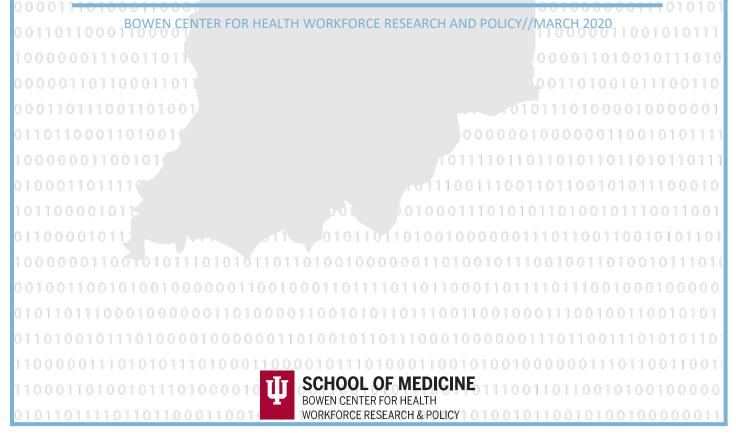


INDIANA'S REGISTERED NURSE WORKFORCE

DATA REPORT



ACKNOWLEDGEMENTS

The Bowen Center for Health Workforce Research and Policy would like to extend its gratitude to the individuals and groups that have contributed to the development of this report. The Indiana Professional Licensing Agency supported the administration of the new 2019 licensure survey and provided all license and survey data. Supplemental survey questions, developed in collaboration with an advisory committee, were adapted to account for administrative changes associated with implementation of 2018 Senate Enrolled Act 223. The Governor's Health Workforce Council reviewed and provided guidance on the final version of the supplemental survey tool administered to Indiana-licensed Registered Nurses during the 2019 renewal period. Finally, the Department of Biostatistics at the IU Richard M. Fairbanks School of Public Health provided collaborative and technical support for data management.

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INTRODUCTION

BACKGROUND

Indiana health workforce data are important for identifying workforce shortages and informing workforce development strategies and policy and programming initiatives. Over the last several years, significant strides have been made for collecting comprehensive, accurate and timely workforce data which are maintained for longitudinal workforce tracking. This effort has contributed to collaborative dialogue regarding health workforce policy and planning.

The enactment of Indiana Senate Act 223 (SEA 223-2018) in January 2019¹ required professionals regulated by selected professional licensing boards to provide information regarding employment and practice during their license renewal periods. The Indiana State Board of Nursing is one of the boards named in SEA 223-2018, specifically affecting registered nurses and licensed practical nurses.

As a research entity, the Bowen Center for Health Workforce Research and Policy (Bowen Center) is committed to and engaged in supporting the State of Indiana with developing sustainable data management processes and publishing timely workforce information.

METHODOLOGY

DATA COLLECTION

The survey administered to registered nurses (RNs) during the 2019 license renewal can be found on IUPUI ScholarWorks at https://scholarworks.iupui.edu/handle/1805/18969. Supplemental data collected during this license renewal, as well as basic licensure data (which includes, name and license information), were exported into two text files 1 month after the close of the 2019 license renewal period.

DATA MANAGEMENT PROCEDURES

Supplemental survey questions were cleaned and coded per processes outlined in the Bowen Center data management procedures document (available at: http://hdl.handle.net/1805/16704). After completing these procedures, the supplemental survey file was merged to the license data file by unique RN license number to create a 2019 RN Workforce Master File which was then uploaded to the Indiana Health Professions Database. Verification and coding of license address data were provided by Melissa Data, Inc.

Additional variables were generated during data management processes. The first included assignment of full-time equivalency (FTE) based on reported hours in direct patient care, as outlined in **Table 1** on the following page. This FTE assignment was applied to reported practice location(s). Address cleaning and geocoding also resulted in additional variables related to geographic location and rurality based on criteria outlined by the United States Department of Agriculture (more information can be found here: https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/).

¹ Additional information about SEA 223-2018 available at: <u>http://iga.in.gov/legislative/2018/bills/senate/223</u>

Reported hours in patient care	Conversion
0 hours in patient care/Not applicable	0.0 FTE
1 - 4 hours in patient care	0.1 FTE
5 - 8 hours in patient care	0.2 FTE
9 - 12 hours in patient care	0.3 FTE
13 - 16 hours in patient care	0.4 FTE
17 - 20 hours in patient care	0.5 FTE
21 - 24 hours in patient care	0.6 FTE
25 - 28 hours in patient care	0.7 FTE
29 - 32 hours in patient care	0.8 FTE
33 - 36 hours in patient care	0.9 FTE
37 - 40 hours in patient care	1.0 FTE
41 or more hours in patient care	1.0 FTE

	Table 1. FTE conv	ersion for report	ed hours in dir	ect patient care
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LIMITATIONS

There are a number of limitations that should be recognized when interpreting the data presented in this report. First, the supplemental information on RNs is largely based on self-reported data which is subject to potential response bias; however, we expect bias to be minimal due to the legal requirement associated with providing supplemental data during online license renewal and the attestation regarding information accuracy. Additionally, because of changes to survey data collected during license renewal, this report can only provide limited longitudinal analysis. Care is being taken to minimize future changes to supplemental survey questions in order to ensure confidence in future longitudinal analyses.

REPORT STRUCTURE

This report includes three sections of summary data:

Section I: Overall License Renewals includes a summary of all RN licensees as of the 2019 license renewal cycle.

Section II: Total Registered Nurses Actively Practicing in Indiana includes a summary of all Indiana licensed RN actively practicing in Indiana (either in-person or through telemedicine).

Section III: Advanced Practice Registered Nurses (APRNs) includes a summary of the subset of RNs who indicated their primary work setting as an Advanced Practiced Registered Nurse (APRN) or have a prescriptive authority APRN license.

The 2019 Registered Nurse Workforce Data Report provides key information on Indiana's RN workforce. Additional data can be viewed or requested online at <u>www.bowenportal.org</u>.

