

JB Pritzker Governor Mario Treto, Jr. Secretary

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Completed in 2023, under the leadership of the Illinois Nursing Workforce Center's Advisory Board of Directors, this workforce survey was offered by Eblasts after individual on-line licensure renewal by the Illinois Advanced Practice Registered Nurse (APRN) was closed. The acquisition of data was accomplished through the collaboration of the following IDFPR sections: Licensing, the Division of Nursing, the Board of Nursing, the Illinois Nursing Workforce Center and the State of Illinois Department of Innovation and Technology.

Special thanks to the Advanced Practice Registered Nurses licensed in Illinois who voluntarily responded to the survey. The feedback provided will make a significant contribution to planning health services in Illinois, specifically those focused on the nursing workforce.

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About the Data/Introduction

The Illinois Nursing Workforce Center Advanced Practice Registered Nurse (APRN) Workforce Survey 2022

This is the fourth time that data has been voluntarily collected post Illinois APRN license renewal. However, this is the first time that data was successfully collected by two separate eblasts to the Illinois licensed APRN email addresses after the extended biennial license renewal process was completed. The past survey request for participation and voluntary data collections were conducted in 2014, 2016, and 2020, by a single eblast. The two 2022 eblast messages can be found in Appendix B.

The primary source of data for this report was from a voluntary survey offered to individual Advance Practice Registered Nurses (APRNs) through two eblasts distributed in October 2022. The eblasts were distributed on October 5 and October 17, 2022, to the IDFPR APRN database of email addresses, approximately 17,999 Illinois APRNs. The biennial APRN license renewal was completed August 31, 2022. The eblasts were distributed after the APRN license renewal portal was closed, and at a time agreeable with Illinois Department of Financial and Professional Regulation (IDFPR) Licensing Section.

The 2022 license renewal period was extended from May 30 to August 31, 2022, by a Variance to 68 Illinois Administrative Code 1300.40 and 68 Illinois Administrative Code 1300.30(b), which require registered professional nurses (RNs), advanced practice registered nurses (APRNs), and advanced practice registered nurses with full practice authority (FPA-APRNs) to submit renewal documentation and pay the renewal fee by the deadline of May 31, 2022. The Variance was granted by Division of Professional Regulation Director Cecilia Abundis on April 5, 2022. RNs, APRNs and FPA-APRNs deadline for license renewal was extended to 8/31/22.

On October 5, 2022, 17,999 Advanced Practice Registered Nurses (APRNs) licensed in Illinois received the first eblast request to voluntarily participate in completion of an individual survey. As of October 16, 2022, 2,605 (14.5%) responses were received. On October 17, 2022, a second eblast was distributed to 16,892 Illinois APRNs; the email message had been adjusted in two places. First, the end of the first line the phrase: "...deadline for survey submission October 31, 2022"; and second, a final sentence was added: "If you have already completed this survey, thank you, you do not need to complete the survey a second time". The survey was closed on November 15, 2022, with 4,268 or 24% response rate of those who hold an Illinois APRN license.

The survey included 55 questions consistent with the Health Resources and Services Administration (HRSA) designed National Sample Survey of Nurse Practitioners (NSSNP) and the National Forum of State Nursing Workforce Centers (Forum) Supply Nursing Minimum Dataset. There were also additional questions on billing practices, compensation, place-of-work zip codes, retirement, and professional collaboration. There were questions about workplace violence and the impact of COVID-19 SARS-2 pandemic. A full list of survey questions is provided in Appendix A. Information from the survey is categorized into the following areas in this report: 1) demographic information such as age, diversity (race, ethnicity, gender), and retirement horizon; 2) human capital elements such as level of education, workplace role and employment specialty area; 3) job characteristics of work setting, annual salary, workplace violence, and 4) COVID-19 SARS-2 impact.

Key Findings

IL Nursing Workforce Center Advanced Practice Registered Nurse (APRN) Survey 2022

Voluntary survey participation was offered to Illinois APRNs through two eblasts, on October 5 and October 17, 2022. The data portal remained open from October 5 through November 15, 2022. A total of 4,268 APRNs completed the survey for a survey response rate of 24% APRNs.

The data quantifies the services APRNs provide, the diversity of APRN specialty areas, the process that is used to bill for these services, the variety of settings where patients receive these specialized services and reimbursement for services.

Key Findings

- Employment: 68% of APRNs work one job full-time (68%), 94% provide direct patient care.
- Employment setting: more (52%) APRNs work in ambulatory non-acute outpatient settings than in hospital acute care settings (32%) settings. Pg 20 or report.
- Diversity: there is more racial and ethnic diversity of APRNs under the age of 45 years in the Illinois workforce.
- Age: The IDFPR Active Licensee database has 18.34% APRNs age 55 years and older.
 Approximately 32% of APRNs responding to the survey indicated they are over 55 years of age; survey age cohorts for Illinois APRNs in 2022 are similar to those reported 2018, 2020.
- Education: 83% of APRNs have a masters' degree, 18% have a doctoral degree (DNP or PhD).

APRN Workplace Settings

52% Practice in an ambulatory setting – outpatient clinic, private APRN practice, private physician practice, hospital outpatient clinic, etc.

29% Practice in hospital acute care settings, an inpatient unit, the emergency room, etc.

5% Practice in Long Term Care, 5% in public or community settings, 2% palliative care

Diversity

More APRNs under the age of 55 years are from ethnic and racially diverse backgrounds.

More than half of the APRNs with Latinx ethnicity are under 45 years of age.

Approximately half of APRNS with Asian heritage are under 45 years of age.

Approximately forty percent of African American or Black APRNs are under 45 years of age.

APRN Billing/Reimbursement

42% Manage a panel of patients.

43% Bill exclusively under their National Provider Identifier (NPI) number.

Reimbursement for services is Medicare (34%), Medicaid (25%), Private Insurance (33%).

Summary

The majority of APRNs are employed full-time in one position providing direct patient care. The majority of APRNs are under 55 years of age, with more ethnic and racial diversity amongst these young APRNs.

Reimbursement for services is divided amongst Medicare, Medicaid and Private Insurance. The full report with additional details will be available after December 15, 2023 on the INWC website https://nursing.illinois.gov/resources/data-reports.html

Executive Summary

General overview: Data on the characteristics, supply, and distribution of Advanced Practice Registered Nurses (APRNs) in the state of Illinois is essential to expanding access to care and planning for provision of essential primary and other health care services. This is the fifth time that data has been voluntarily collected post Illinois APRN license renewal. However, this is the first time that data was successfully collected by two separate eblasts to the Illinois licensed APRN email addresses after the extended biennial license renewal process was closed. The past survey requests for participation and voluntary data collections were conducted in 2014, 2016, and 2020, by a participation message that would have been seen immediately upon completion of payment of the online license renewal fee. The eblast messages for 2022 can be found in Appendix B.

This report contains data on the demographics of Illinois' current APRN workforce, including type of APRN, their racial, ethnic and gender diversity, age, and educational preparation. The data quantifies the services APRNs provide, the process that is used to bill for these services, and reimbursement for services. Finally, the survey captures the diversity of APRN specialty expertise and settings where patients receive these specialized services.

Age of workforce: This report includes age data from both the IDFPR/DPR Active Licensee database, and from the eblast APRN survey respondents. The survey participants include more responses from an aging APRN workforce, with 32% of survey respondents over 55 years of age. The IDFPR/DPR Active Licensee age data indicates that only 18% of Illinois APRNs are 55 years of age or older. The survey respondents also reflect different age ranges based on type of APRN. There are four types of APRNs: Certified Registered Nurse Anesthetist (CRNA), Clinical Nurse Specialist (CNS), Certified Nurse Midwife (CNM) and Certified Nurse Practitioner (NP). For example, 54% of Certified Nurse Practitioners (NPs), 33% of CNMs, and 35% CRNAs are less than 45 years of age. Sixty four percent of CNSs are 55 years of age or older.

<u>Increasing diversity</u>: There continues to be an increase in ethnic and racial diversity in the state of Illinois since the most recent, 2020 APRN survey. Survey data also indicate an increase in the number of Illinois Advanced Practice Registered Nurses (APRN) from ethnic and racially diverse backgrounds. The majority, 82%, of APRNs are White/Caucasian; a higher percentage of APRNs under the age of 55 years are from ethnic and racially diverse backgrounds compared to APRNs in the older age range. For example, approximately half of Hispanic/Latinx and Asian APRNs are under the age of 45 years, while approximately 40% of Black or African American APRNs are younger than 45 years of age. The results are similar to, but slightly higher than data reported in previous APRN surveys.

<u>Specialty/Workplace Characteristics</u>: The survey respondents reported on their nursing specialty, and workplace setting. The respondents were provided a choice amongst job settings as well as the option to write in settings that were not listed. Approximately 50% of respondents practice in ambulatory settings; approximately 30% practice in a hospital/inpatient setting. Some APRNs indicated time was split between hospital and outpatient settings. In line with Illinois regulation, APRNs maintain collaborative agreements, but there is a varied range of physician-collaborator relationships.

