

# 2018 Survey of Michigan Nurses

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## *Survey Summary Report*

**September 28, 2018**

**Office of Nursing Policy  
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 Policy 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 Policy, MPHI held a stakeholder meeting with nurse-leaders in November of 2017 to discuss revisions to the 2017 survey instrument that would be incorporated into the 2018 edition. A copy of the *2018 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. There were a total of 88,152 nurses scheduled to renew their license in 2018. Each of these nurses was 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. The mail option was discontinued in 2017 leaving the online option as the only method for completing the survey. And, in 2018, 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. Due to the low response rate, a link to the licensure survey was also circulated through nursing professional organizations in Michigan.

The license renewal period spanned from January 1 to March 31, 2018. An additional 60-day grace period allowed for license renewals to take place as late as May 30, 2018. Since the survey was completed following confirmation of re-licensure, the survey administration period was expanded beyond this interval and ran from December 15, 2017 to June 15, 2018. Because the link was circulated through professional organizations, 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. It was, however, anticipated that the likelihood of this occurring was minimal.

## **SURVEY RESPONDENTS & RESPONSE RATES**

A total of 4,137 nurses participated in the *2018 Survey of Michigan Nurses*, which is significantly lower than the 38,926 nurses who completed the 2017 survey. The lower response rate for the 2018 survey

may be attributed to the new process for sending out the link to the survey, including only a single notification and changing the timing of making the link accessible to during acknowledgement of completion of the licensure renewal process rather than during the renewal process. Nurses familiar with the survey would not have seen the link in the usual place, and they may not have looked for it in their acknowledgement of completion of the licensure renewal process. The response rate for the 3,695 registered nurses (RNs) who responded to the survey was 4.9% (compared to 45.3% in 2017), while the response rate for the 442 responding licensed practical nurses (LPNs) was 3.6% (compared to 44.9% in 2017). The distribution of responding nurses by demographic characteristics are presented in Table 1.

**Table 1: Demographic Characteristics of Survey Respondents**

Demographics	RN		LPN	
	n	Estimate	n	Estimate
Total	3,695		442	
<b>Age</b>				
<25 years	33	0.9%	4	0.9%
25 to 34 years	496	13.4%	41	9.3%
35 to 44 years	552	14.9%	72	16.3%
45 to 54 years	696	18.8%	95	21.5%
55 to 64 years	1,024	27.7%	110	24.9%
65+ years	606	16.4%	72	16.3%
Unknown	288	7.8%	48	10.9%
<b>Gender</b>				
Female	3,203	86.7%	381	86.2%
Male	274	7.4%	21	4.8%
Unknown	218	5.9%	40	9.0%
<b>Race</b>				
White	3,039	82.2%	290	65.6%
Black or African American	233	6.3%	89	20.1%
American Indian or Alaska Native	43	1.2%	5	1.1%
Asian	133	3.6%	8	1.8%
Native Hawaiian or Pacific Islander	9	0.2%	2	0.5%
Middle Eastern (Arab/Chaldean/Other)	25	0.7%	2	0.5%
Other	52	1.4%	9	2.0%
Unknown	245	6.6%	44	10.0%
<b>Ethnicity</b>				
Hispanic or Latino	69	1.9%	7	1.6%
Not Hispanic or Latino	3,362	91.0%	387	87.6%
Unknown	264	7.1%	48	10.9%
<b>Region</b>				
Upper Peninsula	91	2.5%	23	5.2%
Northwest LP	123	3.3%	15	3.4%
Northeast LP	50	1.4%	9	2.0%
West/West Central	473	12.8%	67	15.2%
East Central	164	4.4%	19	4.3%
East	222	6.0%	34	7.7%
South Central	132	3.6%	15	3.4%
Southwest	233	6.3%	27	6.1%
Southeast	362	9.8%	34	7.7%
Detroit Metro	1,128	30.5%	122	27.6%
MI, Unknown Region	144	3.9%	19	4.3%
Outside MI	378	10.2%	21	4.8%
Unknown	195	5.3%	37	8.4%

## 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](http://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). For example, 89.3% of nurses who completed the survey were RNs compared to 86.1% of all nurses who are licensed as RNs. Additionally, nurses over the age of 55 were overrepresented among survey respondents while younger nurses were underrepresented, which could skew the survey results toward the perspective of older nurses. To adjust for such differences in the survey sample compared to the overall nurse population, 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	Nurse Population (Licensure Data)						Survey Data	
	2018		2019		Total		2018	
	#	%	#	%	#	%	#	%
<b>Total</b>	<b>88,152</b>	<b>-</b>	<b>84,974</b>	<b>-</b>	<b>173,126</b>	<b>-</b>	<b>4,137</b>	<b>-</b>
<b>RNs</b>	<b>75,763</b>	<b>85.9%</b>	<b>73,230</b>	<b>86.2%</b>	<b>148,993</b>	<b>86.1%</b>	<b>3,695</b>	<b>89.3%</b>
NPs	3,531	4.7%	3,616	4.9%	7,147	4.8%	271	7.3%
Anesthetists	1,269	1.7%	1,407	1.9%	2,676	1.8%	46	1.2%
Nurse Midwives	193	0.3%	200	0.3%	393	0.3%	32	0.9%
<b>Age</b>								
<25 years	1,526	2.0%	1,174	1.6%	2,700	1.8%	33	0.9%
25 to 34 years	14,404	19.0%	13,886	19.0%	28,290	19.0%	496	13.4%
35 to 44 years	15,232	20.1%	14,779	20.2%	30,011	20.1%	552	14.9%
45 to 54 years	16,782	22.2%	16,160	22.1%	32,942	22.1%	696	18.8%
55 to 64 years	18,174	24.0%	18,359	25.1%	36,533	24.5%	1,024	27.7%
65+ years	9,629	12.7%	8,866	12.1%	18,495	12.4%	606	16.4%
Unknown	16	0.0%	6	0.0%	22	0.0%	288	7.8%
<b>Region</b>								
Eastern/Central/Western UP	2,097	2.8%	1,975	2.7%	4,072	2.7%	91	2.5%
Northwest LP	2,402	3.2%	2,521	3.4%	4,923	3.3%	123	3.3%
Northeast LP	1,177	1.6%	1,209	1.7%	2,386	1.6%	50	1.4%
West/West Central	9,703	12.8%	9,619	13.1%	19,322	13.0%	473	12.8%
East Central	3,906	5.2%	3,609	4.9%	7,515	5.0%	164	4.4%
East	6,088	8.0%	5,872	8.0%	11,960	8.0%	222	6.0%
South Central	2,666	3.5%	2,728	3.7%	5,394	3.6%	132	3.6%
Southwest	4,804	6.3%	4,772	6.5%	9,576	6.4%	233	6.3%
Southeast	7,626	10.1%	7,463	10.2%	15,089	10.1%	362	9.8%
Detroit Metro	25,365	33.5%	24,611	33.6%	49,976	33.5%	1,128	30.5%
MI, Unknown Region							144	3.9%
Outside of MI	9,929	13.1%	8,851	12.1%	18,780	12.6%	378	10.2%
Unknown							195	5.3%
<b>LPNs</b>	<b>12,389</b>	<b>14.1%</b>	<b>11,744</b>	<b>13.8%</b>	<b>24,133</b>	<b>13.9%</b>	<b>442</b>	<b>10.7%</b>

Characteristics	Nurse Population (Licensure Data)						Survey Data	
	2018		2019		Total		2018	
	#	%	#	%	#	%	#	%
<b>Age</b>								
<25 years	239	1.9%	215	1.8%	454	1.9%	4	0.9%
25 to 34 years	2,190	17.7%	2,018	17.2%	4,208	17.4%	41	9.3%
35 to 44 years	2,626	21.2%	2,409	20.5%	5,035	20.9%	72	16.3%
45 to 54 years	2,566	20.7%	2,432	20.7%	4,998	20.7%	95	21.5%
55 to 64 years	2,994	24.2%	3,089	26.3%	6,083	25.2%	110	24.9%
65+ years	1,770	14.3%	1,578	13.4%	3,348	13.9%	72	16.3%
Unknown	4	0.0%	3	0.0%	7	0.0%	48	10.9%
<b>Region</b>								
Eastern/Central/Western UP	815	6.6%	849	7.2%	1,664	6.9%	23	5.2%
Northwest LP	363	2.9%	305	2.6%	668	2.8%	15	3.4%
Northeast LP	399	3.2%	376	3.2%	775	3.2%	9	2.0%
West/West Central	1,937	15.6%	1,926	16.4%	3,863	16.0%	67	15.2%
East Central	805	6.5%	853	7.3%	1,658	6.9%	19	4.3%
East	1,177	9.5%	1,084	9.2%	2,261	9.4%	34	7.7%
South Central	385	3.1%	368	3.1%	753	3.1%	15	3.4%
Southwest	916	7.4%	839	7.1%	1,755	7.3%	27	6.1%
Southeast	1,176	9.5%	1,010	8.6%	2,186	9.1%	34	7.7%
Detroit Metro	3,648	29.4%	3,516	29.9%	7,164	29.7%	122	27.6%
MI, Unknown Region							19	4.3%
Outside of MI	768		618	5.3%	1,386		21	4.8%
Unknown						0.0%	37	8.4%

## Results of the 2018 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, and 2018 survey results so comparisons between these three 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 2018 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 43.8% of RNs is a bachelor’s degree in nursing and 35.0% hold an associate’s degree in nursing as their highest level of education. Almost all LPNs (93.2%) reported a LPN diploma/certificate being their highest level of nursing education. Over half of RNs and LPNs, 64.5% and 67.1% 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 = 3,681		LPN = 442	
	Estimate	95% CI	Estimate	95% CI
LPN diploma/certificate	*	*	93.2%	(90.5%, 95.2%)
RN diploma in nursing	7.4%	(6.6%, 8.3%)	*	*
Associate’s degree in nursing	35.0%	(33.5%, 36.6%)	6.1%	(4.2%, 8.7%)
Bachelor’s degree in nursing	43.8%	(42.2%, 45.4%)	*	*
Master’s degree in nursing	11.8%	(10.8%, 12.9%)	*	*
Doctorate in Nursing Practice (DNP)	1.0%	(0.8%, 1.4%)	*	*
Doctor of Philosophy in Nursing (PhD)	0.7%	(0.4%, 1.0%)	*	*
Other doctoral degree in nursing	0.1%	(0.0%, 0.3%)	*	*

Table 4: Highest Level of Non-Nursing Education

Education Level	RN = 3,580		LPN = 438	
	Estimate	95% CI	Estimate	95% CI
Non-nursing associate’s degree	12.7%	(11.6%, 13.8%)	25.3%	(21.5%, 29.6%)
Non-nursing bachelor’s degree	15.7%	(14.6%, 16.9%)	6.6%	(4.7%, 9.3%)
Non-nursing master’s degree	6.4%	(5.7%, 7.3%)	*	*
Non-nursing doctoral degree	0.7%	(0.5%, 1.1%)	*	*
Not applicable	64.5%	(62.9%, 66.0%)	67.1%	(62.6%, 71.3%)

Nurses were asked to select which level of degree/certificate qualified them for their first nursing license. As shown in Table 5, 40.8% of RNs started with a bachelor’s degree in nursing. Almost all LPNs applied for an LPN diploma/certificate (95.4%) as their first license. Almost five 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.

