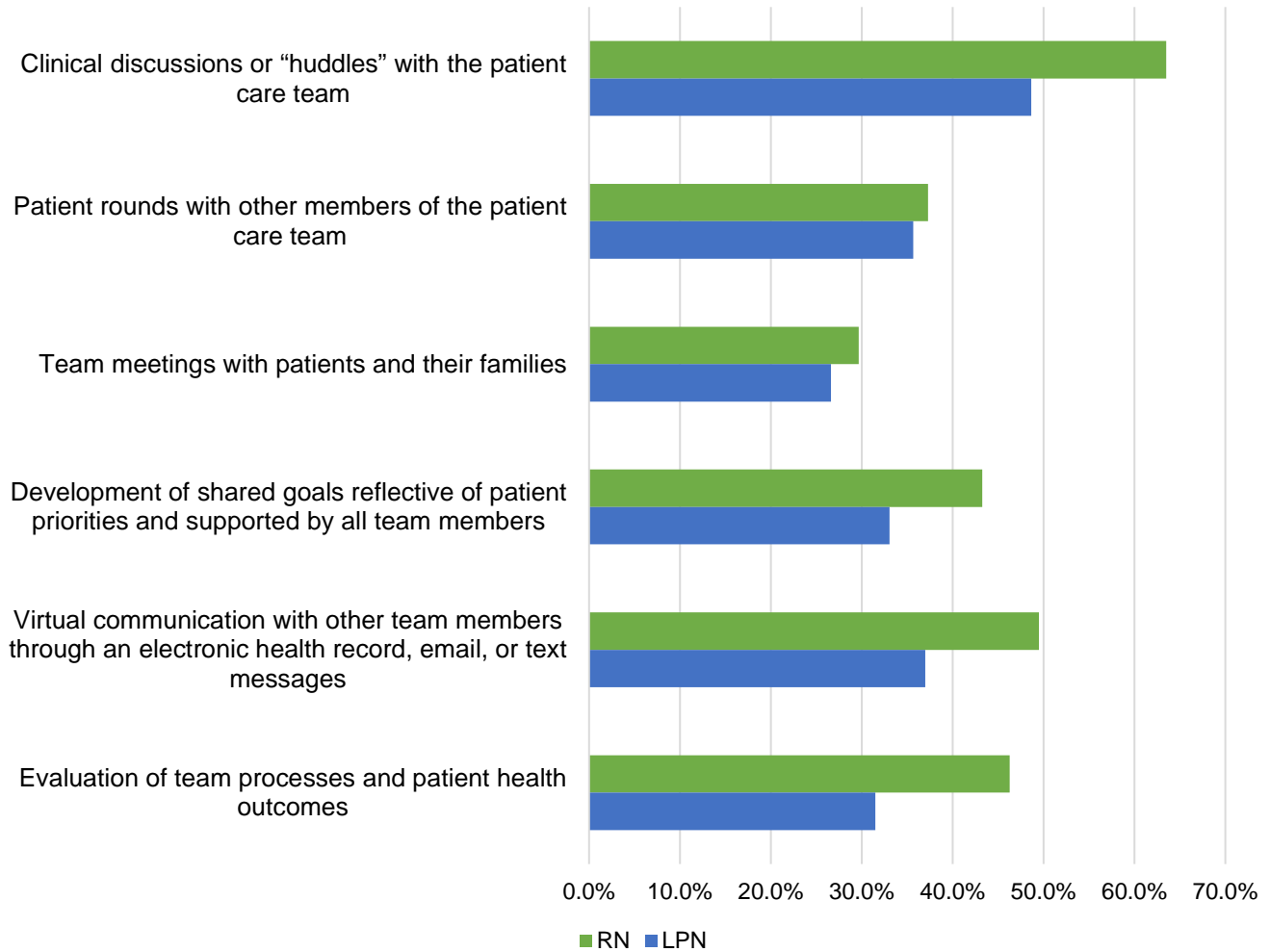
Employed nurses were asked to indicate the number of interprofessional activities they are engaged in as part of their regular work flow. Most RNs (87.5%) and LPNs (80.0%) engage in at least one interprofessional activity as part of their regular nursing duties (Table 33). Furthermore, almost half (45.1%) of RNs engage in four or more interprofessional activities while almost one-third (31.2%) of LPNs engage in the same number of interprofessional activities.

