

2016 Survey of Michigan Nurses

Survey Summary Report

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**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 2015 to discuss revisions to the *Survey of Michigan Nurses* for the 2016 data collection year. Feedback from the stakeholder group was incorporated and the revised version of the survey was prepared for distribution.

Nurses licensed in Michigan are divided into two cohorts, based upon the year in which they first received their license, and each cohort must renew their license every two years. The 88,715 nurses scheduled to renew their license in 2016 received an invitation to participate in the annual *Survey of Michigan Nurses* along with their license renewal notice from the Michigan Department of Licensing and Regulatory Affairs. The regular license renewal period ended on March 31, 2016 and the late license renewal period ended on April 30, 2016. A total of 87,013 nurses renewed their license prior to the end of the license renewal period. Since nurses did not have to renew their license in order to complete the survey (all nurses due to renew their license in 2016 were mailed a paper copy of the survey), it is possible that some nurses chose to respond to the survey even though they did not renew their license.

Nurses who chose to participate in the *Survey of Michigan Nurses* had two options for completing the survey: 1) online through SurveyMonkey as part of their license renewal process or 2) a paper survey returned by mail to MPHI. Each participating nurse was asked to respond to a series of questions regarding their 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 (see Appendix A for a summary of the 2016 *Survey of Michigan Nurses* data collection tool). To allow sufficient time for completion, nurses were able to respond to the survey, either online or by mail, from December 2015 through May 2016.

SURVEY RESPONDENTS & RESPONSE RATES

A total of 19,405 nurses responded to the 2016 *Survey of Michigan Nurses*. The response rate for the 17,244 RNs who responded to the survey was 24.7%, while the response rate for the 2,161 responding LPNs was 17.8%.

Overall, the majority of responding nurses (87.1%) chose to complete the survey online instead of returning a paper survey to MPHI by mail. While RNs utilized the online option at about the same proportion as the overall rate, both APRNs (83.8%) and LPNs (83.0%) used the online option somewhat less often, choosing to return the survey by mail instead.

All respondents were asked to reply to a series of demographic questions about their age, gender, race, ethnicity, and residence (Table 1).

Table 1: Comparison of Online & Mail Survey Response Options

	Online			Mail		
	n	%	95% CI	n	%	95% CI
Total	16,898	87.1%	(86.6%, 87.6%)	2,507	12.9%	(12.4%, 13.4%)
RN	15,105	87.6%	(87.1%, 88.1%)	2,139	12.4%	(11.9%, 12.9%)
APRN	605	83.8%	(81.1%, 86.5%)	117	16.2%	(13.5%, 18.9%)
LPN	1,793	83.0%	(81.4%, 84.6%)	368	17.0%	(15.4%, 18.6%)
Age						
18 to 24 years	318	95.5%	(93.3%, 97.7%)	15	4.5%	(2.3%, 6.7%)
25 to 34 years	2,344	93.7%	(92.8%, 94.7%)	157	6.3%	(5.3%, 7.2%)
35 to 44 years	2,674	92.7%	(91.8%, 93.7%)	210	7.3%	(6.3%, 8.2%)
45 to 54 years	3,818	90.8%	(89.9%, 91.6%)	389	9.2%	(8.4%, 10.1%)
55 to 64 years	5,282	86.3%	(85.4%, 87.2%)	838	13.7%	(12.8%, 14.6%)
65+ years	2,072	73.4%	(71.8%, 75.1%)	750	26.6%	(24.9%, 28.2%)
Gender						
Female	15,595	86.8%	(86.3%, 87.3%)	2,374	13.2%	(12.7%, 13.7%)
Male	1,120	90.8%	(89.1%, 92.4%)	114	9.2%	(7.6%, 10.9%)
Race						
White	15,001	87.2%	(86.7%, 87.7%)	2,195	12.8%	(12.3%, 13.3%)
Black or African American	1,042	85.8%	(83.9%, 87.8%)	172	14.2%	(12.2%, 16.1%)
Other	810	85.5%	(83.3%, 87.8%)	137	14.5%	(12.2%, 16.7%)
Ethnicity						
Hispanic or Latino	238	89.1%	(85.4%, 92.9%)	29	10.9%	(7.1%, 14.6%)
Not Hispanic or Latino	16,024	87.1%	(86.6%, 87.6%)	2,377	12.9%	(12.4%, 13.4%)
Residency						
Eastern/Central/Western UP	575	86.5%	(83.9%, 89.1%)	90	13.5%	(10.9%, 16.1%)
Northwest LP	578	85.6%	(83.0%, 88.3%)	97	14.4%	(11.7%, 17.0%)
Northeast LP	272	82.4%	(78.3%, 86.5%)	58	17.6%	(13.5%, 21.7%)
West/West Central	2,552	88.5%	(87.4%, 89.7%)	331	11.5%	(10.3%, 12.6%)
East Central	857	86.1%	(84.0%, 88.3%)	138	13.9%	(11.7%, 16.0%)
East	1,242	85.8%	(84.0%, 87.6%)	206	14.2%	(12.4%, 16.0%)
South Central	564	86.9%	(84.3%, 89.5%)	85	13.1%	(10.5%, 15.7%)
Southwest	1,100	87.1%	(85.2%, 88.9%)	163	12.9%	(11.1%, 14.8%)
Southeast	1,694	87.2%	(85.7%, 88.7%)	248	12.8%	(11.3%, 14.3%)
Detroit Metro	5,058	86.4%	(85.5%, 87.3%)	797	13.6%	(12.7%, 14.5%)
Outside MI	1,167	84.9%	(83.0%, 86.8%)	208	15.1%	(13.2%, 17.0%)

Data Analysis

Once data collection concluded, both datasets (from the online survey and from the paper survey) were imported into SPSS and run through a number of data cleaning and validation analyses to identify out-of-range or missing values. Missing values that resulted from an issue with scanning the paper surveys were corrected whenever possible. The data files were then merged together into one comprehensive data file and an initial set of preliminary analyses were conducted to ensure data integrity.

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 Department of Licensing and Regulatory Affairs. (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 slight 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, 88.9% of nurses who completed the survey were RNs compared to 85.0% 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)						2016 Survey Data	
	2016		2017		Total		#	%
	#	%	#	%	#	%		
Total	84,439	-	82,034	-	166,473	-	19,405	-
RNs	71,657	84.9%	69,866	85.2%	141,523	85.0%	17,244	88.9%
NPs	2,896	4.0%	2,888	4.1%	5,784	4.1%	564	3.3%
Anesthetists	1,240	1.7%	1,338	1.9%	2,578	1.8%	120	0.7%
Nurse Midwives	169	0.2%	175	0.3%	344	0.2%	48	0.3%
Age								
<25 years	1,309	1.8%	1,038	1.5%	2,347	1.7%	302	1.8%
25 to 34 years	12,775	17.8%	12,411	17.8%	25,186	17.8%	2,306	13.4%
35 to 44 years	14,620	20.4%	14,277	20.4%	28,897	20.4%	2,560	14.8%
45 to 54 years	16,488	23.0%	15,883	22.7%	32,371	22.9%	3,751	21.8%
55 to 64 years	18,173	25.4%	18,551	26.6%	36,724	25.9%	5,387	31.2%
65+ years	8,280	11.6%	7,696	11.0%	15,976	11.3%	2,466	14.3%
Unknown	12	0.0%	10	0.0%	22	0.0%	472	2.7%
Region								
Eastern/Central/ Western UP	2,062	2.9%	1,932	2.8%	3,994	2.8%	524	3.0%
Northwest LP	2,295	3.2%	2,417	3.5%	4,712	3.3%	576	3.3%
Northeast LP	1,152	1.6%	1,151	1.6%	2,303	1.6%	265	1.5%
West/West Central	9,152	12.8%	9,098	13.0%	18,250	12.9%	2,502	14.5%
East Central	3,728	5.2%	3,529	5.1%	7,257	5.1%	859	5.0%
East	5,763	8.0%	5,721	8.2%	11,484	8.1%	1,243	7.2%
South Central	2,587	3.6%	2,618	3.7%	5,205	3.7%	591	3.4%
Southwest	4,599	6.4%	4,647	6.7%	9,246	6.5%	1,111	6.4%
Southeast	7,347	10.3%	7,177	10.3%	14,524	10.3%	1,748	10.1%
Detroit Metro	24,241	33.8%	23,764	34.0%	48,005	33.9%	5,360	31.1%
Outside Michigan	8,731	12.2%	7,812	11.2%	16,543	11.7%	1,276	7.4%
Unknown	0	-	0	-	0	-	1,186	6.9%