SECTION I: TOTAL REGISTERED NURSE LICENSES

TOTAL RENEWALS

Of the 116,259 RNs who renewed their license in 2019, 111,920 (96.3%) renewed their license electronically and responded to the supplemental survey questions. The remaining 4,339 (3.7%) RNs who renewed their license manually (offline) did not have supplemental questions administered to them. Nearly all licenses renewed in 2019 had a license status which permitted active practice in nursing. Table 1.1 provides more details on RN license status for 2019 renewals.

Table 1.1 License status of registered nursing in Indiana, based on renewals status

		Online Renewals (Survey Respondents)		Renewals
	N %		N	%
Total	111,920 4,339		39	
License Status				
Active	109,971	98.3	4,316	99.4
Valid to Practice While Reviewed	377	0.3	5	0.1
Probation	267	0.2	18	0.4
Other Statuses Not Valid for Active Practice*	1,305	1.2	0	0.0

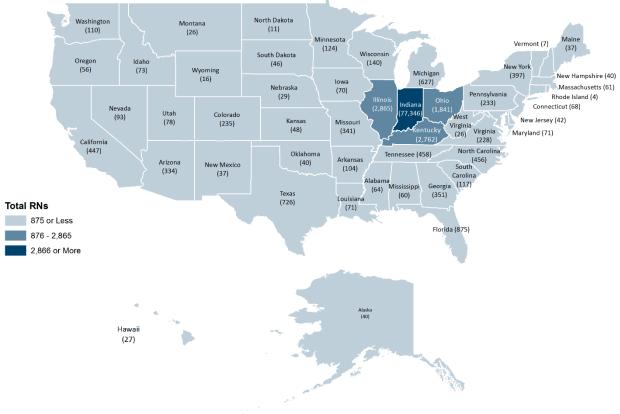
* This group includes those whose license status is currently inactive, retired, expired, suspended or non-renewable.

EMPLOYMENT STATUS AND PRACTICE LOCATION

Among the 2019 online RN license renewals, 84.1% reported actively practicing in nursing at a specified capacity (full-time, part-time or per-diem). Less than 1% of RNs reported working in nursing as a volunteer, while 3% reported working in a field other than nursing. Around 5% of RNs reported being unemployed and 7.2% reported being retired. Table 1.2 provides more information for reported employment status of RNs who renewed their license online in 2019.

As can be seen in Figure 1.1 on the following page, the majority of Indiana-licensed RNs who are actively practicing in nursing are located in the Midwestern region of the United States. There are a considerable number in Illinois (1,197), Kentucky (1,058) and Ohio (792). Outside of the Midwest, there is also a notable number in states such as Texas (612) and California (413) which have the two highest number of Indiana-licensed RNs.

Table 1.2 Reported Employment Status of Registered Nurses who renewed their nee	inse onnine	
Employment Status	N	%
Actively employed in nursing full-time	75,346	67.3
Actively employed in nursing part-time	14,395	12.9
Actively employed in nursing per diem	4,398	3.9
Actively employed in a field other than nursing	3,323	3.0
Working in nursing only as a volunteer	865	0.8
Unemployed and seeking work as a nurse	1,888	1.7
Unemployed and not seeking work as a nurse	3,613	3.2
Retired	8,092	7.2



Source: 2019 Registered Nurse License and Supplemental Survey Data

Figure 1.1 Total actively practicing registered nurses by primary practice location

TREND IN THE REGISTERED NURSE WORKFORCE

The recent history of health workforce data management in Indiana has seen significant changes which have led to improvements in capturing and reporting information for a larger number of RNs licensed in the state. As can be seen in Figure 1.2, the total number of RN survey respondents and those who have been included in each reporting sample has steadily increased each biennium since 2013.

The reporting sample has historically included only RNs who self-reported having a practice address in Indiana. In 2019, the reporting sample criteria was modified to include RNs who self-reported providing patient care to Indiana residents through telemedicine services. Inclusion of RNs involved in telemedicine as well as new requirements for providing supplemental information have contributed to a significant increase in survey response rates and the size of the reporting sample. Details for the new sample selection methodology is provided in the following section.

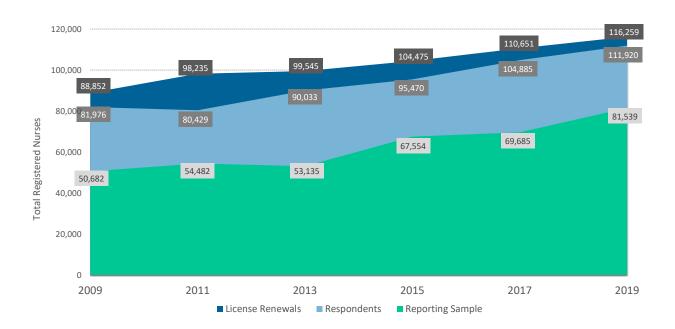


Figure 1.2 Total RNs in counts of license renewals, survey respondents and reporting sample.

SECTION II: REGISTERED NURSES ACTIVELY PRACTICING IN INDIANA

REPORTING SAMPLE

In order to produce a report representative of the RN workforce providing services to residents of Indiana, the following criteria were used for inclusion in the 2019 Indiana RN Workforce reporting sample: 1) had an active license status; 2) renewed their license online; 3) reported actively practicing in nursing; and 4) reported providing telemedicine to Indiana residents or having a practice located in Indiana. Of the 116,259 RNs who renewed their Indiana license in 2019, 81,539 (70.1%) met all of the reporting sample criteria (see Figure 2.1).

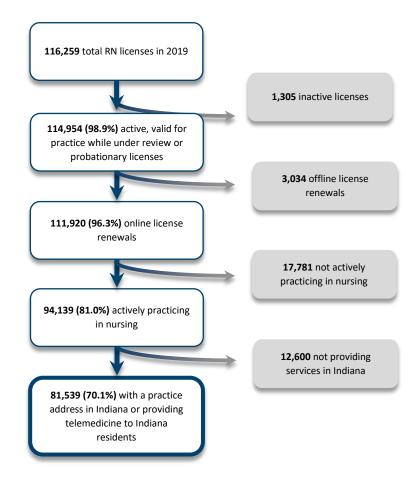


Figure 2.1 Reporting sample selection criteria for the 2019 Registered Nurse Data Report

DEMOGRAPHICS

Table 2.1 provides a summary of the demographic characteristics for Indiana's RN workforce. As can be seen, the RN workforce is predominantly female (92.1%), white (90.5%), and non-Hispanic (97.1%). The average age for this workforce is 44.8, with the largest percentage of the workforce being under age 35 (27.0%). Male RNs are slightly younger than their female counterparts, with an average age of 43.1 (versus 45.0). Male RNs also have greater racial diversity, as 13.7% of male RNs identified as non-white (compared to 9.1% among female RNs).