Table 33: The Number of Interprofessional Activities

Number of Interprofessional Activities	RN= 12,061		LPN= 1,293	
	Estimate	95% CI	Estimate	95% CI
0	12.5%	(11.9%, 13.1%)	20.0%	(17.9%, 22.3%)
1	12.9%	(12.4%, 13.5%)	16.9%	(15.0%, 19.1%)
2	15.1%	(14.5%, 15.8%)	16.3%	(14.3%, 18.4%)
3	14.5%	(13.9%, 15.1%)	15.6%	(13.7%, 17.7%)
4	13.4%	(12.8%, 14.0%)	9.9%	(8.4%, 11.6%)
5	11.6%	(11.0%, 12.2%)	7.9%	(6.5%, 9.5%)
6	8.8%	(8.3%, 9.3%)	5.3%	(4.2%, 6.7%)
7	11.3%	(10.7%, 11.8%)	8.1%	(6.8%, 9.7%)

Nurses participate in a variety of interprofessional activities as part of their regular nursing responsibilities. Almost two-thirds of RNs (64.6%) participate in clinical discussions or “huddles” with the patient care team (Figure 13). Almost half of LPNs (48.7%) reported also participating in clinical discussions or “huddles” with the patient care team.

Figure 13: Participation in Interprofessional Activities



*Note 12.5% of RNs and 20.0% of LPNs reported participating in none of the interprofessional activities

Nurses who made a change in employment setting in the past three years were asked to indicate what type of change they made (Table 34). More than half of RNs (57.3%) and LPNs (53.1%) have not made an employment change in the past three years. Of the RNs who made an employment change, the largest percentage (29.9%) indicated that they made some other type of change in employment, with the next most common being some change in locations but stayed in the same care setting (27.7%). LPNs were also most likely (32.8%) to change locations but stay in the same care setting, with the next most common being some other type of change in employment (28.8%).

Table 34: Change in Employment Setting

Change in Employment Setting	RN= 11,605		LPN= 1,239	
	Estimate	95% CI	Estimate	95% CI
Did not make a change	57.3%	(55.9%, 58.7%)	53.1%	(49.0%, 57.2%)
Made a change	42.7%	(41.3%, 44.1%)	46.9%	(42.8%, 51.0%)
Of those who made a change:				
<i>I did not make an employment change in the past three years.</i>	1.2%	(1.0%, 1.6%)	1.3%	(0.7%, 2.6%)
<i>An inpatient setting to an outpatient setting?</i>	18.0%	(17.0%, 19.1%)	13.7%	(11.1%, 16.8%)
<i>An outpatient setting to an inpatient setting?</i>	4.9%	(4.4%, 5.6%)	6.1%	(4.4%, 8.4%)
<i>A primary care setting (e.g., family practice, general medicine) to a specialty care setting?</i>	4.2%	(3.7%, 4.8%)	5.8%	(4.2%, 8.1%)
<i>A specialty care setting to a primary care setting?</i>	2.0%	(1.7%, 2.5%)	3.9%	(2.6%, 5.8%)
<i>A sub-acute care setting to an acute care setting?</i>	3.4%	(2.9%, 4.0%)	2.5%	(1.5%, 4.2%)
<i>An acute care setting to a sub-acute care setting?</i>	2.1%	(1.8%, 2.6%)	2.2%	(1.3%, 3.8%)
<i>A direct patient care setting to a non-direct patient care setting?</i>	13.7%	(12.7%, 14.7%)	9.9%	(7.7%, 12.6%)
<i>A non-direct patient care setting to a direct patient care setting?</i>	4.8%	(4.2%, 5.4%)	6.9%	(5.1%, 9.3%)
<i>I changed locations but stayed in the same care setting.</i>	27.7%	(26.5%, 29.0%)	32.8%	(29.1%, 36.8%)
<i>Some other type of change in employment.</i>	29.9%	(28.7%, 31.2%)	28.8%	(25.2%, 32.6%)

Among RNs who work in an education setting, 29.4% plan to stop working within five years while 16.6% of RNs who work in an inpatient setting plan to stop working within the same five-year period (Table 35). Thirty-eight and four tenths percent LPNs who work in an education setting plan to stop working within five years while 24.2% of LPNs working in an inpatient setting plan to stop working within five years. The percentages in this table represent nurses who are currently working in each practice setting and plan to stop working in the next five years.