Table 2: Comparison of Survey Respondents to All Nurses Licensed in Michigan (Continued)

Characteristics	Nurse Population (Licensure Data)						2016 Survey Data	
	2016		2017		Total		#	%
	#	%	#	%	#	%		
LPNs	12,782	15.1%	12,168	14.8%	24,950	15.0%	2,161	11.1%
Age								
<25 years	272	2.1%	243	2.0%	515	2.1%	31	1.4%
25 to 34 years	2,263	17.7%	2,085	17.1%	4,348	17.4%	195	9.0%
35 to 44 years	2,651	20.7%	2,421	19.9%	5,072	20.3%	324	15.0%
45 to 54 years	2,612	20.4%	2,592	21.3%	5,204	20.9%	455	21.1%
55 to 64 years	3,367	26.3%	3,334	27.4%	6,701	26.9%	733	33.9%
65+ years	1,614	12.6%	1,488	12.2%	3,102	12.4%	356	16.5%
Unknown	3	0.0%	5	0.0%	8	0.0%	67	3.1%
Region								
Eastern/Central/ Western UP	866	6.8%	919	7.6%	1,785	7.2%	141	6.5%
Northwest LP	372	2.9%	326	2.7%	698	2.8%	99	4.6%
Northeast LP	461	3.6%	443	3.6%	904	3.6%	65	3.0%
West/West Central	2,046	16.0%	2,039	16.8%	4,085	16.4%	381	17.6%
East Central	902	7.1%	950	7.8%	1,852	7.4%	136	6.3%
East	1,275	10.0%	1,132	9.3%	2,407	9.6%	205	9.5%
South Central	420	3.3%	367	3.0%	787	3.2%	58	2.7%
Southwest	932	7.3%	897	7.4%	1,829	7.3%	152	7.0%
Southeast	1,220	9.5%	1,023	8.4%	2,243	9.0%	194	9.0%
Detroit Metro	3,579	28.0%	3,469	28.5%	7,048	28.2%	492	22.8%
Outside Michigan	709	5.5%	603	5.0%	1,312	5.3%	99	4.6%
Unknown	0	-	0	-	0	-	139	6.4%

In addition, several indicator variables were created to account for participants who were not always consistent in their responses across questions. For example, a number of nurses reported that they work at least some hours as a nurse, but then reported that they are not currently working in subsequent questions. Some participants were also inconsistent when describing their license type or the geographic area in which they live or are employed.

Results of the 2016 Survey of Michigan Nurses

All results in this section are presented as weighted estimates that reflect Michigan's overall nurse population. Therefore, results generated from 2016 data should not be directly compared to previous years' results as those data were not weighted. Additionally, 95% confidence intervals were calculated for selected results. Results where the accompanying confidence intervals do not overlap can be considered statistically significant.

EDUCATION

Nurses were asked to select each of the varying levels of degrees/certificates that they possess. As shown in Table 3, almost half (48.1%) of RNs have a Bachelor's Degree in Nursing. LPNs are most likely to hold an LPN diploma/certificate (96.5%). One percent of RNs indicated that they have a Doctorate in Nursing.

Table 3: Educational Background of Michigan Nurses

Education Level	RN = 17,216		LPN = 2,158	
	Estimate*	95% CI	Estimate*	95% CI
LPN diploma/certificate	3.1%	(2.8%, 3.3%)	96.5%	(95.7%, 97.2%)
RN diploma in nursing	12.9%	(12.4%, 13.4%)	-	-
Associate's degree in nursing	39.8%	(39.1%, 40.5%)	4.7%	(3.9%, 5.7%)
Bachelor's degree in nursing	48.1%	(47.4%, 48.9%)	0.7%	(0.4%, 1.1%)
Master's degree in nursing	10.1%	(9.7%, 10.6%)	-	-
Master's degree in other field	4.7%	(4.4%, 5.0%)	-	-
Doctorate in nursing	1.0%	(0.9%, 1.2%)	-	-
Doctorate in other field	0.6%	(0.5%, 0.7%)	-	-
Other degree	6.8%	(6.4%, 7.2%)	10.2%	(9.0%, 11.5%)

*Because nurses had the option to select more than one response, percentages sum to more than 100%.

Among nurses with a doctorate degree in nursing, 55.1% indicated they had a Doctor of Nursing Practice (DNP) degree and 41.8% hold a Doctor of Philosophy (PhD) degree (Table 4). Nursing programs are in the process of phasing out the Doctor of Nursing (ND) and Doctor of Nursing Science (DNSc) degrees.

Table 4: Type of Doctoral Degrees Held by Michigan Nurses

Doctorate Degree	RN = 180	
	Estimate	95% CI
Doctor of Nursing (ND)	3.1%	(1.4%, 6.7%)
Doctor of Nursing Practice (DNP)	55.1%	(47.8%, 62.2%)
Doctor of Nursing Science (DNSc)	1.3%	(0.4%, 4.2%)
Doctor of Philosophy (PhD)	41.8%	(34.8%, 49.1%)

Nurses who responded to the survey were also asked if they were currently enrolled in a program to obtain a Bachelor of Science in Nursing, a Master of Science in Nursing, a Doctor of Nursing Practice, or a Doctor of Philosophy in Nursing degree. It is estimated that 5.5% of RNs and 2.9% of LPNs are currently enrolled in a program to earn a Bachelor of Science in Nursing, while 3.3% of RNs are enrolled in a program to obtain a Master of Science in Nursing.

Table 5: Current Enrollment in Nursing Educational Programs

Degree	RN = 17,244		LPN = 2,161	
	Estimate	95% CI	Estimate	95% CI
Bachelor of Science in Nursing (BSN)	5.5%	(5.2%, 5.9%)	2.9%	(2.2%, 3.6%)
Master of Science in Nursing (MSN)	3.3%	(3.0%, 3.6%)	0.1%	(0.0%, 0.3%)
Doctor of Nursing Practice (DNP)	0.9%	(0.7%, 1.0%)	0.1%	(0.0%, 0.3%)
Doctor of Philosophy in Nursing (PhD)	0.2%	(0.1%, 0.2%)	-	(0.0%, 0.2%)

Nurses who indicated that they were enrolled in a program to earn a Master of Science in Nursing or a Doctor of Nursing Practice degree were asked if the program was designed to prepare them to earn a specialty certification. Most (91.0%) are estimated to be enrolled in a program that will prepare them to be a Nurse Practitioner.

Table 6: Educational Preparation to Earn Specialty Certification

Nurse Certificate	n = 352	
	Estimate	95% CI
Nurse Practitioner	91.0%	(87.5%, 93.5%)
Nurse Midwife	3.3%	(1.9%, 5.7%)
Nurse Anesthetist	5.8%	(3.8%, 8.7%)

EMPLOYMENT

Among all licensed nurses in Michigan, 84.0% of RNs and 77.5% of LPNs are currently employed as a nurse (Table 7). The percentage of RNs and LPNs who are currently employed tends to decrease as age increases, and 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 than female RNs and LPNs, respectively.