It should be noted when reviewing this table that data regarding age and gender were not provided as part of the supplemental survey during license renewal. Information on gender was obtained from the base license file, and age was calculated using date of birth and date of survey completion. As noted in Table 2.1, only small percentages of the reporting sample are missing information regarding gender (1.2%) and age (0.3%)

	Female Male		ale	Gender not Available		Total		
	N	%	N	%	N	%	N	%
Total	75,0	90	5,4	61	98	88	81,539	
Mean Age	45	.0	43	.1	34	4.0	44	.8
Age Groups								
Under 35	19,694	26.2	1,667	30.5	636	64.4	21,997	27.0
35-44	18,472	24.6	1,424	26.1	171	17.3	20,067	24.6
45-54	17,466	23.3	1,336	24.5	81	8.2	18,883	23.2
55-64	15,503	20.6	815	14.9	51	5.2	16,369	20.1
65 and Older	3,782	5.0	199	3.6	17	1.7	3,998	4.9
Age not Available	173	0.2	20	0.4	32	3.2	225	0.3
Ethnicity								
Hispanic or Latino	2,088	2.8	207	3.8	48	4.9	2,343	2.9
Not Hispanic or Latino	73,002	97.2	5,254	96.2	940	95.1	79,196	97.1
Race								
White	68,222	90.9	4,712	86.3	835	84.5	73,769	90.5
Asian	1,150	1.5	193	3.5	34	3.4	1,377	1.7
Black or African American	3,727	5.0	293	5.4	83	8.4	4,103	5.0
Native Hawaiian/Pacific Islander	40	0.1	4	0.1	1	0.1	45	0.1
American Indian or Alaska Native	125	0.2	10	0.2	1	0.1	136	0.2
Other	997	1.3	138	2.5	19	1.9	1,154	1.4
Multiracial	829	1.1	111	2.0	15	1.5	955	1.2

Table 2.1: Registered Nurse Demographic Characteristics

Source: Indiana Registered Nurse License and Supplemental Survey Data, 2019

Notes: The Indiana Professional Licensing Agency (IPLA) does not maintain gender information for all registered nurses. Age was calculated as the difference between the respondent's date of birth and the date of survey completion.

EDUCATION

Educational characteristics of Indiana's RN workforce are summarized in Table 2.2 and Table 2.3. Regarding qualifying, nearly half (49.2%) of Indiana RNs reported qualifying for their nursing license with an associate degree in nursing (ASN) followed by 43.0% who reported qualifying with a baccalaureate degree in nursing (BSN). When examining where RNs completed their education, the majority (n=63,564; 78.0%) reported completing their qualifying education in Indiana. Another 10,583 (13.0%) completed their education in one of Indiana's contiguous states.

The highest percentage of RNs reported a BSN as their highest nursing education (46.9%). Though the majority of RNs (69.9%) did not reported a non-nursing degree, 12.9% reported having a baccalaureate degree in another field not related to nursing. Similarly, 69.6% reported having no intention to pursue further education in the next 2 years. However, 12.9% reported having plans to pursue a BSN and another 12.6% reported having plans to pursue a master's degree in nursing (MSN).

Table 2.2 Qualifying Education, Register
--

Qualifying Degree	India	ana	Contiguo	us States		r State isted)		r Country t US)	Tot	tal
	N	%	N	%	N	%	N	%	N	%
Diploma - nursing	2,266	3.6	824	7.8	544	8.4	175	19.3	3,809	4.7
Associate degree – nursing	30,944	48.7	5,946	56.2	3,103	47.9	109	12.0	40,102	49.2
Baccalaureate degree – nursing	28,504	44.8	3,396	32.1	2,594	40.0	602	66.4	35,096	43.0
Master's degree – nursing	1,758	2.8	393	3.7	222	3.4	21	2.3	2,394	2.9
Doctoral degree – nursing*	92	0.1	24	0.2	22	0.3	0	0.0	138	0.2
Total	63,564	100	10,583	100	6,485	100	907	100	81,539	100

Source: 2019 Registered Nurse License and Supplemental Survey Data

Notes: Contiguous states include Michigan, Ohio, Kentucky and Illinois

* Doctoral degrees are not typically used to qualify for a nursing license. Therefore, these numbers may represent errors in self-reporting qualifying education.

Table 2.3 Highest Education and Education Plans, Registered Nurses

	N	%
Highest Nursing Education		
Diploma - nursing	2,518	3.1
Associate degree - nursing	28,795	35.3
Baccalaureate degree - nursing	38,200	46.9
Master's degree - nursing	11,186	13.7
Doctoral degree - nursing	840	1.0
Highest Non-Nursing Education		
Not Applicable	56,719	69.6
Diploma – non-nursing	5,242	6.4
Associate degree – non-nursing	6,200	7.6
Baccalaureate degree – non-nursing	10,543	12.9
Master's degree – non-nursing	2,605	3.2
Doctoral degree – non-nursing	230	0.3
Education Plans in Next 2 years		
Bachelor's Degree – Nursing	10,488	12.9
Bachelor's Degree – Other Field	388	0.5
Master's Degree – Nursing	10,290	12.6
Master's Degree – Other Field	978	1.2
Doctor of Nursing Practice (DNP)	2,124	2.6
PhD – Nursing	284	0.4
Doctoral Degree – Other Field	276	0.3
No plans to pursue further education	56,711	69.6

EMPLOYMENT & PRACTICE CHARACTERISTICS

EMPLOYMENT CHARACTERISTICS

Table 2.3 provides a summary of employment characteristics for the Indiana RN Workforce. The majority (65.8%) of RNs reported their primary work position to be a staff nurse, followed by 9.2% who reported practicing in a nurse manager position. The highest percentage of RNs reported having only one paid position in nursing (87.4%), and an additional 11.1% reported having two paid positions. While the majority (83.8%) of RNs also reported having no plans to change to their employment status in the next 2 years, 5.6% reported intention to increase hours for the next 2 years and 2.0% reported having plans to retire.