<u>Billing/Reimbursement</u>: Approximately 44% of APRN respondents indicated they manage a panel of patients; this is up from the 2016 survey which indicated that 30% of Illinois APRNs managed a panel of patients. Seventy-nine percent of APRNs indicate that with most of their patients, they counsel and educate both patients and families; in addition, approximately forty percent of respondents note they provide preventive care. Forty-six percent of APRN respondents bill exclusively under their National Provider Identifier (NPI) number; this was followed by 13% billing under the clinic/facility number. With full practice authority, the numbers of APRNs managing a panel of patients in addition to providing education, counseling, and preventive care, it is anticipated that this will increase.

<u>Summary</u>: The 2022 Illinois APRN survey data is extremely valuable as health care planners project the human health care capital that will be needed in Illinois. These data will be of great use in estimating the current APRN supply, their demographics, and practice specialties. The anticipated shortage of primary care providers is particularly acute in Illinois. Focused workforce planning is urgently needed to assure access to healthcare for Illinois residents. The full report is available on the IDFPR/Illinois Nursing Workforce Center website https://nursing.illinois.gov/resources/data-reports.html

Demographics

Demographics are "the statistical characteristics of human populations..." https://www.merriam-webster.com/dictionary/demographic. This section examines the breakdown of select characteristics, such as sex, race, age, and ethnicity among the population of Advanced Practice Registered Nurses (APRN) in Illinois. This section includes the Active Licensee age data obtained from the Illinois Department of Financial and Professional Regulation (IDFPRO/Division of Professional Regulation (DPR) obtained June 2023. This focus of this section is review of voluntary survey responses to the eblasts sent to Illinois APRNs October 2022.

The overall distribution of APRN survey participants by selected age category and type of APRN is described below. Survey age data were derived from participant responses to a question asking their date of birth, there was a non-response rate of approximately 1%, 47 respondents. Since the age ranges differ based on type of APRN, it is useful for each category to be reviewed separately.

This report includes age data from both the IDFPR/DPR Active Licensee database (https://idfpr.illinois.gov/content/dam/soi/en/web/idfpr/licenselookup/alr/fy23/2023-10-01-activelicenseereport.pdf), and from the eblast APRN survey respondents. The voluntary survey participants include more responses from an aging APRN workforce, with 32% of survey respondents over 55 years of age. The IDFPR/DPR Active Licensee age data indicates that only 18% of Illinois APRNs are 55 years of age or older. Details of the comparison of survey APRN ages and the IDFPR APRN Active Licensee ages can be found in Appendix D of this report.

Figure 1 apportions age by type of Advanced Practice Registered Nursing category; these are age categories for survey respondents only. It illustrates that for three of the four types of APRNs, approximately 40% are 44 years of age or younger. For example, 37% of Certified Registered Nurse Anesthetists (CRNAs) are under 45 years of age. Among the other categories, 37% of the Certified Nurse Midwives (CNMs) are younger than 45 years and 48% of Certified Nurse Practitioners (NPs) are younger than 45 years of age. The majority (73%) of Clinical Nurse Specialists (CNSs) are 55 years of age or older. The low growth of the CNS workforce may be impacted by the limited number of Illinois universities and colleges that offer the CNS program and certification. The number of elder CNS APRNs may also be because in the 1980's the primary APRN graduate education was as a CNS; most colleges and universities did not have other APRN education options. Currently APRN students have the four graduate education options to four types APRN roles (CRNA, CNP, CNM, CNS).

Figure 1: Type of Advanced Practice Registered Nurse (APRN) and age

Type of Advanced	<24	25-34	35-44	45-54	55-64	65-70	71+	Total
Practice Registered Nurse	years							
Certified Registered	0%	9.0%	28.3%	24.5%	23.9%	11.2%	3.1%	11%
Nurse Anesthetist (CRNA)	0	53	166	144	140	66	18	577
Certified Clinical	0.4%	0.4%	11.9%	14.2%	36.8%	29.5%	6.9%	7%
Nurse Specialist (CNS)	1	1	31	37	96	77	18	261
Certified Nurse	0%	14.0%	22.8%	17.5%	18.4%	23.7%	3.5%	4%
Midwife (CNM)	0	16	26	20	21	27	4	114
Certified Clinical	0%	15.0%	33.1%	22.9%	18.0%	8.3%	2.8%	78%
Nurse Practitioner (CNP)	0	457	1,007	696	548	251	84	3,043
Total responses	1	527	1,230	897	805	421	124	4,005
	0.2%	13.1%	30.1%	22.3%	20%	10.5%	3.15%	

Figure 1: No response: age= 47 respondents.

Figure 1: No response: type of APRN= 226 respondents.

In Illinois there is one DNP Certified Nurse Midwifery program at the University of Illinois. The number of Illinois APRN Certified Nurse Midwives (CNM) continues to increase, from 406 in 2012 to 506 in October 2022. It is important to note that there are Women's Health Nurse Practitioner (WHNP) programs that focus on preparing clinicians who provide comprehensive healthcare throughout women's lives. These WHNP's are providing some of the care that CNM's provide in addition to offering primary care to women of all ages.

The distribution of racial and ethnic diversity of the Illinois Advanced Practice Registered Nurse (APRN) workforce is less robust than the diversity of the general population of the state. The United States (U.S.) Census Bureau July 1, 2022, reported that the Illinois population totaled approximately thirteen million (12,582,032). https://www.census.gov/quickfacts/fact/table/IL/PST045222

Of the Illinois residents, 15% are Black/African American. In contrast, Black/African American race was indicated by only 8% of APRN respondents. Hispanic/Latinx comprise 18% of the population of Illinois but only 6% of survey respondents. Survey responses indicated a clear majority of APRNs are White/Caucasian (82%), while 76% of Illinois residents are White/Caucasian. Schools of nursing and workforce initiatives continue to seek to recruit and to retain student cohorts reflective of the diversity of the general state population.

Diversity, race, and ethnicity reported by survey respondents are illustrated in Figure 2 (below). To capture both race and ethnicity respondents answered the question "are you Hispanic

or Latinx"; followed by the question "Select one of the following races that apply to you". (Because U.S. Census Bureau regards the Hispanic ethnonym as a culture, irrespective of race, these data may represent duplicate counts. https://suburbanstats.org/population/how-many-people-live-in-illinois)

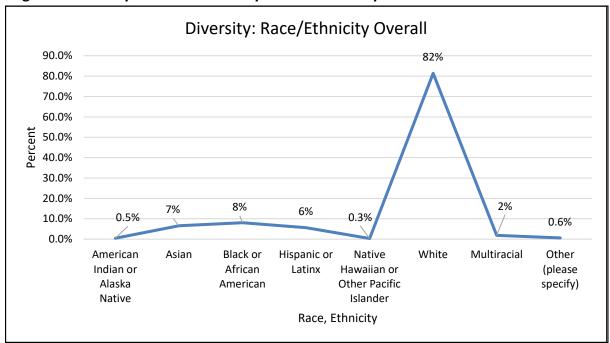


Figure 2: Diversity: Race and Ethnicity Overall Summary 2022

 ${\it Figure~2: No~response: ethnicity, Hispanic~or~Latino=~15~respondents.}$

Figure 2: No response: race = 21 respondents.

Racial and ethnic diversity is higher among the younger APRN age groups. A higher percentage of APRNs under the age of 55 years are from cultural and racially diverse backgrounds compared to APRNs in older age ranges. For example, 63% Hispanic/Latinx APRNs are under the age of 45 years and 42% of Black or African American APRNs are younger than 45 years of age. This is similar to the results of the previous 2020 APRN report. The July 1, 2022, United States Census-Illinois for race and Hispanic origin: 60% White alone (not Hispanic or Latino), 14.7% Black or African American, 0.6% American Indian and Alaska Native, 6.1% Asian, 0.1% Native Hawaiian and Other Pacific Islander, 18% Hispanic or Latinx and 2.2% two or more races. While the percent of representation amongst Illinois APRNs does not match that of the Illinois population, the diversity is increasing. https://www.census.gov/quickfacts/fact/table/IL/PST045222

Figure 3: Diversity: Ethnicity, Race and Gender by age

Age		<24	25-34	35-44	45-54	55-64	65-70	71+	Total
Ethnicity and Race		years	years	years	years	years	years	years	
American Indian or Alaska Native (percent)	N	0% 0	6.3% 1	6.3% 1	37.5% 6	18.8% 3	25% 4	6.3% 1	0.34% 16
Asian	N	0% 0	15% 40	39% 104	29.6% 79	12% 32	3% 8	1.5% 4	6.12% 267
Black or African American	N	0% 0	6.5% 22	35.7% 121	30.7% 104	21.2% 72	4.4% 15	1.5% 5	7.83% 339
Native Hawaiian or Other Pacific Islander	N	0% 0	14.3% 2	50% 7	7.1% 1	14.3% 2	14.3% 2	0% 0	0.32% 14
White/Caucasian	N	0.03% 1	13.6% 465	28.9% 987	21.1% 721	21% 717	12% 409	3.5% 121	79.0% 3,421
Multiracial	N	0% 0	16% 12	46.7% 35	28% 21	8% 6	1.3% 1	0% 0	1.73% 75
Hispanic or Latinx	N	0% 0	16.6% 33	46.7% 93	18.6% 37	14.1% 28	3.5% 7	0.5% 1	4.59% 199
Female	N	0% 0	13.6% 505	30.9% 1,150	21.7% 809	20.3% 756	10.5% 391	3.14% 117	89% 3,728
Male	N	0% 0	10.2% 47	28.4% 131	29.9% 138	17.8% 82	10.6% 49	3.3% 15	11% 462
Age, Gender		<24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-70 years	71+ years	Total 4,331

Figure 4 Note: Hispanic is a culture regardless of race so respondent options for Hispanic were not included in the Multiracial category. Race question: No response = 21 respondents; ethnicity question: no response = 19 respondents; gender question: no response = 38 respondents.

