

Chapter 4: Projection of Nurse Retirement

Overview

A projection of the rates of retirement for nurses from now through 2025 creates the following expectations: a 22% decline in the active RN workforce, an 11% decline in APN workforce, and a 15% in the LPN workforce. In order to maintain an adequate supply of nurses in the workforce, the number of new graduates must be equal to or greater than the number of retirees each year. If current rates of graduation are sustained over the years, the gap in the RN/APN workforce due to expected retirement will reduce considerably. For LPNs, sustaining current rates of graduation will lead to an excess supply of LPNs. Certain settings including Academic Setting, School Health service, Correctional Facilities, Occupational Health and Home Health have the greatest number of retirement-age nurses.

The following charts will outline how RN, APN, and LPN projections were calculated. Assumptions are outlined in the methodology section of this report, page 8.

Retirement Risk Based on Age

Table 74 describes the current age distribution of RNs, APNs, and LPNs. Based on the assumptions, these data are the basis for establishing how many nurses will be at risk of retirement in seven (7) years.

Table 74. Age Distribution of RNs, APNs, and LPNs in 2018			
	RN (%)	LPN (%)	APN (%)
18-25 years	1.8	1.1	0.1
26-35 years	17.3	17.0	18.6
36-45 years	18.0	21.7	23.7
46-55 years	23.6	24.4	24.7
56-65 years	29.3	24.0	24.8
66-75 years	8.7	10.5	7.2
76-85 years	1.3	1.2	0.7
85 years +	0.1	0.1	0.0
Total at risk of retirement	39.3	35.7	32.7

*Chart is based on 1 year of data, equivalent to 50% of the nursing workforce.

(Source: BON Survey 2018)



Table 75 shows the historical trended retirement percentages from 2016 through 2018 for RNs, APNs, and LPNs. These percentages help calculate the projections for potential nurse retirement through 2025.

Table 75. Rate of Retirement by Age Bracket of Nurses in NJ across RN, APN, & LPNs in 2018									
	RN			APN			LPN		
Age	2016 (%)	2017 (%)	2018 (%)	2016 (%)	2017 (%)	2018 (%)	2016 (%)	2017 (%)	2018 (%)
46-50	0.04	0.04	0.02	-	-	-	0.08	0.08	0.1
51-55	0.09	0.09	0.1	-	-	0.2	0.3	0.4	0.4
56-60	0.3	0.3	0.2	-	0.3	1	1	1	1
61-65	1	1	1	2	3	2	5	5	4
66-70	5	5	5	8	4	11	19	17	9
71-75	23	23	18	11	15	17	32	25	10
76-80	39	39	24	19	5	19	34	25	13
81-85	45	45	22	-	-		52	46	5
86+	49	49	23	-	-	50	56	50	38

(Source: NJCCN 2016-17, BON Survey 2018)

This table corresponds all those that answered ‘Retired’ to the survey question “If you are not employed as an RN, how important are each of the following factors in why you are not employed as an RN?” in NJCCN survey 2017 and “What is your employment status?” in BON survey 2018.

Assessing Potential Risk Across Employment Settings

Table 76 shows the percent distribution of nurses in New Jersey across 11 broad employment settings and an “other” category.

Table 76. Distribution of Nurses Across Employment Setting			
Employment Setting	RN (%)	APN (%)	LPN (%)
Hospital	54	41	6
School Health Service	10	4	2
Ambulatory Care Setting	9	7	4
Nursing Home*	7	5	20
Home Health	6	8	0
Correctional Facility	6	21	16
Insurance Claims/Benefits	3	8	45
Public Health	2	2	1
Academic Setting	1	4	3
Occupational Health	1	0	2
Community Health	0	0	0
Other	1	0	0

*Nursing Home includes Nursing Home, Extended Care & Assisted Living

(Source: BON Survey 2018)

Table 77 shows the percentage distribution of RNs, APNs, and LPNs in each of the settings by three age brackets. Highlighted cells indicate employment settings with a higher percentage of nurses at risk of retirement. For example, some settings, such as School Health Service for RNs, will be expected to be impacted more than others.

Table 77. Distribution of Nurses by Age Categories Across Employment Settings									
Employment Setting	RN			APN			LPN		
	18-55 (%)	56 - 65 years (%)	66 + years (%)	18-55 (%)	56 - 65 years (%)	66 + years (%)	18-55 (%)	56 - 65 years (%)	66 + years (%)
Hospital	73	23	3	66	27	6	72	20	7
School Health Service	52	35	13	72	19	9	85	12	3
Ambulatory Care Setting	61	33	6	73	17	9	79	16	5
Nursing Home*	62	30	8	59	26	15	74	19	7
Home Health	55	34	11	47	40	13	62	38	0
Correctional Facility	49	40	11	64	23	13	65	23	12
Insurance Claims/Benefits	61	32	6	72	21	6	79	17	4
Public Health	60	30	10	56	31	13	74	18	9
Academic Setting	39	41	20	57	35	8	73	21	6
Occupational Health	42	43	15	50	33	17	77	19	4
Community Health	59	31	10	-	-	-	-	-	-
Other	57	29	14	0	50	50	100	0	0

*Nursing Home includes Nursing Home, Extended Care & Assisted Living

(Source: BON Survey 2018)

Retirement Risk Through 2025

We estimate the risk of retirement for nurses in each age bracket by calculating their age in subsequent years based on their reported age in 2018.