 Table 2.4: Registered Nurse Employment Characteristics

		N	%
Primary Work Position			
Consultant/Nurse Researcher	1,	098	1.3
Nurse Executive	1,	518	1.9
Nurse Manager	7,	540	9.2
Advanced Practice Nurse	7,5	138	8.8
Staff Nurse	53,	,658	65.8
Nurse Educator (faculty)	1,	320	1.6
Nurse Educator (staff development)	1,	043	1.3
Nurse Educator (patient educator)	1,	171	1.4
Other - health related	6,	624	8.1
Not Applicable	4	29	0.5
Total Paid Positions in Nursing			
1 position	71,	,262	87.4
2 positions	9,	046	11.1
3 positions	9	11	1.1
4 or more positions	1	32	0.2
Not Applicable	1	88	0.2
Employment Plans for Next 2 Years			
No planned change	68,	,308	83.8
Increase hours	4,	560	5.6
Decrease hours	3,	037	3.7
Seek non-clinical job	8	43	1.0
Retire	1,	605	2.0
Unknown	3,	186	3.9

PRACTICE SETTING

The self-reported practice setting of Indiana's RN workforce are found in Table 2.4. Just over half (55.9%) of RNs reported practicing in a hospital setting; 14.6% reported practicing in an outpatient clinic setting; 7.0% reported practicing in a nursing home/extended care facility/assisted living facility; and, 7.2% reporting practicing in another setting not listed.

Table 2.3. Registered Ruise Filling		
Primary Work Setting	N	%
Hospital	45,587	55.9
Outpatient Clinic	11,875	14.6
Other	5 <i>,</i> 873	7.2
Nursing Home/Extended Care Facility/Assisted Living Facility	5,669	7.0
Home Health	4,839	5.9
Insurance Claims/Benefits	1,949	2.4
School-based Health	1,599	2.0
Academic Institution	1,271	1.6
Public/Community Health Agency	1,220	1.5
Occupational Health	676	0.8
Not Applicable	564	0.7
Correctional Facility	371	0.5
Policy/Planning/Licensing Agency	46	0.1

 Table 2.5: Registered Nurse Primary Work Setting

EMPLOYMENT SPECIALTY AND SERVICES

This part of Section II will summarize the distribution of RN employment specialty overall and also based on reported services provided. Table 2.5 will provide a general summary of the reported employment specialties. Tables 2.6 - 2.9 will summarize specific services RNs reported providing as well as specific populations they reported serving. It is important to note when interpreting data in the services and population tables that RNs were able to indicate more than one service type or more than one population they serve. Therefore, only unique counts are provided for each type of service or population. The final column in each table provides unique number of total RNs across all reporting categories in the respective table.

OVERALL EMPLOYMENT SPECIALTY DISTRIBUTION

Table 2.5 provides a summary of RN's self-reported employment specialty. The highest percentage (18.7%) of RNs self-reported practicing in Acute Care/Critical Care, followed by 13.2% who selected 'Other' specialty and 10.6% reported practicing in Medical Surgical. Another 14.7% also reported not providing direct patient care.

Employment Specialty	N	%
Acute Care/Critical Care	15,242	18.7
Not Applicable/No direct patient care	11,999	14.7
Other	10,723	13.2
Medical Surgical	8,660	10.6
Geriatric/Gerontology	4,461	5.5
Adult Health/Family Health	4,457	5.5
Pediatrics/Neonatal	3,845	4.7
Maternal-Child Health	3,229	4.0
Home Health	3,194	3.9
Psychiatric/Mental Health/Substance abuse	2,534	3.1
Oncology	2,285	2.8
Trauma	1,724	2.1
Women's Health	1,673	2.1
School Health	1,486	1.8
Rehabilitation	1,426	1.7
Anesthesia	1,174	1.4
Palliative Care	1,073	1.3
Community	737	0.9
Occupational Health	584	0.7
Public Health	536	0.7
Patient Education	497	0.6

Table 2.6: Registered Nurse Employment Specialty

ADDICTION SERVICES

Ensuring access to addiction services is critical for tackling the addiction crisis. Fortunately, these services can be provided by a number of licensed professionals across the health care system, including RNs. The addiction services reported to be provided by RN are summarized in Table 2.6. Out of the total 81,539 RNs in the 2019 reporting sample, 5,037 (6.2%) RNs reported provided addiction services. Unsurprisingly, the largest percentage of this group (22.5%) reported having a Psychiatric/Mental Health/Substance Abuse employment specialty, followed by 21.2% have an employment specialty in Acute Care/Critical Care. The highest number of RNs reported that they provide addiction counseling (n=3,067), followed by those self-reporting to provide addiction screening (n=2,404). A considerable number (n=2,966) of RNs also reported being involved in medication assisted treatment (MAT) services.

Employment Specialty		liction eening		Addiction Counseling		MAT - Methadone		MAT - Naltrexone		AT - orphine	Unique Number of RNs Providing Addiction Services	
	N	%	N	%	N	%	N	%	N	%	N	%
Acute Care/Critical Care	495	20.6	680	22.2	190	21.8	122	12.4	129	11.6	1,070	21.2
Adult Health/Family Health	289	12.0	290	9.5	25	2.9	102	10.4	96	8.6	502	10
Anesthesia	8	0.3	9	0.3	4	0.5	4	0.4	5	0.5	19	0.4
Community	44	1.8	51	1.7	6	0.7	26	2.7	19	1.7	84	1.7
Geriatric/Gerontology	21	0.9	49	1.6	12	1.4	10	1.0	20	1.8	75	1.5
Home Health	9	0.4	17	0.6	8	0.9	3	0.3	3	0.3	31	0.6
Maternal-Child Health	121	5.0	60	2.0	78	8.9	15	1.5	92	8.3	227	4.5
Medical Surgical	318	13.2	300	9.8	201	23.1	80	8.2	106	9.5	643	12.8
Occupational Health	3	0.1	10	0.3	0	0.0	0	0.0	2	0.2	11	0.2
Oncology	18	0.8	17	0.6	11	1.3	2	0.2	2	0.2	39	0.8
Palliative Care	8	0.3	12	0.4	12	1.4	1	0.1	2	0.2	25	0.5
Patient Education	10	0.4	10	0.3	2	0.2	2	0.2	4	0.4	17	0.3
Pediatrics/Neonatal	24	1.0	18	0.6	25	2.9	3	0.3	13	1.2	61	1.2
Public Health	36	1.5	35	1.1	5	0.6	10	1.0	7	0.6	61	1.2
Psychiatric/Mental Health/Substance Abuse	468	19.5	918	29.9	138	15.8	439	44.7	416	37.4	1,133	22.5
Rehabilitation	10	0.4	30	1.0	20	2.3	9	0.9	12	1.1	54	1.1