Respondents were asked "approximately when do you plan to retire?" Responses indicate that slightly more than half of survey participants (53%) plan to stay in the workforce beyond 10 years. In 2016 the response was 57% planned to stay more than 10 years. Thirty-one per cent (31%) APRNs indicated that they are planning to retire in the next 10 years; in 2020 it was 15%. Ten percent of APRN survey respondents shared that they are undecided as to when they will retire, and six percent indicated that they are already retired.

Human Capital

Human capital refers to the stock of knowledge, education, experience, habits, social and personality attributes, including creativity, embodied in the ability to perform labor to produce economic value.

In the highly skilled workplace environment of healthcare delivery, patient cases are more complex than in the past, the population is aging, and the technology is increasingly sophisticated. Taken together, these factors mean that the ongoing development of human capital is increasingly important to ensure high quality of care and positive patient outcomes.

The skills, knowledge, education, talents, and experiences of Advanced Practice Registered Nurse (APRN) employees (their human capital) are an extremely important intangible asset to the employer and to the entire healthcare system. Human capital is cultivated from continuing professional development, including academic coursework, conferences, workshops, and experience (1).

Advanced educational credentials are a requirement of the Advanced Practice Registered Nurse (APRN) workforce. In Illinois a minimum requirement of APRN licensure is a masters' degree in nursing and APRN certification. This is reflected in the survey responses: 92% of respondents have APRN certification. Educational preparation: 83% have a masters' degree in nursing, 16% have a DNP and 2% have a PhD in nursing. Slightly less than 3% of respondents reported completing a "certificate program" as preparation for licensure as an APRN and these individuals have been grandfathered into Illinois APRN licensure for many years. This 3% of respondents completing an APRN "certificate program" is approximately the same as it was in 2020.

In Illinois APRNs must first be licensed in Illinois as a Registered Professional Nurse (RN) prior to becoming licensed as an APRN. The Illinois Nurse Practice Act (NPA) mandates for licensure as an Advanced Practice Registered Nurse in Illinois, the nurse must have a minimum of a master's degree in nursing (IL NPA Article 65, Section 65-5(4)) and APRN certification. Figure 4 below shows the types of degrees that Illinois APRNs have earned, beginning with the educational degree that was received when first licensed as a RN. Respondents checked off that multiple degrees were earned, the degree obtained with both an RN license and an APRN license.

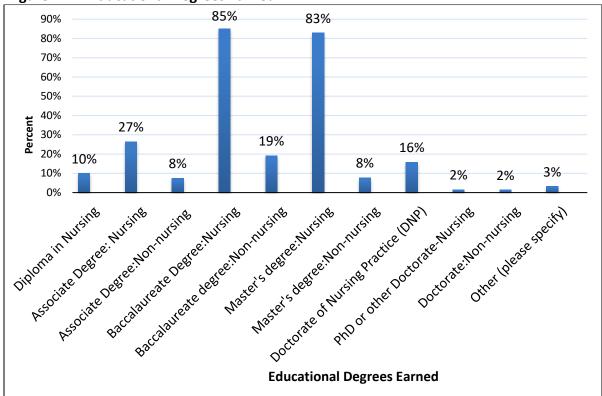


Figure 4: All Educational Degrees Earned

Figure 4: No response = 234 respondents.

Illinois APRNs must initially be licensed as an RN prior to becoming educated and licensed as an APRN. Approximately 27% of APRNs began their RN nursing education through a community college with an associate degree in nursing. Ten percent of respondents received a diploma in nursing, this low number could be in part because currently there is only one RN diploma education program in Illinois (Graham Hospital School of Nursing, Canton, Illinois). Eighty five percent of respondents have a bachelor's degree in nursing. For some of the APRNs, the bachelor's degree was the first degree obtained prior to becoming licensed as a nurse (RN). For others, who received nursing education through a community college or a diploma program, the bachelor's degree was obtained post-RN licensure. Eighty-three percent of the respondents also have a master's degree in nursing. Seventeen percent of the respondents have completed additional nursing education resulting in a doctoral degree. Fifteen percent of the APRNs obtained the Doctorate in Nursing Practice (DNP), a practice-focused doctoral degree that prepares experts in specialized advanced nursing practice. In Illinois, there are a variety of education articulation pathways amongst nursing education programs leading to graduate education to practice as an Advanced Practice Registered Nurse. This is reflected in the number and type of degrees that Illinois APRNs have acquired prior to becoming licensed as an APRN. The survey did not ask what the highest degree obtained was as a separate question.

The American Association of Nurse Practitioners (AANP) shows a growth in DNP programs nationally. As of July 2022, there are 407 DNP graduate education programs enrolling students nationwide, and an additional 106 new DNP programs are in the planning stages. DNP programs are now available in all 50 states plus the District of Columbia. States with the most programs (10 or more programs) include California, Florida, *Illinois*, Massachusetts, Minnesota, New York, Ohio, Pennsylvania and Texas. From 2020 to 2021, the number of students enrolled in DNP programs increased from 39,530 to 40,834. During that same period, the number of DNP graduates increased from 9,158 to 10, 086. https://www.aacnnursing.org/our-initiatives/education-practice/doctor-of-nursing-practice

Figure 5 below is a graph of the number of nurses in Illinois licensed as APRNs beginning in approximately 1975. This Figure 5 (below) also shows that the majority (65%) of survey respondents became licensed as an Illinois APRN in the past twelve years, beginning in 2010. This grid also shows that since approximately 2020, the annual number of APRNs becoming licensed has decreased.

Data in Figure 6, below, is from the Illinois Department of Financial and Professional Regulation (IDFPR) Active Licensee licensure database and reflects growth in the number and type of Illinois APRNs beginning in 2001. This growth is similar to the increase in survey respondents initial Illinois APRN licensure during a similar time period. (Illinois Nursing Workforce Center https://nursing.illinois.gov/resources/data-reports.html.

Figure 6 illustrates that in 2008 there were 6,164 individuals licensed in Illinois as APRNs. In October 2022 there were 18,362 individuals in Illinois licensed as APRNs, almost triple the number of APRNs licenses as there were in 2008 including all APRN specialties. The IDFPR Advanced Practice Registered Nurse (APRN) Licensee type table (2012-203) https://nursing.illinois.gov/content/dam/soi/en/web/nursing/documents/pdf/2023-10-16 to2012 APRN%20Report%20For%20Website.pdf.

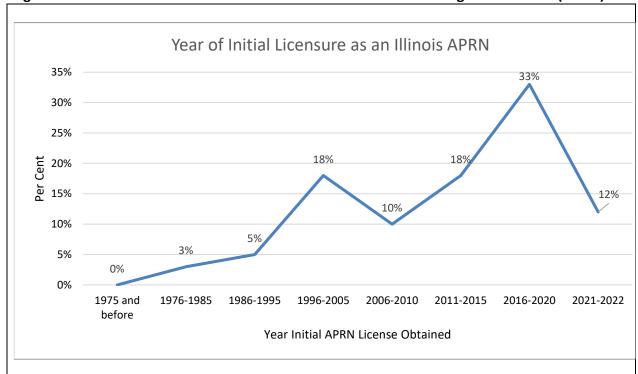


Figure 5: Year of initial licensure as an Illinois Advanced Practice Registered Nurse (APRN)

Figure 5: No response = 226 respondents.