Table 35: Plans to Stop Working in the Next Five Years by Employment Setting

Plans to Stop Working in Next 5 Years	RN= 11,456		LPN= 1,179	
	Estimate	95% CI	Estimate	95% CI
Inpatient	16.6%	(16.0%, 17.3%)	24.2%	(21.8%, 26.7%)
Outpatient	15.6%	(15.0%, 16.3%)	16.6%	(14.5%, 18.8%)
Education	29.4%	(28.6%, 30.3%)	38.4%	(35.6%, 41.2%)
Other**	25.7%	(24.9%, 26.5%)	28.4%	(25.8%, 31.0%)

*Nurses may work in both inpatient and outpatient settings.

**Other was not a response option and was created from nurses who answered no to each of the above employment settings.

Additional Information

For additional information related to the 2018 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 (cwojick@mphi.org).

Appendix A: 2019 Survey of Michigan Nurses Data Collection Tool

Question Number	Question	Response Options
#1	Are you a licensed practical nurse (LPN), a registered nurse (RN), or both? (Mark ONE. If you are both an LPN and an RN, complete only one survey.)	<ul style="list-style-type: none"> • LPN • RN
#2	Are you certified in Michigan to practice as a... (Mark ALL that apply.)	<ul style="list-style-type: none"> • Nurse Anesthetist? • Nurse Midwife? • Nurse Practitioner? • Clinical Nurse Specialist?
#3	What type of nursing degree/credential qualified for you for your first U.S. nursing license? (Mark ONE.)	<ul style="list-style-type: none"> • LPN diploma/certificate • RN diploma in nursing [RNs only] • Associate's degree in nursing • Bachelor's degree in nursing [RNs only] • Master's degree in nursing [RNs only] • Doctorate in nursing [RNs only]
#4	What type of nursing degree/credential qualified you for your first U.S. nursing license? (Mark ONE.) [Only see this question if they answer "LPN" for Question #1]	<ul style="list-style-type: none"> • LPN diploma/certificate • Associate's degree in nursing Other (please specify).
#5	In what year did you qualify for your first U.S. nursing license?	
#6	Are you licensed to practice nursing anywhere outside of Michigan? (Mark ONE.)	<ul style="list-style-type: none"> • Yes, in other state(s); please specify • Yes, in other country(ies); please specify • Yes, in other state(s) AND other country(ies); please specify • No.
#7	What is your highest level of <u>nursing</u> education? (Mark ONE.)	<ul style="list-style-type: none"> • 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
#8	What is your highest level of <u>non-nursing</u> education? (Mark ONE.)	<ul style="list-style-type: none"> • Non-nursing associate's degree • Non-nursing bachelor's degree • Non-nursing master's degree • Non-nursing doctoral degree • Not applicable
#9	Are you currently enrolled in a program to obtain any of the following degrees? (Mark ALL that apply.)	<ul style="list-style-type: none"> • No – not enrolled • Associate's Degree in Nursing (ADN) • Bachelor of Science in Nursing (BSN) • Master of Science in Nursing (MSN) • Doctor of Nursing Practice (DNP) • Doctor of Nurse Anesthesia (DNAP) • Doctor of Philosophy in Nursing (PhD)

#10	If 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.)	<ul style="list-style-type: none"> • Nurse Practitioner? • Nurse Midwife? • Nurse Anesthetist? • Clinical Nurse Specialist?
#11	What is your current employment status? (Mark ONE.)	<ul style="list-style-type: none"> • Actively employed in nursing or in a position that requires a nurse license full-time • Actively employed in nursing or a position that requires a nurse license part-time • Actively employed in nursing or in a position that requires a nurse license on a per-diem basis • On temporary medical leave from a position that requires a nurse license • On temporary non-medical leave from a position that requires a nurse license • Actively employed in a field other than nursing • Working in nursing only as a volunteer • Unemployed, seeking work as a nurse • Unemployed, not seeking work as a nurse • Retired
#12	Please indicate the reason(s) why you are not currently employed in nursing full-time. (Mark ALL that apply.)	<ul style="list-style-type: none"> • Taking care of home and family • Enrolled in education program • Difficulty finding a full-time nursing position • Difficulty finding a part-time or on a per-diem basis nursing position • Semi-retired • Burned out/too stressful • Disabled • Inadequate salary • Other (please specify)
#13	Please indicate the reason(s) why you are not currently employed as a nurse. (Mark ALL that apply.)	<ul style="list-style-type: none"> • Taking care of home and family • Enrolled in education program • Difficulty finding a full-time nursing position • Difficulty finding a part-time or on a per-diem basis nursing position • Semi-retired • Burned out/too stressful • Disabled • Inadequate salary • Other (please specify)
#14	In total, how long were you employed as a practicing nurse? (Mark ONE.)	<ul style="list-style-type: none"> • Less than 3 years • 4 to 9 years • 10 years or more
#15	How many positions are you currently employed in as a nurse? (Mark ONE.)	<ul style="list-style-type: none"> • One • Two • Three or more
#16	How many hours do you work <u>during a typical week</u> in all of your nursing positions?	
#17	In any nursing position, are you currently employed in an inpatient setting?	<ul style="list-style-type: none"> • Yes • No
#18	Identify your current inpatient employment setting(s). (Mark ALL that apply.)	<ul style="list-style-type: none"> • Assisted living facilities • Behavioral health facilities/psychiatric • Correctional system • Hospital (acute care & acute rehabilitation)