Table 2.7: Addiction Services by Employment Specialty, Registered Nurse

Employment Specialty	Addiction Screening			Addiction Counseling		MAT - Methadone		MAT - Naltrexone		\T - orphine	Unique Number of RNs Providing Addiction Services	
	N	%	N	%	N	%	N	%	N	%	N	%
School Health	7	0.3	13	0.4	1	0.1	1	0.1	0	0.0	18	0.4
Trauma	141	5.9	157	5.1	23	2.6	23	2.3	17	1.5	234	4.7
Women's Health	98	4.1	41	1.3	24	2.8	8	0.8	40	3.6	151	3
Other	156	6.5	185	6.0	38	4.4	71	7.2	60	5.4	320	6.3
Not in Direct Patient Care	120	5.0	165	5.4	49	5.6	51	5.2	67	6.0	262	5.2
Total	2,404	100.0	3,067	100.0	872	100.0	982	100.0	1,112	100.0	5,037	100.0

Table 2.7: Addiction Services by Employment Specialty, Registered Nurse

OBSTETRIC SERVICES

Registered nurses are also able to provide obstetric services in a number of settings. As demonstrated in Table 2.7, 6,635 RNs from nearly all employment specialties provide some form of obstetric services. The three most commonly reported employment specialties among this group were Maternal-Child Health (44.0%), Women's Health (20.9%) and Pediatrics/Neonatal (10.8%). The largest number of RNs (n=4,231) reported providing post-natal services, followed by 3,960 providing services in Labor and Delivery and 3,071 providing Pre-natal services.

Employment Specialty	High-Risk Pregnancy Treatment		High-Risk Pregnancy Screening		Pre-Natal Services		Labor and Delivery Services		Post-Natal Services		OUD-Affected Pregnancy Treatment		Unique Number of RNs Providing Obstetric Services	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Acute Care/Critical Care	137	6.1	41	2.7	103	3.4	147	3.7	153	3.6	16	3.9	319	4.7
Adult Health/Family Health	53	2.4	83	5.5	162	5.3	43	1.1	156	3.7	17	4.1	226	3.3
Anesthesia	15	0.7	3	0.2	2	0.1	112	2.8	2	0.1	0	0.0	114	1.7
Community	24	1.1	26	1.7	62	2.0	14	0.4	50	1.2	3	0.7	78	1.1
Geriatric/Gerontology	3	0.1	1	0.1	2	0.1	3	0.1	4	0.1	1	0.2	6	0.1
Home Health	19	0.9	6	0.4	19	0.6	9	0.2	23	0.5	2	0.5	42	0.6
Maternal-Child Health	953	42.6	574	38.0	1274	41.5	2148	54.2	1774	41.9	157	38.0	2,938	42.8
Medical Surgical	18	0.8	12	0.8	18	0.6	38	1.0	34	0.8	3	0.7	71	1.0
Occupational Health	1	0.0	1	0.1	0	0.0	4	0.1	0	0.0	0	0.0	4	0.1
Oncology	4	0.2	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	6	0.1
Palliative Care	1	0.0	0	0.0	1	0.0	2	0.1	1	0.0	0	0.0	3	0.0
Patient Education	14	0.6	6	0.4	18	0.6	8	0.2	17	0.4	2	0.5	28	0.4
Pediatrics/Neonatal	140	6.3	27	1.8	78	2.5	233	5.9	629	14.9	12	2.9	743	10.8
Public Health	32	1.4	31	2.1	74	2.4	10	0.3	69	1.6	7	1.7	88	1.3
Psychiatric/Mental Health/Substance	15	0.7	12	0.8	11	0.4	6	0.2	15	0.4	58	14.0	90	1.3
Rehabilitation	0	0.0	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0	2	0.0
School Health	4	0.2	1	0.1	8	0.3	7	0.2	7	0.2	1	0.2	15	0.2
Trauma	45	2.0	20	1.3	38	1.2	28	0.7	28	0.7	2	0.5	88	0.3

Table 2.8: Obstetric Services by Employment Specialty, Registered Nurse

Employment Specialty	High-Risk Pregnancy Treatment		High-Risk Pregnancy Screening		Pre-Natal Services		Labor and Delivery Services		Post-Natal Services		OUD-Affected Pregnancy Treatment		Unique Number o RNs Providing Obstetric Service	
openaty	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Women's Health	528	23.6	510	33.7	869	28.3	864	21.8	927	21.9	91	22.0	1,401	20.4
Other	56	2.5	34	2.3	67	2.2	81	2.1	79	1.9	14	3.4	176	2.6
Not in Direct Patient Care	176	7.9	124	8.2	263	8.6	201	5.1	263	6.2	27	6.5	427	6.2
Total	2,238	100.0	1,512	100.0	3,071	100.0	3,960	100.0	4,231	100.0	413	100.0	6,865	100.0

PEDIATRIC POPULATIONS SERVED

Understanding the capacity of the RN workforce also requires understanding the populations they serve. The 2019 supplemental survey allowed RNs to indicate the populations they serve as classified by age groups and those with special service needs. Table 2.8 below provides a summary of the RNs who reported serving pediatrics populations – which include newborns, children ages 2 – 10 and adolescents ages 11 – 19. Overall, 36,299 RNs reported providing services to pediatrics patients, with the highest number (n=31,118) serving adolescents. The highest percentage of this group had an employment specialty in in Acute Care/Critical Care (15.3%), followed by another unlisted employment specialty (15.2%) and Pediatrics/Neonatal (10.5%). Another 10.7% reported not being in direct patients though they provide services to these populations.