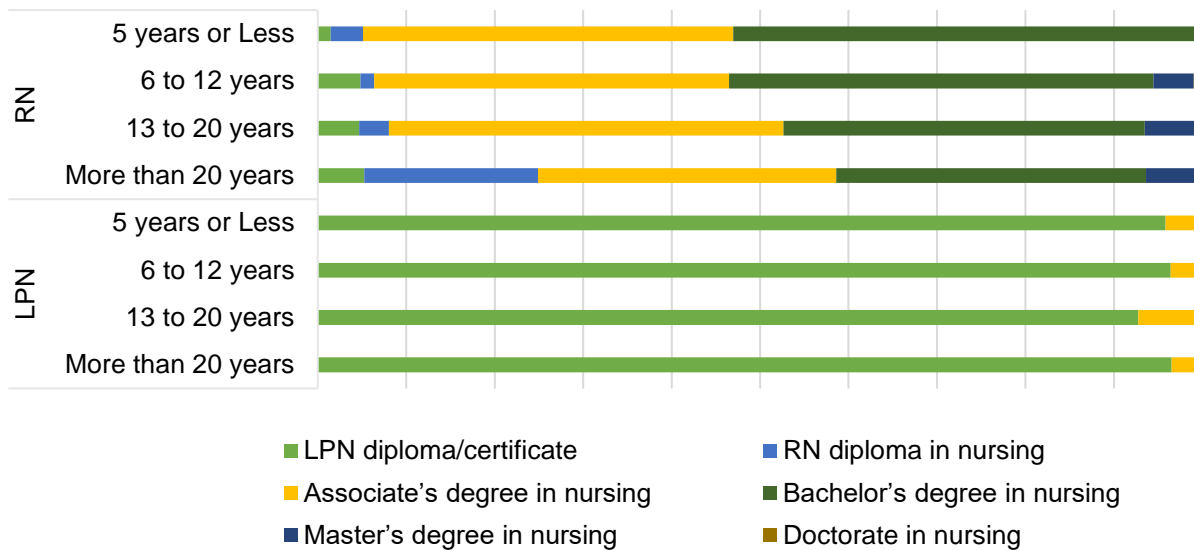
**Table 5: Educational Background that Qualified for First Nursing License**

Education Level	RN = 3,689		LPN = 438	
	Estimate	95% CI	Estimate	95% CI
LPN diploma/certificate	4.5%	(3.9%, 5.2%)	95.4%	(93.1%, 97.0%)
RN diploma in nursing	11.5%	(10.6%, 12.6%)	*	*
Associate's degree in nursing	37.7%	(36.2%, 39.3%)	4.6%	(3.0%, 6.9%)
Bachelor's degree in nursing	40.8%	(39.2%, 42.4%)	*	*
Master's degree in nursing	4.7%	(4.0%, 5.4%)	*	*
Doctorate in nursing	0.7%	(0.5%, 1.1%)	*	*

\*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 working up to 12 years and more than 20 years, had mostly completed a pre-licensure bachelor's degree in nursing (35.0-52.1%) as their first nursing license. However, most RNs working 13 to 20 years entered nursing after completing a pre-licensure Associate Degree in Nursing (ADN) (44.6%). Almost all LPNs (92.7-96.5%) entered nursing after completing a pre-licensure LPN diploma/certificate, with a much smaller portion (3.5-7.3%) 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 4.9% of RNs hold certification as nurse practitioners and 0.8% are certified nurse anesthetists. Less than one percent (0.7%) of RNs are clinical nurse specialists while 0.6% are nurse midwives.



**Table 6: Current Specialty Certifications in Michigan**

Certification	n= 3,695	
	Estimate	95% CI
Nurse Practitioner	4.9%	(4.2%, 5.6%)
Nurse Anesthetist	0.8%	(0.6%, 1.2%)
Nurse Midwife	0.6%	(0.4%, 0.9%)
Clinical Nurse Specialist	0.7%	(0.5%, 1.0%)

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), or Doctor of Philosophy in Nursing (PhD) degree (Table 7). It is estimated that 5.1% of RNs and 2.0% of LPNs are currently enrolled in a program to earn a BSN, while 3.4% of RNs are enrolled in a program to obtain a MSN. Thirteen 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= 3,695		LPN= 442	
	Estimate	95% CI	Estimate	95% CI
Associate's Degree in Nursing (ADN)	0.3%	(0.2%, 0.5%)	13.3%	(10.5%, 16.8%)
Bachelor of Science in Nursing (BSN)	5.1%	(4.4%, 5.9%)	2.0%	(1.1%, 3.8%)
Master of Science in Nursing (MSN)	3.4%	(2.9%, 4.1%)	*	*
Doctor of Nursing Practice (DNP)	1.1%	(0.8%, 1.5%)	*	*
Doctor of Philosophy in Nursing (PhD)	0.3%	(0.1%, 0.5%)	*	*
Not Enrolled	89.8%	(88.8%, 90.8%)	84.6%	(81.0%, 87.7%)

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, 76.4% of RNs are currently enrolled to become nurse practitioners and 9.2% are enrolled to become clinical nurse specialists.

**Table 8: Educational Preparation to Earn Specialty Certification**

Certification	RN= 131	
	Estimate	95% CI
Nurse Practitioner	76.4%	(68.4%, 82.8%)
Nurse Midwife	6.8%	(3.6%, 12.5%)
Nurse Anesthetist	7.6%	(4.2%, 13.5%)
Clinical Nurse Specialist	9.2%	(5.3%, 15.4%)

## 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, 63.3% and 62.2% respectively, are currently employed full-time in a position that requires a nurse license (Table 9).

Table 9: Current Employment Status

Employment	RN= 3,695		LPN= 442	
	Estimate	95% CI	Estimate	95% CI
Actively employed in nursing or a position that requires a nurse license full-time	63.3%	(61.8%, 64.9%)	62.2%	(57.6%, 66.6%)
Actively employed in nursing or a position that requires a nurse license part-time	12.6%	(11.6%, 13.7%)	11.8%	(9.1%, 15.1%)
Actively employed in nursing or a position that requires a nurse license on a per-diem basis	4.7%	(4.0%, 5.4%)	4.8%	(3.1%, 7.2%)
On temporary medical leave from a position that requires a nurse license	0.6%	(0.4%, 0.9%)	*	*
On temporary non-medical leave from a position that requires a nurse license	0.2%	(0.1%, 0.4%)	*	*
Actively employed in a field other than nursing	2.5%	(2.0%, 3.0%)	4.3%	(2.8%, 6.6%)
Working in nursing only as a volunteer	1.5%	(1.2%, 1.9%)	*	*
Unemployed, seeking work as a nurse	1.8%	(1.4%, 2.2%)	3.4%	(2.1%, 5.5%)
Unemployed, not seeking work as a nurse	3.4%	(2.8%, 4.0%)	3.4%	(2.1%, 5.5%)
Retired	9.6%	(8.7%, 10.6%)	7.9%	(5.7%, 10.8%)

Among all licensed nurses in Michigan, 83.3% of RNs and 79.0% of LPNs are currently employed as a nurse (Table 10, below and continued onto next page). The percentage of RNs and LPNs 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 are more likely to be currently employed as a nurse than female RNs; whereas female LPNs are more likely to be currently employed as a nurse than male LPNs. Nurses living in the Southwest region of Michigan are employed as a nurse at the highest levels (89.0% for RNs and 97.6% for LPNs) compared to other regions of the State.

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

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Total	3,695	83.3%	(82.1%, 84.5%)	442	79.0%	(75.2%, 82.8%)
Age						
18 to 24 years	33	97.0%	(91.1%, 100.0%)	4	100.0%	(100.0%, 100.0%)
25 to 34 years	496	94.2%	(92.1%, 96.3%)	41	87.8%	(77.8%, 97.8%)
35 to 44 years	552	92.0%	(89.8%, 94.3%)	72	87.5%	(79.9%, 95.1%)
45 to 54 years	696	90.7%	(88.5%, 92.8%)	95	86.3%	(79.4%, 93.2%)
55 to 64 years	1,024	79.9%	(77.4%, 82.3%)	110	73.6%	(65.4%, 81.9%)
65+ years	606	44.2%	(40.2%, 48.1%)	72	51.4%	(39.8%, 62.9%)
Gender						
Female	3,203	83.1%	(81.8%, 84.4%)	381	80.0%	(75.9%, 84.0%)
Male	274	85.9%	(81.8%, 90.0%)	21	61.3%	(40.5%, 82.1%)

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Race						
White	3,039	82.7%	(81.4%, 84.1%)	290	74.2%	(69.2%, 79.2%)
Black or African American	233	86.1%	(81.6%, 90.5%)	89	92.3%	(86.8%, 97.9%)
Other	249	88.0%	(83.9%, 92.0%)	25	92.3%	(81.8%, 100.0%)
Ethnicity						
Hispanic or Latino	69	94.6%	(89.3%, 99.9%)	7	100.0%	(100.0%, 100.0%)
Not Hispanic or Latino	3,362	83.1%	(81.8%, 84.4%)	387	79.0%	(74.9%, 83.0%)
Residency						
Upper Peninsula	91	83.9%	(76.4%, 91.5%)	23	69.4%	(50.6%, 88.2%)
Northwest LP	123	79.9%	(72.9%, 87.0%)	15	75.2%	(53.4%, 97.1%)
Northeast LP	50	79.2%	(68.0%, 90.5%)	9	72.4%	(43.2%, 100.0%)
West/West Central	473	86.5%	(83.4%, 89.6%)	67	75.1%	(64.8%, 85.5%)
East Central	164	83.8%	(78.1%, 89.4%)	19	82.7%	(65.7%, 99.7%)
East	222	79.7%	(74.4%, 85.0%)	34	69.2%	(53.7%, 84.7%)
South Central	132	85.8%	(79.8%, 91.7%)	15	64.4%	(40.1%, 88.6%)
Southwest	233	89.0%	(85.0%, 93.0%)	27	97.6%	(91.8%, 100.0%)
Southeast	362	79.4%	(75.2%, 83.6%)	34	78.9%	(65.2%, 92.6%)
Detroit Metro	1,128	85.0%	(82.9%, 87.1%)	122	85.5%	(79.2%, 91.7%)
Outside MI	378	76.3%	(72.0%, 80.6%)	21	62.0%	(41.3%, 82.8%)

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 (21.5-24.1% and 19.4-23.5% respectively). Most RNs (92.0%) and LPNs (96.2%) are female.

Table 11: Demographic Characteristics of Employed Nurses

Demographics	RN = 2,796		LPN = 311	
	Estimate	95% CI	Estimate	95% CI
Age				
18 to 24 years	2.1%	(1.6%, 2.7%)	2.4%	(1.2%, 4.8%)
25 to 34 years	21.5%	(20.0%, 23.0%)	19.4%	(15.4%, 24.1%)
35 to 44 years	22.3%	(20.8%, 23.8%)	23.1%	(18.8%, 28.1%)
45 to 54 years	24.1%	(22.5%, 25.7%)	22.6%	(18.3%, 27.6%)
55 to 64 years	23.5%	(22.0%, 25.1%)	23.5%	(19.1%, 28.5%)
65+ years	6.6%	(5.7%, 7.6%)	9.0%	(6.3%, 12.7%)
Gender				
Female	92.0%	(90.9%, 92.9%)	96.2%	(93.4%, 97.8%)
Male	8.0%	(7.1%, 9.1%)	3.8%	(2.2%, 6.6%)
Race				
White	87.7%	(86.4%, 88.8%)	68.6%	(63.3%, 73.5%)
Black	6.8%	(5.9%, 7.8%)	26.2%	(21.6%, 31.4%)
Other	7.7%	(6.8%, 8.8%)	7.3%	(4.9%, 10.7%)
Hispanic or Latino				
Hispanic or Latino	2.4%	(1.9%, 3.0%)	2.2%	(1.0%, 4.5%)
Not Hispanic or Latino	97.6%	(97.0%, 98.1%)	97.8%	(95.5%, 99.0%)

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 (33.9%) and work (34.4%) 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 lower (32.4% and 35.0% respectively) than RNs. The percentage of RNs and LPNs licensed in Michigan who are employed outside of Michigan has similarity with the percentage of nurses who live outside of Michigan.

