



Advanced Practice Registered Nurses in Louisiana According to Role 2014

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Executive Summary

In a time in our country and state when the demand for healthcare is expected to increase tremendously due to aging baby boomers, an increase in the number of insured persons seeking healthcare as a result of the implementation of the Affordable Care Act, changing demographics of our population, and the growing need for healthcare providers that are able to provide culturally competent, patient centered, high quality, cost-effective care to those that will be living longer with chronic, complex health conditions, it is imperative that we take a closer look at the supply of advanced practice registered nurses (APRNs) that live and work in Louisiana. APRNs, in partnership with physicians and other providers, have a significant role in the promotion of health. Advanced practice registered nurses have assumed an increasing role as providers in the health care system, particularly for underserved populations (Newhouse, et.al, 2011).

Workforce projections indicate looming primary care provider shortages, especially in rural areas. Information on the distribution of the APRN workforce supply and education capacity is needed to help workforce planners and policymakers address current and anticipated shortages effectively (Skillman, Kaplan, Fordyce, McMenamain, & Doescher, 2012). This project will support the charge given to the Louisiana Action Coalition (LAC) by providing a current assessment of the APRN nursing workforce in Louisiana. It builds upon the work that has been done through the Louisiana State Board of Nursing – Center for Nursing (the 2014 Nursing Education Capacity and Supply Report) in which graduate nursing education capacity in Louisiana is addressed. The graduate nursing education capacity report can be found in Appendix A.

Findings from the current report will equip policymakers, health care workforce analysts, health care administrators, administrators of schools of nursing, and other interested stakeholders with information that is needed to make informed decisions when developing strategies to address the current and future demand for APRNs in Louisiana.

Major Findings

- Although there is a growing number of APRNs in Louisiana, all types of APRN roles are not growing at the same rate. There has been a 180.7 percent increase in the number of NPs between 2004 and 2014, but there has only been a 3.2 percent increase in the number of CNMs and the number of CNSs have decreased 47.1 percent over the same time period.
- The average age for NPs in Louisiana is 45 years, whereas the average age for CNSs is 59 years and 50 years for CNMs. Almost half (48.8%) of the CNSs workforce is 60 plus years of age.
- The APRN workforce continues to be a majority female dominated workforce except for CRNAs where 48.5 percent of the CRNA workforce is represented by men.
- The APRN workforce continues to be a majority White workforce ranging from a high of 100 percent of the CNM workforce to 72.4 percent of the CNSs workforce.

- The majority of the APRN workforce is prepared at the Masters level with 100 percent of CNSs having a Masters or higher degree, 97.8 percent of NPs, 81.2 percent of CNMs, and 70 percent of CRNAs.
- The DNP is the type of doctorate degree held by the largest percentage of NPs and CRNAs in Louisiana.
- Approximately one third of the CNS workforce only plan to work on to five more years.
- The vast majority of all APRNs work full-time between an average of 38.2 hours for CNSs and 44.7 hours for CNMs. The median hours for a work week for all APRNs was 40 hours.
- Annual income ranged between \$75,001 to \$150,000 for the majority of NPs, CNSs, and CNMs. The range in salary for the majority of CRNAs was \$100,001 to greater than \$150,000.
- The majority of APRNs reported having one job or position, although around 19 percent of NPs and CNSs reported having two positions, and approximately five percent of NPs and CNSs reported having three positions.
- The vast majority of APRNs provide direct patient care: CRNAs – 99.5 percent; NPs – 99.0 percent; CNMs – 90.3 percent; and CNSs – 79.4 percent.
- Approximately 66 percent (65.8%) of NPs reported Family as their primary clinical population, followed by 9.7 percent indicating that their clinical role and population was Adult NP.
- The four most popular clinical populations/specialties reported by CNSs were Adult Health (22.8%), Medical/Surgical (19.7%), Adult Psychiatric/Mental Health (18.9%), and Maternal/Child (12.6%).
- The clinical specialty reported by 100 percent of the CRNAs (1,272) and CNMs (32) was anesthesia, and midwifery, respectively.
- In 2014, the clinical settings where the largest percentage of NPs practiced were outpatient clinics (20.3%); physician's offices (19.7%); and hospitals (17.6%).
- The number of NPs that work in nursing homes went from 26 in 2010 to 67 in 2014, an increase of 158 percent. There was also an 83 percent increase in the number of NPs working in emergency departments between 2010 and 2014, and a 65 percent increase in the number of NPs working in rural health clinics.
- The majority (85.7%) of CRNAs practice in the hospitals and almost 9.6 percent (122) work in outpatient clinics. There has been a 28% increase in the number of CRNAs

working in outpatient clinics between 2010 and 2014 and a 7 percent increase in the number working in hospitals

- The most popular clinical settings for CNSs in 2014 were hospitals (35.4%), schools of nursing (19.7%), and outpatient clinics (11.8%).
- The majority of CNMs (53.1%) work in hospitals, followed by Women's Health Clinics (15.6%).
- There has been a 60 percent decrease in the number of CNMs working in private clinics between 2010 and 2014.
- The vast majority of NPs (95.4%) and CNMs (87.5%) licensed and residing in Louisiana have prescriptive authority. Approximately 24 percent of CNS and one percent of CRNAs have prescriptive authority.

APRNs by Role, Regional Labor Market Area, Race, and Population

- Although there is slight variation between regional labor market areas in terms the race/ethnicity and gender of the regional population and APRN workforce according to role, significant gaps have been identified across regions.
- The percent minority population and the percent minority NP and CRNA population by RLMAs were determined in an effort to identify the gaps in terms of the racial/ethnic and gender make-up of the population and the NP and CRNA workforce at the regional level. Significant gaps existed in every region relative to racial/ethnic makeup of the NP and CRNA population, but it is interesting to note that in terms of gender, in five of the eight regions, male CRNAs exceeded the percentage of males in the regional population.

ADVANCED PRACTICE REGISTERED NURSES (APRNS) IN LOUISIANA ACCORDING TO ROLE

Advanced Practice Registered Nurses

Advanced practice registered nurses (APRNs) are a critical component of Louisiana's healthcare system, giving Louisiana's citizens access to high quality, patient-centered, cost-effective care in a broad range of settings, including private or group practices in offices and clinics as well as hospital inpatient and outpatient settings, and rural communities. Advanced Practice Registered Nurses (APRNs) include nurse practitioners (NPs), certified registered nurse anesthetists (CRNAs), clinical nurse specialists (CNSs), and certified nurse midwives (CNMs).

APRNs are licensed registered nurses educated at a masters or post masters/doctoral level in a specific role and patient population. They are prepared by education and certification to assess, diagnose, and manage patient problems, order tests, and prescribe medications (NCSBN, 2015; Budden, Zhong, Moulton, & Cimiotti, 2013). Descriptions of the roles of APRNs are provided by many sources which include but are not limited to the Louisiana State Board of Nursing (LSBN) Nurse Practice Act, the National Council of State Boards of Nursing (NCSBN), and professional APRN organizations.

Certified Nurse Midwives or "CNMs" are APRNs educated in the disciplines of nursing and midwifery and certified according to a nationally recognized certifying body, such as the American Midwifery Certification Board (AMCB), as approved by the Board of Nursing (BON), and who are authorized to manage the nurse midwifery care of newborns and women in the antepartum, intrapartum, postpartum, and/or gynecological periods (Louisiana Nurse Practice Act, 2010). CNMs provide a full range of primary health care services to women throughout the lifespan, including gynecologic care, family planning services, preconception care, prenatal and postpartum care, childbirth, and care of the newborn. The practice includes treating the male partners of their female clients for sexually transmitted disease and reproductive health. CNMs practice in diverse settings such as the home, hospital, birth center, private offices, community clinics and public health clinics (NCSBN, 2015).

Nurse Practitioners or "NPs" are APRNs educated in a specified area of care and certified according to the requirements of a nationally recognized accrediting agency such as the American Nurses Association's American Nurses Credentialing Center, National Certification Corporation for the Obstetric, Gynecologic and Neonatal Nursing Specialties, or the National Certification Board of Pediatric Nurse Practitioners and Nurses, or as approved by the BON and who is authorized to provide primary, acute, or chronic care as an advanced NP acting within his/her scope of practice to individuals, families, and other groups in a variety of settings including, but not limited to, homes, institutions, offices, industry, schools, and other community agencies (Louisiana Nurse Practice Act, 2010). Certified NPs are responsible and accountable for health promotion, disease prevention, health education and counseling as well as the diagnosis and management of acute and chronic diseases. They provide initial, ongoing and comprehensive care to patients in family practice, pediatrics, internal medicine, geriatrics, and women's health (NCSBN, 2015).

Certified Registered Nurse Anesthetists or “CRNAs” are APRNs who are educated in the field of nurse anesthesia and certified according to the requirements of a nationally recognized certifying body such as the National Board for Certification and Recertification of Nurse Anesthetists, as approved by the BON and who is authorized to select and administer anesthetics or ancillary services to patients under their care (Louisiana Nurse Practice Act, 2010). CRNAs are prepared to provide the full spectrum of patients’ anesthesia care and anesthesia-related care for individuals across the lifespan. This care is provided in diverse settings, including hospital surgical suites, delivery rooms, critical access hospitals, ambulatory surgical centers, and pain management clinics (NCSBN, 2015). CRNAs are the primary providers of anesthesia care in rural America, enabling healthcare facilities in these medically underserved areas to offer obstetrical, surgical, pain management and trauma stabilization services. In some states, CRNAs are the sole providers in nearly 100 percent of the rural hospitals (American Association of Nurse Anesthetists, 2015).

Clinical Nurse Specialists or “CNS” are APRNs who are educated in a recognized nursing specialty area and are certified according to the requirements of a nationally recognized certifying body such as the American Nurses Association’s American Nurses Credentialing Center, as approved by the BON and who are authorized to provide direct nursing care to a select population in a recognized nursing specialty area, and plans, guides, and directs care given by other nursing personnel (Louisiana Nurse Practice Act, 2010). Clinical nurse specialists are expert clinicians in a specialized area of nursing practice which is identified in terms of population, setting, disease or medical subspecialty, type of care, and type of problem. Clinical nurse specialists serve in a variety of settings and influence care outcomes by providing expert consultation for nursing staffs and by implementing improvements in health care delivery (NACNS, 2015).

The Louisiana State Board of Nursing collects data on every APRN that is licensed to practice in Louisiana through the annual licensure renewal process. A brief summary of the aggregate data on APRNs is published in the LSBN Annual Report each year but with the ever increasing changes in the demand for healthcare and healthcare services in our state, there was a need for a more thorough analysis of the data which depicts APRNs. Thus, the purpose of this project was to complete a detailed report on APRNs in Louisiana according to their roles: NPs, CRNAs, CNS, and CNMs. Demographic information, educational preparation, population focus, clinical setting, annual salary, and geographical region of employment will be addressed in the current report.

APRN Supply According to Role

In 2014, there were a total of 4,968 APRNs licensed to practice in Louisiana. Information relative to county of residence was available for 4,650 (93.6%) of the licensed APRNs via the APRN licensure renewal application process. Of the 4,650 APRNs licensed to practice in Louisiana, 4,204 (90.4%) actually resided in Louisiana (Table 1).

Table 1. Number of APRNs Licensed to Practice in LA (2014)

Report Year	# Holding a LA License (Residing in LA)	# Holding a LA License (Not Residing in LA)	Total # with an APRN License in LA
NP	2,773	242	3,015
CRNA	1,272	190	1,462
CNS	127	8	135
CNM	32	6	38
Total	4,204	446	4,650

Note: Parish of residence was not available for 318 licensed APRNs.

Louisiana’s APRN workforce has grown significantly between 2004 and 2014. In 2004 there were 2,188 employed APRNs that were licensed and residing in Louisiana and in 2014 this number had grown to 4,204 APRNs which represents a 92 percent increase in the number of APRNs licensed to practice in Louisiana. Considering how healthcare in the U.S. is changing with the passage of the Affordable Care Act (ACA), expanded insurance coverage, the movement to accountable care organizations and team based care, and an aging population that is living longer with more complex chronic diseases, the demand for APRNs is expected to grow significantly over the next 10 to 15 years.

Figure 1 illustrates changes in the supply of APRNs according to role that have occurred between 2004 and 2014. The greatest increase in APRNs has occurred amongst NPs, which has gone from 988 in 2004 to 2,773 in 2014, a 180.7 percent increase in number. There was a 36.9 percent increase in the number of CRNAs, and only a 3.2 percent increase in the number of CNMs. In contrast, the number of CNSs has decreased by 47.1 percent.

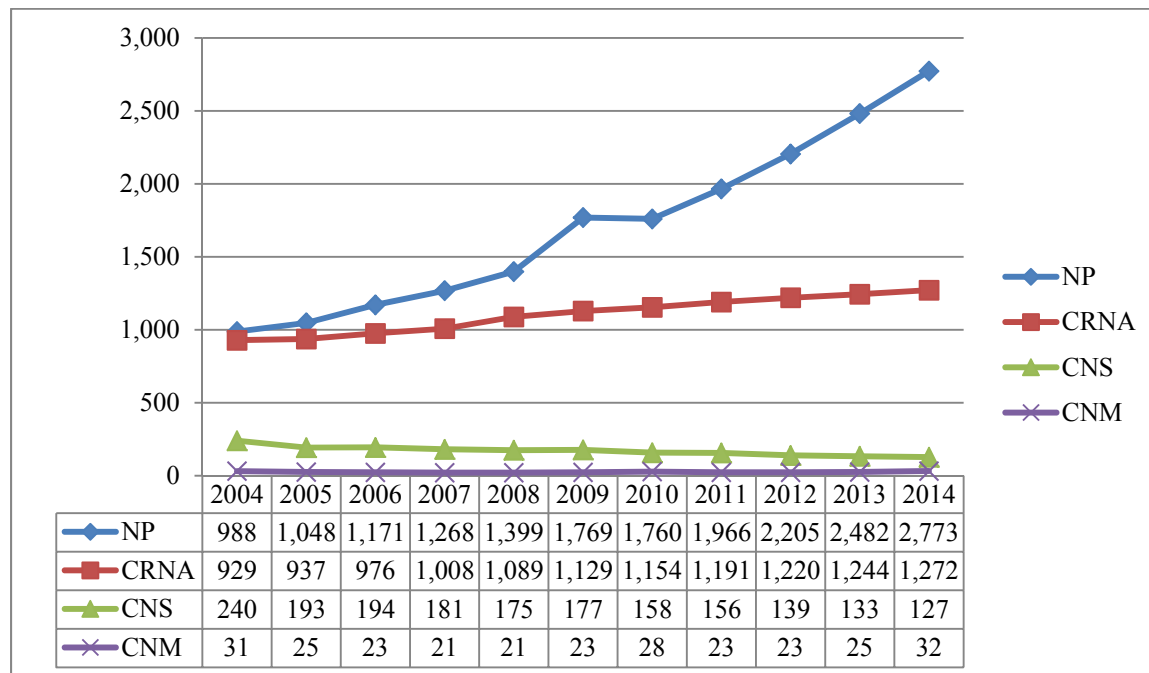


Figure 1. APRN Supply in Louisiana according to role 2004-2014.