Employment Specialty	Newl	oorns	Child (ages 2			scents 1 - 19)	Unique Number of F Serving Pediatric Populations	
	N	%	N	%	N	%	N	%
Acute Care/Critical Care	3,201	16.7	4,272	17.2	5,346	17.2	5,563	15.3
Adult Health/Family Health	1,567	8.2	2,442	9.8	2,782	8.9	2,825	7.8
Anesthesia	294	1.5	873	3.5	944	3.0	953	2.6
Community	213	1.1	347	1.4	392	1.3	423	1.2
Geriatric/Gerontology	15	0.1	39	0.2	71	0.2	76	0.2
Home Health	355	1.9	870	3.5	932	3.0	1,148	3.2
Maternal-Child Health	2,798	14.6	209	0.8	1,010	3.3	2,918	8.0
Medical Surgical	605	3.2	1,920	7.7	2,645	8.5	2,711	7.5
Occupational Health	18	0.1	69	0.3	137	0.4	137	0.4
Oncology	51	0.3	102	0.4	231	0.7	233	0.6
Palliative Care	79	0.4	137	0.6	159	0.5	168	0.5
Patient Education	59	0.3	122	0.5	164	0.5	179	0.5
Pediatrics/Neonatal	3,461	18.1	2,476	10.0	2,394	7.7	3,818	10.5
Public Health	277	1.5	326	1.3	360	1.2	398	1.1
Psychiatric/Mental Health/Substance Abuse	12	0.1	581	2.3	1,023	3.3	1,031	2.8
Rehabilitation	7	0.0	34	0.1	171	0.6	176	0.5
School Health	33	0.2	1,050	4.2	1,222	3.9	1,438	4.0
Trauma	1,030	5.4	1,245	5.0	1,385	4.5	1,392	3.8
Women's Health	830	4.3	72	0.3	704	2.3	1,288	3.6
Other	1,878	9.8	4,531	18.3	5,393	17.3	5,534	15.2
Not in Direct Patient Care	2,344	12.3	3,113	12.5	3,653	11.7	3,890	10.7
Total	19,127	100.0	24,830	100.0	31,118	100.0	36,299	100.0

Table 2.9: Pediatric populations served by Registered Nurses, based on Reported Employment Specialty

ADULT AND SPECIAL POPULATIONS SERVED

In addition to pediatric populations, RNs were also able to indicate serving adult and special populations. A summary of RNs serving these groups is provided in Table 2.9. Overall, 71, 943 RNs reported providing health care services to adults, geriatric patients, pregnant women, inmates, disabled persons and individuals in recovery. Just over one-fifth (20.4%) of this group reported employment specialty in Acute Care/Critical Care, followed by 14.3% indicating "Other" as their employment specialty. Another 12.2% reported not providing direct patient care though also reporting offering services to these populations. The largest number reported serving adults(n=63,929) followed by 53,157 serving the geriatric population.

Employment Specialty	Adult Po	pulation	Geriatric P	opulation	Pregnant	Pregnant Women		ates	Disabled Persons		Individuals in Recovery		Total RNs Serving Adults and Special Populations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Acute Care/Critical Care	14,548	22.8	12,066	22.7	4,078	21.3	4,615	35.4	6,398	24.3	3,764	29.7	14,698	20.4
Adult Health/Family Health	4,299	6.7	3,666	6.9	1,227	6.4	336	2.6	1,827	6.9	779	6.2	4,413	6.1
Anesthesia	1,126	1.8	970	1.8	592	3.1	446	3.4	658	2.5	400	3.2	1,150	1.6
Community	620	1.0	478	0.9	224	1.2	83	0.6	277	1.1	131	1.0	684	1.0
Geriatric/Gerontology	1,735	2.7	4,375	8.2	17	0.1	14	0.1	885	3.4	173	1.4	4,412	6.1
Home Health	2,320	3.6	2,297	4.3	161	0.8	14	0.1	1,431	5.4	161	1.3	2,921	4.1
Maternal-Child Health	1,646	2.6	133	0.3	2,676	14.0	190	1.5	118	0.5	191	1.5	2,999	4.2
Medical Surgical	8,327	13.0	7,007	13.2	1,119	5.8	1,900	14.6	3,186	12.1	1,462	11.5	8,454	11.8
Occupational Health	563	0.9	162	0.3	65	0.3	9	0.1	65	0.3	30	0.2	565	0.8
Oncology	2,193	3.4	1,447	2.7	205	1.1	228	1.8	474	1.8	122	1.0	2,213	3.1
Palliative Care	869	1.4	950	1.8	19	0.1	27	0.2	330	1.3	41	0.3	1,049	1.5
Patient Education	435	0.7	347	0.7	141	0.7	19	0.2	145	0.6	38	0.3	484	0.7
Pediatrics/Neonatal	643	1.0	135	0.3	231	1.2	24	0.2	304	1.2	52	0.4	901	1.3
Public Health	457	0.7	327	0.6	254	1.3	170	1.3	192	0.7	122	1.0	496	0.7
Psychiatric/Mental Health/Substance Abuse	2,187	3.4	1,365	2.6	385	2.0	226	1.7	686	2.6	896	7.1	2,328	3.2
Rehabilitation	1,158	1.8	1,183	2.2	22	0.1	30	0.2	514	2.0	220	1.7	1,388	1.9
School Health	404	0.6	108	0.2	60	0.3	12	0.1	152	0.6	19	0.2	483	0.7
Trauma	1,654	2.6	1,522	2.9	1,154	6.0	1,162	8.9	1,256	4.8	911	7.2	1,659	2.3
Women's Health	1,127	1.8	379	0.7	1,371	7.2	165	1.3	167	0.6	134	1.1	1,621	2.3