Table 78. Projected Trend of the Active NJ Nursing Workforce Through 2025						
	RN		APN		LPN	
	2020	2025	2020	2025	2020	2025
Expected # of Retirements	7,169	23,831	179	786	826	3,161
Active Workforce after retirements (projected)	98,855	82,193	7,201	6,594	20,004	17,670
% reduction in the workforce from 2018	7	22	2	11	4	15

(Source: NJCCN Educational Survey 2017, BON Survey 2018)

Note: For purposes of projection, the number of respondents from 2017-2018 surveys were combined to get an estimate of the total number of nurses in the workforce. The assumed numbers are as follows: 106,024 RNs, 7,380 APNs, and 20,831 LPNs. The actual number of nurses in the state is higher than this estimate since not all nurses have completed the surveys. Taking the estimates for retirement rates among each age bracket, our projection suggests a 22% decline in the RN workforce, 11% decline in APN workforce and 15% in the LPN workforce between now and 2025.

Table 79 shows the number of new graduates from all schools across New Jersey.

Table 79. Graduation Rates Trended 2013-2017*					
	2013	2014	2015	2016	2017
RN	3101	3077	3161	3007	3122
APN	65	59	93	88	116
LPN	1777	1575	1543	1247	1220

(Source: NJCCN Educational Survey 2013-2018)

For purposes of projection, it is assumed based on NJCCN Educational Survey data, that 3,000 RNs, 100 APNs, and 1,200 LPNs enter the workforce every year.

Table 80 shows the percent net reduction in workforce for 2020 and 2025.

Table 80. Projected Trend of the NJ Active Nursing Workforce through 2025¹						
	RN		APN		LPN	
	2020	2025	2020	2025	2020	2025
Expected number of Retirements	7,169	23,831	179	786	826	3,161
Active Workforce after retirements (projected)	98,855	82,193	7,201	6,594	20,004	17,670
Reduction in the workforce from 2018	-7%	-22%	-2%	-11%	-4%	-15%
Expected new graduates entering workforce	6,000	21,000	200	700	2,400	8,400
Net reduction in the workforce from 2018	-1%	-3%	0%	-1%	8%	25%²
95% Confidence Intervals for % net reduction in workforce³	(-2%, -0.3%)	(-5%, -1%)	(-2%, 2%)	(-8%, 6%)	(0%, 15%)	(-1%, 52%)

(Sources: BON Survey 2018, NJCCN Educational Surveys 2013-2018)

Note¹: For purposes of projection, the number of respondents from 2017-2018 surveys were combined to get an estimate of the total number of nurses in the workforce. The assumed numbers are as follows: 106,024 RNs, 7,380 APNs, and 20,831 LPNs. The actual number of nurses in the state is higher than this estimate since not all nurses have completed the surveys.

Note²: There is inconclusive evidence that graduates from practical nursing programs are joining the LPN workforce. Hence, there is a question of whether the LPNs are not working in nursing, out-migrating or just unresponsive to the survey. The projections for LPNs may be overstated and should be used with caution (See Note³). However, note that the data from the national HRSA report also reflects an excess of LPNs by 2030 which is consistent with this report.

Note³: There is a certain level of intrinsic uncertainty in the ‘% net reduction in the workforce’. Schools may not graduate the assumed numbers in the projections every year. All graduates may not find a job in the workforce or within the state. There may not be insufficient applicants to schools in the coming years. For such cases, the 95% confidence demonstrates the best and worst-case scenarios and inform the level of confidence in estimates. For example, a 25% excess

of LPNs is expected by 2025. However, if schools were to graduate fewer than 1200 graduates per year, or LPN graduates seek employment outside of the LPN workforce, then a decline of 1% in LPNs can be expected by 2025. Likewise, if schools were to graduate more than 1200 graduates per year and all of them join the workforce, higher gains to the likes of 52% excess LPNs could be seen by 2025.

In **Table 78** and **Table 80**, the percentage reduction in workforce represents the compounded decline in the workforce year-over-year. The yearly rate can be approximated by dividing by 7. For example, for LPNs, the percent net reduction in the workforce is 25%, which divided by 7 is 3.6% excess annually.