Demographics According to APRN Role

Age

The average age for licensed APRNs residing in Louisiana was 46 years in 2014 and the median age was 44 years (LSBN Annual Report, 2014), yet there was variation in average age according to role. The average age for NPs and CRNAs was 45 and 47 years, respectively, compared to an average age of 50 and 59 years for CNMs and CNSs, respectively (Figure 2). According to the Health Resources and Services Administration (HRSA) 2012 National Sample Survey of Nurse Practitioners (2014), the average age within the NP workforce at the time of the survey was 48 years.

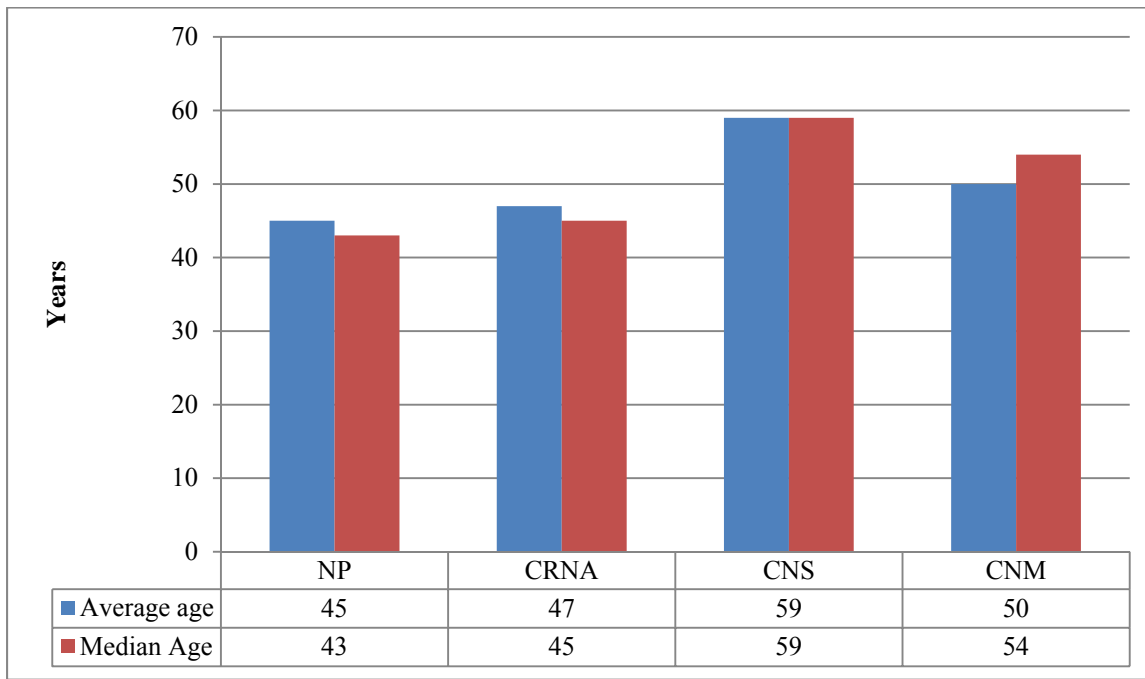


Figure 2. APRN average and median age according to role in 2014.

Over 60 percent of the NP and CRNA workforce were between 30 and 49 years of age in 2014 (Figure 3). In contrast, it is interesting to note that almost one half (48.8%) of the CNS workforce in Louisiana is 60 plus years.

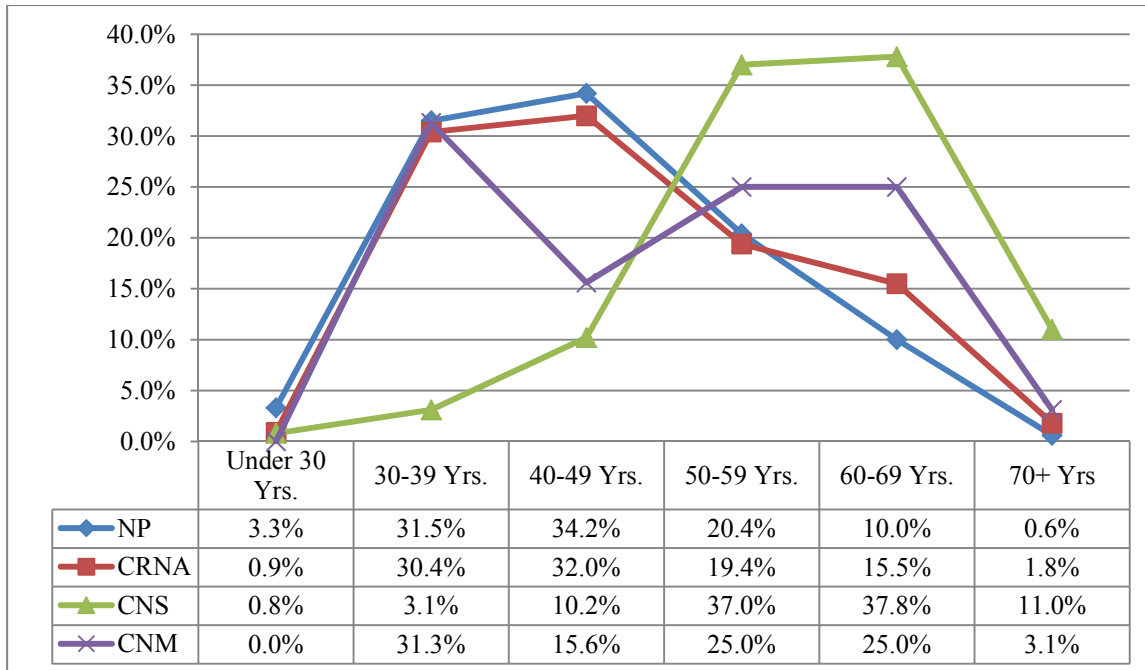


Figure 3. Age category for employed APRNs according to role: NP = 2,773; CRNA= 1,272; CNS=127; CNM=32

Gender

Statewide, 23.1 percent of the APRNs licensed and residing in Louisiana are male and 76.9 percent are female (LSBN Annual Report, 2014). When comparing gender distribution according to APRN role, 48.5 percent of the CRNAs in Louisiana are male, compared to 12.7 percent of NPs and 3.1 percent of CNSs (Table 2 and Figure 4). One hundred percent of the 32 CNMs in Louisiana are female.

Table 2. Gender According to Type of APRN (2014)

APRN	Female		Male	
	#	%	#	%
APRN	3,232	76.9%	972	23.1%
NP	2,422	87.3%	351	12.7%
CRNA	655	51.5%	617	48.5%
CNS	123	96.9%	4	3.1%
CNM	32	100%	0	0%

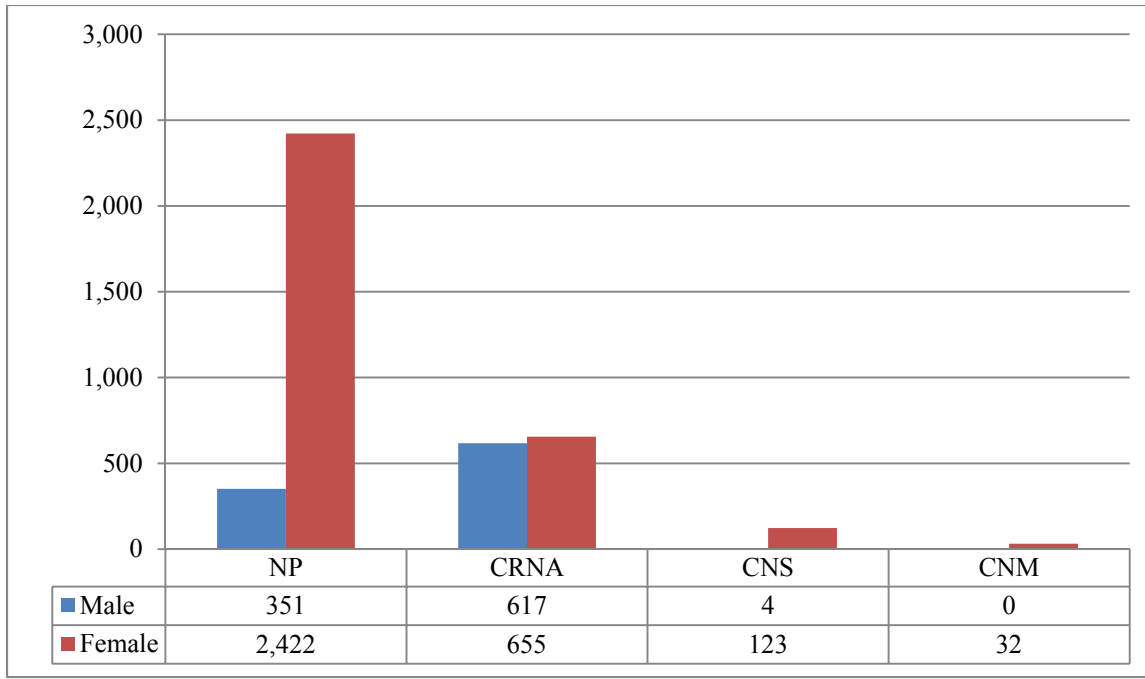


Figure 4. APRN Role by Gender 2014

Race/Ethnicity

The majority of APRNs in Louisiana are White, ranging from 100 percent of the CNMs to 72.4 percent of the CNSs (Table 3, Figure 5). Eighty one percent (81.2%) of NPs are White, 16.2 percent are Black, 1.1 percent Hispanic, and 1.0 percent Asian. Less than one percent of licensed NPs residing in Louisiana are American Indian or Native American. Blacks represent 25 percent of the CNS workforce, while only two percent of CNSs and CRNAs in Louisiana are Hispanic or Asian.

Table 3. Racial Distribution According to APRN Role (2014)

APRN	White		Black		Hispanic		Asian		American Indian		Native Hawaiian/ Pacific Islander	
	#	%	#	%	#	%	#	%	#	%	#	%
NP	2,251	81.2%	450	16.2%	30	1.1%	27	1.0%	12	0.4%	2	0.1%
CRNA	1,170	92.0%	65	5.1%	21	1.7%	9	0.7%	5	0.4%	1	0.1%
CNS	92	72.4%	32	25.2%	2	1.6%	0	0%	1	0.8%	0	0%
CNM	32	100%	0	0%	0	0%	0	0%	0	0%	0	0%

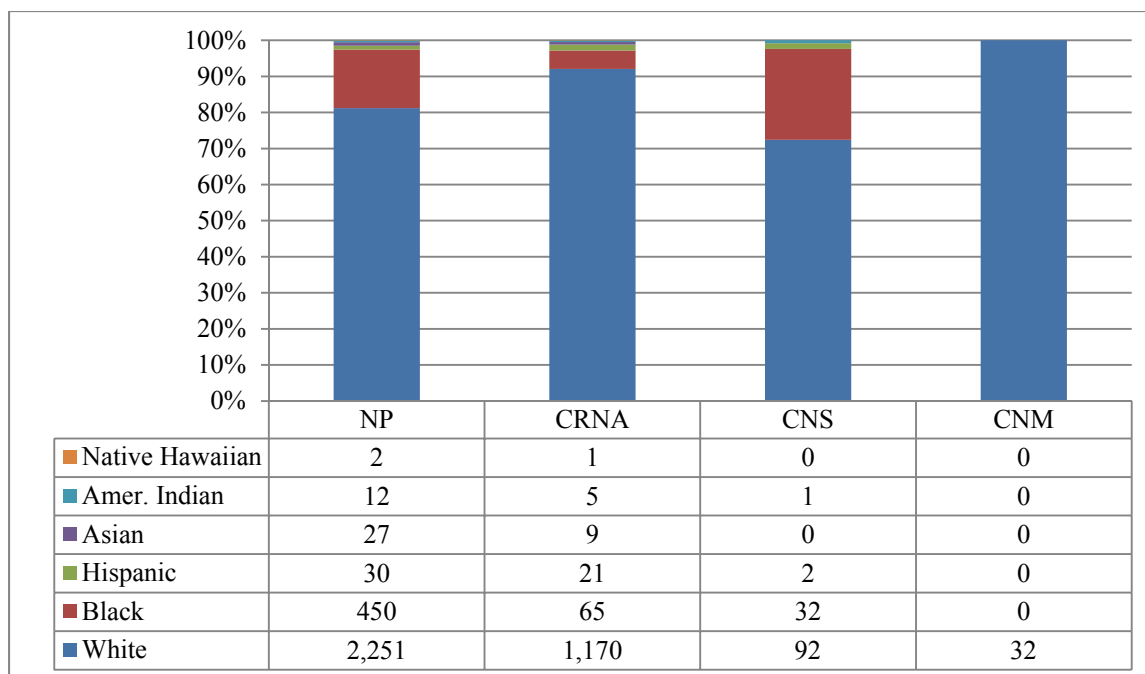


Figure 5. APN Role by Race/Ethnicity 2014

Highest Degree

The vast majority of APRNs have a Masters or higher degree. The highest degree held by approximately 92 percent of NPs, 78 percent of CNSs and CNMs, and 68 percent of CRNAs licensed, working, and residing in Louisiana is the Master’s degree in Nursing (Table 4, Figure 6). Twenty-two percent of CNSs reported having a doctorate. There is still a small percentage of APRNs reporting the diploma, associate, and bachelor’s degree as their highest level of education. The reason being that from 1981 to 1995, APRN’s were formally “recognized” and authorized to practice by the Louisiana State Board of Nursing (LSBN Rules and Regulations, 2010). When licensure was available and required for practice in Louisiana in 1996, APRN’s who had previously successfully completed post-basic education in the APRN role but who did not hold a master’s degree were allowed to be licensed through “grandfathering” provisions, also called commensurate requirements. There are also a number of APRNs reporting degrees in disciplines outside of nursing.