 Table 2.10: Adult and Special Populations Served by Registered Nurses, based on Reported Employment Specialty

Employment Specialty	Adult Po	pulation	Geriatric P	Geriatric Population Pregnant Women		Inmates Disabled Persons				Individ Reco		Total RNs Serving Adults and Special Populations		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Other	9,919	15.5	7,973	15.0	2,705	14.1	2,372	18.2	4,106	15.6	1,702	13.4	10,276	14.3
Not in Direct Patient Care	7,699	12.0	6,267	11.8	2,442	12.8	1,004	7.7	3,148	12.0	1,319	10.4	8,749	12.2
Total	63,929	100.0	53,157	100.0	19,148	100.0	13,046	100.0	26,319	100.0	12,667	100.0	71,943	100.0

Table 2.10: Adult and Special Populations Served by Registered Nurses, based on Reported Employment Specialty

SECTION III: ADVANCED PRACTICE REGISTERED NURSES

DISTRIBUTION OF APRN POSITIONS

The Advanced Practice Registered Nurse (APRN) is a growing occupation that provides primary and specialty care services for Indiana residents. This section provides a summary of the 7,746 APRNs identified as actively practicing in Indiana or providing telemedicine to Indiana residents.

As shown in Figure 3.1, Indiana APRNs practice in several positions, but predominantly report the role of Nurse Practitioner (85.1%). The smallest group of APRNs reported having a role as a Certified Nurse Midwife (1.6%). Other roles include a Clinical Nurse Specialist (3.5%) and a Certified Registered Nurse Anesthetist (6.8%).

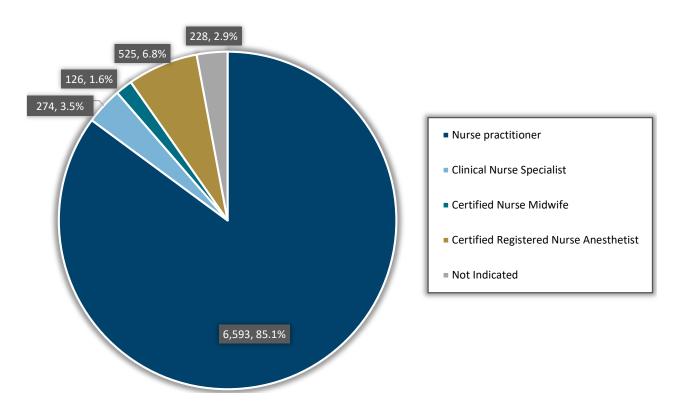


Figure 3.1: Distribution of roles among Indiana Advanced Practice Registered Nurses

DEMOGRAPHICS

A summary of APRN demographics is found in Table 3.1. Overall, APRNs are predominantly female (7,039; 90.9%), non-Hispanic (97.6%) and white (90.8%). The average age of APRNs is 45.1 years, with little difference in ages between male and females. Male APRNs have a greater racial diversity than their female counterparts, with a greater percentage identifying as non-white (14.1% vs. 8.7%). Similar to the demographic characteristics of the total RN workforce, a small percentage of APRNs are missing information regarding age (0.2%) and gender (0.3%)

	Fem	Female		lale		nder not /ailable	Tot	al
	N	%	N	%	N	%	N	%
Total	7,0	39	6	683		24	7,7	46
Mean Age	45	45.1		5.2		41.8	45	.1
Age Groups								
Under 35	1,527	21.7	131	19.2	8	33.3	1,666	21.5
35-44	2,246	31.9	228	33.4	5	20.8	2,479	32.0
45-54	1,719	24.4	187	27.4	5	20.8	1,911	24.7
55-64	1,238	17.6	108	15.8	3	12.5	1,349	17.4
65 and Older	297	4.2	29	4.2	1	4.2	327	4.2
Age not Available	12	0.2	0	0.0	2	8.3	14	0.2
Ethnicity								
Hispanic or Latino	167	2.4	22	3.2	0	0.0	189	2.4
Not Hispanic or Latino	6,872	97.6	661	96.8	24	100.0	7,557	97.6
Race								
White	6,429	91.3	587	85.9	18	75.0	7,034	90.8
Asian	103	1.5	20	2.9	2	8.3	125	1.6
Black or African American	322	4.6	43	6.3	2	8.3	367	4.7
Native Hawaiian/Pacific Islander	7	0.1	2	0.3	0	0.0	9	0.1
American Indian or Alaska Native	8	0.1	1	0.1	0	0.0	9	0.1
Other	106	1.5	16	2.3	2	8.3	124	1.6
Multiracial	64	0.9	14	2.0	0	0.0	78	1.0

Table 3.1: Advanced Practice	Registered Nurse	Demographic Characteristics

Source: Indiana Registered Nurse License and Supplemental Survey Data, 2019

Notes: Data on Gender was not provided for every respondent by Indiana Professional Licensing Agency (IPLA). Age was calculated as the difference between the respondent's date of birth and the date of survey completion.

EDUCATION

Educational characteristics for Indiana APRNs are presented in Table 3.2 and 3.3. When asked about the education that qualified them for their nursing license, the highest percentage of APRNs (46.1%) reported qualifying for their nursing licensed with a BSN, followed by 28.2% who reported qualifying with an ASN. As with the RN workforce, the majority of APRNs obtained their qualifying education in Indiana (n=5,600; 72.3%) and another 16.5% (n=1,279) obtained their qualifying education in one of Indiana's contiguous states. When asked about their education plans over the next 2 years, 85.0% of APRNs reported no intentions for pursuing further education, while 10.2% intended to pursue a Doctorate of Nursing Practice (DNP).