**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	2.7%	(2.2%, 3.4%)	2.8%	(2.2%, 3.4%)	5.3%	(3.3%, 8.5%)	5.1%	(3.1%, 8.2%)
Northwest LP	3.5%	(2.9%, 4.3%)	3.7%	(3.0%, 4.5%)	3.5%	(1.9%, 6.2%)	3.1%	(1.7%, 5.8%)
Northeast LP	1.4%	(1.0%, 2.0%)	1.3%	(1.0%, 1.9%)	2.0%	(0.9%, 4.3%)	2.0%	(0.9%, 4.3%)
West/West Central	15.4%	(14.1%, 16.8%)	15.2%	(13.9%, 16.6%)	17.2%	(13.3%, 21.9%)	18.9%	(14.8%, 23.7%)
East Central	5.1%	(4.3%, 6.0%)	5.0%	(4.2%, 5.9%)	5.5%	(3.4%, 8.7%)	6.3%	(4.1%, 9.6%)
East	6.5%	(5.6%, 7.5%)	5.1%	(4.3%, 6.0%)	7.2%	(4.8%, 10.7%)	5.7%	(3.6%, 8.9%)
South Central	4.0%	(3.3%, 4.8%)	4.1%	(3.4%, 4.9%)	3.3%	(1.8%, 6.0%)	4.1%	(2.4%, 7.0%)
Southwest	7.5%	(6.5%, 8.5%)	7.7%	(6.8%, 8.8%)	10.3%	(7.3%, 14.2%)	8.7%	(6.0%, 12.4%)
Southeast	10.3%	(9.2%, 11.5%)	11.7%	(10.6%, 13.0%)	9.1%	(6.3%, 12.9%)	7.7%	(5.2%, 11.3%)
Detroit Metro	33.9%	(32.2%, 35.7%)	34.4%	(32.6%, 36.2%)	32.4%	(27.4%, 38.0%)	35.0%	(29.8%, 40.6%)
Outside MI	9.7%	(8.7%, 10.9%)	9.0%	(8.0%, 10.2%)	4.2%	(2.5%, 7.2%)	3.4%	(1.9%, 6.2%)

Among nurses who were working part-time or on a per diem basis, 55.1% of RNs and 46.1% of LPNs indicated that they do so because they are also taking care of the home and family (Table 13). However, 20.7% of RNs and 26.7% of LPNs work part-time or on a per diem basis because they are semi-retired. Only 4.3% 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 = 609		LPN = 69	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	55.1%	(51.1%, 59.0%)	46.1%	(34.8%, 57.7%)
School	10.7%	(8.4%, 13.4%)	26.8%	(17.7%, 38.2%)
Difficulty finding a full-time nursing position	4.3%	(2.9%, 6.2%)	*	*
Prefer to work part-time or per diem basis	0.4%	(0.1%, 1.3%)	*	*
Semi-retired	20.7%	(17.7%, 24.1%)	26.7%	(17.7%, 38.1%)
Burned Out	12.5%	(10.1%, 15.4%)	7.9%	(3.5%, 16.7%)
Other	12.2%	(9.8%, 15.0%)	11.9%	(6.2%, 21.6%)

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 (47.6% and 45.2% 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 = 61		LPN = 14	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	47.6%	(35.6%, 59.9%)	45.2%	(23.2%, 69.4%)
Difficulty finding a full-time nursing position	13.2%	(6.8%, 23.8%)	5.6%	(0.8%, 29.5%)
Difficulty finding a part-time or on a per-diem basis nursing position	9.6%	(4.4%, 19.6%)	12.3%	(3.1%, 37.6%)
Semi-retired	19.8%	(11.7%, 31.4%)	30.1%	(12.7%, 56.1%)
Burned out	11.8%	(5.9%, 22.2%)	12.4%	(3.2%, 37.8%)
Other (please specify)	24.9%	(15.7%, 37.0%)	24.5%	(9.3%, 50.7%)

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 (64.7%) responded they are unemployed and not seeking work as a nurse due to taking care of home and family (Table 15). LPNs responses showed much more variation. However, taking care of home and family was still their most common reason but at a much lower percentage (29.9%).

**Table 15: Unemployed and Not Seeking Work as a Nurse**

Unemployed and NOT seeking work as a nurse	RN = 120		LPN = 15	
	Estimate	95% CI	Estimate	95% CI
Taking care of home and family	64.7%	(52.2%, 75.5%)	29.9%	(12.6%, 55.9%)
School	6.2%	(2.4%, 15.2%)	13.1%	(3.5%, 38.6%)
Difficulty finding a full-time nursing position	1.6%	(0.3%, 8.7%)	0.0%	(0.0%, 21.5%)
Difficulty finding a part-time or on a per-diem basis nursing position	5.4%	(1.9%, 14.2%)	7.5%	(1.4%, 31.9%)
Semi-retired	19.6%	(11.6%, 31.3%)	16.8%	(5.2%, 42.7%)
Burned out	9.3%	(4.2%, 19.2%)	19.0%	(6.3%, 45.1%)
Other (please specify)	12.4%	(6.3%, 22.9%)	47.6%	(25.0%, 71.3%)

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, 81.9% and 84.4% respectively. For those RNs and licensed out of state, the majority are licensed in Florida (22.6%), while LPNs licensed out of state are mostly in Ohio (26.9%). Almost half (45.8%) of RNs who are licensed in another country are licensed in Canada.

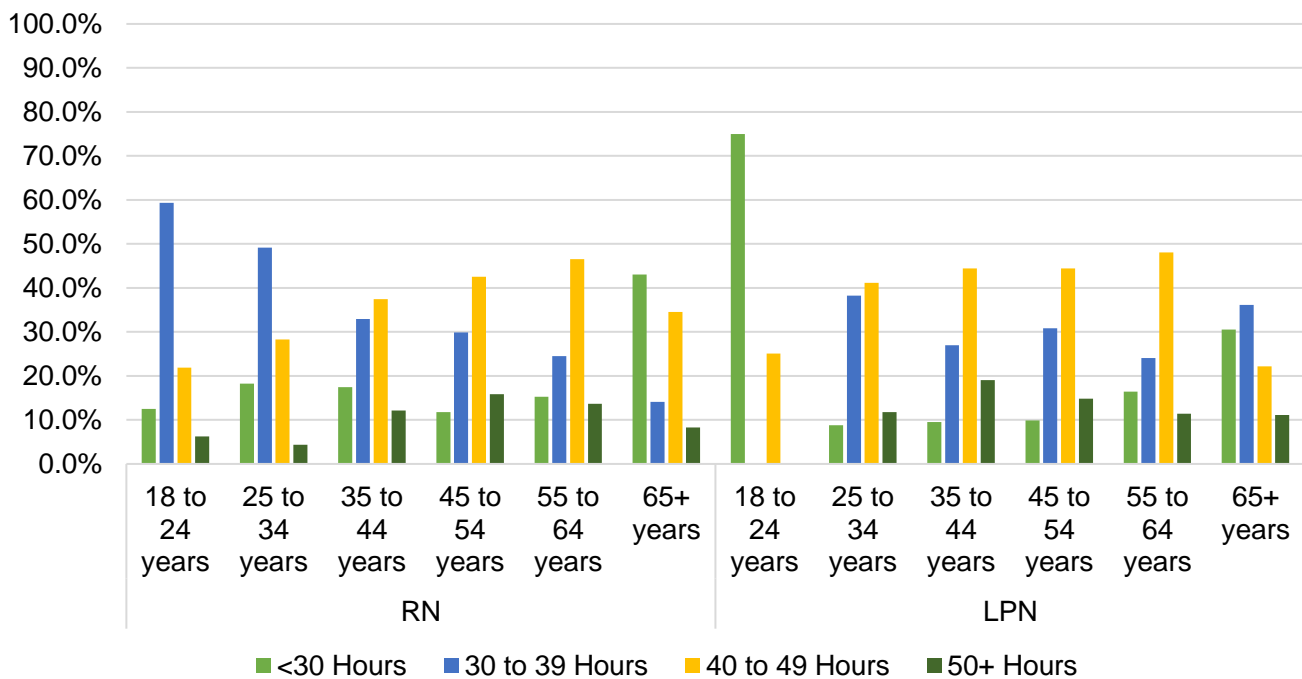
Table 16: Nurses Licensed Out of State or Country

Region	RN = 3,695		LPN = 442	
	Estimate	95% CI	Estimate	95% CI
Michigan Only	81.9%	(80.6%, 83.1%)	84.4%	(80.7%, 87.5%)
Other U.S. State*	16.9%	(15.7%, 18.1%)	15.2%	(12.1%, 18.8%)
Ohio	18.1%	(15.2%, 21.3%)	26.9%	(23.0%, 31.2%)
Indiana	14.1%	(11.6%, 17.1%)	13.4%	(10.6%, 16.9%)
Illinois	15.2%	(12.6%, 18.2%)	9.0%	(6.6%, 12.0%)
Wisconsin	11.9%	(9.6%, 14.7%)	13.4%	(10.6%, 16.9%)
Florida	22.6%	(19.5%, 26.0%)	23.9%	(20.1%, 28.1%)
Other Country*	1.8%	(1.4%, 2.3%)	*	*
Canada	45.8%	(34.5%, 57.5%)	*	*
Other State & Country	0.6%	(0.4%, 0.9%)	*	*

\*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 (38.3% and 42.2% 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. The percentage of RNs working 30 to 39 hours per week in nursing or a related area decreases as age increases.

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, 87.8% and 82.2% respectively.

Table 17: Number of Currently Employed Nursing Positions

Number of Positions	RN = 2,961		LPN = 344	
	Estimate	95% CI	Estimate	95% CI
1 Position	87.8%	(86.6%, 88.9%)	82.2%	(77.8%, 85.9%)
2 Position	10.7%	(9.7%, 11.9%)	12.6%	(9.5%, 16.5%)
3+ Positions	1.5%	(1.1%, 2.0%)	5.3%	(3.4%, 8.1%)

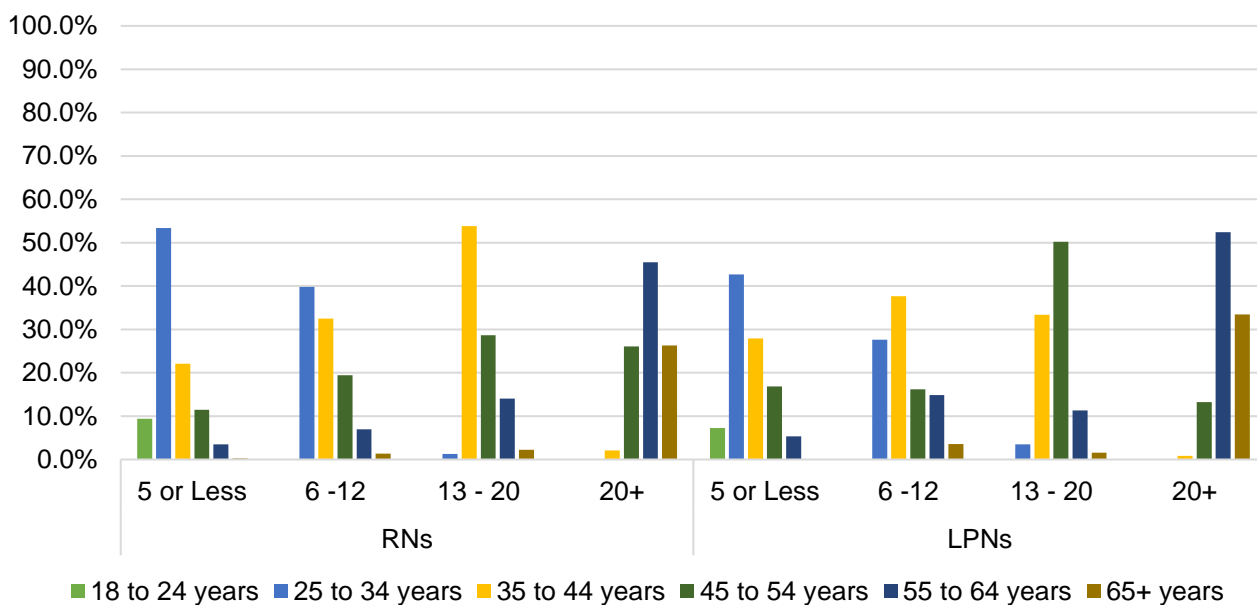
The number of years nurses were licensed is presented in Table 18. Most RNs (52.5%) and LPNs (42.0%) have been a licensed nurse for more than 20 years. Twenty-three and three tenths percent of LPNs have been employed five years or less.