Table 4. Highest Degree held by APRNs Residing in Louisiana (2014)

APRN	Diploma in Nursing		Associate Degree in Nursing		Bachelors in Nursing		Masters in Nursing		Doctorate in Nursing		Doctorate not in Nursing	
	#	%	#	%	#	%	#	%	#	%	#	%
NP	11	0.4%	7	0.3%	16	0.6%	2,547	91.8%	150	5.4%	16	0.6%
CRNA	48	3.8%	33	2.6%	76	6.0%	863	67.8%	21	1.6%	7	0.6%
CNS	0	0.0%	0	0.0%	0	0.0%	99	78.0%	19	14.9%	9	7.1%
CNM	0	0.0%	0	0.0%	4	12.5%	25	78.1%	1	3.1%	0	0.0%

Note: NP – Bachelor’s Degree Non-Nursing=2; Master’s Non-Nursing=23; CRNA – Associate Degree Non-nursing=3; Bachelor’s Non-Nursing=28; Masters Non-Nursing=192; CNM – Master’s Non-Nursing=2

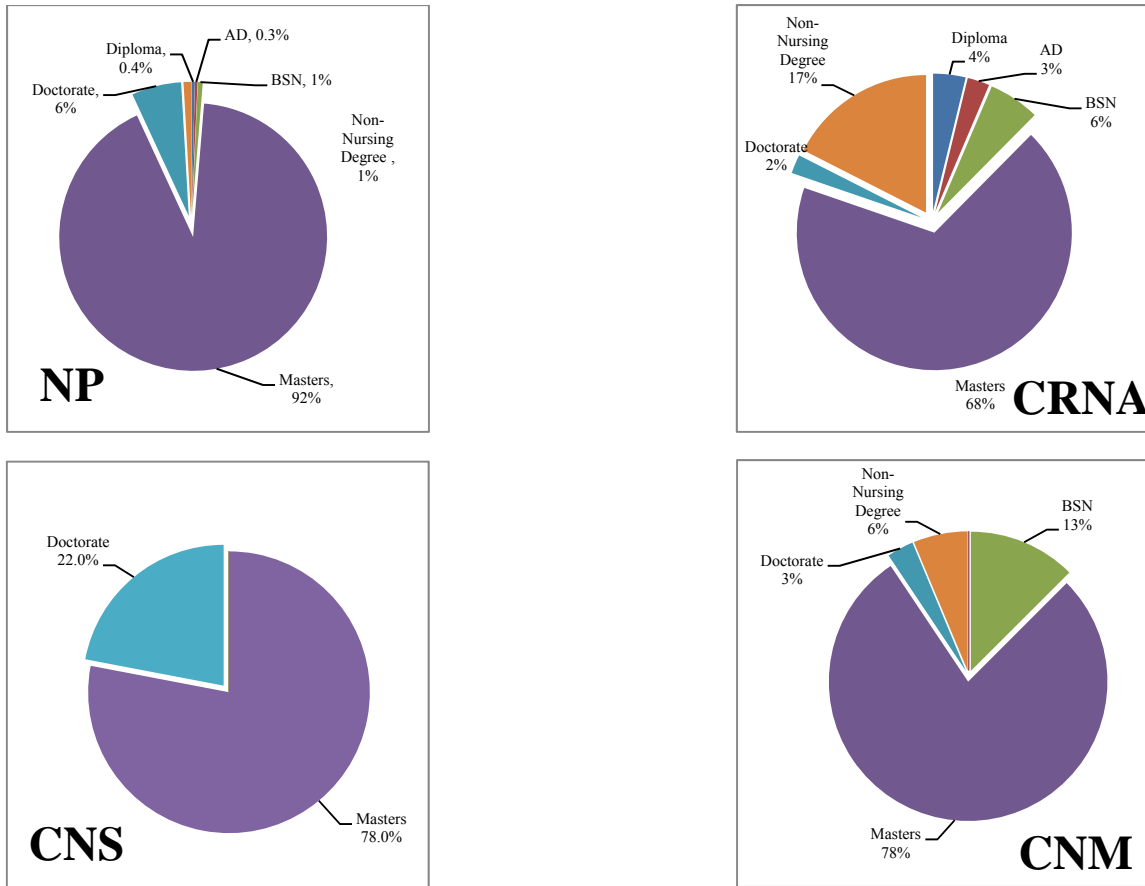


Figure 6. APRN Role by Highest Degree

Type of Doctorate

Of those APRNs having doctorates, 120 NPs and 18 CRNAs reported having DNPs (Table 5, Figure 7). Doctorates for CNSs were distributed across the spectrum but the greatest number held either a DNS (9) or a doctorate in a related field (9). The one CNM that reported having a doctorate, held a PhD in Nursing.

Table 5. Types of Doctorates held by Licensed APRNs Residing in Louisiana (2014)

Report Year	PhD in Nursing		Doctorate in Other Field		DNP		DNS		Total
NP	16	9.6%	16	9.6%	120	72.3%	14	8.4%	166
CRNA	0	0.0%	7	25.0%	18	64.3%	3	10.7%	28
CNS	6	21.4%	9	32.1%	4	14.3%	9	32.1%	28
CNM	1	100%	0	0.0%	0	0.0%	0	0.0%	1
Total	23		32		142		26		223

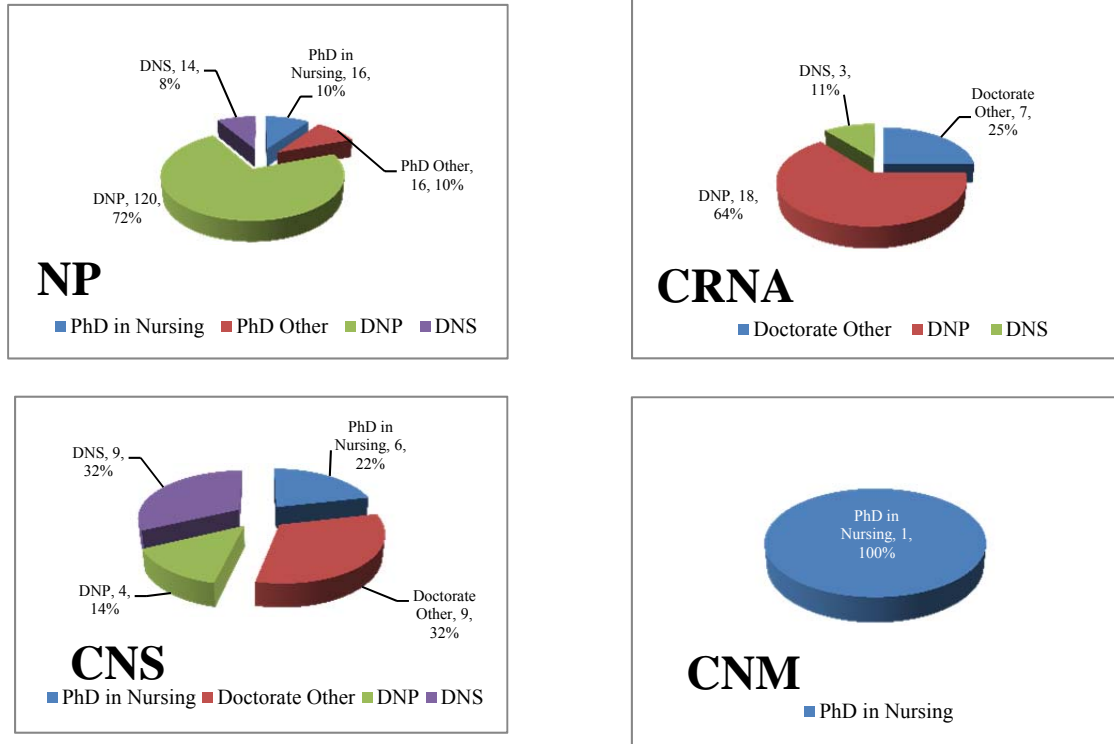


Figure 7. AP RN Role according to type of doctorate

Length of Time Plan to Work

Over 70 percent of NPs and CRNAs, and 50 percent of the CNM workforce plan to work 11+ years (Table 6, Figure 8). In contrast, approximately a third of the CNSs workforce plans to only work one to five more years. These findings fall in line with the average age of 59 years for Louisiana’s CNSs workforce and 48.8 percent that are 60 plus years.

Table 6. Number of Years Licensed AP RNs in Louisiana Plan to Work (2014)

Report Year	0 years		1-5 years		6-10 years		11-20 years		Over 20 years		No Answer #
	#	%	#	%	#	%	#	%	#	%	
NP	11	0.4%	286	10.3%	460	16.6%	1,058	38.2%	958	34.5%	0
CRNA	6	0.5%	160	12.6%	193	15.2%	418	32.9%	495	38.9%	0
CNS	1	0.8%	43	33.9%	45	35.4%	28	22%	10	7.9%	0
CNM	2	6.3%	5	15.6%	9	28.1%	9	28.1%	7	21.9%	0

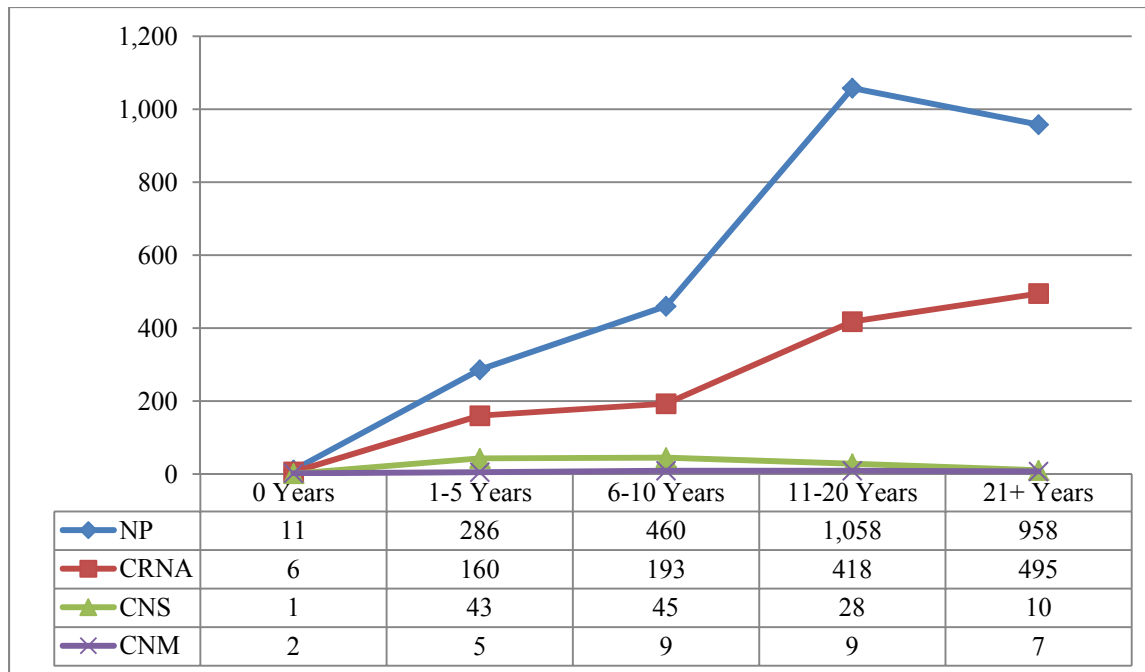


Figure 8. APN Role by Length of Time Expected to Work

Employment Status

The majority of all types of APRNs are employed full-time. Approximately 18 percent of the CNS workforce is employed part-time compared to a little over nine percent of the NP workforce (Table 7, Figure 9). There were a small number of APRNs that work on a per diem or as needed basis.

Table 7. Employment Status of APRNs Residing in LA (2014)

Report Year 2014	Full-Time Nursing		Part-Time Nursing		Per Diem		Employed in Field Other than Nursing		Not Employed		Retired/Volunteer	
	#	%	#	%	#	%	#	%	#	%	#	%
NP	2,436	87.8%	256	9.2%	50	1.8%	4	0.1%	21	0.7%	6	0.2%
CRNA	1,109	87.2%	95	7.5%	46	1.7%	11	0.9%	8	0.7%	3	0.2%
CNS	95	74.8%	23	18.1%	5	0.2%	1	0.8%	0	0.0%	3	2.4%
CNM	29	90.6%	2	6.3%	1	3.1%	0	0.0%	0	0.0%	0	0.0%

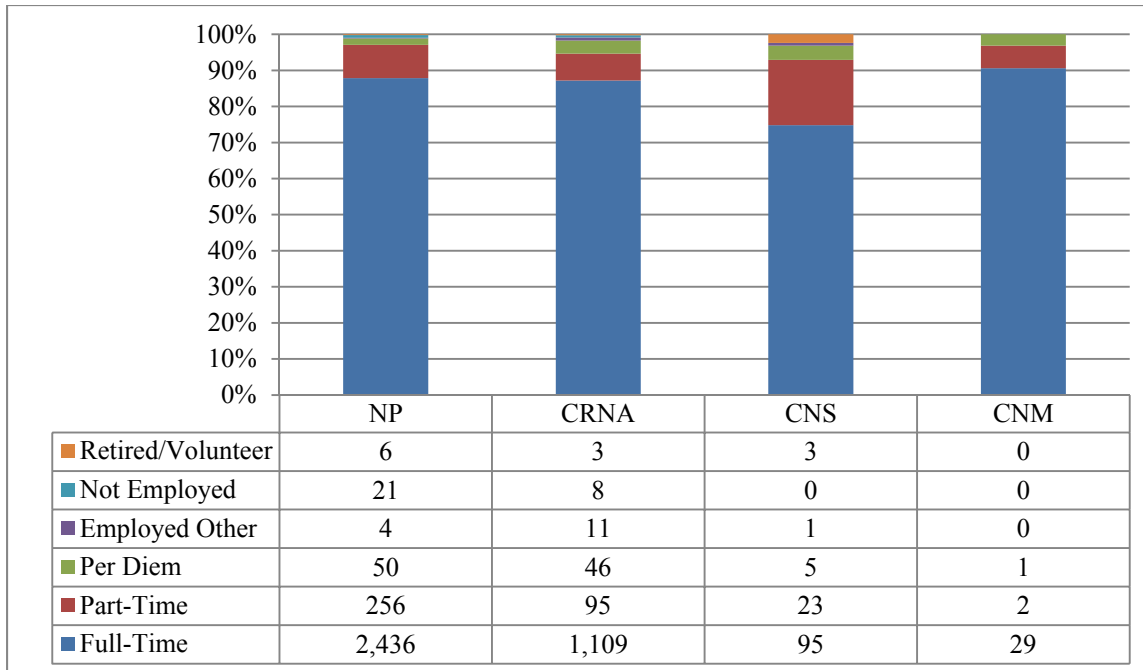


Figure 9. AP RN Role by Employment Status

Reasons for Unemployment

Of the seventy-two AP RNs responding to this question, 12 NPs and 5 CRNAs indicated caring for home and family as the reason for not being employed (Table 8). Three NPs indicated they were in school and three CRNAs reported being disabled. Five AP RNs indicated they had difficulty finding a nursing position and forty-one indicated ‘Other’ as a reason for unemployment. Some of the reasons listed under ‘Other’ included being laid off, maternity leave, inactive AP RN license, waiting for endorsement, and looking for a job.