Table 7: Demographic Characteristics of Employed Nurses

Demographics	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Total	17,244	84.0%	(83.4%, 84.5%)	2,161	77.5%	(75.7%, 79.2%)
Age						
18 to 24 years	302	97.0%	(95.1%, 98.9%)	31	83.9%	(70.9%, 96.8%)
25 to 34 years	2,306	95.8%	(95.0%, 96.6%)	195	86.2%	(81.3%, 91.0%)
35 to 44 years	2,560	91.8%	(90.7%, 92.9%)	324	83.6%	(79.6%, 87.7%)
45 to 54 years	3,752	90.6%	(89.7%, 91.6%)	455	86.4%	(83.2%, 89.5%)
55 to 64 years	5,387	80.5%	(79.5%, 81.6%)	733	74.1%	(70.9%, 77.3%)
65+ years	2,466	43.7%	(41.7%, 45.7%)	356	46.6%	(41.5%, 51.8%)
Gender						
Female	15,946	83.6%	(83.0%, 84.2%)	2,023	77.0%	(75.2%, 78.9%)
Male	1,125	89.8%	(88.0%, 91.5%)	109	85.7%	(79.1%, 92.2%)
Race						
White	15,461	83.8%	(83.2%, 84.4%)	1,735	75.8%	(73.8%, 77.9%)
Black or African American	891	84.7%	(82.4%, 87.1%)	323	85.2%	(81.3%, 89.1%)
Other	830	86.3%	(84.0%, 88.6%)	117	79.0%	(71.6%, 86.4%)
Ethnicity						
Hispanic or Latino	241	92.0%	(88.6%, 95.4%)	26	83.5%	(69.2%, 97.8%)
Not Hispanic or Latino	16,381	84.0%	(83.5%, 84.6%)	2,020	77.5%	(75.6%, 79.3%)
Residency						
Eastern/Central/ Western UP	524	84.1%	(81.0%, 87.3%)	141	73.3%	(66.0%, 80.6%)
Northwest LP	576	83.4%	(80.4%, 86.5%)	99	79.8%	(71.9%, 87.7%)
Northeast LP	265	81.0%	(76.3%, 85.7%)	65	77.5%	(67.4%, 87.7%)
West/West Central	2,502	86.7%	(85.4%, 88.0%)	381	78.7%	(74.6%, 82.8%)
East Central	859	87.3%	(85.1%, 89.5%)	136	79.4%	(72.6%, 86.2%)
East	1,243	86.3%	(84.4%, 88.2%)	205	74.2%	(68.2%, 80.2%)
South Central	591	85.3%	(82.5%, 88.2%)	58	71.5%	(59.9%, 83.1%)
Southwest	1,111	85.7%	(83.6%, 87.7%)	152	84.6%	(78.8%, 90.3%)
Southeast	1,748	85.7%	(84.0%, 87.3%)	194	82.7%	(77.4%, 88.1%)
Detroit Metro	5,363	86.4%	(85.5%, 87.4%)	492	81.7%	(78.3%, 85.1%)
Outside MI	1,276	81.6%	(79.5%, 83.8%)	99	73.5%	(64.8%, 82.2%)

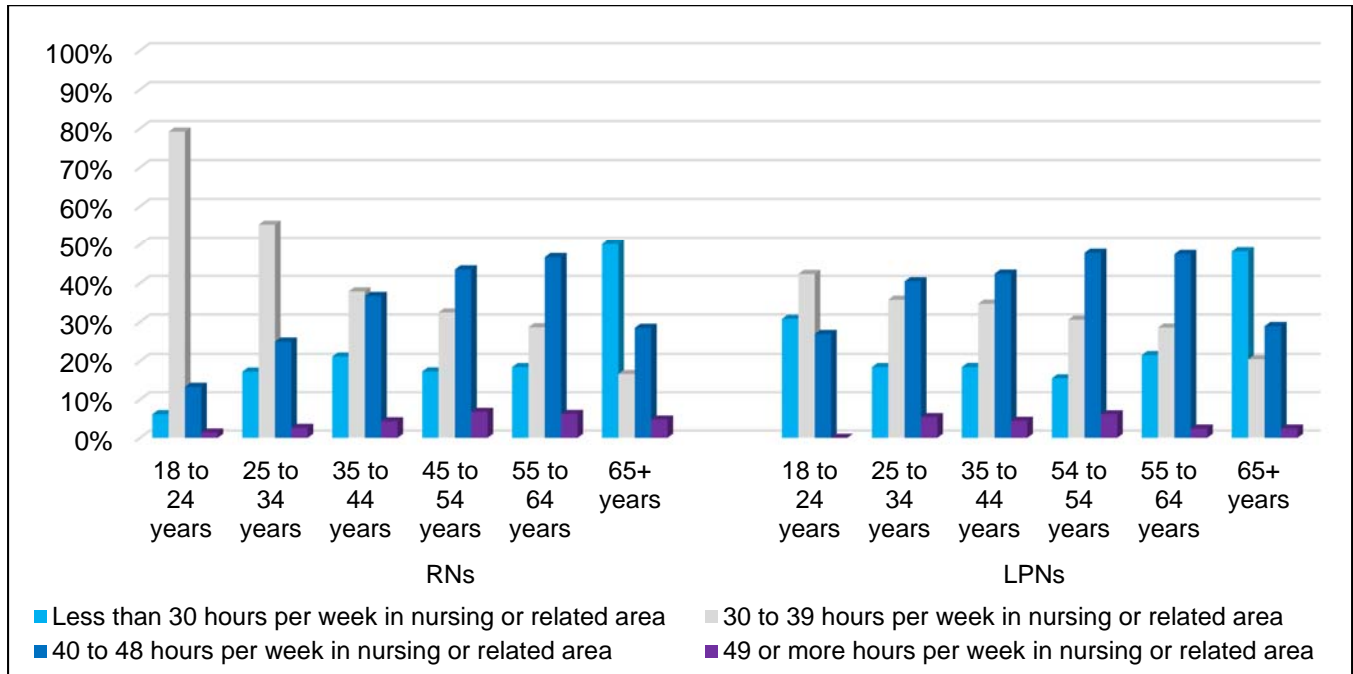
Table 8 shows the distribution of where nurses live and work with respect to Michigan's 10 Prosperity Regions. The highest proportion of RNs live (34.3%) and work (32.7%) in the Detroit Metro region. While the Detroit Metro region also has the highest proportion of LPNs living and working within this region, the percentages are somewhat lower (29.2% and 29.6%, respectively). The percentage of RNs licensed in Michigan who are employed outside of Michigan (11.4%) is similar to the percentage of RNs who live outside of Michigan (11.2%). Conversely, a higher percentage of LPNs live outside of Michigan (4.9%) than work outside of the State (3.7%).

Table 8: 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
Eastern/ Central/ Western UP	2.8%	(2.5%, 3.1%)	2.9%	(2.6%, 3.2%)	6.6%	(5.5%, 8.0%)	7.4%	(6.2%, 8.9%)
Northwest LP	3.2%	(3.0%, 3.6%)	3.3%	(3.0%, 3.7%)	2.8%	(2.1%, 3.8%)	2.9%	(2.1%, 3.9%)
Northeast LP	1.5%	(1.3%, 1.8%)	1.5%	(1.3%, 1.7%)	3.5%	(2.7%, 4.6%)	3.2%	(2.4%, 4.2%)
West/ West Central	13.1%	(12.5%, 13.7%)	12.7%	(12.1%, 13.3%)	16.3%	(14.6%, 18.2%)	16.6%	(14.8%, 18.6%)
East Central	5.2%	(4.9%, 5.6%)	5.3%	(5.0%, 5.7%)	7.5%	(6.2%, 8.9%)	7.7%	(6.5%, 9.2%)
East	8.2%	(7.7%, 8.7%)	7.1%	(6.7%, 7.6%)	9.1%	(7.7%, 10.6%)	8.2%	(6.9%, 9.7%)
South Central	3.7%	(3.4%, 4.0%)	4.0%	(3.6%, 4.3%)	2.8%	(2.1%, 3.8%)	3.1%	(2.3%, 4.1%)
Southwest	6.5%	(6.1%, 7.0%)	7.0%	(6.6%, 7.4%)	7.8%	(6.6%, 9.3%)	8.1%	(6.8%, 9.6%)
Southeast	10.3%	(9.8%, 10.8%)	12.0%	(11.4%, 12.6%)	9.4%	(8.1%, 11.0%)	9.7%	(8.2%, 11.3%)
Detroit Metro	34.3%	(33.5%, 35.1%)	32.7%	(31.9%, 33.5%)	29.2%	(27.0%, 31.5%)	29.6%	(27.3%, 32.0%)
Outside MI	11.2%	(10.6%, 11.7%)	11.4%	(10.9%, 12.0%)	4.9%	(3.9%, 6.1%)	3.7%	(2.8%, 4.7%)

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 1). In general, RNs and LPNs are more likely to work 40 to 48 hours per week in nursing or a related area as they approach the 55 to 64 year old age range. 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 and LPNs working 30 to 39 hours per week in nursing or a related area decreases as age increases.