Figure 6: Type of APRN Specialty – Data from the Illinois Licensure Database*

Type of APRN Specialty	2001	2008	2012 Jan	2014 Feb	2015 March	2016 Jan	2017 Feb	2018 Jan	2019 March	2020 Dec	July 2021	Oct 2022
CNS			1,023	1,054	1,034	1,081	1,016	1,056	989	963	893	892
CRNA			1,924	1,883	1,849	1,997	1,945	2,076	2,044	2,300	2,181	2,321
CNM			406	447	445	486	489	525	502	510	462	506
CNP			4,682	5,917	6,411	7,697	8,777	10,162	11,175	13,244	13,121	14,574
Total APRNs	1,976	6,164	7,833	9,301	9,739	11,261	12,227	13,819	14,710	17,017	16,657	18,362

^{*}Figure 6: the number of APRNs indicated reflects the total number of APRNs licensed in Illinois on the date listed. Role type of APRN was not available until 2012.

Data regarding APRN employment within medical specialty areas were categorized by practice specialties in the areas of Primary Care, Total Subspecialties, Surgical, and Other Specialty. These are displayed in Figure 7, below. Similar to the 2020 APRN survey, there are specialty areas of significant need (Psychiatric- Mental Health, Long Term Care) which contain a relatively small number of licensed APRNs.

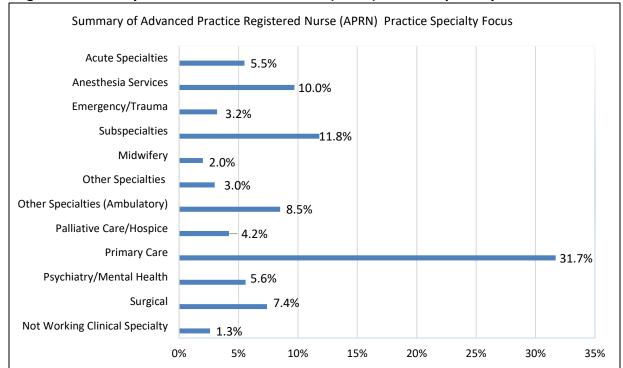


Figure 7: Summary of Advanced Practice Nurse (APRN) Practice Specialty Focus

Figure 7: No response = 445 respondents.

A summary of Advanced Practice Registered Nurse (APRN) Practice Specialty Focus is described in Figure 7 (above). This summary reflects a combining of practice specialty responses based on similarities in specialty, acuity, or location of service. Certain specialties are shown separately due to the uniqueness of their care or setting (e.g., Anesthesia Services, Emergency/Trauma, Midwifery, Palliative Care, Psychiatry/Mental Health). The specialties that were combined are as follows:

- Acute Specialties: Hospitalist (1.9%), Intensive Care (2.0%), Neonatal (1.6%)
- Anesthesia Services: (10.0%)
- Emergency, Trauma: (3.2%)
- **Subspecialties**: Advance Disease Management (0.2%), Cardiology (4.6%), Endocrinology (0.3%), Gastroenterology (1.1%), Hematology/Oncology (2.7%), Infectious Disease (0.73%), Pulmonary/Respiratory (1.2%), Renal/Nephrology (0.7%), Rheumatology (0.3%)
- Midwifery: (2. 0%)
- Other Specialties: Allergy and Immunology (0.2%), Dermatology (0.5%), Interventional Radiology (0.3%), Neurology (0.9%), Wound/Ostomy (1.1%)
- Other Specialties (Ambulatory Settings): Long Term Care (1.0%), Occupational Health (1.3%), Rehabilitation (1.0%), School Health (0.5%), Urgent Care (4.7%)
- Palliative Care, Hospice: (4.2%)

- **Primary Care:** includes Pediatrics through Gerontology/Geriatrics: Internal Medicine (5.2%), Family Practice (14.8%), Geriatrics (3.2%), General Pediatrics (2.9%), Pediatric Specialties (0.9%), OB/GYN Women's Health (4.7%)
- Psychiatric/Mental Health: (5. 6%)
- **Surgical:** General Surgery (1.5%), Urological Surgery (0.5%), Orthopedic Surgery (1.5%), Other Surgery (3.9%)
- Not Working in a Clinical specialty: (2.6%)
- Other: (4.9%)

Overall pre-tax earnings reported by respondents are illustrated in Figure 8. The median income for APRNs in Illinois is approximately \$105,000 to \$145,000 range for full-time work. The Illinois APRN annual salary range is slightly lower than the national data from the United States Department of Labor, Bureau of Labor Statistics, which reports that the "median annual wage for nurse anesthetists, nurse midwives, and nurse practitioners was \$123,780 in September 2021. The median wage is the wage at which half the workers in an occupation earned more than that amount, and half earned less. The lowest 10 percent earned less than \$79,870, and the highest 10 percent earned more than \$200,540." (https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm#tab-5)

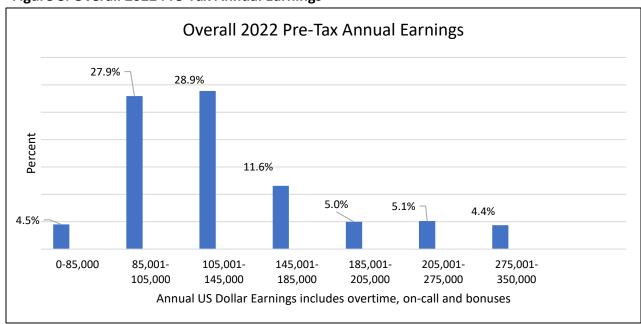


Figure 8: Overall 2022 Pre-Tax Annual Earnings

Figure 8: No response = 1,157 respondents.

Information about annual salaries was reported by approximately 70% of the survey respondents, and information about typical weekly hours worked for primary positions was provided by approximately 70% of survey respondents. Among the many survey questions,

participants were asked about the number of hours worked in a typical work week, how and when they were paid, the estimated pre-tax annual earnings, and whether they worked overtime and on-call hours. The overwhelming majority (94%) of Illinois APRNs reported that they provide direct patient care. The majority work one job full-time (68%), 31-40 hours per week (44%), and 69% are a salaried employee. Approximately thirty percent of APRNs work between 41-50 hours per week; 7% work more than 50 hours per week. Approximately 13% of respondents indicated that they worked a second job.

There was a question asking if the APRN worked part-time, which was defined as less than 30 hours of service per week or less than 130 hours of service per month; 56% survey participants skipped the part-time employment question. Of those that responded, approximately 20% annually make \$50,000 or less per year; approximately 16% make between \$50,001-\$100,000 per year, and approximately 4% make more than \$100,000 per year. Due to the small number of respondents, the part-time employment income is interesting.

Responses to the survey show that Advanced Practice Registered Nurses (APRNs) are typically paid an annual salary. Sixty-nine per cent indicate they receive an annual salary rather than an hourly rate or a percentage of billing. This, too, is consistent with the national trend, according to the United States Department of Labor (2). The Bureau of Labor Statistics reports that "most advanced practice registered nurses (APRNs) work full time. APRNs working in physicians' offices typically work during normal business hours. Those working in hospitals and various other healthcare facilities may work in shifts to provide round-the-clock patient care. They may work nights, weekends, and holidays. Some APRNs, especially those who work in critical care or those in maternity care who deliver babies, also may be required to be on call." (https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm#tab-5 (United States Department of Labor, Bureau of Labor Statistics Occupational Outlook Handbook, May 2021, Nurse Anesthetists, Nurse Midwives, and Nurse Practitioners).

While the majority (69%) of APRNs are paid an annual salary, 28% are paid by the hour, and approximately 4% are paid a percentage of billing, or "other". The Certified Registered Nurse Anesthetists (CRNAs) indicate that approximately half are paid an annual salary and half are paid by the hour. The Certified Nurse Midwives (CNMs), only 21% indicate that they are paid hourly, 75% are paid an annual salary. The Certified Nurse Practitioners (NP) indicate that 72% are paid by annual salary, 24% are paid hourly. The Certified Clinical Nurse Specialists (CNS) overwhelming 81% are paid an annual salary, and 19% are paid hourly. The majority of APRNs (64%) indicate that they are not required to take evening or weekend call. Of those who are

required to take call 24% indicate they either are not compensated for taking evening or weekend call, or taking call is included as part of the annual salary compensation.

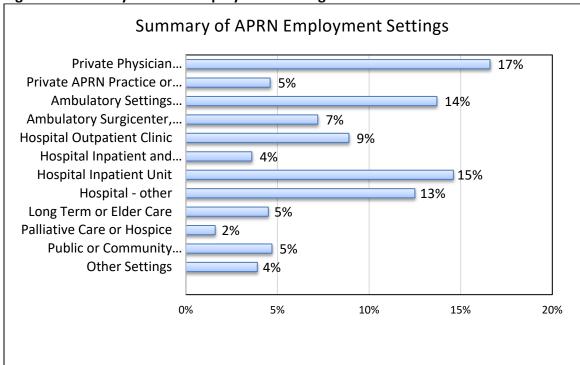


Figure 9: Summary of APRN Employment Settings

Figure 9: No response =1,222 respondents.