Table 8. Reasons for Unemployment for AP RNs (2014)

Report Year	Home/Family Care	Inadequate Salary	Difficulty Finding a Nursing Position	Currently in School	Disabled	Other
NP	12	1	1	3	2	26
CRNA	5	0	2	0	3	14
CNS	0	0	2	0	0	1
CNM	0	0	0	0	0	0
Total	17	1	5	3	5	41

Personal Income

An annual income of \$75,001 to \$100,000 was reported by the largest proportion of NPs, CNSs, and CNMs (Table 9, Figure 10). Over 70 percent (70.6%) of CRNAs reported annual incomes of \$100,001 or greater with 35.1 percent (446) reporting salaries between \$100,001 to \$150,000 and 35.5 percent (450) reporting annual salaries greater than \$150,000.

Table 9. Salaries of APRNs Living in Louisiana 2014

Year	\$15,000 or less	\$15,001 to \$25,000	\$25,001 to \$35,000	\$35,001 to \$50,000	\$50,001 to \$75,000	\$75,001 to \$100,000	\$100,001 to \$150,000	>\$150,000	Declined
NP	45 1.6%	32 1.2%	29 1.1%	68 2.5%	271 9.9%	1,193 43.5%	806 29.4%	114 4.2%	184 6.7%
CRNA	7 0.6%	6 0.5%	9 0.7%	30 2.4%	37 2.9%	64 5.0%	446 35.1%	450 35.5%	220 17.3%
CNS	6 4.8%	5 4.0%	6 4.8%	5 4.0%	24 19.2%	38 30.4%	25 20.0%	0 0%	16 12.8%
CNM	2 6.5%	0 0%	1 3.2%	0 0%	4 12.9%	13 41.9%	10 32.3%	1 3.2%	0 0%

Note: Number of Respondents (NPs= 2,742; CRNAs=1,269; CNSs=125; CNMs=31)

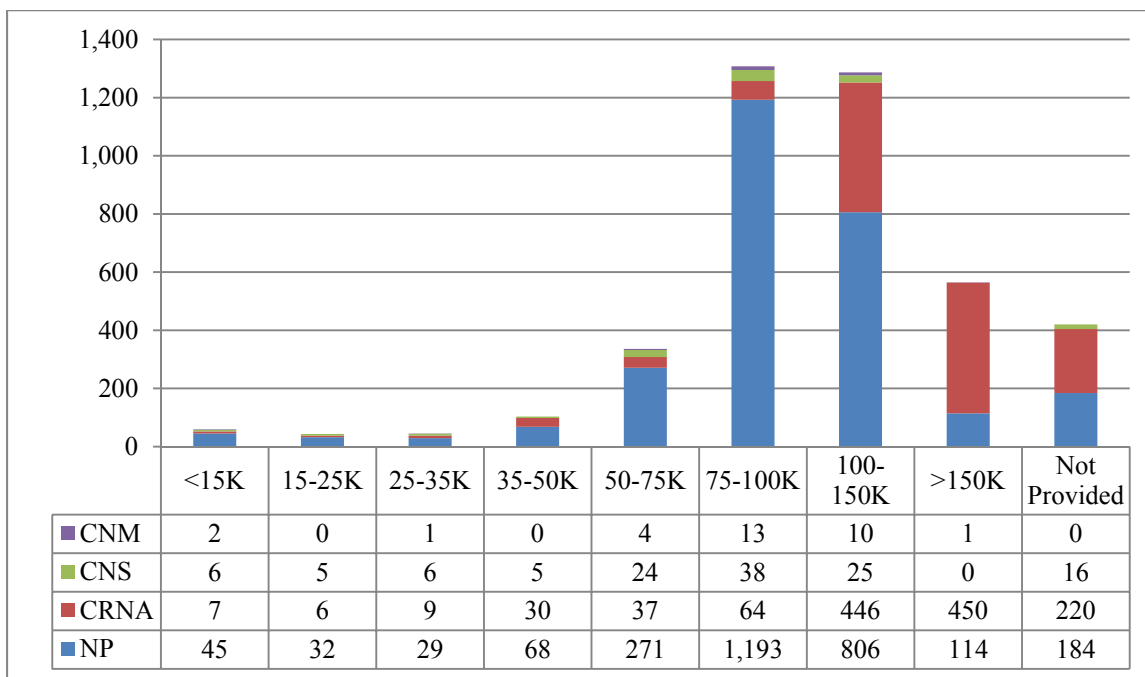


Figure 10. APRN Role by Personal Income; NP=2,742; CRNA=1,269; CNS=125; CNM=31

Average Hours Worked

The average hours worked for all APRN roles ranged from 38.2 to 44.7 hours with the median weekly hours for each role being 40 (Figure 11). Certified nurse midwives reported working the most hours (45 hours) when compared to the other APRN roles with CNSs reporting working the least number of hours (38 hours) per week.

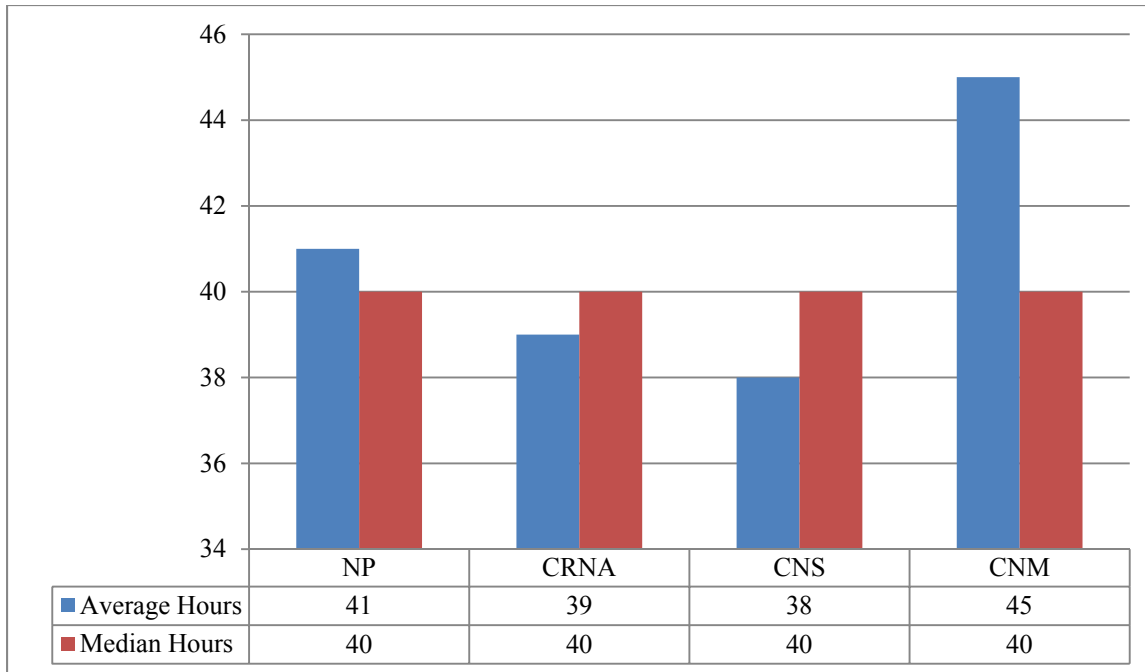


Figure 11. APRN Role by hours worked per week

Number of Positions Held

The majority of all APRNs held one position or job, although 19 percent of NPs and 18 percent of CNSs held two positions (Table 10, Figure 12). One hundred and twenty-eight NPs (4.6%) reported having 3 positions.

Table 10. Number of Jobs/Positions Held By APRNs Residing in Louisiana (2014)

Report Year	0		1		2		3 or more		No Answer
	#	%	#	%	#	%	#	%	#
NP	45	1.6%	2,070	74.6%	529	19.1%	128	4.6%	1
CRNA	17	1.3%	1,076	84.6%	133	10.5%	45	3.5%	1
CNS	5	3.9%	91	71.7%	24	18.9%	7	5.5%	0
CNM	0	0%	24	75.0%	8	25.0%	0	0%	0

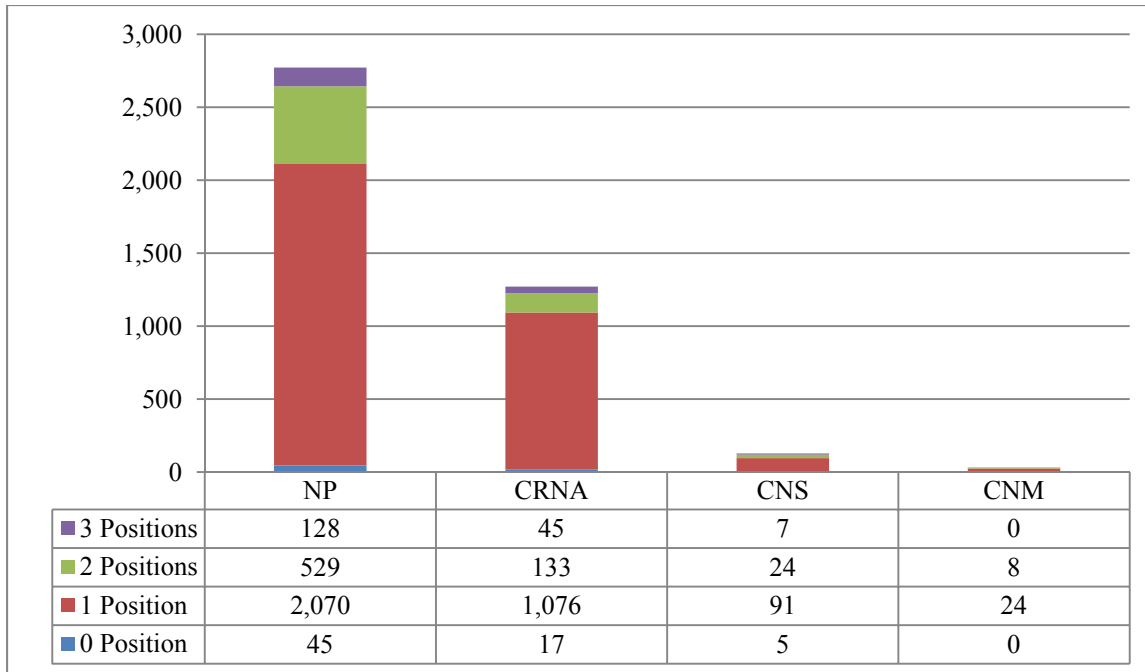


Figure 12. APRN role by number of positions held

Direct Care

The vast majority of APRNs provide direct patient care: 99.5 percent of CRNAs, 99.0 percent of NPs, 90.3 percent of CNMs, and 79.4 percent of CNS (Figure 13).

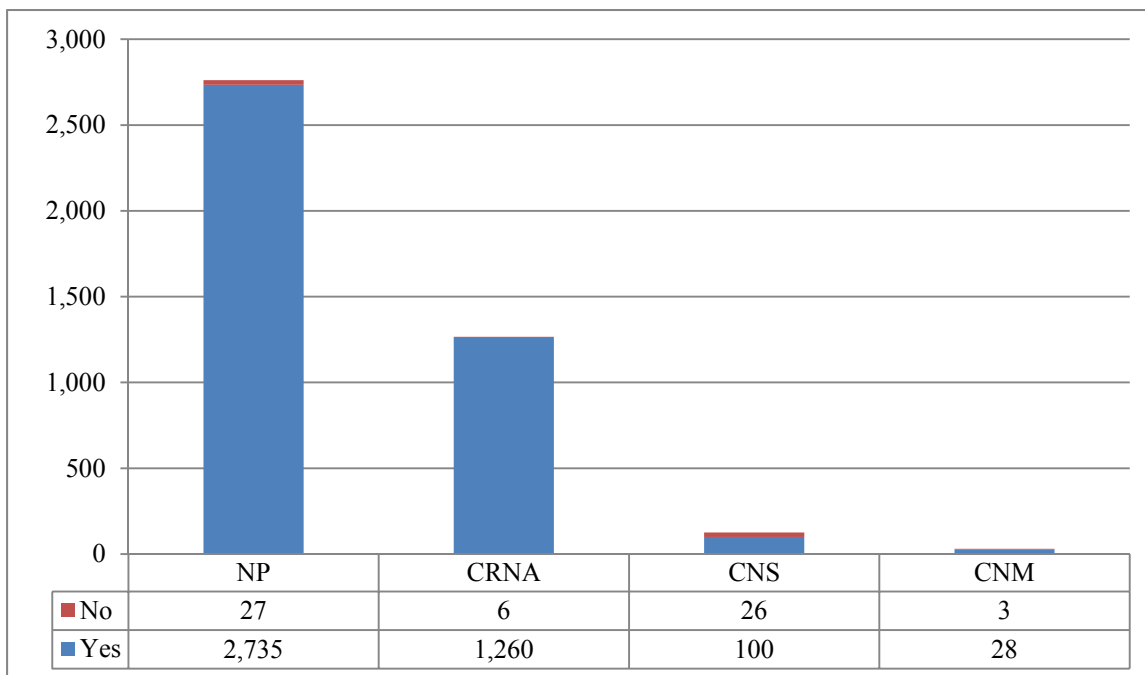


Figure 13. APRNs providing direct patient care by role

Clinical Specialties/Populations Reported by APRNS According to Role

Approximately 66 percent (65.8%) of NPs reported Family as their primary clinical population, followed by 9.7 percent indicating their clinical role and population was Adult NP (Table 11). Five percent (144) were Pediatric NPs and 4.8 percent (134) were Neonatal NPs.