Figure 1: Current Employment Status



Most RNs (64.7%) and LPNs (56.2%) have been working as a nurse for 10 or more years. Conversely, 15.8% of RNs have been working for less than 3 years compared to 21.2% of LPNs (Table 9).

Table 9: Number of Years Working as a Nurse

Years	RN = 13,884		LPN = 1,592	
	Estimate	95% CI	Estimate	95% CI
Less than 3 years	15.8%	(15.2%, 16.4%)	21.2%	(19.2%, 23.2%)
4 to 9 years	19.5%	(18.8%, 20.1%)	22.6%	(20.6%, 24.7%)
10 years or more	64.7%	(63.9%, 65.5%)	56.2%	(53.8%, 58.6%)

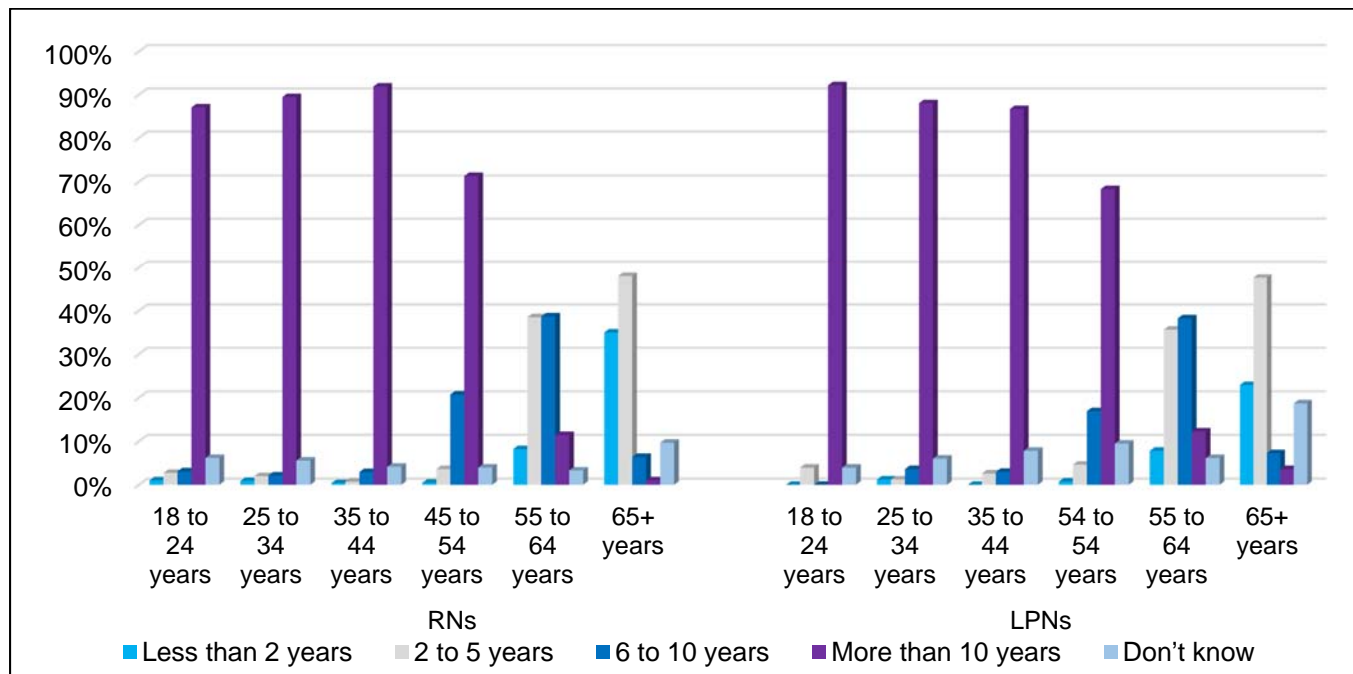
To assist in projecting the supply of nurses in the future, nurses who are currently working were asked to indicate for how many more years they plan to continue working as a nurse (Table 10). Most RNs (60.8%) and LPNs (57.5%) estimated that they will continue working as a nurse for more than 10 years. A much smaller percentage of RNs (4.5%) and LPNs (4.1%) plan to work as a nurse for fewer than 2 additional years.

Table 10: Plans to Continue Working as a Nurse

Years	RN = 13,897		LPN = 1,592	
	Estimate	95% CI	Estimate	95% CI
Less than 2 years	4.5%	(4.1%, 4.8%)	4.1%	(3.2%, 5.1%)
2 to 5 years	13.9%	(13.3%, 14.5%)	14.7%	(12.9%, 16.4%)
6 to 10 years	16.3%	(15.6%, 16.9%)	15.6%	(13.8%, 17.4%)
More than 10 years	60.8%	(60.0%, 61.6%)	57.5%	(55.0%, 59.9%)
Don't know	4.5%	(4.2%, 4.9%)	8.1%	(6.8%, 9.5%)

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 2). Most RNs (83%) and LPNs (70.5%) who are aged 65 or older indicated that they plan to continue working as a nurse for five or fewer years. RNs and LPNs between the ages of 55 and 64 were most likely to indicate they plan to continue working for two to five more years or for six to ten more years. Nurses younger than 55 years old most frequently indicated that they plan to continue practicing as a nurse for more than 10 years.

Figure 2: Plans to Continue to Practice Nursing (in years) by Age



When looking at nurses aged 55 years and older, more than half of RNs (53.6%) indicated that they plan to stop working within the next 5 years. Similarly, about half of LPNs (49.6%) also indicated that they plan to stop working within the next 5 years (Table 11).

Table 11: Nurses Who Plan to Stop Working within the Next 5 Years by Age

Age Category	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
< 55 Years	8,218	2.7%	(2.4%, 3.1%)	854	3.5%	(2.3%, 4.8%)
55+ Years	5,381	53.6%	(52.3%, 54.9%)	705	49.6%	(45.9%, 53.3%)

DIRECT CARE

Almost eight out of ten RNs (81.3%) and almost nine out of ten LPNs (87.9%) provide direct care services to patients and their families as a part of their main nursing position (Table 12). Among RNs who plan to stop working as a nurse within the next 5 years, 70% provide direct care services compared to 83.8% of RNs who plan to work for more than 5 years. Of the LPNs who plan to work for less than 5 years, 83.5% provide direct care services compared to 88.8% of LPNs who plan to work for more than 5 years.

Table 12: Nurses Who Provide Direct Care Services

Plans to Work	RN			LPN		
	n	Estimate	95% CI	n	Estimate	95% CI
Total	13,911	81.3%	(80.6%, 81.9%)	1,596	87.9%	(86.3%, 89.5%)
5 years or less	3,203	70.0%	(68.4%, 71.6%)	391	83.5%	(79.9%, 87.2%)
More than 5 years	10,646	83.8%	(83.1%, 84.5%)	1,194	88.8%	(87.1%, 90.6%)