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

Years	RN = 3,583		LPN = 412	
	Estimate	95% CI	Estimate	95% CI
5 years or Less	15.9%	(14.7%, 17.1%)	23.3%	(19.2%, 27.4%)
6 to 12 years	18.0%	(16.8%, 19.3%)	21.4%	(17.4%, 25.3%)
13 to 20 years	13.5%	(12.4%, 14.7%)	13.3%	(10.1%, 16.6%)
More than 20 years	52.5%	(50.8%, 54.1%)	42.0%	(37.2%, 46.8%)

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)

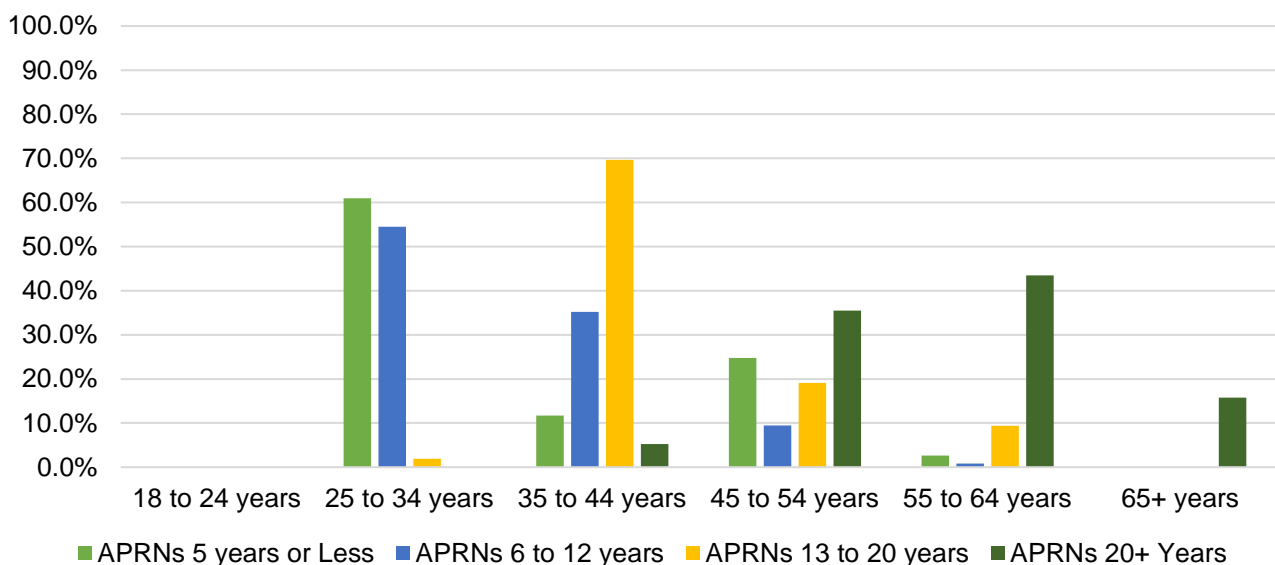


Advanced Practice Registered Nurses (APRNs) were measured as a subset of RNs. The majority of APRNs (60.4%) have also been licensed for more than 20 years (Table 19). Figure 4 compares the number of years APRNs have been a licensed nurse to their age. Most APRNs 25 to 34 years old have been licensed less than five years (61.0%), while those 35 to 44 years old have been licensed 13 to 20 years (69.6%), and APRNs 45 years or older have been licensed more than 20 years (14.7-46.9%).

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

Years	APRN = 371	
	Estimate	95% CI
5 years or less	5.9%	(3.5%, 8.3%)
6 to 12 years	17.5%	(13.7%, 21.4%)
13 to 20 years	16.2%	(12.4%, 19.9%)
More than 20 years	60.4%	(55.4%, 65.4%)

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



Most RNs (38.1%) have been working as a nurse for 20 or more years. Almost one third (31.9%) of LPNs have been working as a nurse three to less than ten years, and almost one third (30.3%) have been working for 20 or more years. Conversely, 11.7% of RNs have been working for less than three years compared to 19.8% of LPNs (Table 20).

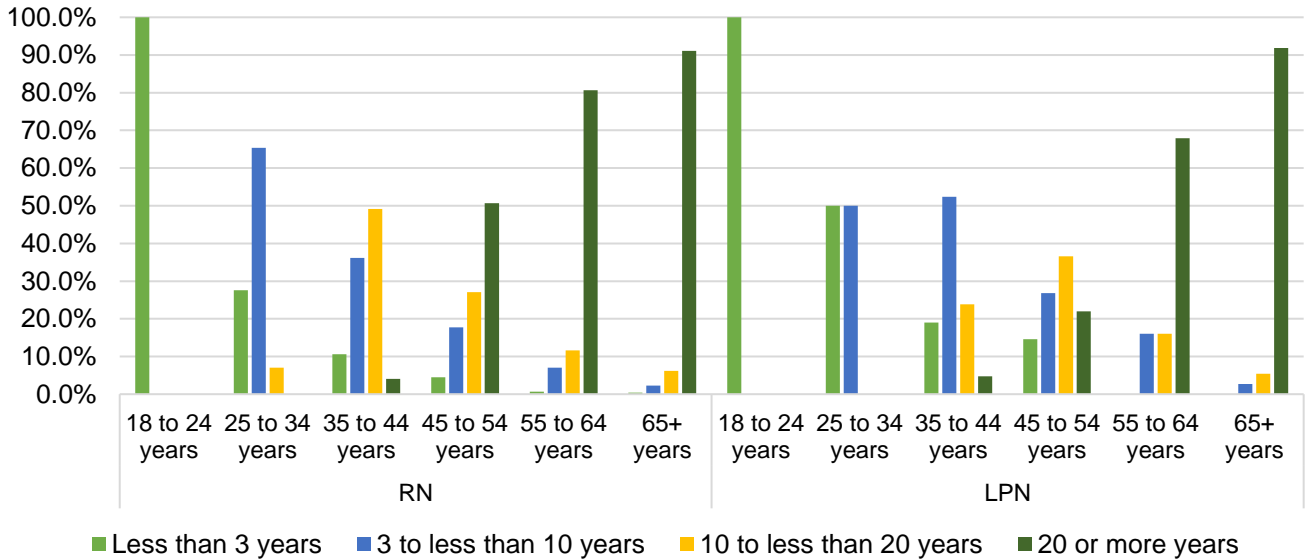
**Table 20: Number of Years Working as a Nurse (RN and LPN)**

Years	RN= 2,871		LPN= 321	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	11.7%	(10.5%, 12.8%)	19.8%	(15.4%, 24.1%)
3 to less than 10 years	28.2%	(26.5%, 29.8%)	31.9%	(26.8%, 37.0%)
10 to less than 20 years	22.1%	(20.6%, 23.6%)	18.0%	(13.8%, 22.2%)
20 or more years	38.1%	(36.3%, 39.8%)	30.3%	(25.3%, 35.3%)

The number of years working was also compared to the age of the nurse (Figure 5). All of RNs and LPNs who have been working less than three years are 18 to 24 years old (100.0% for both). RNs working three to less than ten years are mostly between 25 to 34 years old (65.4%) while most LPNs working three to less than ten years are between 35 to 44 years old (52.4%).



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

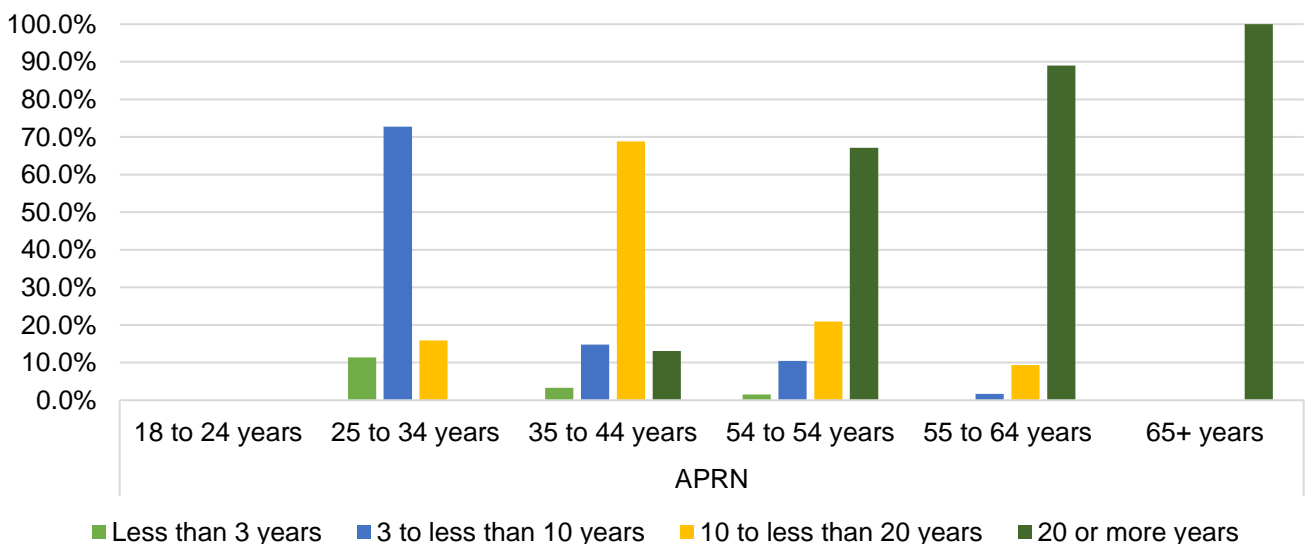


The number of years APRNs have been working was also measured as a subset of RNs. Forty-seven and two tenths percent of APRNs have been working as a nurse for 20 or more years (Table 21). The number of years APRNs have been working was also compared to their age (Figure 6). The percentage of APRNs working three to less than ten years are mostly between 25 and 34 years old (72.7%) while most APRNs 35 to 44 years old have been working for 10 to less than 20 years (68.8%). APRNs 54 years or older are most likely to have worked as a nurse for 20 or more years (67.2-100%).

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

Years	APRN= 335	
	Estimate	95% CI
Less than 3 years	3.4%	(01.4%, 05.3%)
3 to less than 10 years	20.4%	(16.1%, 24.8%)
10 to less than 20 years	29.0%	(24.1%, 33.8%)
20 or more years	47.2%	(41.9%, 52.6%)

**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 (62.1% and 68.7% respectively) felt adequately prepared. The next most common response for both RNs (25.2%) and LPNs (19.0%) 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= 260		LPN= 49	
	Estimate	95% CI	Estimate	95% CI
Adequately prepared	62.1%	(56.1%, 67.8%)	68.7%	(54.8%, 79.9%)
Not enough classroom time	0.8%	(0.2%, 2.8%)	*	*
Not enough clinical time	25.2%	(20.3%, 30.8%)	19.0%	*
Not enough skills lab/simulation time	13.3%	(9.7%, 18.0%)	12.7%	(6.0%, 24.8%)
Not enough critical thinking/prioritization practice	18.7%	(14.4%, 23.9%)	17.3%	(9.2%, 30.2%)
Other	3.2%	(1.7%, 6.1%)	*	*

Most retired RNs and LPNs indicated they had been working as a nurse 10 years or more (96.2% and 85.1% respectively) as shown in Table 23 below. A small percentage of RNs (3.5%) and LPNs (11.7%) had worked four to nine years before retiring.