The practice settings (Figure 9 above) in the survey were grouped into broad categories: multiple types of outpatient ambulatory settings, private physician office or practice, inpatient hospital settings, long term and elder care, public or community health and a general "other" category. A significant number of APRNs (32%) work in a hospital inpatient or other setting. Amongst the various hospital settings, most APRNs work either in an inpatient unit (15%) or emergency department (3%). Inpatient unit includes those working in the operating room (OR) and perioperative areas (11%). The major ambulatory settings where APRNs are employed are either a private physician office or practice (17%), a hospital outpatient clinic (9%), an ambulatory setting (14%), a private APRN practice (5%) or an ambulatory surgicenter (7%). For a detailed employment setting description please see the list below.

The survey offered thirty-two different options to choose from to describe the employment setting as well as the opportunity to write in individual responses. If the individual response fit into a previously listed category, the response was moved into that category and the response percentages were adjusted. For purposes of this report the employment setting responses were combined as follows:

- Private physician office/practice: (16.6%)
- Ambulatory settings: Private APRN practice (4.6%), Nurse managed clinic (0.7%), Retail based clinic (1.4%), Urgent care clinic (5.1%), Ambulatory surgery center (2.1%), Federal clinic (FQHC, VA, Military, NIH, IHS) (5.1%)
- Hospital outpatient clinic setting: (not an emergency department) (8.9%)
- Hospital inpatient settings: Hospital inpatient unit (14.6%), Hospital operating room and/or peri-operative area (11.2%), Hospital emergency department (2.5%), Federal hospital (Military, VA, NIH, IHS) (0.7%), Hospital administration (0.2%), Hospital educator/education of staff and/or patients (0.4%), combination Hospital inpatient and outpatient settings (3.6%)
- Long term and elder care: long-term care facility (3.0%), Home care agency (0.6%)
 Advance disease management (0.9%),
- **Hospice** (0.8%), Palliative care (0.8%),
- **Public or Community Health**: Community clinic (2.1%), Correctional facility (0.3%), Health department (0.5%), Mental health center (0.7%), Rural health clinic (1.1%)
- Other settings: Academic (university/college) education program (2.4%), Health maintenance organization/managed care (0.8%), Occupational/employee health (1.0%), School/college health service (1.3%), Research (0.5%), Government agency (0.5%),
- Other (written descriptions): (3.9%)

Approximately half the comments from the "other" category were moved to a setting described above. Most responses indicated specifics of a subspecialty. There were some APRNs that split time between inpatient and outpatient settings. Other comments included telehealth, research, industry, dialysis, insurance, and government. Some APRN workplace settings continue to have a high number of APRNs working in those settings. For example, the percent responses in the past three surveys (2016, 2018, 2020) that were similar, show, for example, APRNs are employed in the private physician practice setting (2016: 19%; 2018: 21%; 2020: 19%; 2022: 17%) and hospital outpatient settings (2016: 10%; 2018: 11%; 2020: 9%; 2022: 9%). The percent of APRNs employed in hospital inpatient settings has gradually decreased, from 30% in 2016, 28% in 2020 and now 27% in 2022. Other settings showed similar results in past survey reports that were completed in 2015-2020 (3). These past reports are available on the Illinois Nursing Workforce Center website: https://nursing.illinois.gov/resources/data-reports.html

To determine how APRNs divided their time in the various settings, APRNs were provided four professional activities to choose from as to how their work time was spent. The total for each respondent should have had a limit of 100%, but it did not, the summary total of all responses is 127%. Regardless of workplace setting, the vast majority of time was spent providing patient care/documentation (83%), with equitable amounts of time spent teaching/precepting/orienting (14%), supervision/administration (14%) and other (16%).

Services provided are summarized in Figure 10 below. Responses are ordered by frequency in the "most" to "no" patients" columns. The top five responses include: "conduct physical exams and obtain medical histories", "counsel and educate patients and families", "order, perform and interpret tests, diagnostic studies", "prescribe drugs for acute and chronic illnesses" and "diagnosis, treatment, management of acute illnesses".

Figure 10: Summary of Services Provided by APRNs

Summary of Services Provided by Advanced Practice Registered Nurses (APRNs)									
Type of Service	vice Most Patients Some Patients Few Patients No Patients Total*								
Conduct physical	82.56%	8.00%	2.87%	6.57%	2,861				
exams, obtain medical histories	2,362	229	82	188					
Counsel and educate	76.86%	12.98%	4.70%	5.46%	2,874				
patients and families	2,209	373	135	157					
Order, perform,	67.64%	17.78%	6.23%	8.35%	2,874				
interpret lab tests, x- rays, EKGs, other	1,944	511	179	240					
diagnostic studies	·								
Prescribe drugs for	63.17%	12.68%	4.83%	19.33%	2,856				
acute and chronic	1,804	362	138	552	,				
illnesses Diagnosis, treatment,	·				2.062				
management of	62.86%	17.16%	7.9%	12.09%	2,862				
acute illnesses	1,799	491	226	346					
Diagnosis, treatment,	57.07%	18.05%	10.29%	14.59%	2,858				
management of chronic illnesses	1,631	516	294	417					
Type of Service	Most Patients	Some Patients	Few Patients	No Patients	Total*				
Provide preventive	37.54%	15.74%	14.51%	32.22%	2,840				
care inc. screening and immunizations	1,066	447	412	915					
Deliver	16.61%	2.52%	4.68%	76.19%	2,818				
Anesthesia	468	71	132	2,147	•				
Provide	5.74%	10.01%	12.11%	72.14%	2,807				
psychotherapy	161	281	340	2,025					
Perform	19.10%	28.34%	20.62%	31.94%	2,837				
procedures	542	804	585	906					
Type of Service	Most Patients	Some Patients	Few Patients	No Patients	Total*				
Provide care	45.72%	2.21%	13.36%	13.71%	2,859				
coordination	702	778	382	392					
Make referrals	32.91%	38.01%	14.17%	14.90%	2,865				
	943	1,089	406	427					
Participate in	30.98%	29.43%	20.58%	19.00%	2,847				
practice improve-	882	838	586	541					
ment activities	Most Datiania	Como Datiant	Fave Deticate	No Dotingto	Ta+-1*				
Type of Service	Most Patients	Some Patients	Few Patients	No Patients	Total*				

^{*}Total indicates the number of respondents that perform a service; the number may vary from line to line depending on the number of respondents that answered affirmatively.

In addition to asking about the type of services provided to the patient population, the APRNs were asked how many patients they provide services to in an average day, providing care as described above. The APRN respondents indicated the number of patients seen on an average day: (46%) see between 0-10 patients and 43% see between 11-20 patients. The survey also asked APRNs if they are responsible for a panel of patients. A panel of patients is the number of individual patients under the care of a specific provider, in this survey, the provider is an Advanced Practice Registered Nurse (APRN). APRN survey respondents indicated that 42% of them manage a panel of patients. The percent of APRNs that manage a panel of patients is similar to the responses in 2018 (44%) and 2020 (44%). The responsibility for managing a panel of patients has remained consistent since the question was first asked in the 2016 Illinois APRN survey. In 2016 thirty percent of APRNs indicated that they managed a panel of patients. As shown in the above grid, three quarters of APRNs include education and counseling of both patients and families in their care. This is in addition to the 38% APRNs who provide preventive care, as indicated in the above grid. With APRN full practice authority, the numbers of APRNs managing a panel of patients in addition to providing education, counseling, and preventive care, it is anticipated that these numbers will increase in the FPA-APRN practice.

Continuing to explore the type of services APRNs provide, one survey question asked: "Do you have prescriptive authority, the ability and authority to prescribe medications and treatments to patients?" Consistent with 2020 data, approximately eighty percent of APRNs have prescriptive authority. Of those nurses who have prescriptive authority, 71% also have a controlled substance license, and 75% also have a DEA number, which allows the APRN to prescribe certain controlled substances. APRN prescriptive authority and required licenses have remained fairly constant since 2018, in the 70 percent range.

The APRN survey respondents who responded that they do not have prescriptive authority were primarily CRNA's and CNS's. Approximately fifty seven percent are CRNAs who provide anesthesia services including medications in inpatient or outpatient operative or perioperative settings. Eight percent of Clinical Nurse Specialists (CNS) responded that they did not need prescriptive authority to perform their job; they primarily work in inpatient settings. A total of twenty-three percent of the respondents who answered that they did not have prescriptive authority indicated that they did not need it to perform their job. These individuals indicated that they worked in administration, research, education, insurance, pharmacy, government, or industry.

In the Fall of 2022 when these data were collected, according to Illinois statute, APRNs were required to work with a physician in a collaborative agreement unless they were practicing in

a hospital setting, ambulatory surgical treatment center, or hospital affiliate (Illinois Nurse Practice Act, Article 65, Section 65-45). This practice is reflected in the responses as to how often a physician is present on site to discuss patient problems as they occur. Fifty percent (50%) responded that physicians are present 76-100% of the time. See Figure 11 (below) for a summary of the amount of time physicians are present with the APRNs while they are treating patients.