#18 continued		<ul style="list-style-type: none"> • Hospice • Non-acute hospital • Nursing home/long-term care facility • Traveling/staffing agency • Other nursing employment setting (please specify) 				
#19	In any nursing position, are you currently employed in an outpatient setting?	<ul style="list-style-type: none"> • Yes • No 				
#20	Identify your current outpatient employment setting(s). (Mark ALL that apply.)	<ul style="list-style-type: none"> • Ambulatory care • Assisted living facility • College health center • Community health/public health/coaching/wellness • Correctional system Elementary or secondary school health • Federally qualified health center • Home health care • Hospice Insurance company/health plan/benefits • Specialty office/clinic • Nurse managed clinic • Long-term home care • Nursing training/continuing education • Primary care/clinic • Private practice • Public/community health • Retail clinic • Rural health clinic • Surgical center • Traveling/staffing agency • Other nursing employment setting (please specify) 				
#21	In any nursing position, are you currently employed in an educator or academia setting?	<ul style="list-style-type: none"> • Yes • No 				
#22	Identify your current nurse educator/academia employment setting(s). (Mark ALL that apply).	<ul style="list-style-type: none"> • ADN Educator • BSN Educator • CNS Educator • NP Educator • Simulations • Clinical/didactic • Dean/Faculty Chair • Faculty • Adjunct 				
#23	In any of your positions, do you provide direct care services?	<ul style="list-style-type: none"> • Yes • No 				
#24	How many hours are spent providing direct care services to patients/families?					
#25	If you provide direct care services, please identify your main practice area. (Mark ALL that apply.)	<table> <tr> <td><u>Inpatient</u></td> <td><u>Outpatient</u></td> </tr> <tr> <td> <ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management </td> <td> <ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management </td> </tr> </table>	<u>Inpatient</u>	<u>Outpatient</u>	<ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management 	<ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management
<u>Inpatient</u>	<u>Outpatient</u>					
<ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management 	<ul style="list-style-type: none"> • Acute care • Adult health • Cardiology/cardiac care • Case management/care management 					

<p>#25 continued</p>		<ul style="list-style-type: none"> • Community • Consultant • Critical care • Dialysis/hemodialysis • Emergency/urgent care • Endoscopy/diagnostic testing • Entrepreneur • Family health • Family practice • Float • Geriatrics/elderly care • Home health • Hospice/palliative care • Internal medicine • Maternal-child health • Medical-surgical • Neonatal • Nephrology • Nurse anesthesia • Obstetrics • Occupational health • Oncology • Patient education • Pediatrics • Perioperative • Psychiatric/mental health • Public health • Rehabilitation • School health • Sub-acute care/long term care • Women's health • Other (please specify) 	<ul style="list-style-type: none"> • Community • Consultant • Critical care • Dialysis/hemodialysis • Emergency/urgent care • Endoscopy/diagnostic testing • Entrepreneur • Family health • Family practice • Float • Geriatrics/elderly care • Home health • Hospice/palliative care • Internal medicine • Maternal-child health • Medical-surgical • Neonatal • Nephrology • Nurse anesthesia • Obstetrics • Occupational health • Oncology • Patient education • Pediatrics • Perioperative • Psychiatric/mental health • Public health • Rehabilitation • School health • Sub-acute care/long term care • Women's health • Other (please specify)
<p>#26</p>	<p>If you work in an area of nursing that does NOT include direct patient care services, please identify your main role. (Mark ALL that apply.) If you only provide direct patient care services, select the first response option.</p>	<ul style="list-style-type: none"> • I only provide direct patient care services • Accreditation review • Admission nurse • Audit • Case manager • Care coordination • Consulting • Discharge nurse • Faculty, full-time • Faculty, part-time 	<ul style="list-style-type: none"> • IT/informatics • Nurse administrator • Nurse preceptor • Nursing education • Patient Education • Quality improvement • Research • Triage • Utilization review • Other (please specify)
<p>#27</p>	<p>As part of your regular nursing responsibilities, does your role include participation in any of the following interprofessional activities? (Mark ALL that apply.)</p>	<ul style="list-style-type: none"> • Team discussion of team members' roles and responsibilities • Clinical discussions or "huddles" with the patient care team • Patient rounds with other members of the patient care team 	