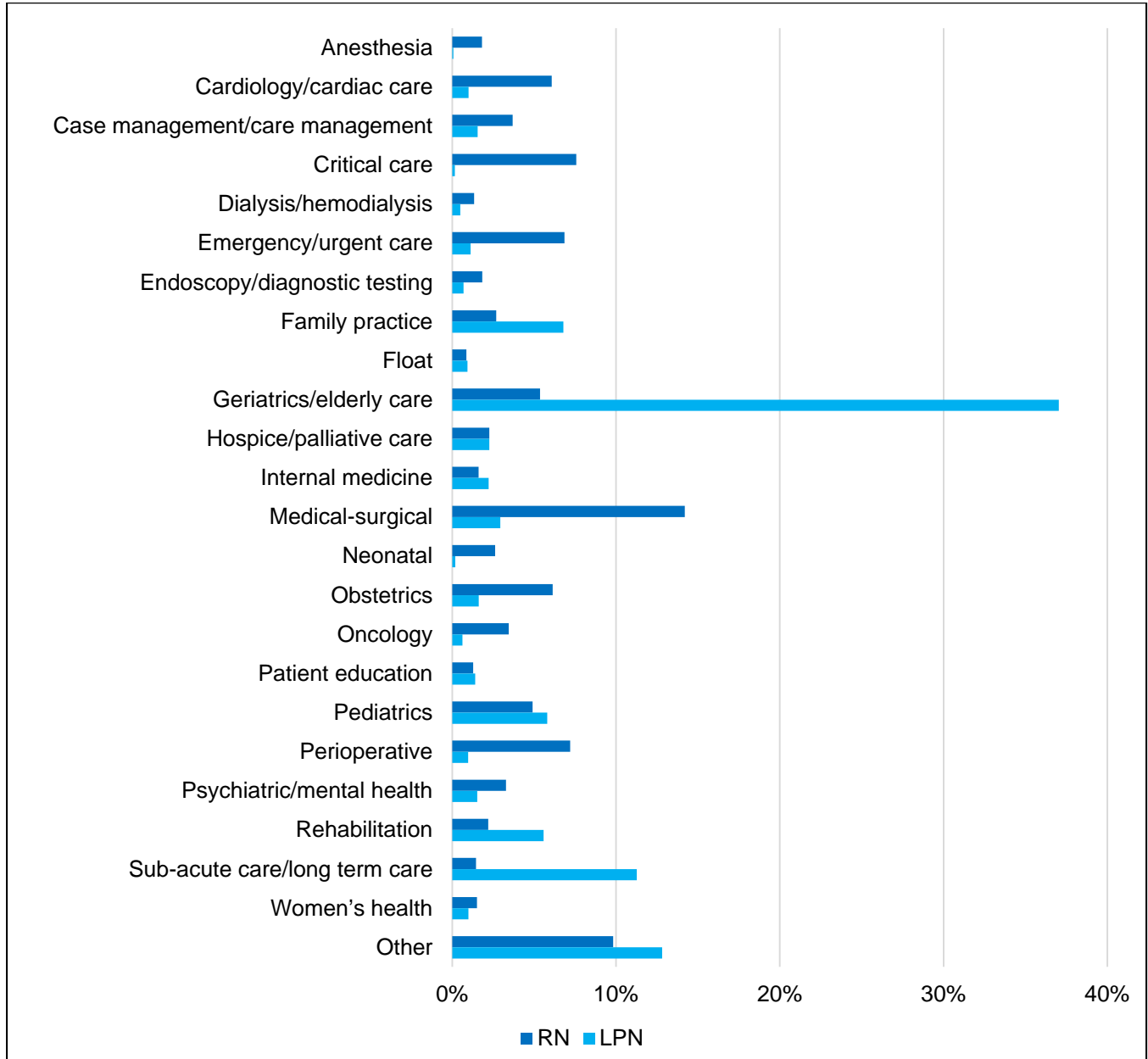
Table 13 shows the average number of hours per week nurses provide direct care services to patients and their families. In this table, nurses are broken out by RNs (excluding APRNs), APRNs (including Nurse Practitioners, Nurse Midwives, and Nurse Anesthetists), and LPNs. In general, about 40% of RNs and about one-third of both APRNs and LPNs provide direct care services for 36 to 41 hours per week. However, 20.2% of APRNs provide direct care, on average, between 42 and 48 hours per week with another 8.2% of APRNs providing direct care for 49 or more hours per week. A smaller percent of RNs (5.5%) and LPNs (9.3%) provide direct care services for 42 to 48 hours per week.

Table 13: Hours per Week Spent Providing Direct Care Services

Hours per Week	RN (excluding APRNs) = 12,353		APRNs = 659		LPNs = 1,313	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
No direct care	14.5%	(13.9%, 15.2%)	2.7%	(2.7%, 10.6%)	8.9%	(7.5%, 10.6%)
Less than 10 hours per week	8.9%	(8.4%, 9.4%)	4.1%	(2.7%, 7.9%)	9.4%	(7.9%, 11.1%)
10 to 15 hours per week	4.9%	(4.5%, 5.3%)	5.1%	(2.7%, 4.4%)	5.5%	(4.4%, 06.9%)
16 to 25 hours per week	12.8%	(12.2%, 13.4%)	11.9%	(2.7%, 11.5%)	13.3%	(11.5%, 15.2%)
26 to 35 hours per week	12.9%	(12.3%, 13.5%)	15.2%	(2.7%, 15.5%)	17.4%	(15.5%, 19.6%)
36 to 41 hours per week	39.0%	(38.2%, 39.9%)	32.6%	(2.7%, 30.8%)	33.3%	(30.8%, 35.9%)
42 to 48 hours per week	5.5%	(5.1%, 5.9%)	20.2%	(2.7%, 07.8%)	9.3%	(7.8%, 11.0%)
49 or more hours per week	1.5%	(1.3%, 1.7%)	8.2%	(2.7%, 2.1%)	2.9%	(2.1%, 4.0%)

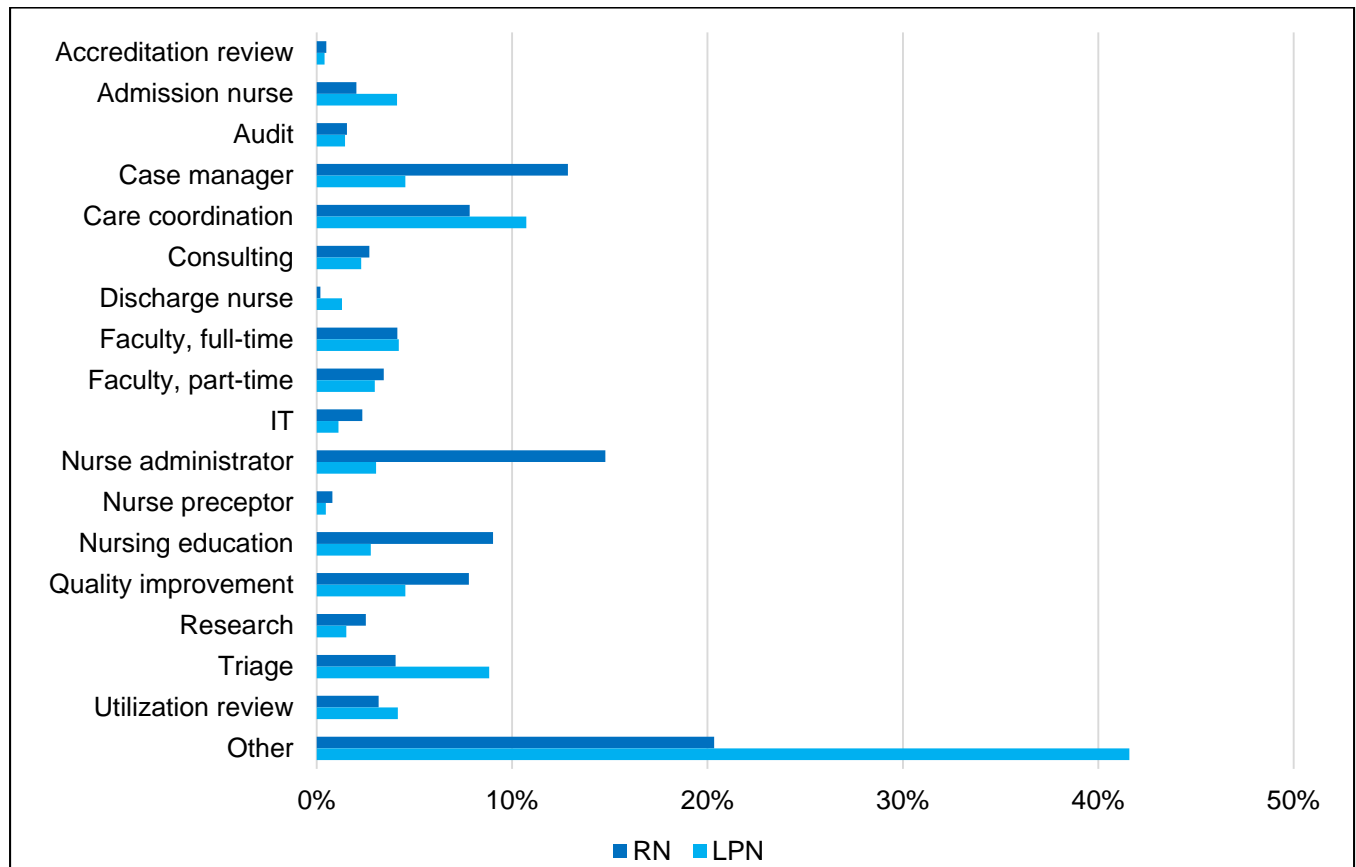
Licensed nurses who are employed as a nurse and provide direct patient care work in a wide variety of practice areas (Figure 3). Greater than one-third of LPNs mainly work in geriatrics or elderly care. RNs work in a variety of practice settings, but the largest percentage of RNs (14.2%) work in the medical-surgical field.