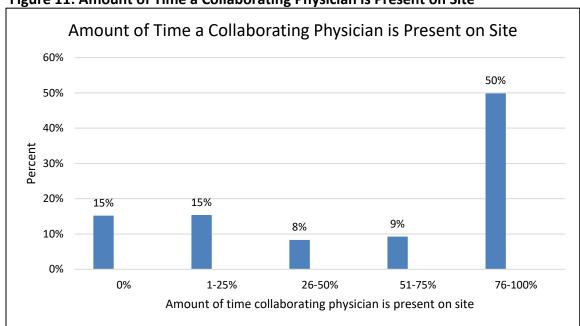


Figure 11: Amount of Time a Collaborating Physician is Present on Site

Figure 11: No response = 1,478 respondents

The survey requested the specific type of professional relationship the APRN has with the collaborating physician and respondents could choose more than one option. The majority of APRNs (64%) responded that they collaborated with a physician who was on site. The next top three collaborations arrangements were: collaborate with a physician at another site (23%); the collaborating physician is the medical director who oversees the practice (19%); 15% of APRNs there is no hierarchy, physician and APRN are equal colleagues and 12% of physicians cosign orders and/or progress notes. In response to a separate question, the majority of APRNs (81%) do not pay the collaborating physician or physicians a fee. Only 3% of respondents indicated that they do pay the collaborating physician a fee. The survey responses to these 2 questions are similar to the 2020 responses for payment of fees.

The respondents were asked "to what extent would you agree or disagree that you are allowed to practice to the fullest extent of your state's legal scope of practice?" The second question asks about the extent of agreement with "...my APRN skills are being fully utilized." For

both questions, approximately 80 percent of the APRN respondents agreed that they are practicing to the full extent of their scope of practice and their skills are being utilized.

Survey responses to billing arrangements and the use of a National Provider Identifier (NPI) number were derived from two questions. The response rate to the first question, "Do you have an NPI number?", was 98% (in 2020 98%, in 2015 - 74%). The second question asked, "Which of the following best describes your billing arrangements for your principal APRN position?" Options include "bill under my provider number (43%)", "bill under a physician's provider number (9%)", "bill under my clinic/ facility number (15%)", "No billing, cash only (1.1%)", and "No, billing, grant supported/ free clinic (1%)". This is shown in Figure 12 below. Almost half of the APRNs bill under their own NPI provider number, which has been approximately the same per cent since 2018.

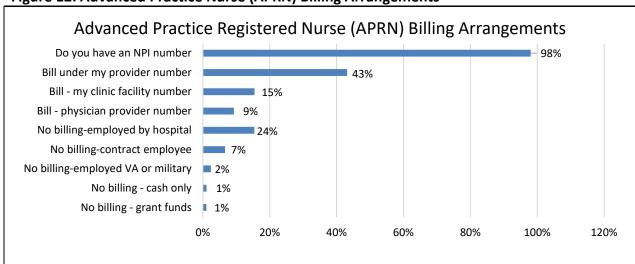


Figure 12: Advanced Practice Nurse (APRN) Billing Arrangements

Figure 22: No response: do you have a National Provider Identifier (NPI) number = 1,504 respondents Figure 22: No response: billing arrangements = 1,400 respondents

Survey respondents indicated reimbursement for APRN services is from Medicare (34%), Medicaid (25%), private insurance (33%), no insurance (4%) and a small percent of APRNs are not involved in direct patient care (4%). With health care reform possibilities, including a proposed lower age of Medicare eligibility, some have argued that such a proposal could lead to more physicians opting out of Medicare. This would create barriers to care for people with Medicare. Access to APRNs would provide an option for patients with Medicare to receive care.

Emerging Trends:

Workplace Violence

The Illinois General Assembly (IGA) in 2019 passed the Health Care Violence Prevention Act (Public Act #100-1051, effective 1/1/2019) to combat the violence that occurs against health care workers in nearly all care settings. To better understand workplace violence, three survey questions were added. The questions were prefaced by the Emergency Nurses Association (ENA) definition of violence: an act of aggression directed toward persons at work or on duty that ranges from offensive or threatening to homicide. Workplace violence is commonly understood as any physical assault, emotional or verbal abuse, or threatening, harassing, or coercive behavior in the work setting that causes physical or emotional harm. Both the questions and the definition were used with permission from the Emergency Nurses Association (4).

The three workplace violence questions are in the report appendix with the other survey questions. In summary, 40% of APRNs reported experiencing physical or verbal abuse (based on the ENA definition) at least quarterly or more often; 14% have never attended workplace violence training and the clear majority, 82%, know that the facility where they work has a policy for reporting workplace violence. The percent responses to each question are similar to responses in the 2020 survey. This is different from the RN survey responses where RNs indicated that they have experienced increased workplace violence since 2020. The number of APRNs that have not attended workplace violence prevention training is approximately half of what it was in 2018. Approximately 1,500 respondents skipped each of these questions.

COVID-19 Impact

Four specific COVID-19 impact questions, were asked. The first asked: *Have you switched jobs since Fall 2020? If yes, please list the type of switch: a different care unit, a different employer, a temporary staffing agency, or if you are working as a travel nurse.* Approximately 23% (974) skipped answering this question (total 4,268); of those that responded, 62% indicated that they had not switched jobs since Fall 2020. The next highest response rate: 25% indicated that they had switched employers and are with a different employer; 5% indicated they had switched jobs but are with the same employer. Slightly more than one per cent indicated that they are working for a temporary staffing agency and approximately 0.76% are working as travel nurse. Approximately 1% indicated that they are no longer working as a nurse and 1% indicated that they are now retired. Of those that answered this question the majority, 62%, maintained the same role and function during the 2020-2022 pandemic.

Two specific COVID-19 questions: Are you required to provide proof of completion of COVID-19 vaccination series to maintain employment? Approximately 22% (952) skipped the question; of those that responded, 78% indicated yes, a COVID-19 vaccination series is required to maintain employment. The second question: If you have an approved COVID-19 exemption, how often are

you required to complete a COVDI-19 test to maintain employment? Only 16% responded to the question; since the response rate is limited, it is not included.

A final question in this section asked about COVID-19 impact on the work environment, staffing, pay, scheduling and nurse support. The question: *Due to ongoing concerns about nurses'* emotional well-being and burnout, many organizations have implemented policies directly aimed at the safety, well-being and support of the nursing workforce. Please check which revisions have occurred at your current place of employment since Fall 2020. Check all that apply. There was a 65% response rate to this question. Response options: are divided into the following areas:

- Work environment: 48% experienced new PPE policies and practices; 19% experienced increased access to mental health services.
- Pay: 26% received an increase rate of pay; 12% COVID-19 received hazard pay; 17% received bonus pay; and 3% received an increased amount of paid time off.
- Scheduling: 19% received an increased flexible scheduling; 8% received an increased "ease ability" to schedule paid time off; 5% paid leave of absence.
- Temporary staffing assistance: 19% experienced increased number of travel nurses as coworkers; 13% increased number of temporary agency nurses as coworkers.

In summary, for nurses responding to this COVID-19 impact question there were many changes in the work environment including rate of pay, scheduling and support services.

Limitations

This is the fourth time that data has been voluntarily collected post Illinois APRN license renewal. However, this is the first time that data was successfully collected by two separate eblasts to the Illinois licensed APRN email addresses after the extended biennial license renewal process was completed. The past survey requests for participation and voluntary data collections were conducted in 2014, 2016, and 2020, by a single eblast. The two 2022 eblast messages can be found in Appendix B.

The overall distribution of APRN survey participants by selected age categories is described below. Data were derived from participant responses to a question asking their date of birth (non-response 47 participants). The age ranges of respondents are similar to, but slightly older than the APRN age range in the Illinois Department of Financial and Professional Regulation (IDFPR) Active licensee data base. The IDFPR APRN age range is only available for the total number of APRNs, not the different types of APRNs. The survey participants include more responses from an aging APRN workforce, with 32% of survey respondents over 55 years of age. The IDFPR/DPR Active Licensee age data indicates that only 18% of Illinois APRNs are 55 years of age or older. The differences between the survey respondents and the IDFPR APRN Active Licensee age ranges can be found in Appendix D.

Discussion and Implications

The 2022 Illinois Advanced Practice Registered Nurse (APRN) survey report provides valuable data on this important workforce. The size of the Illinois APRN workforce has grown by approximately 50% since 2012; 7,833 in 2012, 18,362 in October 2022. Most of this increase can be attributed to the Certified Nurse Practitioner (NP) specialty group which approximately tripled, from 4,682 in 2012 to 14,574 in 2022. Two of the other three types of APRN specialties have also increased: Certified Registered Nurse Anesthetist increased by 8% (from 1,924 in 2012 to 2,321 in 2020); Certified Nurse Midwives (from 406 in 2012 to 506 in 2022) 11%. The Clinical Nurse Specialist APRN specialty group has decreased by 13 % from 2012 to 2022 (from 1,023 to 892) (5).