#27 continued		<ul style="list-style-type: none"> • Team meetings with patients and their families • Development of shared goals reflective of patient priorities and supported by all team members • Virtual communication with other team members through an electronic health record, email, or text messages • Evaluation of team processes and patient health outcomes • None of the above
#28	<p>If you made a change in your employment setting within the past three years was it a change from... (Mark ALL that apply.)</p>	<ul style="list-style-type: none"> • I did not make an employment change in the past three years. • An inpatient setting to an outpatient setting? • An outpatient setting to an inpatient setting? • A primary care setting (e.g., family practice, general medicine, internal medicine, or general pediatrics) to a specialty care setting? • A specialty care setting to a primary care setting? • A sub-acute care setting to an acute care setting? • An acute care setting to a sub-acute care setting? • A direct patient care setting to a non-direct patient care setting? • A non-direct patient care setting to a direct patient care setting? • I changed locations but stayed in the same care setting. • I made some other type of employment change.
#29	<p>In total, how long have you been employed as a practicing nurse? (Mark ONE.)</p>	<ul style="list-style-type: none"> • Less than 3 years • 3 to less than 10 years • 10 years to less than 19 years • Greater than 19 years
#30	<p>How prepared did you feel when you entered the nursing workforce? (Mark ALL that apply.)</p>	<ul style="list-style-type: none"> • Adequately prepared • Not enough classroom time • Not enough clinical time • Not enough skills lab/simulation time • Not enough critical thinking/prioritization practice • Other (please specify)
#31	<p>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.)</p>	<ul style="list-style-type: none"> • Less than 2 years • 2 to 5 years • 6 to 10 years • More than 10 years • Don't know
#32	<p>Why are you planning on leaving nursing? (Mark ALL that apply.)</p>	<ul style="list-style-type: none"> • Enrolled in education program • Difficulty finding a full-time nursing position • Difficulty finding a part-time or on a per-diem basis nursing position • Too stressful • Work load • Difficulties with EMR/new technology • Violence issues • Safety issues • Other (please specify)
#33	<p>Where is your primary place of employment? (Mark ONE.)</p>	<ul style="list-style-type: none"> • Michigan • Other state in the U.S. • Canada • Other nation

#34	Why is your primary place of employment not in Michigan? (Mark ALL that apply.)	<ul style="list-style-type: none"> • Practice restrictions are better outside of Michigan • Taking care of home and family • School • Difficulty finding a full-time nursing position • Difficulty finding a part-time or on a per-diem basis nursing position • Semi-retired • Other (please specify)
#35	If you work in the U.S., what is the ZIP Code of your <u>primary</u> place of employment?	
#36	Where is your primary place of residence? (Mark ONE.)	<ul style="list-style-type: none"> • Michigan • Other state in the U.S. • Canada • Other nation
#37	If you live in the U.S., what is the ZIP Code of your <u>primary</u> place of residence?	
#38	In what year were you born?	
#39	What is your gender? (Mark ONE.)	<ul style="list-style-type: none"> • Female • Male
#40	What is your ethnicity? (Mark ONE.)	<ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino
#41	What is your race? (Mark ALL that apply.)	<ul style="list-style-type: none"> • White • Black or African American • American Indian or Alaska Native • Asian • Native Hawaiian or Pacific Islander • Middle Eastern (Arab/Chaldean/Other) • Some other race