Figure 3: Direct Care Main Practice Area



Some licensed nurses who are employed in nursing do not provide direct patient care services as part of their main nursing role (Figure 4). These nurses work in a variety of other roles including case management (12.9% of RNs), care coordination (10.7% of LPNs), and administration (14.8% of RNs).

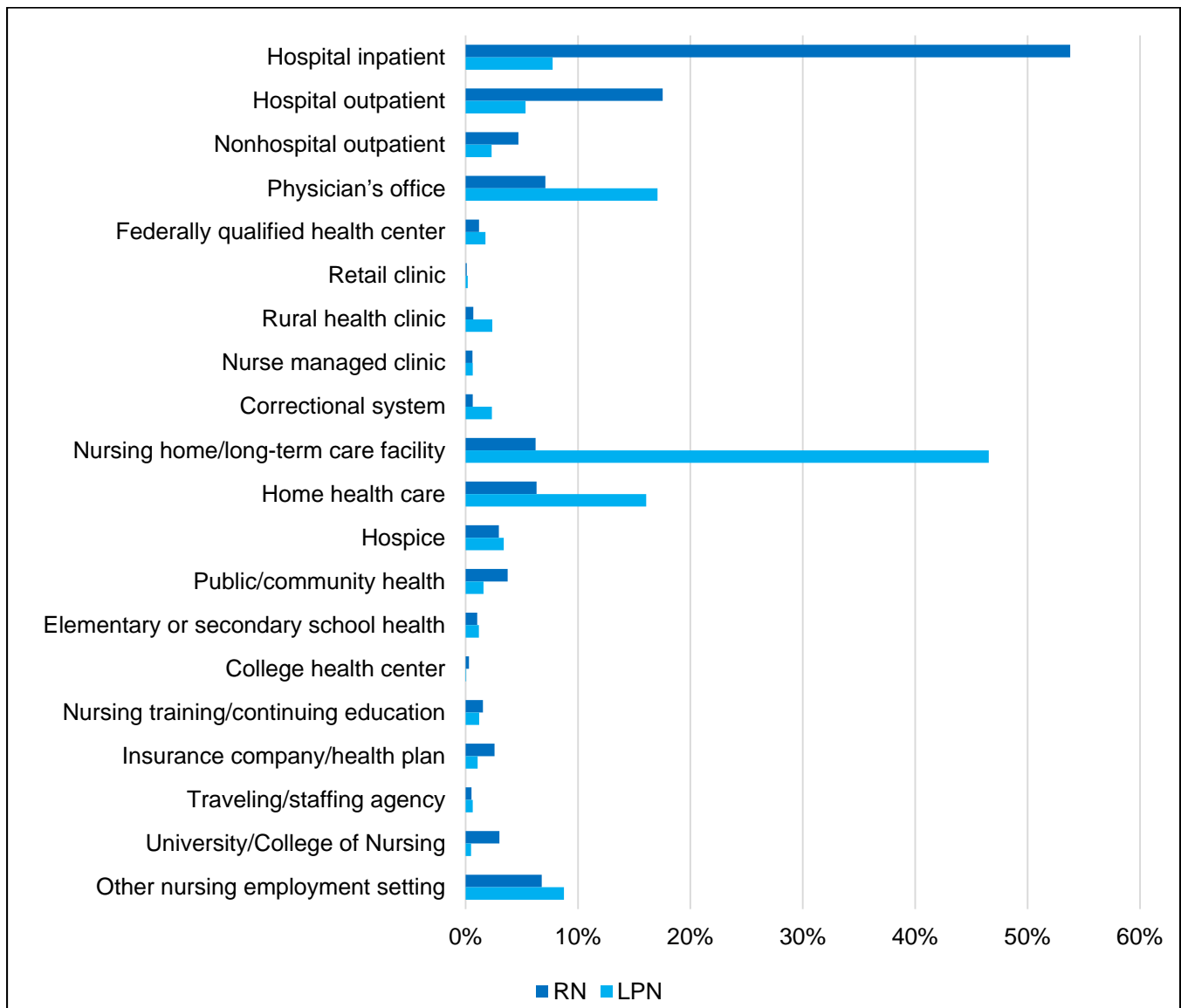
Figure 4: Main Role Outside of Direct Patient Care



PRACTICE SETTING

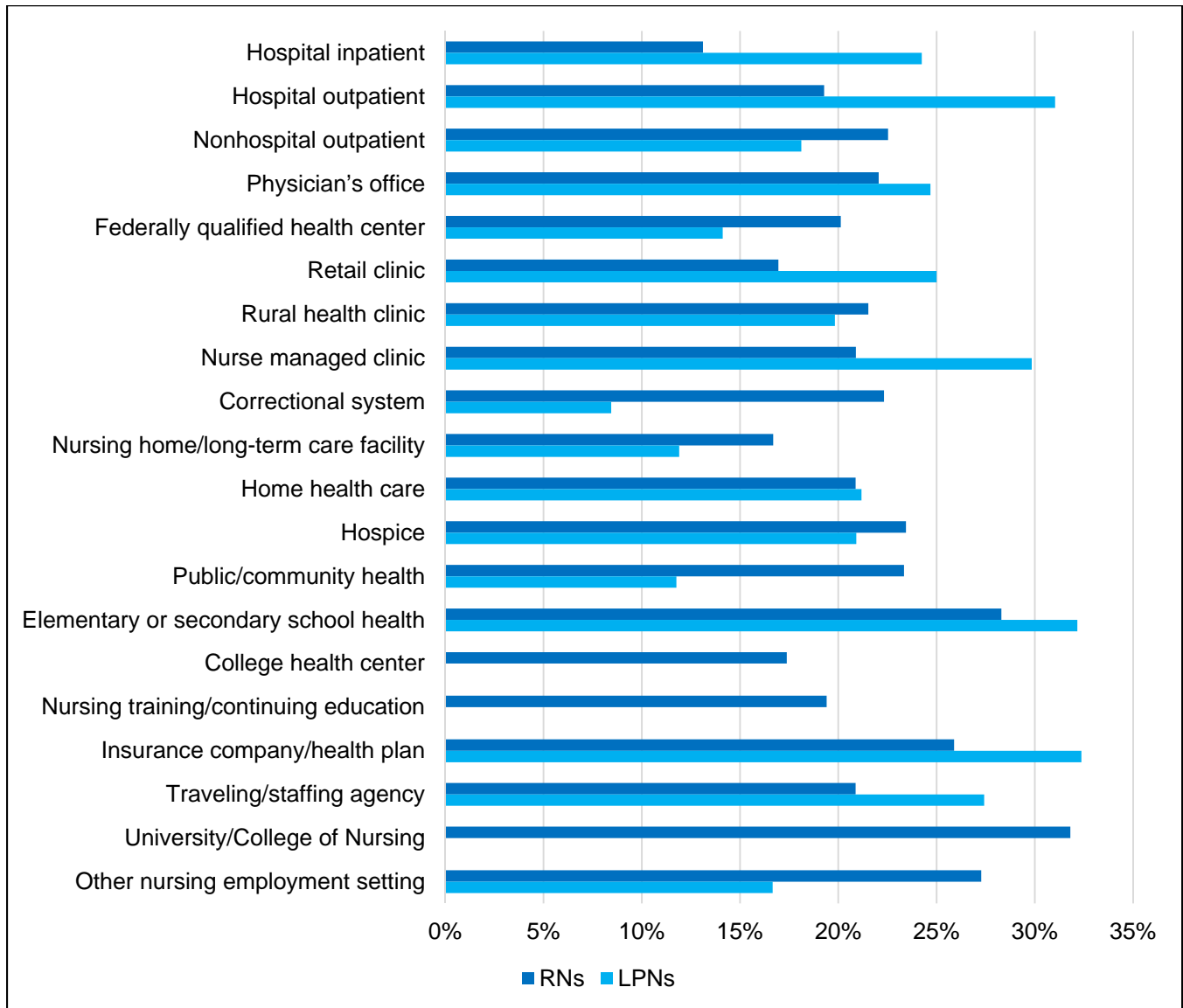
Both RNs and LPNs are employed in a wide variety of practice settings. Among nurses who are currently working in nursing or a related area, the largest percentage of RNs (53.8%) are estimated to be working in a hospital inpatient setting and the largest percentage of LPNs (46.6%) are estimated to be working in a nursing home or long-term care facility (Figure 5). RNs (17.5%) are also likely to be employed in a hospital outpatient setting and many LPNs work in a physician's office (17.1%) or in home health care (16.1%).