Table 11. Clinical Specialties/Populations Reported by NPs (2014)

Clinical, Teaching or Practice Area	2014	%
Acute Care NP	121	4.4%
Acute Care Pediatric NP	10	0.4%
Adult/Gero Acute Care NP	10	0.4%
Adult/Gero Primary Care NP	16	0.6%
Adult NP	268	9.7%
Adult Psychiatric/Mental Health NP	48	1.7%
Family NP	1,826	65.8%
Family Psychiatric/Mental Health NP	39	1.4%
Gerontological NP	8	0.3%
Neonatal NP	134	4.8%
Pediatric NP	144	5.2%
Woman's Health Care NP	91	3.3%
Other	58	2.1%
Total	2,773	100%

The four most popular clinical specialties/populations reported by CNSs were Adult Health (22.8%), Medical/Surgical (19.7%), Adult Psychiatric/Mental Health (18.9%), and Maternal/Child (12.6%) as seen in Table 12.

Table 12. Clinical Specialties/Populations Reported by CNSs 2014

Clinical, Teaching or Practice Area	2014	%
Adult Gerontological CNS	1	0.8%
Adult Health CNS	29	22.8%
Adult Psychiatric/Mental Health CNS	24	18.9%
Child/Adolescent Psychiatric/Mental Health CNS	3	2.4%
Community Health CNS	12	9.4%
Gerontological CNS	1	0.8%
Home Health CNS	1	0.8%
Maternal/Child CNS	16	12.6%
Medical/Surgical CNS	25	19.7%
Oncology CNS	1	0.8%
Other	14	11%
Total	127	100%

The clinical specialty reported by 100 percent of the CRNAs (1,272) and CNMs (32) was anesthesia, and midwifery, respectively.

Clinical Settings Reported by APRNs According to Role

In 2014, the clinical settings where the largest percentage of NPs practiced were outpatient clinics (20.3%); physician’s offices (19.7%); and hospitals (17.6%) (Table 13a).

Table 13a. Clinical Settings Reported by NPs (2014)

Clinical, Teaching or Practice Area	2014	%
College Student Health Clinic	19	0.7%
Emergency Room	99	3.6%
HIV/AIDS	16	0.6%
Hospital	487	17.6%
Medicine Clinic	41	1.5%
Nursing Home	67	2.4%
Outpatient Clinic	562	20.3%
Pediatric Clinic	78	2.8%
Physician’s Office	545	19.7%
Private Clinic	233	8.4%
Rural Clinic	235	8.5%
School Clinic	50	1.8%
School of Nursing	24	0.9%
Urban Clinic	23	0.8%
Women’s Health	36	1.3%
Other	258	9.3%
TOTAL	2,773	100%

Over the last five years there has been a notable variation in practice settings for NPs (Table 13b). The number of NPs that worked in nursing homes went from 26 in 2010 to 67 in 2014, an increase of 158%. The number of NPs working in HIV/AIDS clinics doubled over the five year period (8 in 2010 to 16 in 2014). There was also an 83 percent increase in the number of NPs working in emergency departments between 2010 and 2014, and a 65 percent increase in the number of NPs working in rural health clinics.

Table 13b. Clinical Settings Reported by NPs (2010-2014)

Clinical, Teaching or Practice Area	2014	2013	2012	2011	2010	1 & 5 Year Variance
College Student Health Clinic	19	17	15	17	13	↑12% / ↑46%
Emergency Department	99	89	79	49	54	↑11% / ↑83%
HIV / AIDs	16	9	6	11	8	↑78% / ↑100%
Hospital	487	445	420	395	347	↑9% / ↑40%
Medicine Clinic	41	28	20	21	25	↑46% / ↑64%
Nursing Home	67	68	48	32	26	↓1% / ↑158%
Outpatient Clinic	562	465	461	343	315	↑21% / ↑78%
Pediatric Clinic	78	75	56	50	48	↑4% / ↑63%
Physician's Office	545	527	402	452	390	↑3% / ↑40%
Private Clinic	233	214	183	157	132	↑9% / ↑77%
Rural Clinic	235	198	199	175	142	↑19% / ↑65%
School Clinic	50	45	43	43	42	↑11% / ↑19%
School of Nursing	24	19	27	16	24	↑26% / 0%
Urban Clinic	23	31	18	13	22	↓26% / ↑5%
Women's Health Clinic	36	31	31	27	34	↑16% / ↑6%
Other	258	221	197	165	138	↑17% / ↑87%
TOTAL	2,773	2,482	2,205	1,966	1,760	↑12% / ↑58%

As can be seen in Table 14a, the majority of CRNAs (85.7%) practice in hospitals and 9.6 percent work in outpatient clinics.

Table 14a. Clinical Settings Reported by CRNAs (2014)

Clinical, Teaching or Practice Area	2014	%
Hospital	1,090	85.7%
Outpatient Clinic	122	9.6%
Physician Office	8	0.6%
Private Clinic	3	0.2%
Rural Clinic	1	0.1%
School of Nursing	5	0.4%
Other	43	3.4%
TOTAL	1,272	100%

There has been a 28 percent increase in the number of CRNAs working in outpatient clinics between 2010 and 2014 and a 7 percent increase in the number working in hospitals (Table 14b). Although small in number, there has been a 300 percent increase in the number of CRNAs working in physicians' offices (2 in 2010; 8 in 2014).

Table 14b. Clinical Settings Reported by CRNAs (2010-2014)

Clinical, Teaching or Practice Area	2014	2013	2012	2011	2010	1 & 5 Year Variance
HIV/AIDS Clinic	0	1	1	0	0	↓100% / 0%
Hospital	1,090	1,065	1,049	1,030	1,016	↑2% / ↑7%
Outpatient Clinic	122	118	118	112	95	↑3% / ↑28%
School of Nursing	5	6	9	5	6	↓17% / ↓17%
Physician Office	8	5	4	3	2	↑60% / ↑300%
Private Clinic	3	3	2	3	3	0% / 0%
Rural Clinic	1	1	0	1	1	0% / 0%
Other	43	45	37	37	31	↓4% / ↑39%
TOTAL	1,272	1,244	1,220	1,191	1,154	↑2% / ↑10%

According to Table 15a the most popular clinical settings for CNSs in 2014 were hospitals (35.4%), schools of nursing (19.7%), and outpatient clinics (11.8%).

Table 15a. Clinical Settings Reported by CNSs (2014)

Clinical, Teaching or Practice Area	2014	%
Hospital	45	35.4%
Medicine Clinic	2	1.6%
Nursing Home	1	0.8%
Outpatient Clinic	15	11.8%
Physician Office	7	5.5%
Private Clinic	5	3.9%
Rural Clinic	1	0.8%
School of Nursing	25	19.7%
Other	26	20.5%
TOTAL	127	100%

Between 2010 and 2014 there was a decrease in the number of CNSs working in the majority of clinical settings listed in Table 15b, with the greatest decrease in number occurring in schools of nursing.

Table 15b. Clinical Settings Reported by CNSs (2010-2014)

Clinical, Teaching or Practice Area	2014	2013	2012	2011	2010	1 & 5 Year Variance
Hospital	45	45	52	56	50	0% / ↓10%
Medicine Clinic	2	0	0	0	0	↑200%/↑200%
Nursing Home	1	1	2	1	1	0% / 0%
Outpatient Clinic	15	18	20	19	20	↓17% / ↓25%
Physician Office	7	5	7	8	9	↑40% / ↓22%
Private Clinic	5	11	4	7	7	↓55% / ↓29%
Rural Clinic	1	1	0	1	0	0% / 100%
School of Nursing	25	30	30	40	39	↓17% / ↓36%
Women's Health Clinic	0	0	0	1	0	0% / 0%
Other	26	22	24	23	32	↑18% / ↓19%
TOTAL	127	133	139	156	158	↓5% / ↓20%

As illustrated in Table 16a, the majority of CNMs (53.1%) work in hospitals, followed by Women's Health Clinics (15.6%).

Table 16a. Clinical Settings Reported by CNMs (2014)

Clinical, Teaching or Practice Area	2014	%
Hospital	17	53.1%
Outpatient Clinic	1	3.1%
Physician Office	1	3.1%
Private Clinic	2	6.3%
Rural Clinic	1	3.1%
School of Nursing	1	3.1%
Urban Clinic	1	3.1%
Women's Health Clinic	5	15.6%
Other	3	9.4%
TOTAL	32	100%

Between 2013 and 2014 there has been a 70 percent increase in the number of CNMs working in hospitals (Table 16b). In contrast, there was a 60 percent decrease in the number of CNMs working in private clinics between 2010 and 2014. There was no change in the number of CNMs that were working in Women's Health Clinics in 2014 when compared to 2010.

Table 16b. Clinical Settings Reported by CNMs (2010-2014)

Clinical, Teaching or Practice Area	2014	2013	2012	2011	2010	1 & 5 Year Variance
Hospital	17	10	10	11	11	↑70% / ↑55%
Outpatient Clinic	1	1	1	3	2	0% / ↓50%
Private Clinic	2	1	3	1	5	↑100% / ↓60%
Physician Office	1	2	2	1	1	↓50% / 0%
Rural Clinic	1	1	1	2	2	0% / ↓50%
School of Nursing	1	1	1	1	1	0% / 0%
Urban Clinic	1	1	1	0	0	0% / 0%
Women's Health Clinic	5	3	2	1	5	↑67% / 0%
Other	3	5	2	3	1	↓40% / ↑200%
TOTAL	32	25	23	23	28	↑28% / ↑14%

Prescriptive Authority

The vast majority of NPs (95.4%) and CNMs (87.5%) licensed and residing in Louisiana have prescriptive authority. Approximately 24 percent of CNS and one percent of CRNAs had prescriptive authority in Louisiana in 2014 (Figure 14).

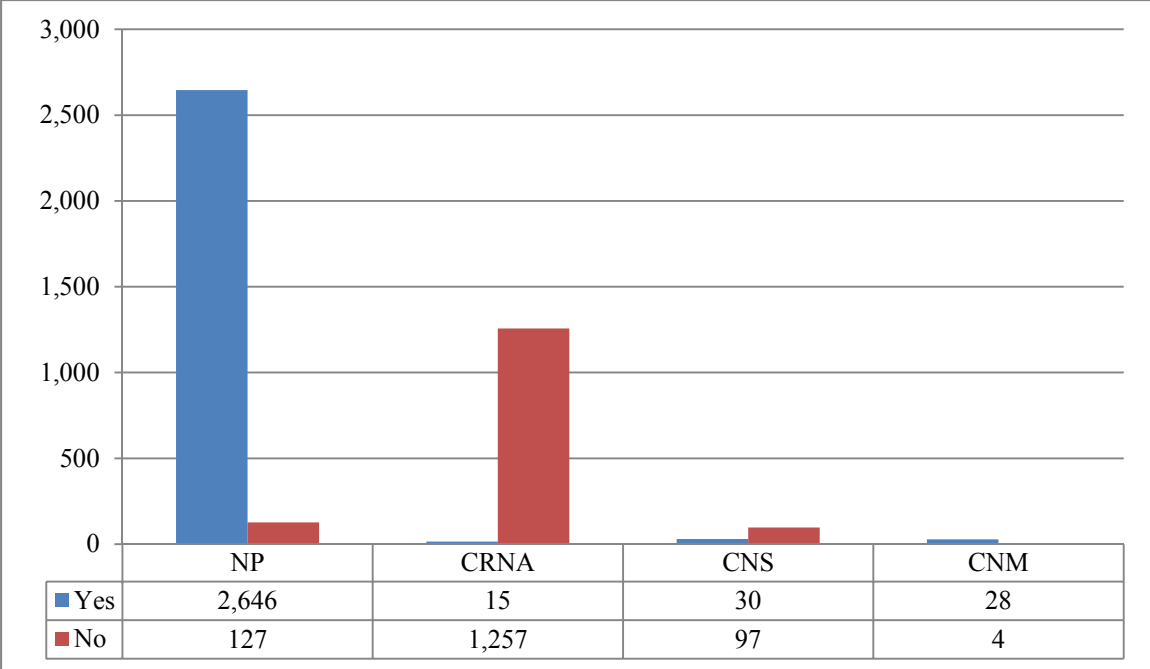


Figure 14. Prescriptive Authority by APRN Role

APRNs by Role, Regional Labor Market Area, Race, and Population

Regional Labor Market Areas (RLMAs) are economically integrated areas in which individuals can live and find employment within a reasonable distance or can feasibly change jobs without changing their place of residence (LWC, 2011). Occupational projections for all occupations are reported by the Louisiana Workforce Commission (LWC) according to the eight RLMAs in Louisiana. A map depicting Louisiana’s sixty-four parishes included within the eight RLMAs can be found in Appendix B. The population size for the eight RLMAs according to race/ethnicity and the number and type of APRNs (NPs, CRNAs, CNSs, and CNMs) working in the region according to race/ethnicity is depicted in the following tables. State population statistics were taken from the U.S. Census Bureau, Population Division (2015). The data in Tables 17-24 can be used to identify racial/ethnic and gender gaps between the APRN workforce and the population being served at the regional level. An examination of the New Orleans RLMA will be used to illustrate the utilization of the information found in the tables.

In the New Orleans RLMA, 52.7 percent of the population is White, yet 73.3 percent of NPs, 88.3 percent of CRNAs, 67.2 percent of CNSs, and 100 percent of the CNMs working in the New Orleans region are White. In contrast, 34.5 percent of the population in the New Orleans RLMA is Black, 8.3 percent are Hispanic, 2.8 percent Asian, 0.4 percent American Indian, .03 percent Native Hawaiian, and 1.3% two or more races. Of the 12 CNMs in the New Orleans RLMA, there are no minorities. Based on this information, it can be surmised that there is an underrepresentation of APRNs within the minority population in the New Orleans RLMA.