**Table 23: Number of Years Worked as a Nurse for Retired Nurses**

Years	RN = 341		LPN = 35	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	0.3%	(0.1%, 1.6%)	3.2%	(0.6%, 15.0%)
4 to 9 years	3.5%	(2.0%, 6.1%)	11.7%	(4.7%, 26.3%)
10 years or more	96.2%	(93.6%, 97.7%)	85.1%	(69.9%, 93.4%)

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 24). Most RNs (60.9%) and LPNs (55.8%) estimated that they will continue working as a nurse for more than 10 years. A much smaller percentage of RNs (4.5%) and LPNs (5.9%) plan to work as a nurse for fewer than two additional years.

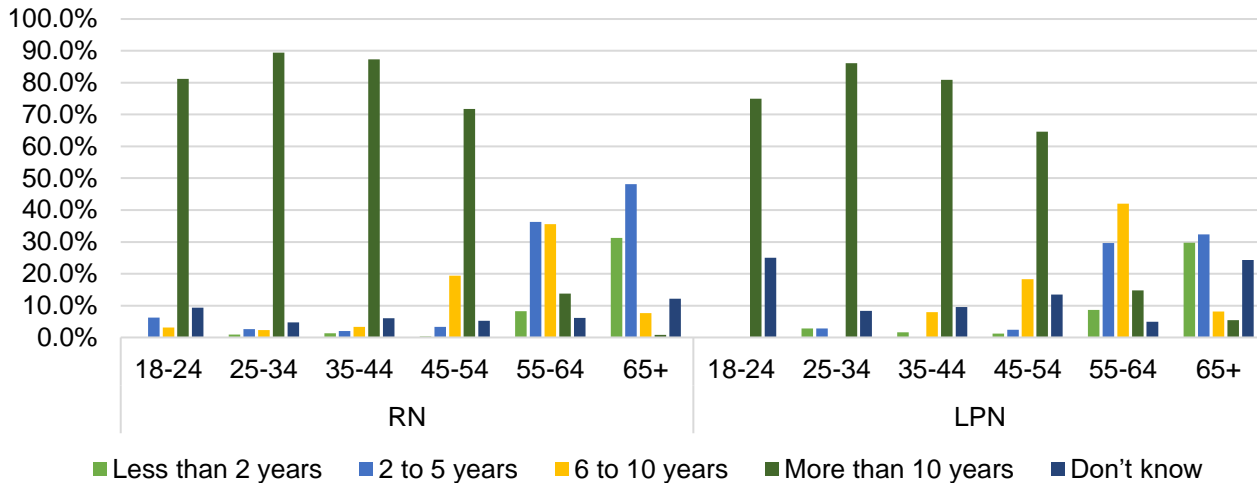
**Table 24: Plans to Continue Working as a Nurse (RN and LPN)**

Years	RN= 2,867		LPN= 320	
	Estimate	95% CI	Estimate	95% CI
Less than 2 years	4.5%	(3.8%, 5.3%)	5.9%	(3.3%, 8.5%)
2 to 5 years	13.7%	(12.4%, 14.9%)	11.0%	(07.5%, 14.4%)
6 to 10 years	14.8%	(13.5%, 16.1%)	16.6%	(12.5%, 20.6%)
More than 10 years	60.9%	(59.1%, 62.7%)	55.8%	(50.3%, 61.2%)
Don't know	6.1%	(5.2%, 6.9%)	10.8%	(7.4%, 14.2%)

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 (48.2%) and LPNs (29.7%) 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 (36.3%), while LPNs 55 to 64 years old were most likely to continue working six to ten more years (42.0%). 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)**

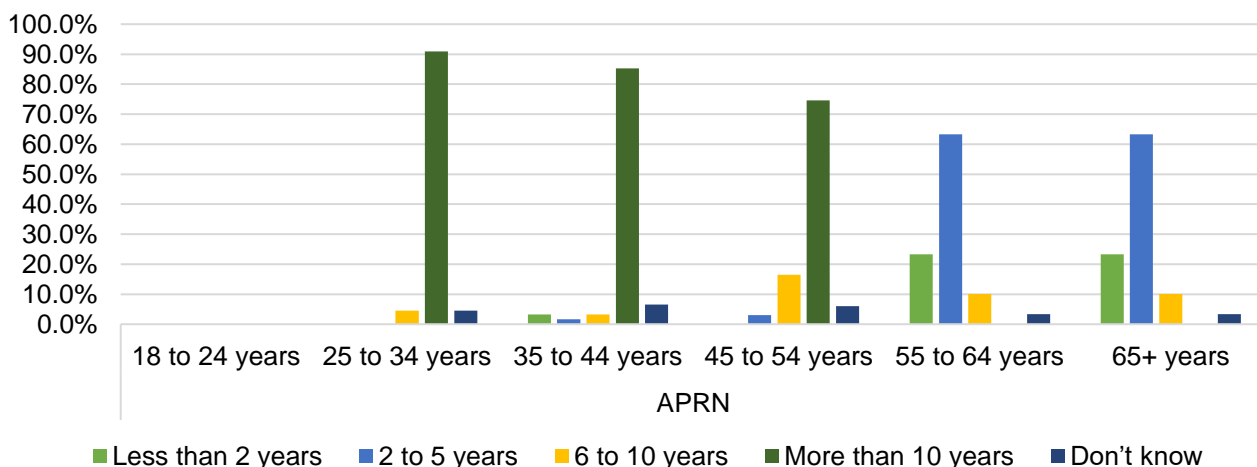


APRNs plan to continue working as a nurse was also measured as a subset of RNs. Sixty and five tenths percent of APRNs estimated that they will continue working as a nurse for more than 10 years, while 3.8% plan to work as a nurse for fewer than two additional years (Table 25). APRNs plans to continue 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 (63.3%). The APRNs 54 years or younger plan to continue working for more than 10 years.

**Table 25: Plans to Continue Working as a Nurse (APRN)**

Years	APRN= 334	
	Estimate	95% CI
Less than 2 years	3.8%	(3.1%, 4.5%)
2 to 5 years	13.2%	(12.0%, 14.5%)
6 to 10 years	16.1%	(14.8%, 17.5%)
More than 10 years	60.5%	(58.7%, 62.3%)
Don't know	6.3%	(5.4%, 7.2%)

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



## DIRECT CARE

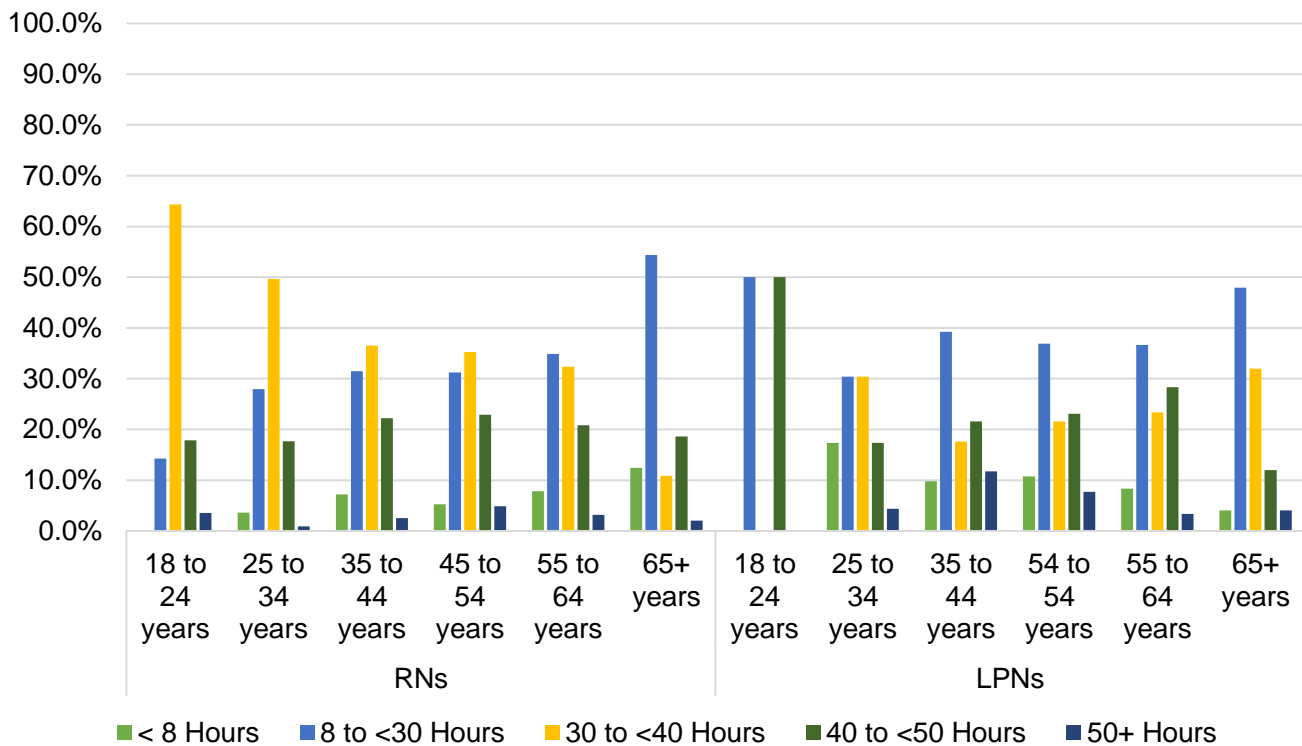
A large majority of RNs (81.5%) and LPNs (89.5%) provide direct care to patients and their families. When asked how many hours per week they provide direct care, about 32% of RNs provide direct care services 8 to 29 hours per week, and 38% provide direct care services 30 to 39 hours per week Table 26. However, LPNs provide direct care services almost evenly between 30 to 39 hours per week and 40 to 49 hours per week (23.0% and 22.5% respectively).

Table 26: Hours per Week Spent Providing Direct Care Services

Hours	RN= 1,990		LPN= 244	
	Estimate	95% CI	Estimate	95% CI
<8 Hours	6.0%	(04.9%, 07.0%)	10.3%	(06.5%, 14.1%)
8 to <30 Hours	31.8%	(29.7%, 33.8%)	37.5%	(31.4%, 43.6%)
30 to <40 Hours	38.3%	(36.2%, 40.4%)	23.0%	(17.7%, 28.3%)
40 to <50 Hours	20.7%	(18.9%, 22.5%)	22.5%	(17.3%, 27.7%)
50+ Hours	2.8%	(2.1%, 3.6%)	6.7%	(3.6%, 9.8%)