Figure 5: Employment Setting



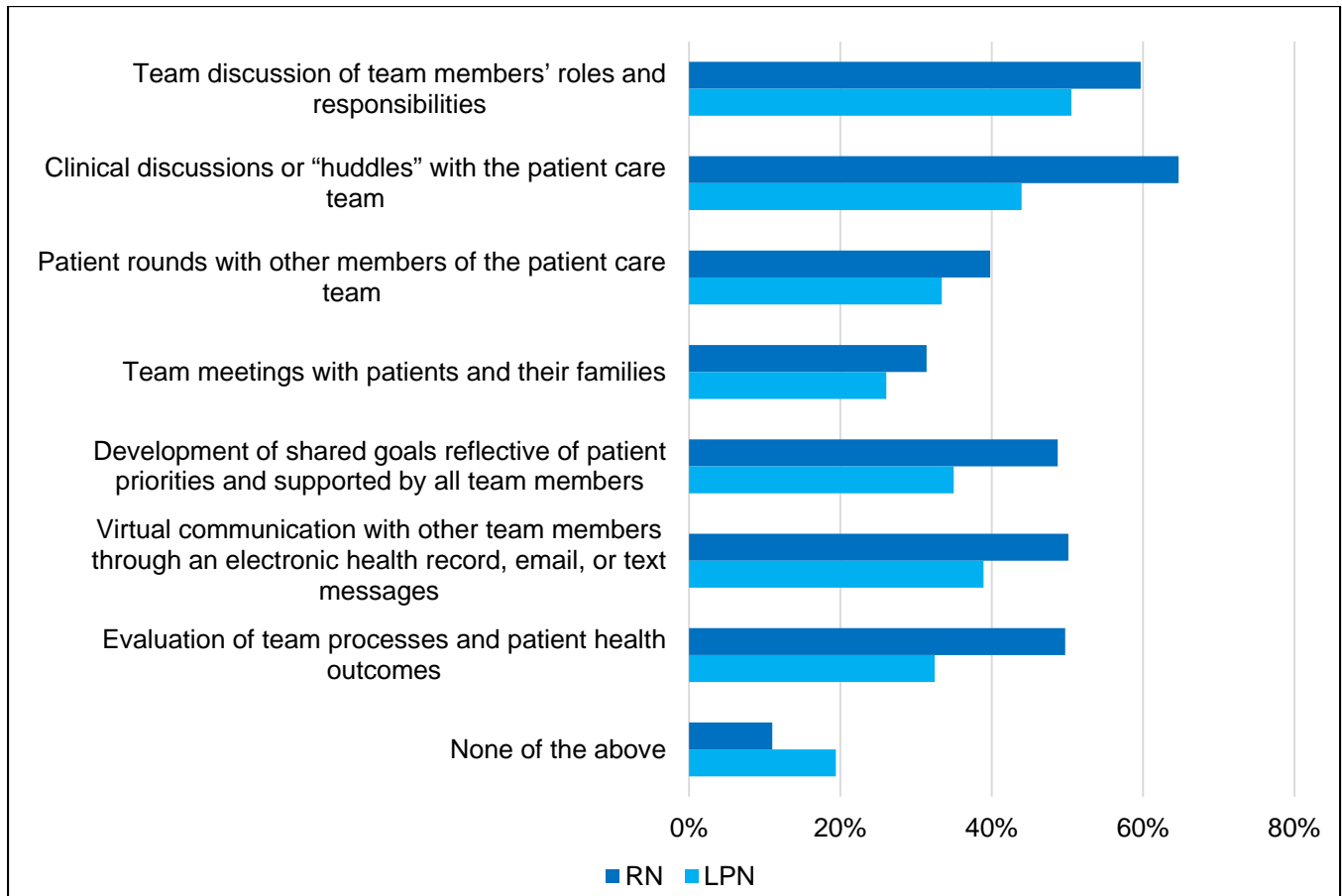
For each practice setting where nurses work, Figure 6 shows the percentage of those who plan to stop working within the next 5 years. Among RNs, the practice settings with the highest percentage of nurses who plan to stop working in the next 5 years are Universities or Colleges of Nursing (31.8%) followed by elementary or secondary school health (28.3%) and a combination of other practice settings not listed on the survey (27.3%). Among LPNs, the practice settings with the highest percentage of nurses who plan to stop working within the next 5 years are insurance companies/health plans (32.4%), elementary or secondary school health (32.2%), and hospital outpatient settings (31.0%).

Figure 6: Percentage of Nurses who Plan to Stop Working in the Next 5 Years by Employment Setting