Table 17. New Orleans RLMA 1 – APRN Role and Population by Race/Ethnicity

RLMA 1	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	1,240,977	654,130	427,921	103,061	34,776	4,592	462	16,035
%	100%	52.7%	34.5%	8.3%	2.8%	0.4%	0.03%	1.3%
NP	697	511	149	19	16	2	0	
%	100%	73.3%	21.4%	2.7%	2.3%	0.3%	0%	
CRNA	489	432	36	13	5	2	1	
%	100%	88.3%	7.4%	2.7%	1.0%	0.4%	0.2%	
CNS	64	43	19	2	0	0	0	
%	100%	67.2%	29.7%	3.1%	0%	0%	0%	
CNM	12	12	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Table 18. Baton Rouge RLMA 2 – APRN Role and Population by Race/Ethnicity

RLMA 2	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	991,990	654,130	427,921	103,061	34,776	4,592	462	16,035
%	100%	58.6%	34.6%	3.6%	1.8%	0.3%	0.03%	1.1%
NP	530	409	113	3	2	2	1	
%	100%	77.2%	21.3%	0.6%	0.4%	0.4%	0.2%	
CRNA	215	191	13	4	4	3	0	
%	100%	88.8%	6.0%	1.9%	1.9%	1.4%	0%	
CNS	15	12	3	0	0	0	0	
%	100%	80%	20%	0%	0%	0%	0%	
CNM	14	14	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Table 19. Houma RLMA 3 – APRN Role and Population by Race/Ethnicity

RLMA 3	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	233,077	167,242	40,892	9,732	2,074	8,993	90	4,054
%	100%	71.8%	17.5%	4.2%	0.9%	3.9%	0.04%	1.7%
NP	101	99	0	1	0	1	0	
%	100%	98.0%	0%	1.0%	0%	1.0%	0%	
CRNA	58	57	1	0	0	0	0	
%	100%	98.3%	1.7%	0%	0%	0%	0%	
CNS	3	3	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	
CNM	1	1	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Table 20. Lafayette RLMA 4 – APRN Role and Population by Race/Ethnicity

RLMA 4	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	649,691	427,165	179,908	22,369	9,165	2,943	146	7,995
%	100%	65.7%	27.7%	3.4%	1.4%	0.5%	0.02%	1.2%
NP	387	328	55	2	1	1	0	
%	100%	84.8%	14.2%	0.5%	0.3%	0.3%	0%	
CRNA	126	119	7	0	0	0	0	
%	100%	94.4%	5.6%	0%	0%	0%	0%	
CNS	12	11	1	0	0	0	0	
%	100%	91.7%	8.3%	0%	0%	0%	0%	
CNM	0	0	0	0	0	0	0	
%	0%	0%	0%	0%	0%	0%	0%	

Table 21. Lake Charles RLMA 5 – APRN Role and Population by Race/Ethnicity

RLMA 5	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	295,045	212,163	64,732	8,213	2,890	2,113	117	4,817
%	100%	71.9%	21.9%	2.8%	1.0%	0.7%	0.04%	1.6%
NP	198	178	18	1	1	0	0	
%	100%	89.9%	9.1%	0.5%	0.5%	0%	0%	
CRNA	51	51	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	
CNS	8	5	2	0	0	1	0	
%	100%	62.5%	25.0%	0%	0%	12.5%	0%	
CNM	1	1	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Table 22. Alexandria RLMA 6 – APRN Role and Population by Race/Ethnicity

RLMA 6	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	308,928	203,667	82,703	11,217	3,126	2,778	274	5,163
%	100%	65.9%	26.8%	3.6%	1.0%	0.9%	0.09%	1.7%
NP	201	178	21	0	0	1	1	
%	100%	88.6%	10.4%	0%	0%	0.5%	0.5%	
CRNA	67	66	0	1	0	0	0	
%	100%	98.5%	0%	1.5%	0%	0%	0%	
CNS	6	5	1	0	0	0	0	
%	100%	83.3%	16.7%	0%	0%	0%	0%	
CNM	0	0	0	0	0	0	0	
%	0%	0%	0%	0%	0%	0%	0%	

Table 23. Shreveport RLMA 7 – APRN Role and Population by Race/Ethnicity

RLMA 7	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	596,783	327,780	228,712	19,760	6,853	4,472	355	8,851
%	100%	54.9%	38.3%	3.3%	1.1%	0.7%	0.06%	1.5%
NP	297	250	39	2	2	4	0	
%	100%	84.2%	13.1%	0.7%	0.7%	1.3%	0%	
CRNA	146	140	4	2	0	0	0	
%	100%	95.9%	2.7%	1.4%	0%	0%	0%	
CNS	7	6	1	0	0	0	0	
%	100%	85.7%	14.3%	0%	0%	0%	0%	
CNM	1	1	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Table 24. Monroe RLMA 8 – APRN Role and Population by Race/Ethnicity

RLMA 8	Total	White	Black	Hispanic	Asian	American Indian	Native Hawaiian	Two or More
Pop.	308,979	183,123	113,401	6,595	1,952	786	93	3,029
%	100%	59.3%	36.7%	2.1%	0.6%	0.3%	0.03%	1.0%
NP	258	230	23	1	4	0	0	
%	100%	89.1%	8.9%	0.4%	1.6%	0%	0%	
CRNA	51	50	1	0	0	0	0	
%	100%	98.0%	2%	0%	0%	0%	0%	
CNS	4	2	2	0	0	0	0	
%	100%	50%	50%	0%	0%	0%	0%	
CNM	1	1	0	0	0	0	0	
%	100%	100%	0%	0%	0%	0%	0%	

Minority Population and Minority NPs and Minority CRNA Population by Region

Using the data from Tables 17 through 24, the percent minority population and the percent minority NP and CRNA populations by RLMAs were determined in an effort to identify the gaps in terms of the racial/ethnic make-up of the population and the NP and CRNA workforce at the regional level. According to Figure 15, gaps are prevalent across all RLMAs. In RLMA 3 (Houma), 28.2 percent of the population is represented by minorities, but only two percent of the NPs in this RLMA are minorities. In RLMA 7 (Shreveport RLMA) and RLMA 8 (Monroe

RLMA), the minority population is 45.1 percent and 40.7 percent, respectively, but the NP population is 15.8 percent and 10.9 percent, respectively. These findings indicate an underrepresentation of minority NPs at the regional level.

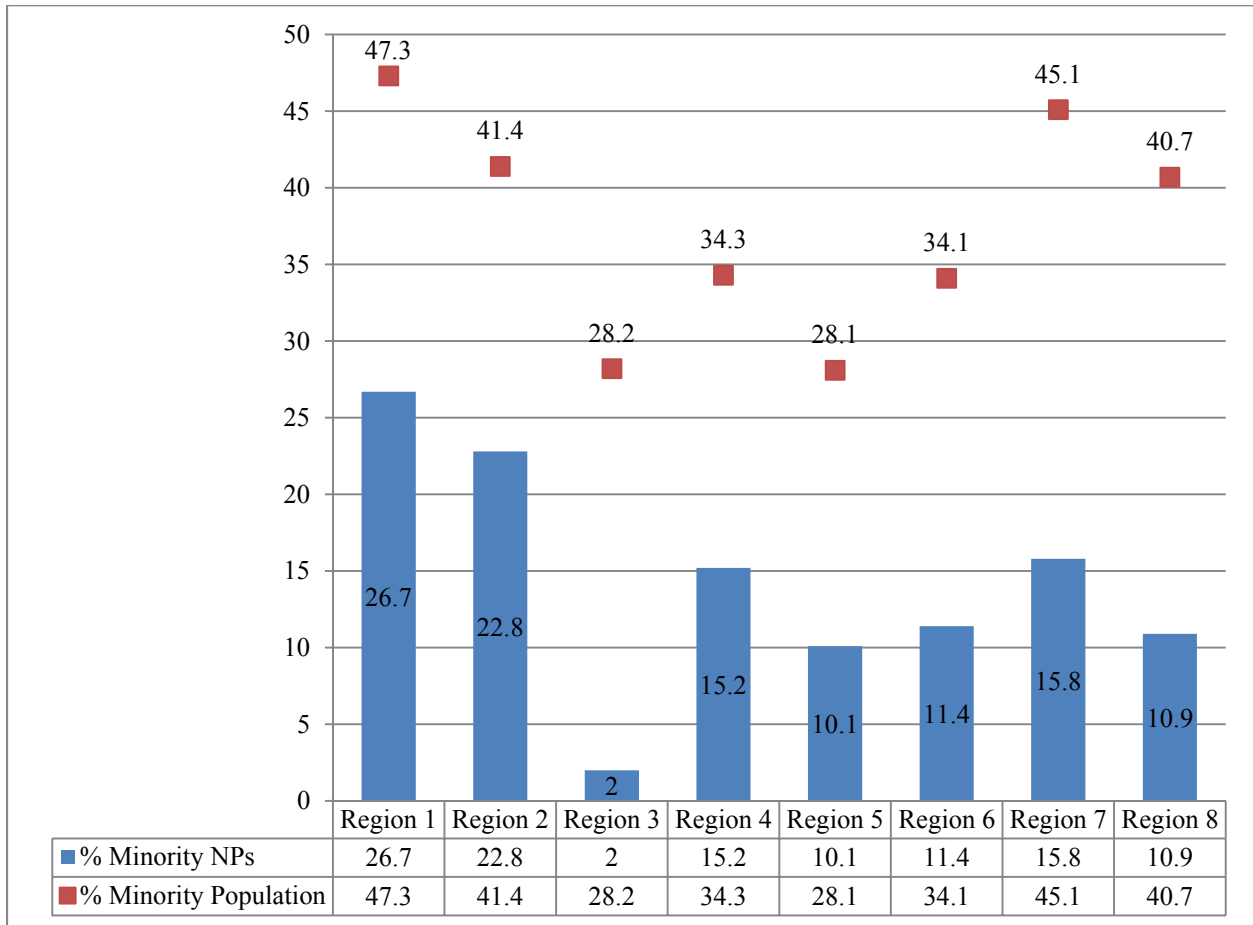


Figure 15. Minority NPs and Minority Population by RLMA

Figure 16 depicts gaps in the percentage of minority CRNAs at the regional level when compared to the minority population of the region. Again, gaps are noted across all RLMA. Minorities make up 28.1 percent of the population in RLMA 5 (Lake Charles RLMA) and there are zero minority CRNAs in the region. In RLMA 7 (Shreveport RLMA) and 8 (Monroe RLMA) minorities make up 45.1 percent and 40.7 percent of the population but only 4.1 percent and 2.0 percent of the CRNA workforce.

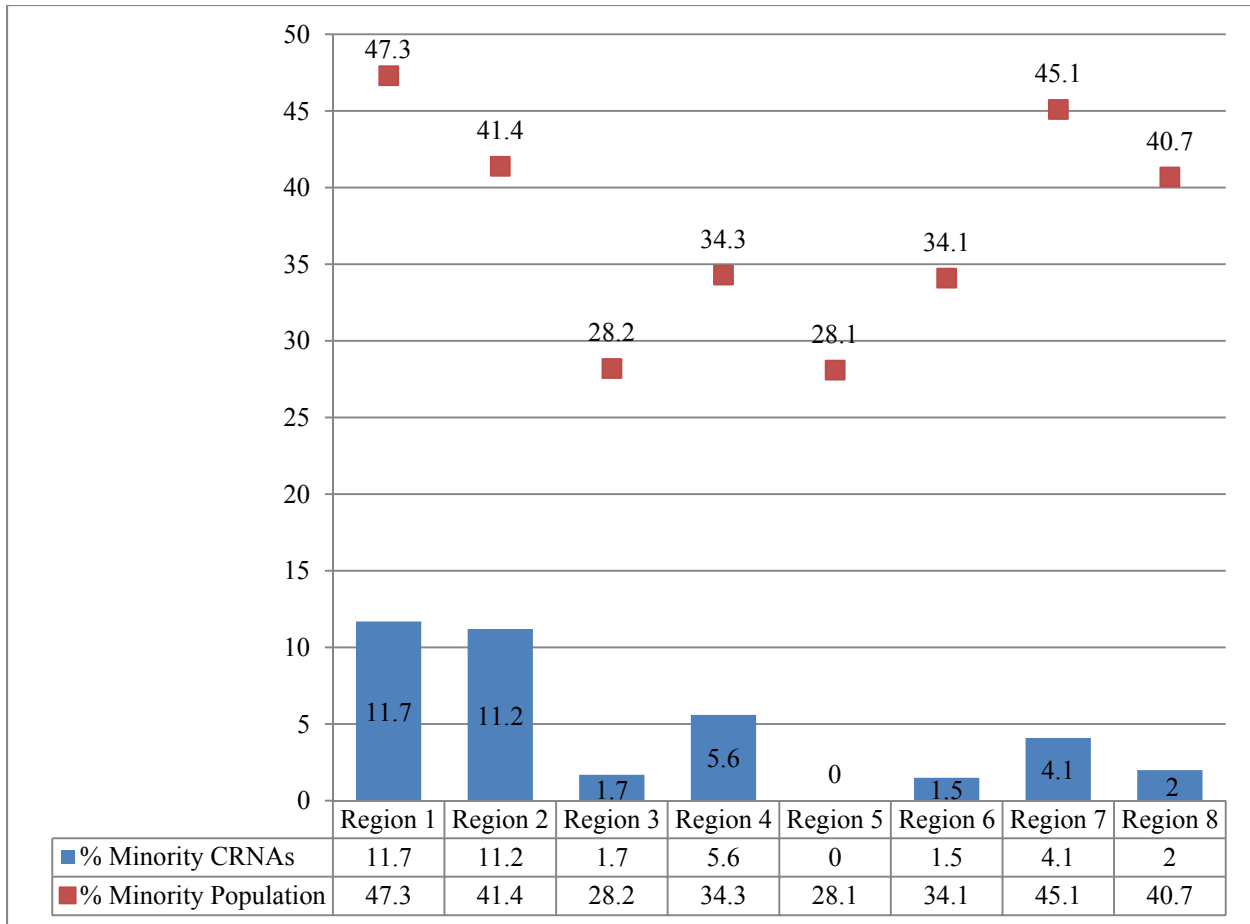


Figure 16. Minority CRNAs and Minority Population by RLMA

APRN Workforce by Role, Gender, and Regional Population

Tables 25 through 32 provide data relative to the APRN workforce according to role, gender, and population for the eight regional labor market areas in Louisiana. The data in Tables 25 through 32 can be used to identify gaps in gender between the APRN workforce and the population being served at the regional level. An examination of the New Orleans RLMA will be used to illustrate the utilization of the information found in these tables.