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



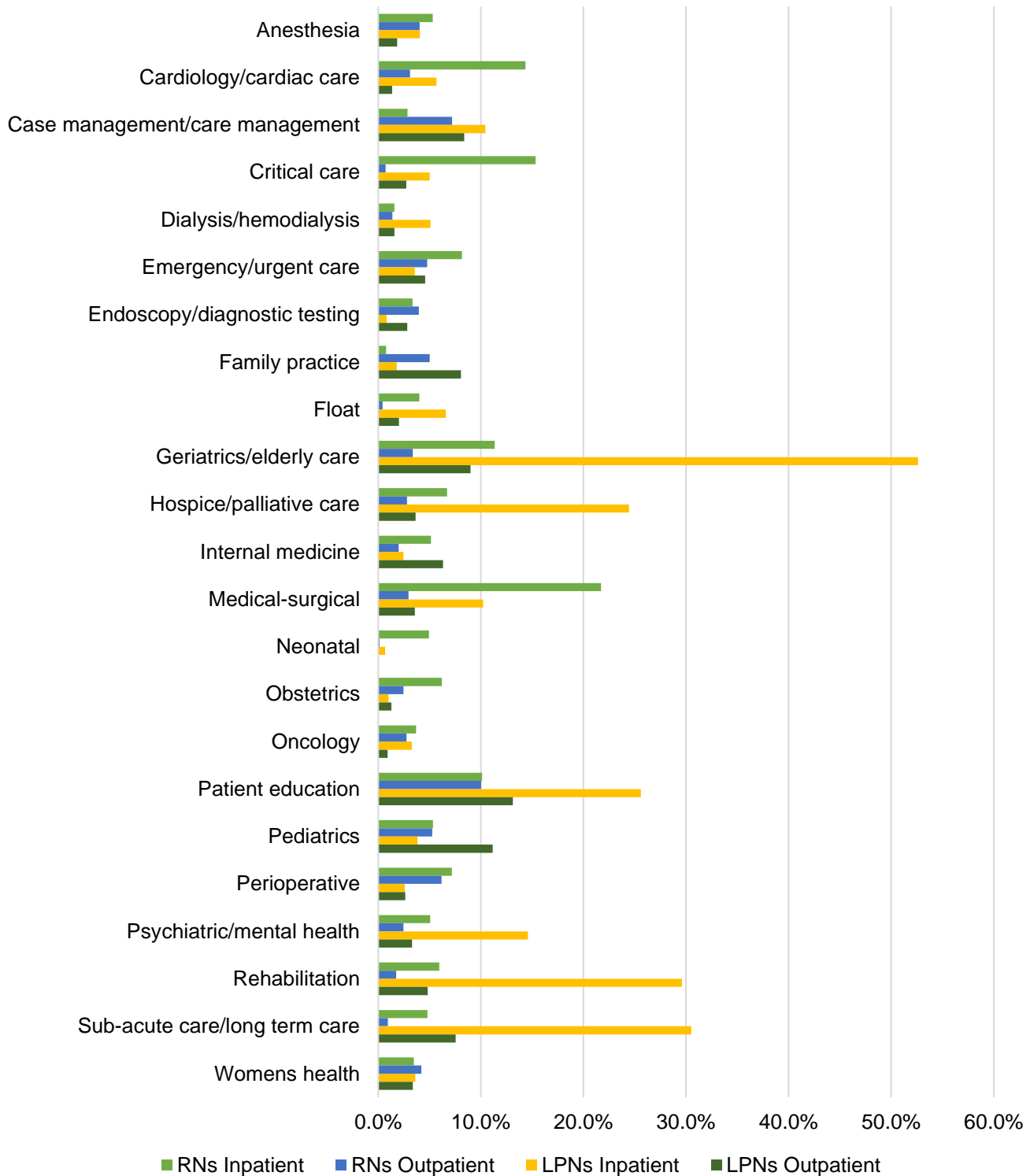
When looking at nurses currently employed and who plan to stop work in five or less years, nurses who provide direct care for eight or more hours per week (12.8% of RNs and 13.0% LPNs) are much less likely to plan on stopping work as a nurse in the next five years compared to nurses who provide direct care for less than eight hours or who do not provide direct care (28.8% of RNs and 23.5% of LPNs; Table 27).

**Table 27: Plans to Stop Working in the Next Five Years by Nurses who Provide Direct Care**

<b>Provides Direct Care for 8+ Hours/Week</b>	<b>RNs</b>			<b>LPNs</b>		
	<b>n</b>	<b>Estimate</b>	<b>95% CI</b>	<b>n</b>	<b>Estimate</b>	<b>95% CI</b>
Yes	1,116	12.8%	(11.2%, 14.3%)	109	13.0%	(7.7%, 18.2%)
No	653	28.8%	(26.7%, 30.9%)	49	23.5%	(16.8%, 30.1%)

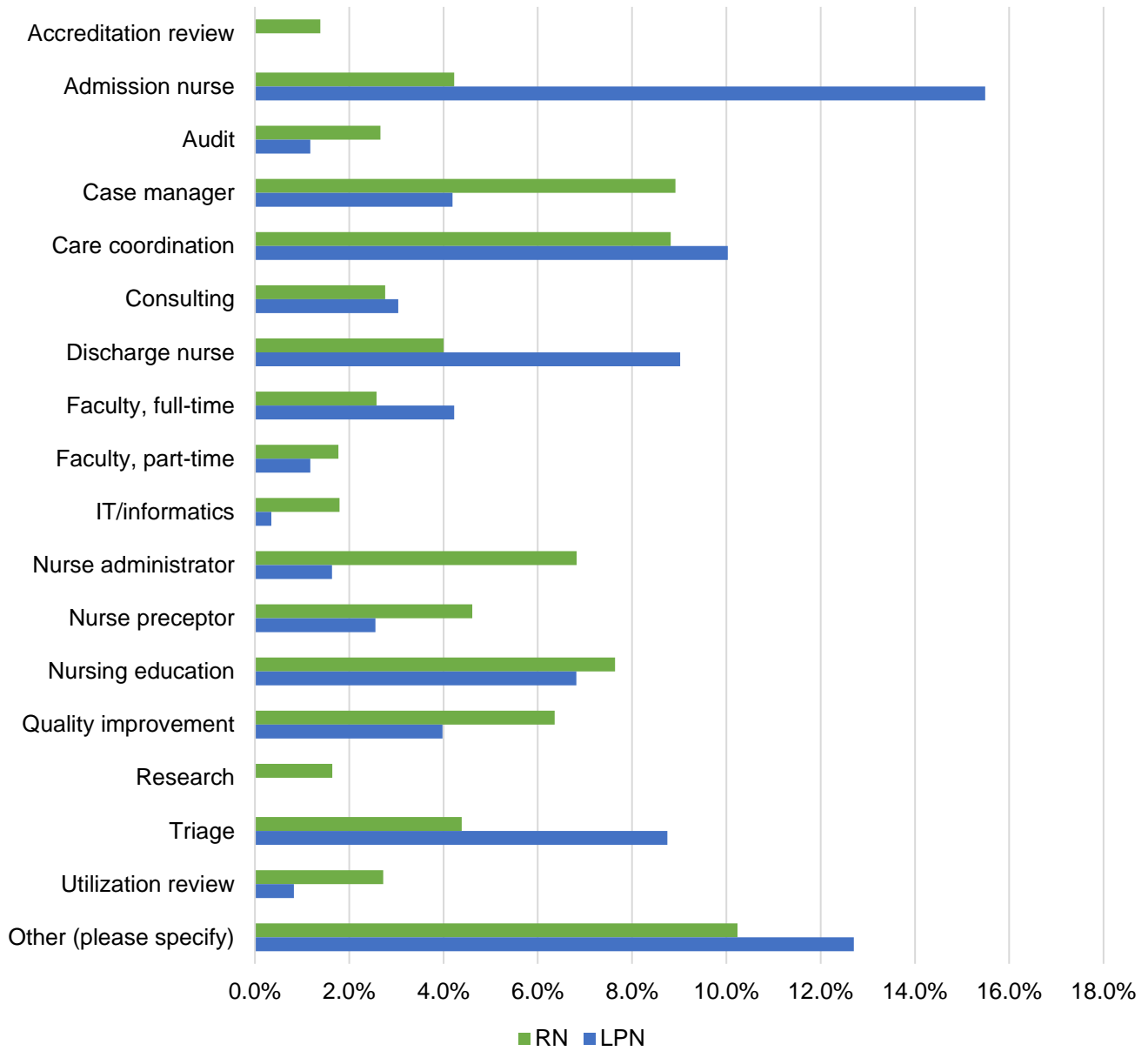
Licensed nurses who are employed as a nurse and provide direct patient care work in a wide variety of inpatient and outpatient practice areas (Figure 10). There were a total of 2,137 RNs and 266 LPNs who answered this question. The most common RN practice setting is inpatient medical-surgical (21.7%). The most common LPN practice setting is inpatient geriatrics/elderly care (52.6%)

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 work in a variety of other roles including care coordination (8.8% of RNs and 10.0% of LPNs). Eight and nine tenths percent of RNs are case managers, while 15.5% of LPNs are admission nurses.

**Figure 11: Main Role Outside of Direct Patient Care**



## PRACTICE SETTING

Over half of both RNs and LPNs work in inpatient settings (51.4% and 52.3% respectively). About one third of RNs and LPNs work in outpatient settings (33.4% and 34.8% respectively). A much smaller percentage of respondents indicated they work in both inpatient and outpatient settings, as shown in Table 28 below.

Table 28: Workplace Setting (Inpatient, Outpatient, and Both)

Workplace Setting	RN= 2,979		LPN= 345	
	Estimate	95% CI	Estimate	95% CI
Inpatient	51.4%	(49.6%, 53.2%)	52.3%	(47.0%, 57.5%)
Outpatient	33.4%	(31.7%, 35.1%)	34.8%	(29.8%, 39.8%)
Both inpatient and outpatient	15.2%	(13.9%, 16.4%)	12.9%	(09.4%, 16.5%)

Within the inpatient settings, respondents were asked to identify which setting they are currently working in (Table 29). Most RNs (86.1%) working in an inpatient setting are at a hospital (acute care and acute rehabilitation). Alternatively, the majority of LPNs (79.0%) working in an inpatient setting are at a nursing home or long-term care facility.