The APRN survey had 32% survey respondents aged 55 years or older. However, the Illinois Department of Financial and Professional Regulation (IDFPR) Licensing Section assessed June 2-6, 2023, has only 18% of Actively Licensed APRNs, both those living in Illinois and those living out of state are age 55 years and older. 21% are between 45-54 years, 38% between 25-44 years and 22% age 24 years and younger. This is the first year that the IDFPR Active Licensee database has been assessed for age range of Illinois APRNs. So, while the survey responses reflect APRNs aged 55+years, it may have as much information about the majority of Illinois APRNs, who are less than 55 years of age and are a more racially and ethnically diverse group than those that responded to the eblast surveys distributed October 2022.

These are concerns about the number of APRNs available in certain care areas. In the survey, for example, there were a small number of Psychiatric Mental Health (PMH) NPs; a small percent of NPs (5%) challenged to address the 126 Illinois Mental Health Professional Shortage areas. With our ever increasing 65 years and over group (15.2%) (6) also concerning is the small percent of APRNs practicing in Geriatrics (3.5%) and in long term care (0.72%). The complex needs of theses populations and the growing shortages of physicians compound the workforce needs for this group. Yet even with this overall growth, Illinois NPs remains at approximately 60 per 100,000 population.

Schools/Colleges of Nursing must continue efforts to recruit and enroll diverse student cohorts. While race and ethnic diversity is improving slightly in younger APRN age groups, the workforce remains largely female and the majority Caucasian/White (82%). This is of particular concern considering the cultural and racial diversity of the State: 18 % Hispanic or Latinx and 15% Black or African American; and 6% Asian.

The overwhelming majority of APRNs provide direct care (94%) in a variety of ambulatory and inpatient settings. APRNs are providing the basics of primary care, diagnosis/treatment/management, physical exams and prescribing medication. A significant

portion of their role is educating families and providing care coordination. Most APRNs see between 10 and 20 patients per day; indicating that these APRNs are valuable providers for basic health needs of Illinois Citizens. In addition, a large portion of APRN services is to Medicare (34%) and Medicaid (25%) recipients, which research demonstrates is of high quality yet with a less intensive use of costly health services (7).

Finally, with the change in the Illinois practice laws, the Illinois APRN-FPA license became available in December 2019, these data serve as an important baseline for gauging the impact of increased practice authority. Billing may be one area to monitor. In Illinois, while 98% of APRNs have an NPI number only 43% bill under this provider number. Currently 64% of APRNs collaborate with a physician on site. National data indicate a greater percent of APRNs who do not work within an MD practice use their NPI number. National data also indicate that more APRN-FPA's, advanced practice nurses with full practice authority practice in rural and underserved areas(8).

The 2022 Illinois APRN survey results indicate relatively low numbers of APRNs and primary care providers in the state. It is important to continue to recruit and train a diverse APRN workforce to address the human health care capital that will be needed in Illinois. This will be critical to low income and low access areas of the state. Continued data collection and focused workforce planning are vital to assure access to healthcare for all Illinois residents.

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Appendix A

Questions from the 2022 APRN Voluntary Licensure Survey

- 1. What is your gender?
- 2. Are you Hispanic/Latinx? (Yes or No)
- 3. Select one of the following races that apply to you:
- 4. What is your year of birth?
- 5. Please identify your APRN role?
- 6. Are you currently licensed in Illinois as an APRN with full-practice authority (APRN-FPA)?
- 7. Which educational program did you complete for your initial APRN preparation?
- 8. Please check all educational degrees that you have earned:
- 9. In what year did you receive your initial APRN license?
- 10. In what year did you receive your initial RN/registered nurse license?
- 11. In which state(s) or U.S. territories do you currently have certification/licensure/recognition to practice as an APRN? (Select up to 3)
- 12. In which area(s) have you ever received certification from a national certifying organization for APRNs? (Check all that apply)
- 13. In how many positions are you currently employed as an APRN?
- 14. Full-time employment: please estimate your 2021 pre-tax annual earnings from our APRN primary position. Include overtime, on-call earnings, and bonuses.
- 15. Part-time employment: please only answer if you work part-time. Please estimate your 2021 part-time annual earnings. Report approximate annual rate for working less than an average of 30 hours of service per week or 130 hours of service per month.
- 16. Are you required to provide proof of completion of COVID-19 vaccination series to maintain employment?
- 17. If you have an approved COVID-19 exemption, how often are you required to complete a COVID-19 test to maintain employment?
- 18. Due to ongoing concerns about nurses' well-being and burnout, many organizations implemented policies directly aimed at the safety, well-being and support of the nursing workforce. Please check which revisions have occurred at your current place of employment since Fall 2020. Please check all that apply.
- 19. Have you switched jobs since Fall 2020? If yes, please list the type of switch: a different unit, a different employer, a temporary staffing agency, if you are working as a travel nurse, etc.
- 20. If you are not working as an APRN, what are the reasons? (Check all that apply)
- 21. Functioning in your primary APRN position, check the one term below that best describes the focus of your practice/facility. Choose from Primary Care, Subspecialties, Surgical Specialties, Other Specialties or check "Not working in a clinical specialty".
- 22. For this survey, your primary position refers to the APRN position in which you work the most hours per week and are compensated monetarily. Do not include volunteer positions or adjunct faculty status. Describe your primary position? Check only one.

- 23. In what type of setting do you work in your primary APRN position? (Please select only one)
- 24. Functioning in your primary APRN position, do you provide direct patient care?
- 25. Functioning in your primary APRN position, what percentage of your time is spent in each of the following roles? The total must equal 100%.
- 26. Regarding your primary APN position, for how many patients do you provide the following services?
- 27. Which of the following best describes your primary APRN position billing arrangements?
- 28. How often is a physician present on site to discuss patient problems as they occur in your primary APRN position?
- 29. What type of professional relationship do you have with the physician(s) in your primary APRN position? (Select all that apply)
- 30. Do you pay your collaborating physician a fee?
- 31. If you do pay your collaborating physician a fee, how would you define the fee schedule (Check all that apply)? Is it:
- 32. Are you privileged and credentialed at your primary place of employment?
- 33. To what extent would you agree or disagree with the following: In my primary APN position I am able to practice to the fullest extent of my state's legal scope of practice.
- 34. To what extent would you agree or disagree with the following: In my primary APRN position, my APRN skills are being fully utilized.
- 35. I receive adequate administrative support in my primary APRN position in order that my APRN skills are fully utilized.
- 36. How many patients do you see on an average day?
- 37. Do you have a panel of patients you manage and for whom you are the primary provider?
- 38. Are you required to take evening or weekend call for your primary APRN position?
- 39. Are you compensated for taking evening or weekend call for your primary APRN position?
- 40. Are you covered by malpractice insurance?
- 41. Who pays for your malpractice insurance?
- 42. Do you have prescriptive authority?
- 43. If you don't have prescriptive authority why not?
- 44. Do you have a National Provider Identifier (NPI) number?
- 45. Do you have a controlled substance license in Illinois?
- 46. Do you have a personal drug enforcement administration (DEA) number?
- 47. Do you and/or your practice accept Medicaid?
- 48. Regarding patients for whom you provide care, who pays the majority of the cost?
- 49. How are you paid in your primary APRN position? (Select all that apply)
- 50. In a typical week, how many hours do you work in your primary APRN position?
- 51. What is the ZIP code(s) where you practice your APRN primary position? You may enter up to three zip codes, each followed by a comma. If you do not know the zip code, please supply the county.
- 52. How often have you experienced patient/visitor/family physical or verbal abuse while at work?

- 53. Where have you attended workplace violence training?
- 54. Does your hospital/facility have a policy in place for reporting workplace violence incidents?
- 55. Approximately when do you plan to retire from nursing and APRN work?

Appendix B

Survey Eblast Wording

Date: October 5, 2022

Subject line: Advanced Practice Registered Professional Nurse (APRN) License – data collection from

licensee:

We are requesting approximately 5 minutes of your time. All data will be reported in the aggregate for use in determining nursing workforce projections and needs in Illinois. Individual responses will remain anonymous and confidential. Although this report is not mandatory, your participation is critical, since employees in the field are our best and most reliable real-time source of information available. By participating in this report, you will be helping to ensure that there will be an uninterrupted supply of nurses to meet the increasing future demands in the healthcare industry.

Please click here to participate in the survey

Date: October 17, 2022

Subject line: Advanced Practice Registered Professional Nurse (APRN) License – data collection from licensee:

We are requesting approximately 5 minutes of your time. Deadline for survey submission October 31, 2022. All data will be reported in the aggregate for use in determining nursing workforce projections and needs in Illinois. Individual responses will remain anonymous and confidential. Although this report is not mandatory, your participation is critical, since employees in the field are our best and most reliable real-time source of information available. By participating in this report, you will be helping to ensure that there will be an uninterrupted supply of nurses to meet the increasing future demands in the healthcare industry.