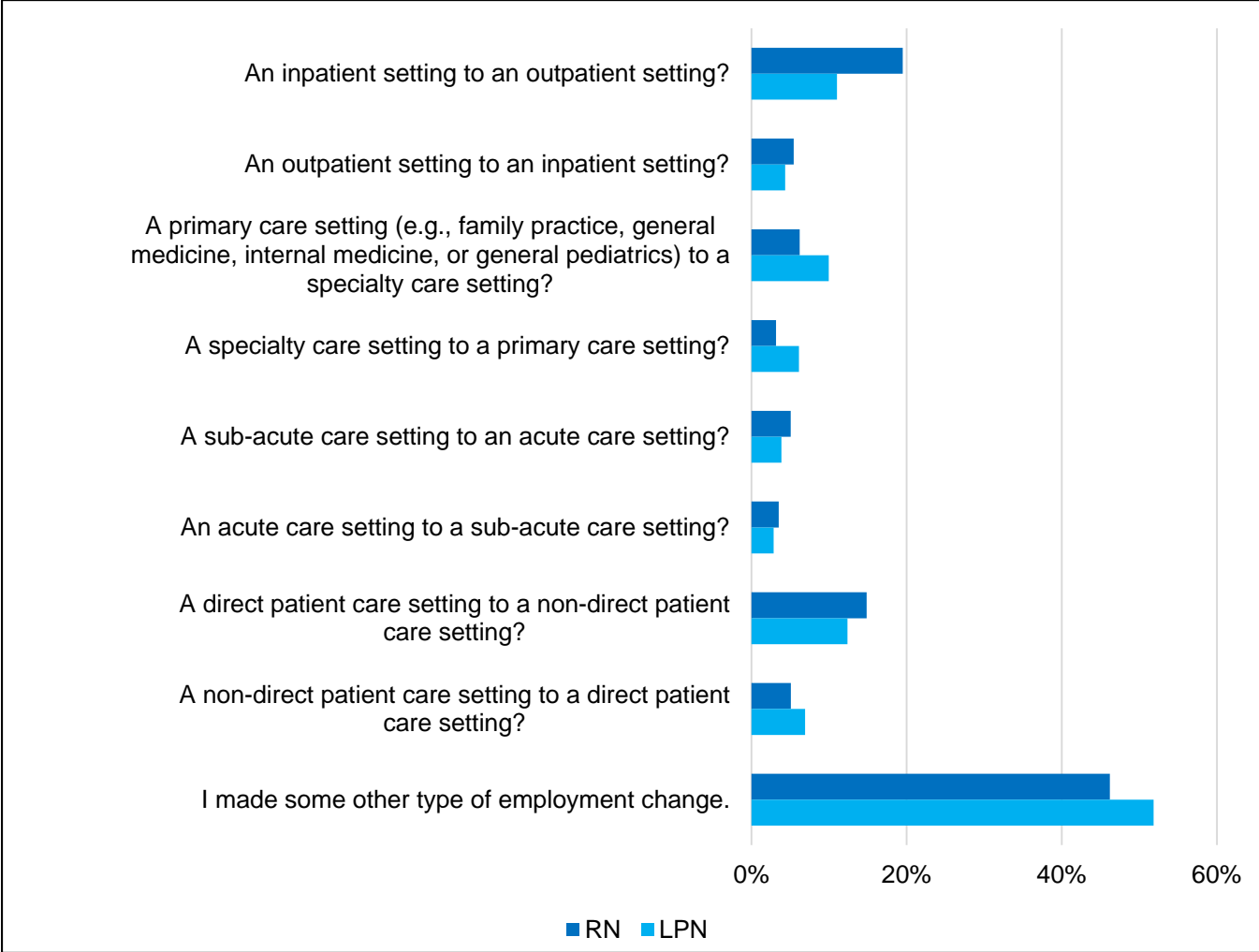
Licensed nurses participate in a variety of interprofessional activities as part of their regular nursing responsibilities (Figure 7). More than six in ten RNs (64.7%) participate in clinical discussions or “huddles” with the patient care team. While LPNs are less likely than RNs to participate in these interprofessional activities, over half of LPNs (50.5%) reported participating in team discussion of team members’ roles and responsibilities. Few RNs (11%) and LPNs (19.4%) indicated that they did not participate in any of the listed interprofessional activities.

Figure 7: Participation in Interprofessional Activities



Nurses who made a change in employment setting in the past 3 years were asked to indicate what type of change they made (Figure 8). Most nurses who did make an employment change indicated that they made some other type of employment change that was not listed on the survey (46.2% of RNs and 51.8% of LPNs who made an employment change). Of the RNs who selected one of the provided response options, the largest percentage (19.5%) indicated that they made a change from an inpatient setting to an outpatient setting. LPNs were most likely (12.4% of those who made an employment change) to indicate that they made a change from a direct patient care setting to a non-direct patient care setting.

Figure 8: Change in Employment Setting



Additional Information

For additional information related to the 2016 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 Katie Parker (kparker@mphi.org) from the Michigan Public Health Institute.

Appendix A: 2016 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 • Both
#2	What is your educational background? (Mark ALL that apply.)	<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 • Master's degree in other field • Doctorate in nursing • Doctorate in other field • Other degree
#3	If you have a doctorate in nursing, please indicate the type of doctorate degree. (Mark ALL that apply.)	<ul style="list-style-type: none"> • Doctor of Nursing (ND) • Doctor of Nursing Practice (DNP) • Doctor of Nursing Science (DNSc) • Doctor of Philosophy (PhD)
#4	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?
#5	Are you currently enrolled in a program to obtain any of the following degrees? (Mark ALL that apply.)	<ul style="list-style-type: none"> • Bachelor of Science in Nursing (BSN) • Master of Science in Nursing (MSN) • Doctor of Nursing Practice (DNP) • Doctor of Philosophy in Nursing (PhD)
#6	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?
#7	What is your current employment status? (Mark ONE.)	<ul style="list-style-type: none"> • Less than 30 hours per week in nursing or related area • 30 to 39 hours per week in nursing or related area • 40 to 48 hours per week in nursing or related area • 49 or more hours per week in nursing or related area • Employed, but not in nursing • Not employed and seeking employment in nursing or related area • Not employed and seeking employment outside of nursing • Not working and not looking for a job • Retired with no plans to return to work
#8	Does your main nursing position involve providing direct care services to patients/families? (Mark ONE.)	<ul style="list-style-type: none"> • Yes • No • Not applicable
#9	If you are a registered nurse without specialty certification or a licensed practical nurse, on average, how many	<ul style="list-style-type: none"> • I am not currently practicing as an RN or LPN. • I am practicing as an RN or LPN, but with no time in direct patient care.

	hours per week do you provide direct patient care? (Mark ONE.)	<ul style="list-style-type: none"> • Less than 10 hours per week • 10 to 15 hours per week • 16 to 25 hours per week • 26 to 35 hours per week • 36 to 41 hours per week • 42 to 48 hours per week • 49 or more hours per week
#10	If you hold state certification as a Nurse Anesthetist, Nurse Midwife, or Nurse Practitioner, on average, how many hours per week do you provide direct patient care as an advanced practice registered nurse? (Mark ONE.)	<ul style="list-style-type: none"> • I am not currently practicing as an APRN. • I am practicing as an APRN, but with no time in direct patient care. • Less than 10 hours per week • 10 to 15 hours per week • 16 to 25 hours per week • 26 to 35 hours per week • 36 to 41 hours per week • 42 to 48 hours per week • 49 or more hours per week
#11	Identify your current employment setting(s). (Mark ALL that apply.)	<ul style="list-style-type: none"> • Not applicable; not employed in nursing • Hospital inpatient • Hospital outpatient • Nonhospital outpatient • Physician's office • Federally qualified health center • Retail clinic • Rural health clinic • Nurse managed clinic • Correctional system • Nursing home/long-term care facility • Home health care • Hospice • Public/community health • Elementary or secondary school health • College health center • Nursing training/continuing education • Insurance company/health plan • Traveling/staffing agency • University/College of Nursing • Other nursing employment setting
#12	If you provide direct care services, please identify your main practice area. (Mark ONE.)	<ul style="list-style-type: none"> • Anesthesia • Cardiology/cardiac care • Case management/care management • Critical care • Dialysis/hemodialysis • Emergency/urgent care • Endoscopy/diagnostic testing • Family practice • Float • Geriatrics/elderly care • Hospice/palliative care • Internal medicine • Medical-surgical • Neonatal • Obstetrics • Oncology • Patient education • Pediatrics

		<ul style="list-style-type: none"> • Perioperative • Psychiatric/mental health • Rehabilitation • Sub-acute care/long term care • Women's health • Other
#13	If you work in an area of nursing that does not include direct patient care services, please identify your main role. (Mark ONE.)	<ul style="list-style-type: none"> • Accreditation review • Admission nurse • Audit • Case manager • Care coordination • Consulting • Discharge nurse • Faculty, full-time • Faculty, part-time • IT • Nurse administrator • Nurse preceptor • Nursing education • Quality improvement • Research • Triage • Utilization review • Other
#14	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"> • Less than 2 years • 2 to 5 years • 6 to 10 years • More than 10 years • Don't know
#15	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"> • 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 • 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
#16	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"> • 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?

		<ul style="list-style-type: none"> • 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 made some other type of employment change.
#17	In total, how long have you been 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 • Not working as a nurse
#18	Where is your primary place of employment? (Mark ONE.)	<ul style="list-style-type: none"> • Michigan • Other state in the U.S. • Canada • Other nation
#19	If you live in the U.S. or if your primary place of employment is in the U.S., what are the ZIP Codes of your residence and primary place of employment?	
#20	In what year were you born?	
#21	What is your gender? (Mark ONE.)	<ul style="list-style-type: none"> • Female • Male
#22	What is your ethnicity? (Mark ONE.)	<ul style="list-style-type: none"> • Hispanic or Latino • Not Hispanic or Latino
#23	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