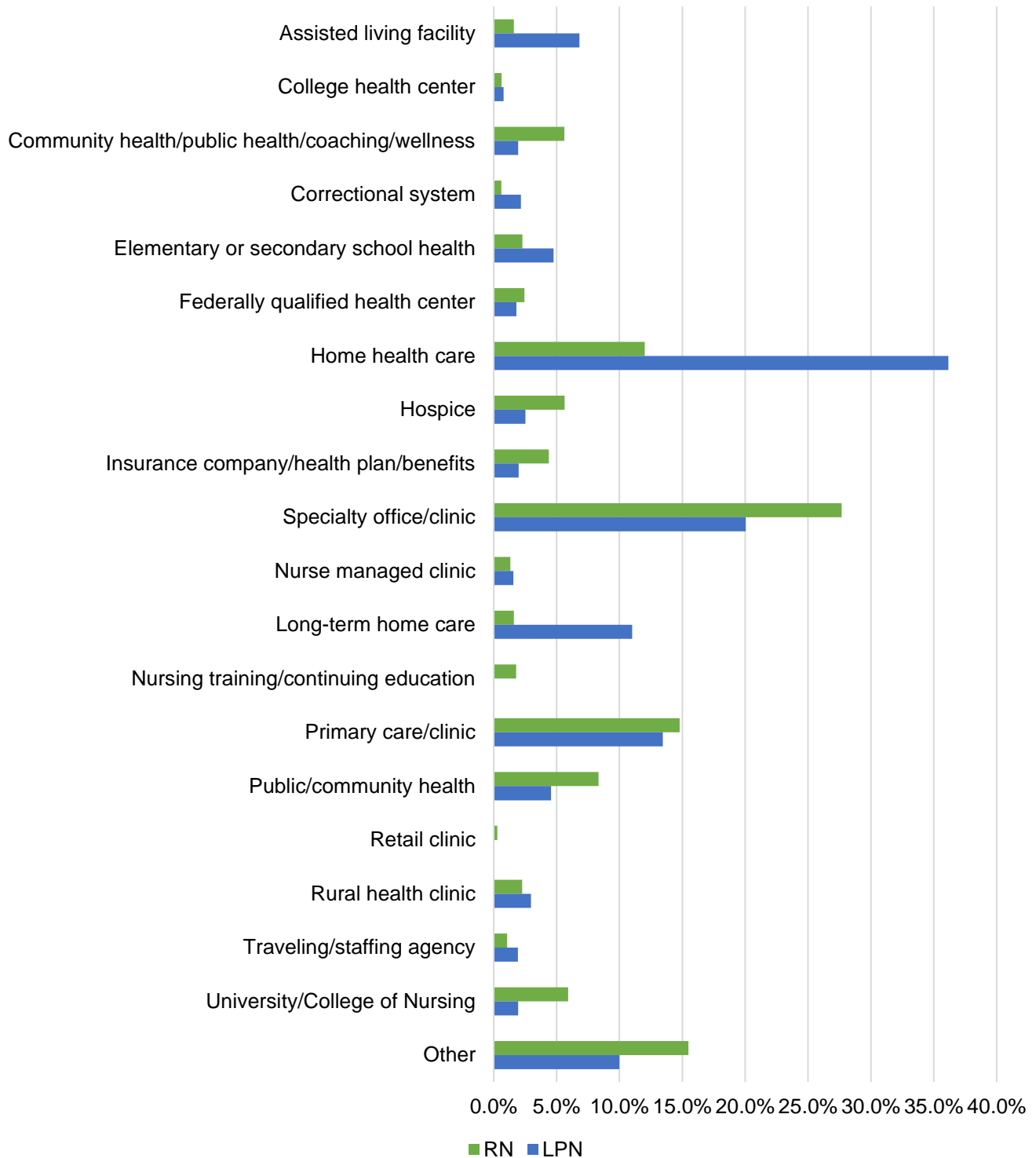
Table 29: Inpatient Settings

Inpatient Settings	RN= 1,879		LPN= 220	
	Estimate	95% CI	Estimate	95% CI
Hospital (acute care & acute rehabilitation)	86.1%	(84.4%, 87.5%)	16.4%	(12.1%, 21.9%)
Nursing home/long-term care facility	11.0%	(9.6%, 12.5%)	79.0%	(73.1%, 83.9%)
Correctional system	0.4%	(0.2%, 0.8%)	4.1%	(2.2%, 7.6%)
Traveling/staffing agency	1.4%	(0.9%, 2.0%)	3.6%	(1.8%, 7.0%)
Other	3.5%	(2.8%, 4.5%)	7.0%	(4.3%, 11.2%)



Both RNs and LPNs are employed in a wide variety of outpatient practice settings. The largest percentage of RNs (27.7%) are estimated to be working in a specialty office/clinic and LPNs (36.2%) are estimated to be working in a home health care (Figure 12). RNs (14.8%) are also likely to be employed in a primary care/clinic outpatient setting. LPNs are likely to work in a specialty office/clinic (20.0%).

**Figure 12: Outpatient Practice Setting**



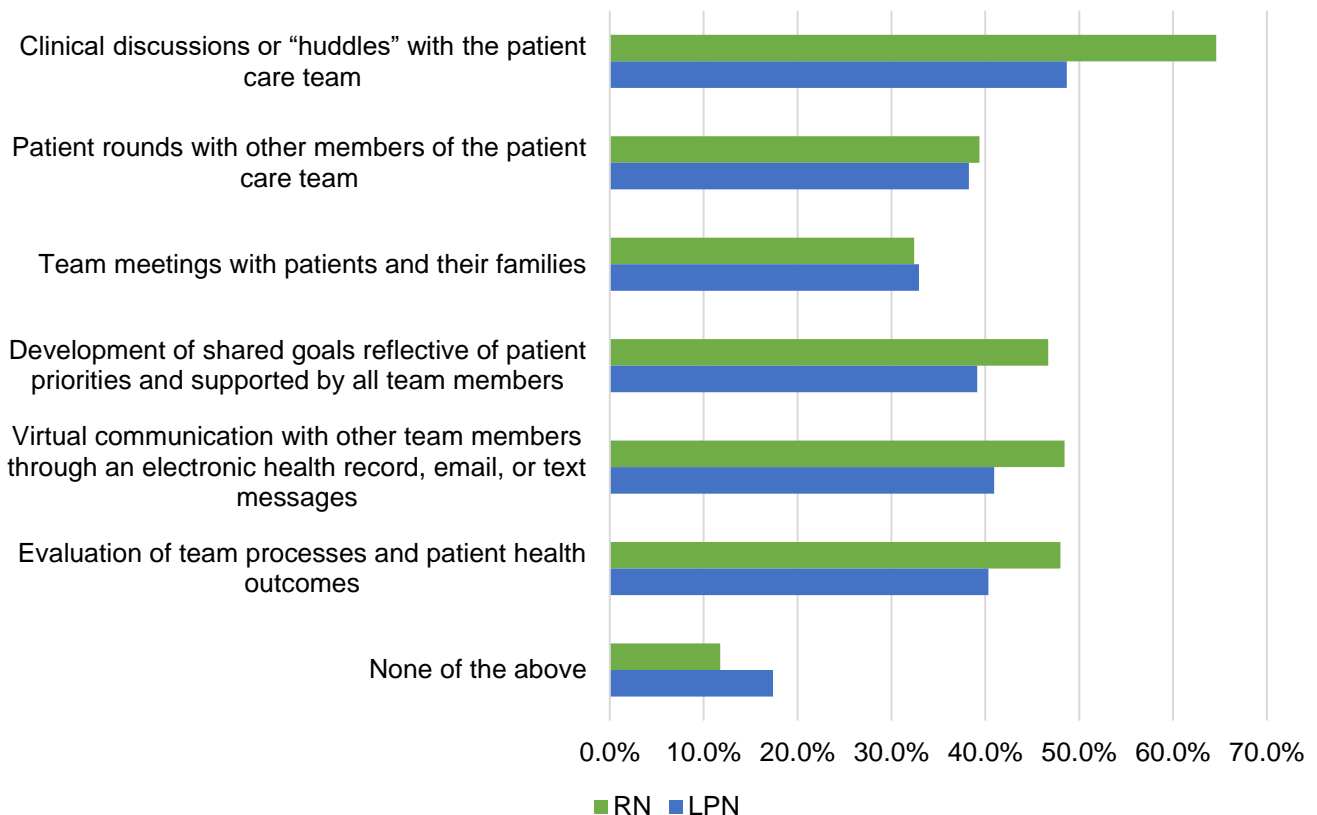
Employed nurses were asked to indicate the number of interprofessional activities they are engaged in as part of their regular work flow. Most RNs (88.2%) and LPNs (82.6%) engage in at least one interprofessional activity as part of their regular nursing duties (Table 30). Furthermore, almost half (47.6%) of RNs engage in four or more interprofessional activities while slightly more than one-third (38.3%) of LPNs engage in the same number of interprofessional activities.

Table 30: The Number of Interprofessional Activities

Number of Interprofessional Activities	RN= 2,819		LPN= 315	
	Estimate	95% CI	Estimate	95% CI
0	11.8%	(10.6%, 13.0%)	17.4%	(13.6%, 21.9%)
1	12.9%	(11.7%, 14.2%)	17.2%	(13.5%, 21.8%)
2	13.8%	(12.5%, 15.1%)	12.4%	(9.2%, 16.4%)
3	14.0%	(12.7%, 15.3%)	14.8%	(11.3%, 19.1%)
4	13.3%	(12.0%, 14.6%)	10.3%	(7.4%, 14.1%)
5	12.7%	(11.5%, 14.0%)	10.6%	(7.7%, 14.5%)
6	9.3%	(8.3%, 10.4%)	8.7%	(6.0%, 12.3%)
7	12.3%	(11.2%, 13.6%)	8.7%	(6.1%, 12.3%)

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



Nurses who made a change in employment setting in the past three years were asked to indicate what type of change they made (Table 31). More than half of RNs (56.9%) and LPNs (54.7%) have not made an employment change in the past three years. Of the RNs who made an employment change, the largest percentage (28.9%) indicated that they made a change in locations but stayed in the same care setting, with the next most common being some other type of change in employment (26.1%). LPNs were also most likely (43.7%) to change locations but stay in the same care setting, with the next most common being some other type of change in employment (20.9%).

**Table 31: Change in Employment Setting**

Change in Employment Setting	RN= 2,642		LPN= 301	
	Estimate	95% CI	Estimate	95% CI
Did not make a change	56.9%	(53.9%, 59.8%)	54.7%	(46.2%, 62.9%)
Made a change	43.1%	(40.2%, 46.1%)	45.3%	(37.1%, 53.8%)
Of those who made a change:				
<i>I did not make an employment change in the past three years.</i>	0.8%	(0.4%, 1.6%)	0.0%	(0.0%, 2.8%)
<i>An inpatient setting to an outpatient setting?</i>	17.8%	(15.6%, 20.1%)	13.8%	(8.9%, 20.7%)
<i>An outpatient setting to an inpatient setting?</i>	5.4%	(4.2%, 6.9%)	5.8%	(3.0%, 11.2%)
<i>A primary care setting (e.g., family practice, general medicine) to a specialty care setting?</i>	4.5%	(3.4%, 5.9%)	9.8%	(5.8%, 16.1%)
<i>A specialty care setting to a primary care setting?</i>	3.0%	(2.1%, 4.2%)	3.4%	(1.4%, 8.0%)
<i>A sub-acute care setting to an acute care setting?</i>	4.9%	(3.7%, 6.3%)	1.9%	(0.6%, 5.9%)
<i>An acute care setting to a sub-acute care setting?</i>	2.6%	(1.8%, 3.7%)	3.2%	(1.3%, 7.8%)
<i>A direct patient care setting to a non-direct patient care setting?</i>	14.1%	(12.1%, 16.3%)	9.5%	(5.6%, 15.7%)
<i>A non-direct patient care setting to a direct patient care setting?</i>	4.5%	(3.4%, 5.9%)	1.2%	(0.3%, 4.9%)
<i>I changed locations but stayed in the same care setting.</i>	28.9%	(26.3%, 31.7%)	43.7%	(35.6%, 52.3%)
<i>Some other type of change in employment.</i>	26.1%	(23.6%, 28.8%)	20.9%	(14.8%, 28.6%)

Among RNs who work in an outpatient setting, 24.9% plan to stop working within five years while 15.6% of RNs who work in an inpatient setting plan to stop working within the same five-year period (Table 32). Twenty-one percent LPNs who work in an outpatient setting plan to stop working within five years while 16.6% 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 32: Plans to Stop Working in the Next Five Years by Employment Setting

Plans to Stop Working in Next 5 Years	RN= 2,673		LPN= 279	
	Estimate	95% CI	Estimate	95% CI
Inpatient	15.6%	(14.2%, 17.0%)	16.6%	(12.2%, 21.0%)
Outpatient	24.9%	(23.3%, 26.5%)	21.7%	(16.9%, 26.6%)
Both inpatient and outpatient	20.0%	(18.5%, 21.5%)	20.2%	(15.5%, 24.9%)

## 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](http://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](mailto:cwojcik@mphi.org)).