Please click <u>here</u> to participate in the survey.

If you have already completed this survey, thank you, you do not need to complete the survey a second time.

Appendix C Illinois APRNs* and FPA-APRNs** per Illinois County

Illinois County	County (Est) Population	APRNs per County	Illinois County	FPA-APRNs per County
ADAMS	65,326	167	ADAMS	16
ALEXANDER	4,340	6	ALEXANDER	3
BOND	16,413	28	BOND	4
BOONE	53,232	56	BOONE	8
BROWN	6,037	10	BROWN	0
BUREAU	32,725	46	BUREAU	3
CALHOUN	4,242	5	CALHOUN	0
CARROLL	15,798	13	CARROLL	1
CASS	12,862	14	CASS	1
CHAMPAIGN	207,299	481	CHAMPAIGN	56
CHRISTIAN	33,801	46	CHRISTIAN	1
CLARK	15,191	27	CLARK	2
CLAY	13,129	19	CLAY	3
CLINTON	36,641	83	CLINTON	12
COLES	44,760	93	COLES	5
соок	5,299,802	7,900	соок	853
CRAWFORD	18,337	36	CRAWFORD	6
CUMBERLAND	10,270	14	CUMBERLAND	3
DE WITT	98,998	19	DE WITT	2
DEKALB	15,204	113	DEKALB	15
DOUGLAS	19,668	23	DOUGLAS	4
DUPAGE	937,662	1,705	DUPAGE	200
EDGAR	16,353	21	EDGAR	2
EDWARDS	6,101	9	EDWARDS	2

Illinois County	County (Est) Population	APRNs per County	Illinois County	FPA-APRNs per County
EFFINGHAM	34,797	91	EFFINGHAM	16
FAYETTE	21,293	30	FAYETTE	3
FORD	13,369	17	FORD	0
FRANKLIN	37,276	43	FRANKLIN	8
FULTON	32,571	57	FULTON	5
GALLATIN	4,754	6	GALLATIN	0
GREENE	11,415	20	GREENE	1
GRUNDY	53,274	72	GRUNDY	17
HAMILTON	7,855	31	HAMILTON	2
HANCOCK	17,176	14	HANCOCK	4
HARDIN	3,448	7	HARDIN	0
HENDERSON	6,105	6	HENDERSON	0
HENRY	48,924	68	HENRY	6
IROQUOIS	26,285	32	IROQUOIS	2
JACKSON	50,802	118	JACKSON	10
JASPER	9,164	20	JASPER	2
JEFFERSON	36,600	90	JEFFERSON	10
JERSEY	21,071	27	JERSEY	4
JO DAVIESS	21,843	16	JO DAVIESS	4
JOHNSON	13,527	31	JOHNSON	1
KANE	516,897	647	KANE	90
KANKAKEE	105,717	152	KANKAKEE	16
KENDALL	137,008	203	KENDALL	35
KNOX	49,082	64	KNOX	6
LA SALLE	717,606	117	LA SALLE	13

Illinois County	County (Est)	APRNs per	Illinois County	FPA-APRNs
ois county	Population	County	illinois county	per County
LAKE	108,377	952	LAKE	109
LAWRENCE	14,815	15	LAWRENCE	3
LEE	33,578	53	LEE	4
LIVINGSTON	34,873	30	LIVINGSTON	1
LOGAN	27,291	35	LOGAN	6
MACON	25,627	208	MACON	16
MACOUPIN	310,670	54	MACOUPIN	10
MADISON	171,368	495	MADISON	47
MARION	101,967	91	MARION	11
MARSHALL	44,127	9	MARSHALL	0
MASON	264,833	13	MASON	0
MASSAC	37,216	13	MASSAC	0
MCDONOUGH	11,472	43	MCDONOUGH	1
MCHENRY	12,612	361	MCHENRY	54
MCLEAN	13,791	296	MCLEAN	32
MENARD	12,174	28	MENARD	0
MERCER	15,477	17	MERCER	3
MONROE	35,562	91	MONROE	11
MONTGOMERY	27,742	52	MONTGOMERY	6
MORGAN	32,126	55	MORGAN	7
MOULTRIE	14,430	13	MOULTRIE	4
OGLE	51,275	60	OGLE	10
PEORIA	180,432	476	PEORIA	30
PERRY	20,525	22	PERRY	5
PIATT	16,655	44	PIATT	7

Illinois County	County (Est) Population	APRNs per County	Illinois County	FPA-APRNs per County
PIKE	14,232	27	PIKE	2
POPE	3,550	8	POPE	2
PULASKI	4,902	3	PULASKI	2
PUTNAM	5,526	6	PUTNAM	0
RANDOLPH	29,170	44	RANDOLPH	6
RICHLAND	15,687	27	RICHLAND	5
ROCK ISLAND	143,811	160	ROCK ISLAND	14
SAINT CLAIR	253,602	389	SAINT CLAIR	31
SALINE	23,426	42	SALINE	3
SANGAMON	196,007	617	SANGAMON	47
SCHUYLER	6,710	8	SCHUYLER	0
SCOTT	4,826	53	SCOTT	7
SHELBY	20,579	27	SHELBY	1
STARK	5,223	18	STARK	0
STEPHENSON	43,706	43	STEPHENSON	5
TAZEWELL	130,128	322	TAZEWELL	45
UNION	17,706	16	UNION	0
VERMILION	71,956	121	VERMILION	17
WABASH	11,184	15	WABASH	2
WARREN	16,574	16	WARREN	3
WASHINGTON	13,473	36	WASHINGTON	2
WAYNE	16,005	20	WAYNE	2
WHITE	13,640	14	WHITE	1
WHITESIDE	54,848	68	WHITESIDE	6
WILL	701,995	1,165	WILL	155

		APRN		FPA-APRN
Illinois County	County (Est) Population	APRNs per County	Illinois County	FPA-APRNs per County
WOODFORD	38,407	89	WOODFORD	6
WINNEBAGO	282,374	495	WINNEBAGO	45
WILLIAMSON	67,393	179	WILLIAMSON	13

*APRN: Advanced Practice Registered Nurse license

The above grid of the number of Advanced Practice Registered Nurse Active Licensees (APRNs) and Full-Practice Authority-Advanced Practice Registered Nurse Active Licensees (FPA-APRNs) per each of the Illinois 102 counties was completed June 2-6, 2023. The grid includes nurses that have a name, date of birth, and an address including zip code in Illinois. The county address is based on the address that the APRN or FPA-APRN submitted with either license application or license renewal. Historically, the address is either where the nurse licensee lives or works - especially if the employer pays the licensure fee.

The June 2023 population number of individuals per county is from Illinois population by counties 2023 weblink https://worldpopulationreview.com/states/illinois/counties

^{**}FPA-APRN: Full-Practice Authority -Advanced Practice Registered Nurse license

Appendix D

Illinois Advanced Practice Registered Nurses (APRN) Ages

Age Ranges	APRN Active	Per Cent of	Difference	APRN Survey	Per Cent of
by Birth Year	Licensees*	Respondents		Responses**	Respondents
18-24 years	10	0.06%		1	0.02%
1998-2004					
25-34 years	3,949	23%	AL:	553	13%
1988-1997			+9%		
35-44 years	6,974	38%	AI:	1,297	31%
1978-1987			+8%		
45-54 years	3,891	21%		953	22%
1968-1977					
55-64 years	2,345	13%	Survey:	843	20%
1958-1967			+7%		
65-70 years	789	4%	Survey:	441	11%
1952-1957			+6%		
70+ years	195	1%	Survey	133	3%
1925-1951			+2%		
APRN Total	18,149	100%		4,221	99.8%

^{*}APRN Active Licensee (AL) data, done June 2023, is from the IDFPR licensure database. Active Licensee data includes APRNs only licensed as an APRN, with a date of birth, and includes both those with an Illinois mailing address and those with a mailing address in another state.

**The 2022 APRN Survey Responses data is from the data collected voluntarily from APRNs responding to the survey request. The request for participation was sent by eblast on both October 5 and 17, 2022 to approximately 18,000 actively licensed Illinois APRNs. The survey was sent to both those that have an Illinois mailing address those with a mailing address in another state. The survey portal was closed 11/16/2022. For this question about age/date of birth, approximately 47 survey participants or 1% did not respond. A total of 4,268, approximately 23%, of Illinois APRNs participated in the supply survey questions, including this question about age.

Difference: Central column: this column shows the difference between the number of APRNs in the active licensee database and the number of APRNs that voluntarily responded to the survey request for participation. In general, more APRNs over the age of 55 years responded to the survey, approximately 15% more. The majority (61%) of actively licensed Illinois APRNs are age 25-44 years of age.

Advanced Practice Registered Nurse (APRN) 2022 Workforce Survey Report