In the New Orleans RLMA, 48.7 percent of the population is male, yet 8.9 percent of NPs, 1.6 percent of CNS, and zero percent of CNMs are males. The gap is not as great for CRNAs, in that 36.6 percent of CRNAs in the New Orleans RLMA are males.

Table 25. New Orleans RLMA 1 – APRN Role and Population by Gender

RLMA 1	Total	Male	Female
Pop.	1,240,977	604,109	636,868
%	100%	48.7%	51.3%
NP	697	62	635
%	100%	8.9%	91.1%
CRNA	489	179	310
%	100%	36.6%	63.4%
CNS	64	1	63
%	100%	1.6%	98.4%
CNM	12	0	12
%	100%	0%	100%

Table 26. Baton Rouge RLMA 2 – APRN Role and Population by Gender

RLMA 2	Total	Male	Female
Pop.	991,990	486,755	505,235
%	100%	49.1%	50.9%
NP	530	67	463
%	100%	12.6%	87.4%
CRNA	215	94	121
%	100%	43.7%	56.3%
CNS	15	0	15
%	100%	0%	100%
CNM	14	0	14
%	100%	0%	100%

Table 27. Houma RLMA 3 - APRN Role and Population by Gender

RLMA 3	Total	Male	Female
Pop.	233,077	115,080	117,997
%	100%	49.4%	50.6%
NP	101	25	76
%	100%	24.8%	75.2%
CRNA	58	41	17
%	100%	70.7%	29.3%
CNS	3	0	3
%	100%	0%	100%
CNM	1	0	1
%	100%	0%	100%

Table 28. Lafayette RLMA 4 – APRN Role and Population by Gender

RLMA 4	Total	Male	Female
Pop.	649,691	317,285	332,406
%	100%	48.8%	51.2%
NP	387	61	326
%	100%	15.8%	84.2%
CRNA	126	75	51
%	100%	59.5%	40.5%
CNS	12	1	11
%	100%	8.3%	91.7%
CNM	0	0	0
%	0%	0%	0%

Table 29. Lake Charles RLMA 5 – APRN Role and Population by Gender

RLMA 5	Total	Male	Female
Pop.	295,045	146,736	148,309
%	100%	49.7%	50.3%
NP	198	36	162
%	100%	18.2%	81.8%
CRNA	51	46	5
%	100%	90.2%	9.8%
CNS	8	0	8
%	100%	0%	100%
CNM	1	0	1
%	100%	0%	100%

Table 30. Alexandria RLMA 6 – APRN Role and Population by Gender

RLMA 6	Total	Male	Female
Pop.	308,928	155,058	153,870
%	100%	50.2%	49.8%
NP	201	21	180
%	100%	10.4%	89.6%
CRNA	67	38	29
%	100%	56.7%	43.3%
CNS	6	1	5
%	100%	16.7%	83.3%
CNM	0	0	0
%	0%	0%	0%

Table 31. Shreveport RLMA 7 - APRN Role and Population by Gender

RLMA 7	Total	Male	Female
Pop.	596,783	289,003	307,780
%	100%	48.4%	51.6%
NP	297	32	265
%	100%	10.8%	89.2%
CRNA	146	85	61
%	100%	58.2%	41.8%
CNS	7	1	6
%	100%	14.3%	85.7%
CNM	1	0	1
%	100%	0%	100%

Table 32. Monroe RLMA 8 - APRN Role and Population by Gender

RLMA 8	Total	Male	Female
Pop.	308,979	150,054	158,925
%	100%	48.6%	51.4%
NP	258	37	221
%	100%	14.3%	85.7%
CRNA	51	26	25
%	100%	51.0%	49.0%
CNS	4	0	4
%	100%	0.0%	100%
CNM	1	0	1
%	100%	0%	100%

Data from Tables 25 through 32 will be used to further illustrate gaps in terms of the gender of the NP and CRNA workforce and the regional population. Substantial gaps exist across RLMA in terms of the percentage of male NPs and the percentage of males in the regional population (Figure 17). The greatest gaps in terms of gender can be found in RLMA 1 (New Orleans RLMA) and RLMA 6 (Alexandria RLMA) where 48.7 percent of the New Orleans RLMA is made up of minorities, yet only 8.9 percent of the NPs are minorities and 50.2 percent of the population in the Alexandria RLMA is made up of minorities, but only 10.4 percent of the NPs that work in the region are minorities.

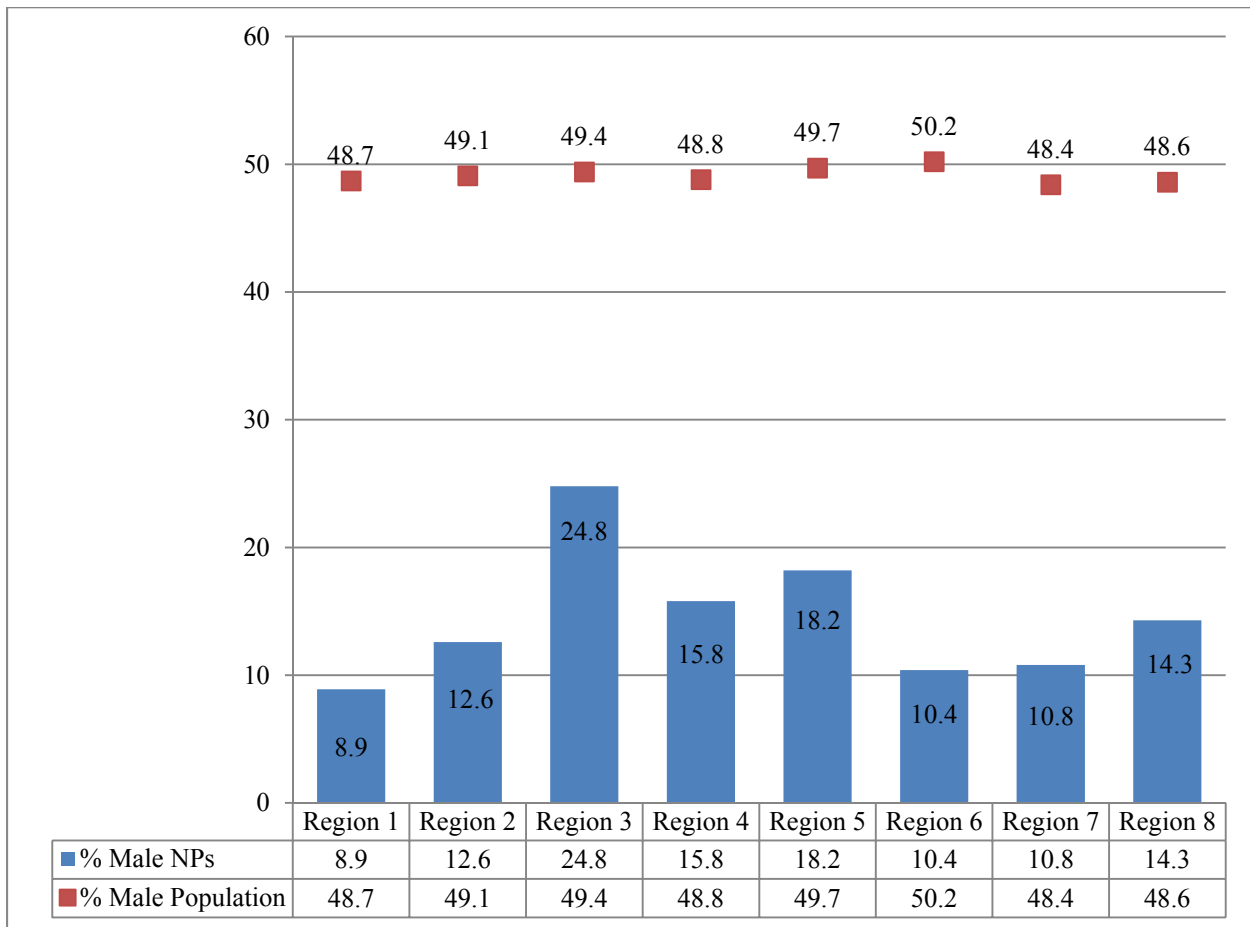


Figure 17. Male NPs and Population by RLMA

Nationwide, the number of males choosing the CRNA role has equaled or in some instances, surpassed the number of females. This is validated in the findings from the analysis of the CRNA data by gender and RLMA. In Figure 18, in five out of eight of the RLMA, the percentage of CRNAs that are male exceed the percentage of males represented in the regional population. The gender gap in the remaining three regions is relatively small with the widest gap occurring in Region 1 (New Orleans RLMA) where the male population is 48.7 percent and the CRNA male population is 36.6%.

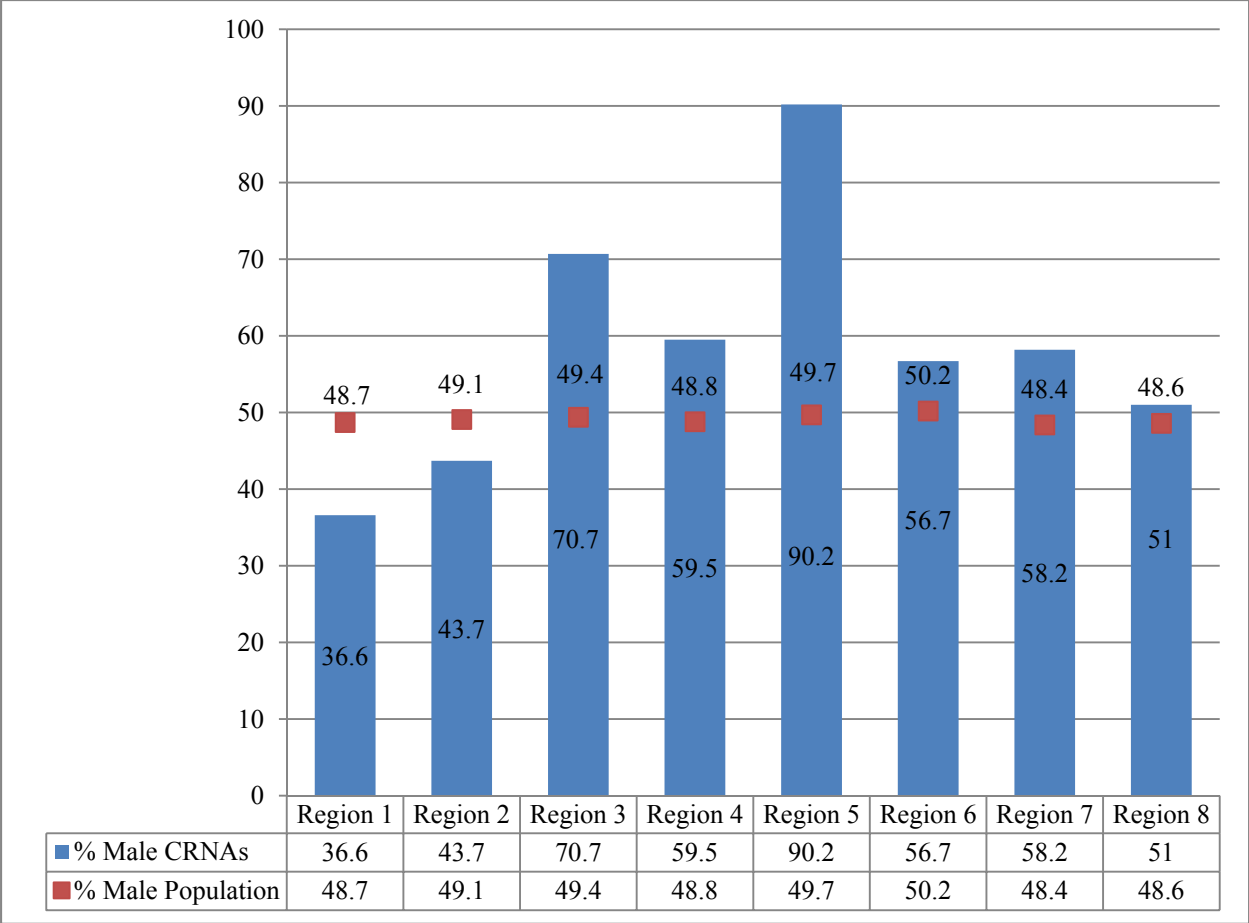


Figure 18. Male CRNAs and Population by RLMA

Conclusions and Major Findings

There is a growing concern around the country and in Louisiana about the growing demand for healthcare services. Many experts in the area of health, healthcare, and the provision of healthcare have identified APRNs as key players in addressing the current gap that exist in the provision of healthcare. An understanding of the supply of APRNs according to their role is essential when addressing the specific healthcare needs of the citizens of Louisiana. Each type of APRN plays a vital, yet specific role, in the provision of healthcare. This report has taken a look at not only the demographics, educational preparation, clinical specialties, practice settings, and geographic regions where APRNs practice, but it has also informed stakeholders about the gaps that exist at the regional level in terms of racial/ethnic and gender representation within the APRN workforce according to role.

APRNs play a vital role in the provision of healthcare in Louisiana. A thorough depiction of Louisiana’s APRN workforce will help nurse educators and administrators, regulators, healthcare administrators, and healthcare workforce policymakers make informed decisions to ensure that Louisiana will have an adequate supply of the types of healthcare providers that are needed to provide high quality, patient centered, cost effective, care to the citizens of Louisiana.

Appendix A

Graduate Nursing Programs in Louisiana

Advanced Practice Registered Nurse (APRN) Education in Louisiana

There are seven Graduate Nursing Programs in Louisiana offering a degree as an advanced practice registered nurse (APRN). Six of the seven programs offer the Nurse Practitioner (NP) role; four the Clinical Nurse Specialist (CNS) role; and two the Certified Registered Nurse Anesthetist (CRNA) role (see Appendix A for a list of LSBN Approved Graduate Nursing Programs). There are currently no programs offering the Certified Nurse Midwife (CNM) role in Louisiana (Table 1).