## Appendix A: 2018 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"> <li>• LPN</li> <li>• RN</li> </ul>
#2	Are you certified in Michigan to practice as a... (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Nurse Anesthetist?</li> <li>• Nurse Midwife?</li> <li>• Nurse Practitioner?</li> <li>• Clinical Nurse Specialist?</li> </ul>
#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"> <li>• LPN diploma/certificate</li> <li>• RN diploma in nursing [RNs only]</li> <li>• Associate's degree in nursing</li> <li>• Bachelor's degree in nursing [RNs only]</li> <li>• Master's degree in nursing [RNs only]</li> <li>• Doctorate in nursing [RNs only]</li> </ul>
#4	In what year did you qualify for your first U.S. nursing license?	
#5	Are you licensed to practice nursing anywhere outside of Michigan? (Mark ONE.)	<ul style="list-style-type: none"> <li>• Yes, in other state(s); please specify</li> <li>• Yes, in other country(ies); please specify</li> <li>• Yes, in other state(s) AND other country(ies); please specify</li> <li>• No.</li> </ul>
#6	What is your highest level of <u>nursing</u> education? (Mark ONE.)	<ul style="list-style-type: none"> <li>• LPN diploma/certificate</li> <li>• RN diploma in nursing</li> <li>• Associate's degree in nursing</li> <li>• Bachelor's degree in nursing</li> <li>• Master's degree in nursing</li> <li>• Doctorate in Nursing Practice (DNP)</li> <li>• Doctor of Philosophy in Nursing (PhD)</li> <li>• Other doctoral degree in nursing</li> </ul>
#7	What is your highest level of <u>non-nursing</u> education? (Mark ONE.)	<ul style="list-style-type: none"> <li>• Non-nursing associate's degree</li> <li>• Non-nursing bachelor's degree</li> <li>• Non-nursing master's degree</li> <li>• Non-nursing doctoral degree</li> <li>• Not applicable</li> </ul>
#8	Are you currently enrolled in a program to obtain any of the following degrees? (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Associate's Degree in Nursing (ADN)</li> <li>• Bachelor of Science in Nursing (BSN)</li> <li>• Master of Science in Nursing (MSN)</li> <li>• Doctor of Nursing Practice (DNP)</li> <li>• Doctor of Philosophy in Nursing (PhD)</li> </ul>
#9	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"> <li>• Nurse Practitioner?</li> <li>• Nurse Midwife?</li> <li>• Nurse Anesthetist?</li> <li>• Clinical Nurse Specialist?</li> </ul>
#10	What is your current employment status? (Mark ONE.)	<ul style="list-style-type: none"> <li>• Actively employed in nursing or in a position that requires a nurse license full-time</li> <li>• Actively employed in nursing or a position that requires a nurse license part-time</li> </ul>

#10 continued		<ul style="list-style-type: none"> <li>• Actively employed in nursing or in a position that requires a nurse license on a per-diem basis</li> <li>• On temporary medical leave from a position that requires a nurse license</li> <li>• On temporary non-medical leave from a position that requires a nurse license</li> <li>• Actively employed in a field other than nursing</li> <li>• Working in nursing only as a volunteer</li> <li>• Unemployed, seeking work as a nurse</li> <li>• Unemployed, not seeking work as a nurse</li> <li>• Retired</li> </ul>
#11	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"> <li>• Taking care of home and family</li> <li>• School</li> <li>• Difficulty finding a full-time nursing position</li> <li>• Difficulty finding a part-time or on a per-diem basis nursing position</li> <li>• Semi-retired</li> <li>• Burned out</li> <li>• Other (please specify)</li> </ul>
#12	Please indicate the reason(s) why you are not currently employed as a nurse. (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Taking care of home and family</li> <li>• School</li> <li>• Difficulty finding a full-time nursing position</li> <li>• Difficulty finding a part-time or on a per-diem basis nursing position</li> <li>• Semi-retired</li> <li>• Burned out</li> <li>• Other (please specify)</li> </ul>
#13	In total, how long were you employed as a practicing nurse? (Mark ONE.)	<ul style="list-style-type: none"> <li>• Less than 3 years</li> <li>• 4 to 9 years</li> <li>• 10 years or more</li> </ul>
#14	In how many positions are you currently employed as a nurse? (Mark ONE.)	<ul style="list-style-type: none"> <li>• One</li> <li>• Two</li> <li>• Three or more</li> </ul>
#15	Identify your current employment setting.	<ul style="list-style-type: none"> <li>• Inpatient</li> <li>• Outpatient</li> <li>• Both inpatient and outpatient</li> </ul>
#16	Identify your current inpatient employment setting(s). (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Correctional system</li> <li>• Hospital (acute care &amp; acute rehabilitation)</li> <li>• Hospice</li> <li>• Nursing home/long-term care facility</li> <li>• Traveling/staffing agency</li> <li>• Other nursing employment setting (please specify)</li> </ul>
#17	Identify your current outpatient employment setting(s). (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Assisted living facility</li> <li>• College health center</li> <li>• Community health/public health/coaching/wellness</li> <li>• Correctional system</li> <li>• Elementary or secondary school health</li> <li>• Federally qualified health center</li> <li>• Home health care</li> <li>• Hospice</li> <li>• Insurance company/health plan/benefits</li> <li>• Specialty office/clinic</li> <li>• Nurse managed clinic</li> </ul>

<p>#17 continued</p>		<ul style="list-style-type: none"> <li>• Long-term home care</li> <li>• Nursing training/continuing education</li> <li>• Primary care/clinic</li> <li>• Public/community health</li> <li>• Retail clinic</li> <li>• Rural health clinic</li> <li>• Traveling/staffing agency</li> <li>• University/College of Nursing</li> <li>• Other nursing employment setting (please specify)</li> </ul>																																																		
<p>#18</p>	<p>In any of your positions, do you provide direct care services?</p>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>																																																		
<p>#19</p>	<p>How many hours are spent providing <u>direct care services</u> to patients/families?</p>																																																			
<p>#20</p>	<p>If you provide direct care services, please identify your main practice area. (Mark ALL that apply.)</p>	<table border="0"> <thead> <tr> <th data-bbox="818 598 1143 632"><u>Inpatient</u></th> <th data-bbox="1143 598 1481 632"><u>Outpatient</u></th> </tr> </thead> <tbody> <tr><td>• Anesthesia</td><td>• Anesthesia</td></tr> <tr><td>• Cardiology/cardiac care</td><td>• Cardiology/cardiac care</td></tr> <tr><td>• Case management/care management</td><td>• Case management/care management</td></tr> <tr><td>• Critical care</td><td>• Critical care</td></tr> <tr><td>• Dialysis/hemodialysis</td><td>• Dialysis/hemodialysis</td></tr> <tr><td>• Emergency/urgent care</td><td>• Emergency/urgent care</td></tr> <tr><td>• Endoscopy/diagnostic testing</td><td>• Endoscopy/diagnostic testing</td></tr> <tr><td>• Family practice</td><td>• Family practice</td></tr> <tr><td>• Float</td><td>• Float</td></tr> <tr><td>• Geriatrics/elderly care</td><td>• Geriatrics/elderly care</td></tr> <tr><td>• Hospice/palliative care</td><td>• Hospice/palliative care</td></tr> <tr><td>• Internal medicine</td><td>• Internal medicine</td></tr> <tr><td>• Medical-surgical</td><td>• Medical-surgical</td></tr> <tr><td>• Neonatal</td><td>• Neonatal</td></tr> <tr><td>• Obstetrics</td><td>• Obstetrics</td></tr> <tr><td>• Oncology</td><td>• Oncology</td></tr> <tr><td>• Patient education</td><td>• Patient education</td></tr> <tr><td>• Pediatrics</td><td>• Pediatrics</td></tr> <tr><td>• Perioperative</td><td>• Perioperative</td></tr> <tr><td>• Psychiatric/mental health</td><td>• Psychiatric/mental health</td></tr> <tr><td>• Rehabilitation</td><td>• Rehabilitation</td></tr> <tr><td>• Sub-acute care/long term care</td><td>• Sub-acute care/long term care</td></tr> <tr><td>• Women's health</td><td>• Women's health</td></tr> <tr><td>• Other (please specify)</td><td>• Other (please specify)</td></tr> </tbody> </table>	<u>Inpatient</u>	<u>Outpatient</u>	• Anesthesia	• Anesthesia	• Cardiology/cardiac care	• Cardiology/cardiac care	• Case management/care management	• Case management/care management	• Critical care	• Critical care	• Dialysis/hemodialysis	• Dialysis/hemodialysis	• Emergency/urgent care	• Emergency/urgent care	• Endoscopy/diagnostic testing	• Endoscopy/diagnostic testing	• Family practice	• Family practice	• Float	• Float	• Geriatrics/elderly care	• Geriatrics/elderly care	• Hospice/palliative care	• Hospice/palliative care	• Internal medicine	• Internal medicine	• Medical-surgical	• Medical-surgical	• Neonatal	• Neonatal	• Obstetrics	• Obstetrics	• Oncology	• Oncology	• Patient education	• Patient education	• Pediatrics	• Pediatrics	• Perioperative	• Perioperative	• Psychiatric/mental health	• Psychiatric/mental health	• Rehabilitation	• Rehabilitation	• Sub-acute care/long term care	• Sub-acute care/long term care	• Women's health	• Women's health	• Other (please specify)	• Other (please specify)
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<p>#21</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>	<table border="0"> <tbody> <tr><td>• I only provide direct patient care services</td><td>• IT/informatics</td></tr> <tr><td>• Accreditation review</td><td>• Nurse administrator</td></tr> <tr><td>• Admission nurse</td><td>• Nurse preceptor</td></tr> <tr><td>• Audit</td><td>• Nursing education</td></tr> <tr><td>• Case manager</td><td>• Patient Education</td></tr> <tr><td>• Care coordination</td><td>• Quality improvement</td></tr> <tr><td>• Consulting</td><td>• Research</td></tr> <tr><td></td><td>• Triage</td></tr> </tbody> </table>	• I only provide direct patient care services	• IT/informatics	• Accreditation review	• Nurse administrator	• Admission nurse	• Nurse preceptor	• Audit	• Nursing education	• Case manager	• Patient Education	• Care coordination	• Quality improvement	• Consulting	• Research		• Triage																																		
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• Care coordination	• Quality improvement																																																			
• Consulting	• Research																																																			
	• Triage																																																			



		<ul style="list-style-type: none"> <li>• Discharge nurse</li> <li>• Faculty, full-time</li> <li>• Faculty, part-time</li> <li>• Utilization review</li> <li>• Other (please specify)</li> </ul>
#22	As part of your regular nursing responsibilities, does your role include participation in any of the following interprofessional activities? (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Team discussion of team members' roles and responsibilities</li> <li>• Clinical discussions or "huddles" with the patient care team</li> <li>• Patient rounds with other members of the patient care team</li> <li>• Team meetings with patients and their families</li> <li>• Development of shared goals reflective of patient priorities and supported by all team members</li> <li>• Virtual communication with other team members through an electronic health record, email, or text messages</li> <li>• Evaluation of team processes and patient health outcomes</li> <li>• None of the above</li> </ul>
#23	If you made a change in your employment setting within the past three years was it a change from... (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• I did not make an employment change in the past three years.</li> <li>• An inpatient setting to an outpatient setting?</li> <li>• An outpatient setting to an inpatient setting?</li> <li>• A primary care setting (e.g., family practice, general medicine, internal medicine, or general pediatrics) to a specialty care setting?</li> <li>• A specialty care setting to a primary care setting?</li> <li>• A sub-acute care setting to an acute care setting?</li> <li>• An acute care setting to a sub-acute care setting?</li> <li>• A direct patient care setting to a non-direct patient care setting?</li> <li>• A non-direct patient care setting to a direct patient care setting?</li> <li>• I changed locations but stayed in the same care setting.</li> <li>• I made some other type of employment change.</li> </ul>
#24	In total, how long have you been employed as a practicing nurse? (Mark ONE.)	<ul style="list-style-type: none"> <li>• Less than 3 years</li> <li>• 3 to less than 10 years</li> <li>• 10 years to less than 19 years</li> <li>• Greater than 19 years</li> </ul>
#25	How prepared did you feel when you entered the nursing workforce? (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Adequately prepared</li> <li>• Not enough classroom time</li> <li>• Not enough clinical time</li> <li>• Not enough skills lab/simulation time</li> <li>• Not enough critical thinking/prioritization practice</li> <li>• Other (please specify)</li> </ul>
#26	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.)	<ul style="list-style-type: none"> <li>• Less than 2 years</li> <li>• 2 to 5 years</li> <li>• 6 to 10 years</li> <li>• More than 10 years</li> <li>• Don't know</li> </ul>
#27	Why are you planning on leaving nursing? (Mark ALL that apply.)	<ul style="list-style-type: none"> <li>• Plan to retire</li> <li>• Taking care of home and family</li> <li>• School</li> <li>• Difficulty finding a full-time nursing position</li> <li>• Difficulty finding a part-time or on a per-diem basis nursing position</li> </ul>

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