Table 1. Advanced Practice Registered Nurse Programs in Louisiana (2014)

Master's Program	Specialties	Roles*
Grambling State University	Family Pediatrics	NP NP
Intercollegiate Consortium for a Master of Science in Nursing (ICMSN) <ul style="list-style-type: none"> • McNeese State University • Nicholls State University • Southeastern Louisiana University • University of Louisiana at Lafayette 	Adult Health Adult Psychiatric / Mental Health Family Health Family Psychiatric/Mental Health	NP/CNS NP NP NP
LSU Health Science Center	Adult Gerontology Health Public/Community Health Neonatal Primary Care Family Anesthesia	CNS CNS NP NP CRNA
Loyola University	Family Adult	NP NP
Northwestern State University	Family Women's Health Pediatric Adult Gerontology Acute Care Adult Gerontology Primary Care Adult Gerontology	NP NP NP NP NP CNS
Our Lady of the Lake College	Nurse Anesthesia	CRNA
Southern University	Family Gerontology	NP NP/CNS

Note: Advanced Practice Registered Nurse Roles: Nurse Practitioner (NP), Clinical Nurse Specialist (CNS), Certified Registered Nurse Anesthetist (CRNA).

Admission to APRN Programs in Louisiana

In the 2013-2014 report year, there was a 7% decrease in the number of students admitted to APRN programs in Louisiana when compared to the previous report year (Table 2). There was a 7% decrease in NP program admissions and a 60% decrease in CNS admissions. The only role showing an increase in admissions was CRNA programs (1%). It is important to note that the numbers that are addressed in the annual reports from Louisiana's graduate nursing programs do

not include RNs living and working in Louisiana that have been admitted to APRN programs in other states.

Table 2. Admission to APRN Programs in LA (2011-2014)

Report Year	No. of Students Admitted to NP Programs	No. of Students Admitted to CNS Programs	No. of Students Admitted to CRNA Programs	Total No. of Students Admitted to APRN Programs
2014	438	2	76	516
2013	473	5	75	553
2012	412	5	81	498
2011	420	4	155	579
1 & 4 Year Variance	↓7% / ↓4%	↓60% / ↓50	↑1% / ↓51%	↓7% / ↓11%

Note: There were 105 students admitted to Louisiana’s BSN-DNP APRN programs in 2013-2014 (NP=52; CRNA=51; CNS=2) which are reflected in Table 21.

Enrollment in APRN Programs in Louisiana

There was an overall 8% decrease in the number of students enrolled in Louisiana’s APRN programs with the most significant decrease in enrollment occurring in NP programs (Table 3). The number of students enrolled in BSN to DNP APRN programs in Louisiana (121 in 2013; 187 in 2014) increased by 55%.

Table 3. Enrollment in APRN Programs in LA (2010-2014)

Report Year	No. of Students Enrolled in NP Programs	No. Students Enrolled in CNS Programs	No. Students Enrolled in CRNA Programs	Total No. Students Enrolled in APRN Programs
2014	932	8	147	1,087
2013	1,023	7	148	1,178
2012	888	10	203	1,101
2011	707	5	163	875
2010	726	18	228	972
1 & 5 Year Variance	↓9% / ↑28%	↑14% / ↓56%	↓0.7% / ↓36%	↓8% / ↑12%

Note: There were 187 students enrolled in Louisiana’s BSN-DNP APRN programs during the 2013-2014 report year (NP=102; CRNA=83; CNS=2) which are reflected in Table 22.

Gender of Students Enrolled in APRN Programs in Louisiana

Eighty-one percent of the students enrolled in APRN programs in Louisiana were female and 19% were male (Table 4). The overall decrease in the number of students enrolled in APRN programs in Louisiana in the current report year resulted in a decrease in the number of males and females enrolled, with no significant change in the percentage of females and males.

Table 4. Gender of Students Enrolled in APRN Programs in Louisiana (2010-2014)

Report Year	Male		Female		Total APRN Students
	#	%	#	%	
2014	208	19%	879	80%	1,087
2013	209	18%	969	82%	1,178
2012	221	20%	880	80%	1,101
2011	138	16%	737	84%	875
2010	206	21%	766	79%	972
1 & 5 Year Variance	↓0.5% / ↑1%		↓9% / ↑15%		↓8% / ↑12%

Ethnicity of Students Enrolled in APRN Programs in Louisiana (2010-2014)

In 2013, 29% of the students enrolled in Louisiana’s APRN programs were minorities, in 2014, 27% were minorities (Table 5). The greatest decrease in number in 2014 occurred among Blacks (↓20%).

Table 5. Ethnicity of Students Enrolled in APRN Programs in LA (2010-2014)

Report Year	White		Black		Hispanic		Asian		Other	
	#	%	#	%	#	%	#	%	#	%
2014	797	73%	217	20%	23	2%	24	2%	26	2%
2013	842	71%	271	23%	21	2%	23	2%	21	2%
2012	779	71%	251	23%	27	2%	20	2%	24	3%
2011	629	72%	200	23%	19	2%	14	2%	13	1%
2010	675	69%	215	22%	20	2%	12	1%	50	5%
1 & 5 Year Variance	↓5% / ↑18%		↓20% / ↑1%		↑10% / ↑15%		↑4% / ↑100%		↑24% / ↓48%	

Note: American Indian/Alaska Native (2) was included in *Other*. Total=1,087.

Age of Students enrolled in APRN Programs in Louisiana

Almost three-fourths (74%) of the students enrolled in APRN programs in Louisiana for the 2013-2014 report year were between 26 and 40 years of age (38% between 26-30 years; 36% between 31 and 40 years). There was a 42% increase in the number of students enrolled in APRN programs in Louisiana that were between 51 and 60 years of age (Table 6).

Table 6. Age of Students Enrolled in APRN Programs in LA (2012-2014)

Report Year	17-20		21-25		26-30		31-40		41-50		51-60		>61	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2014	0	0%	91	8%	413	38%	395	36%	131	12%	54	5%	2	0.2%
2013	0	0%	109	9%	413	35%	462	39%	153	13%	38	3%	2	.2%
2012	0	0%	113	10%	391	36%	371	34%	180	16%	44	4%	2	.2%
1 & 3 Year Variance	0%/0%		↓17%/↓19%		0%/↑6%		↓15%/↑6%		↓14%/↓27%		↑42%/↑23%		0%/0%	

Note: Total=1,086

Graduates from APRN Programs in Louisiana

In the 2013-2014 report year, there were a total of 342 graduates from Louisiana's APRN programs (Table 7) which represents a 6% increase when compared to the 323 graduates in the previous report year (2012-2013). The majority of the graduates were from NP programs (82%), which represent a 10% increase in the number of NP graduates (280 graduates in 2014; 255 graduates in 2013). Eighteen percent of the graduates were from CRNA programs (61 graduates). The number of graduates from CNS programs went from 5 in 2013 to 1 in 2014.

Table 7. Graduates from APRN Programs in Louisiana According to Program Type (2010-2014)

Report Year	Total No. of APRN Graduates	NP		CNS		CRNA	
		No.	%	No.	%	No.	%
2014	342	280	82%	1	0.3%	61	18%
2013	323	255	79%	5	2%	63	20%
2012	307	235	77%	4	1%	68	22%
2011	279	200	72%	6	2%	73	26%
2010	246	174	71%	2	1%	70	28%
1 & 5 Year Variance	↑6% / ↑39%	↑10% / ↑61%		↓80% / ↓50%		↓3% / ↓13%	

Performance of APRN Graduates on Certification Exams

Certification examinations taken by graduates from Louisiana's APRN programs include, but are not limited to the American Nurses Credentialing Center (ANCC), the American Academy of Nurse Practitioners (AANP), the Council on Certification for Nurse Anesthetists (CCNA), the National Certification Corporation (NCC), the Pediatric Nursing Certification Board (PNCB), and the American Association of Critical Care Nurses (AACCN). In 2013-2014, 326 APRN candidates sat for their respective certification exams. Three hundred and eleven (311) candidates successfully passed their certification exams resulting in a 95.40% passage rate for the state (Table 8).

Table 8 Performance on APRN Certification Exams by Graduates of Louisiana's APRN Programs (2010-2014)

Report Year	No. Taking Exam	No. Passing Exam	Passage Rate %
2014	326	311	95.40
2013	274	266	97.08
2012	261	248	95.02
2011	270	262	97.04
2010	233	223	95.71
1 & 5 Year Variance	↑19% / ↑40%	↓0.4% / ↑19%	↓16% / ↓15%

Note: Could not use NCC numbers - number taking the exam was not reported.

Nurse Faculty Teaching in Graduate Nursing Programs in Louisiana

Educational Preparation of Nursing Faculty Teaching in Graduate Nursing Programs in Louisiana

Faculty teaching in Graduate Nursing programs in Louisiana must have a minimum of a Master's Degree in Nursing (LSBN Rules and Regulations Title 46 Part XLVII Chapter 45, 4509 G 2.c) although most accrediting bodies prefer that graduate nursing faculty have a doctorate either in nursing or in a related field. Seventy-two percent (72%) of the faculty teaching in Louisiana's graduate nursing programs held an earned doctorate in nursing or a related field in the current report year (Table 9). A Masters was the highest degree held by 24% of the faculty teaching in graduate nursing programs in Louisiana in 2013-2014, and 5% held a degree outside of nursing (e.g., MD, Pharm D.). These individuals possessed credentials and/or expertise in an advanced practice specialty area that was recognized by both LSBN and national accrediting bodies.

Table 9. Educational Preparation of Faculty Teaching in Graduate Nursing Programs

Report Year	No. of Faculty with a Doctorate in Nursing	No. of Faculty with a Doctorate in a Related Field	No. of Mastered Prepared Nurses Teaching in an APRN Program	Total Faculty
2014	102	34	45	190
2013	96	40	54	190
2012	82	37	38	157
2011	73	32	39	144
2010	73	35	38	146
1 & 5 Year Variance	↑6% / ↑40%	↓15% / ↓3%	↓17% / ↑18%	0 / ↑30%

Note: Faculty with other degree/MD/Pharm D, etc. = 9

Filled and Vacant Nurse Faculty Positions in Graduate Nursing Programs in Louisiana

Deans and Directors of Louisiana's graduate nursing programs were asked to submit the number of budgeted full-time faculty positions that were filled as of October 15, 2014. There were 112 filled full-time nurse faculty positions reported statewide which reflects a 2% decrease in the number of filled nurse faculty positions in Louisiana's graduate nursing programs compared to the previous year (114 filled positions in 2012-2013). A total of 190 faculty taught at some point and time in the graduate nursing programs during the 2013-2014 report year (Table 10). There were 19 new faculty appointments and 13 faculty positions were reported as vacant. There was a 43% increase in the number of faculty positions funded from other sources (e.g., grants, capitation funds) when compared to a 4% decrease in the previous report year.

Table 10. Faculty Positions in Graduate Nursing Programs in LA (2010-2014)

Report Year	No. of Budgeted Nurse Faculty Positions Filled	No. of Full-time and Part-time Faculty Teaching in Graduate Nursing Programs	Nurse Faculty Positions Funded from other Sources	Vacant Nurse Faculty Positions	No. of New Faculty Appointments
2014	112	190	33	13	19
2013	114	190	23	13	30
2012	88	165	24	9	25
2011	54	150	50	7	14
2010	72	149	50	9	13
1 & 5 Year Variance	↓2% / ↑56%	0% / ↑28%	↑43% / ↓34%	0% / ↑44%	↓37% / ↑46%

Graduate Nursing Faculty Attrition

As seen in Table 11, a total of 24 faculty left their teaching positions in graduate nursing programs in Louisiana in 2013-2014 for one of the following reasons: approved paid or unpaid leave (3), resignations (6), retirement (8), and ending of contract or termination (7). The number of retirements went from four in 2012-2013 to eight in 2013-2014.

Table 11. Graduate Nursing Faculty Attrition: Leave, Resignation, and Retirement/Death/Termination

Report Year	No. of Faculty on Leave	No. of Faculty Resignations	No. of Faculty Retiring/Death/Termination-Contracts Ended
2014	3	6	8 Retirements / 7 Contracts Ended
2013	3	6	4 Retirements / 3 Contracts Ended
2012	1	6	5 Retirements / 4 Contracts Ended
2011	5	9	6 Retirements
2010	1	5	6 Retirements / 3 Contracts Ended
1 & 5 Year Variance	0% / ↑200%	0% / ↑20%	↑114% / ↑67%

Gender, Ethnicity, and Age of Faculty Teaching in Graduate Nursing Programs in Louisiana

As noted in Tables 12 and 13, the majority of faculty teaching in graduate nursing programs in Louisiana are female (84%) and White (77%). There was a 3% decrease in the number of male faculty and a 2% increase in the number of female faculty since the previous report year (Table 12).

Table 12. Gender Distribution of Graduate Nursing Faculty

Report Year	Male		Female		Total Number of Faculty
	#	%	#	%	
2014	31	16%	159	84%	190
2013	32	17%	156	83%	188
2012	26	17%	127	83%	153
1 & 3 Year Variance	↓3% / ↑19%		↑2% / ↑25%		↑1% / ↑24%

Twenty-three percent of the faculty teaching in the graduate nursing programs were minorities in the 2013-2014 report year (Table 13). There was an addition of one Hispanic faculty member and a loss of one Asian faculty member when compared to the previous report year.

Table 13. Ethnicity of Graduate Nursing Faculty (2012-2014)

Ethnicity of Graduate Nursing Faculty	2012		2013		2014	
	#	%	#	%	#	%
White	122	80%	144	77%	146	77%
Black	28	18%	37	20%	37	19%
Hispanic	2	1%	3	2%	4	2%
Asian	1	0.7%	2	1%	1	0.5%
American Indian/Alaska Native	0	0%	0	0%	0	0%
Other	0	0%	2	1%	2	1%
Total	153	99.7%	188	101%	190	99.5%

Sixty-one percent of the faculty teaching in graduate nursing programs in Louisiana were 51 and over compared to 58% in 2012-2013. Over a fourth of the graduate nursing faculty (27%) were 61 years and older (Table 14). Only 16% were 40 and younger.

Table 14. Age Distribution of Graduate Nursing Faculty (2012-2014)

Age Category	2012		2013		2014	
	#	%	#	%	#	%
30 and younger	2	1%	4	2%	2	1%
31-40	22	14%	34	18%	29	15%
41-50	36	24%	41	22%	43	23%
51-55	27	18%	27	14%	27	14%
56-60	35	23%	37	20%	38	20%
61-65	21	14%	34	18%	32	17%
66-70	5	3%	7	4%	15	8%
>71	5	3%	4	2%	4	2%
Total	153	100%	188	100%	190	100%