Qualifying Degree	Indiana		Contiguous States			er State listed)	Another Country (not US)		Total	
	N	%	N	%	N	%	N	%	N	%
Diploma - nursing	155	2.8	89	7.0	56	6.8	14	29.2	314	4.1
Associate degree - nursing	1,596	28.5	381	29.8	198	24.2	8	16.7	2,183	28.2
Baccalaureate degree - nursing	2,608	46.6	552	43.2	393	48.0	21	43.8	3,574	46.1
Master's degree - nursing	1,178	21.0	244	19.1	159	19.4	5	10.4	1,586	20.5
Doctoral degree - nursing	63	1.1	13	1.0	13	1.6	0	0.0	89	1.2
Total	5,600	100.0	1,279	100.0	819	100.0	48	100.0	7,746	100.0

Source: 2019 Registered Nurse License and Supplemental Survey Data

Notes: Contiguous states in Michigan, Ohio, Kentucky Illinois

Table 3.3 Highest Education and Education Plans, Advanced Practice Registered Nurses

	N	%
Highest Nursing Education		
Diploma - nursing	22	0.3
Associate degree - nursing	73	0.9
Baccalaureate degree - nursing	225	2.9
Master's degree - nursing	6,958	89.8
Doctoral degree - nursing	468	6.0
Highest Non-Nursing Education		
Not Applicable	5,819	75.1
Diploma – non-nursing	140	1.8
Associate degree – non-nursing	232	3.0
Baccalaureate degree – non-nursing	1,047	13.5
Master's degree – non-nursing	452	5.8
Doctoral degree – non-nursing	56	0.7
Education Plans in Next 2 years		
Bachelor's Degree – Nursing	21	0.3
Bachelor's Degree – Other Field	12	0.2
Master's Degree – Nursing	134	1.7
Master's Degree – Other Field	73	0.9
Doctor of Nursing Practice (DNP)	786	10.2
PhD – Nursing	79	1.0
Doctoral Degree – Other Field	56	0.7
No plans to pursue further education	6,585	85.0

PRACTICE CHARACTERISTICS

EMPLOYMENT CHARACTERISTICS

A summary of APRN employment characteristics can be seen in Table 3.3. The majority of APRNs reported their primary position as an Advanced Practice Nurse (92.2%). Other commonly reported positions were staff nurse (4.4%) and faculty nurse educator (1.3%).

The majority (79.4%) of APRNs reported holding one paid position in nursing, though 16.5% of APRNs reported having two paid nursing positions. When asked about employment plans for the next 2 years, 86.3% of APRNs reported no intentions of changing plans for employment. 6.1% reported intent to increase hours, and 3.1% reported intent to decrease hours over the next two years.

	Ν	%
Primary Work Position		
Consultant/Nurse Researcher	9	0.1
Nurse Executive	28	0.4
Nurse Manager	48	0.6
Advanced Practice Nurse	 7,138	92.2
Staff Nurse	343	4.4
Nurse Educator (faculty)	100	1.3
Nurse Educator (staff development)	6	0.1
Nurse Educator (patient educator)	4	0.1
Other - health related	50	0.6
Not Applicable	20	0.3
Total Paid Positions in Nursing		
1 position	6,154	79.4
2 positions	1,277	16.5
3 positions	254	3.3
4 or more positions	42	0.5
Not Applicable	19	0.2
Employment Plans for Next 2 Years		
No planned change	6,688	86.3
Increase hours	475	6.1
Decrease hours	242	3.1
Seek non-clinical job	21	0.3
Retire	64	0.8
Unknown	256	3.3

Table 3.4: Advanced Practice Registered Nurse Employment Characteristics

PRIMARY WORK SETTING

The reported primary work setting for APRNs can be found in Table 3.4. The most commonly reported practice settings for APRNs was outpatient clinics (47.9%) and hospitals (28.9%). Another 7.5% reported practicing in another unlisted (Other) setting and 5.0% reported practicing in a Nurse Home/Extended Care Facility/Assisted Living Facility.

Tuble 3.3. Auvanceu Fractice Registereu Naise Frinary Work Setting		
Primary Work Setting	N	%
Outpatient Clinic	3,707	47.9
Hospital	2,239	28.9
Other	580	7.5
Nursing Home/Extended Care Facility/Assisted Living Facility	388	5.0
Public/Community Health Agency	250	3.2
Home Health	162	2.1
Occupational Health	148	1.9
Academic Institution	133	1.7
School-based Health	46	0.6
Not Applicable	43	0.6
Correctional Facility	31	0.4
Insurance Claims/Benefits	15	0.2
Policy/Planning/Licensing Agency	4	0.1
Commented in a Desistant d'Alexandrian and Complemental Comments Data 2010		

Table 3.5: Advanced Practice Registered Nurse Primary Work Setting

APRN SPECIALTY AND SERVICES

This part of Section III will summarize the distribution of APRN specialties overall and also based on reported services provided. Table 3.5 will provide a general summary of the reported employment specialties. Tables 3.6 – 3.8 will summarize specific services APRNs reported providing as well as specific populations they reported serving. It is important to note when interpreting data in the services and population tables that APRNs were able to indicate more than one service type or more than one population they serve. Therefore, only unique counts are provided for each type of service or population. The final column in each table provides unique number of total physicians across all reporting categories in the respective table.

APRN SPECIALTY AND TELEMEDICINE

Telemedicine is defined in Indiana statute as the delivery of health care services using electronic communications and information technology, including: secure videoconferencing, interactive audio-using store and forward technology, or remote patient monitoring technology between a provider in one (1) location and a patient in another location². This definition was provided to APRNs during completion of the supplemental licensure survey to ensure a uniform understanding of telemedicine when indicating whether they provide these services in Indiana.

Table 3.5 provides a summary of self-reported APRN specialties overall and by telemedicine participation status. Overall, the most common specialty reported among Indiana APRNs is primary care (39.3%), followed by Other specialties (24.2%). Within this reporting sample, 634 (8.2%) reported providing telemedicine services to Indiana residents. The three most common specialties among APRNs providing telemedicine were primary care specialties (44.6%), other specialties (21.1%) and psychiatry (adult and child) (12.5%). Among APRNs not providing telemedicine services, the distribution of specialties reflected that which is found among the total reporting sample.

		tal	Providing Telemedicine Services					
APRN Specialty	To	ldl	Y	es	NO			
	N	%	N	%	N	%		
Total	7,7	46	6	34	7,1	12		
Primary Care Specialties	3,041	39.3	283	44.6	2,758	38.8		
Other Specialty	1,872	24.2	134	21.1	1,738	24.4		
Internal Medicine Subspecialties	631	8.1	54	8.5	577	8.1		
Anesthesiology, Pathology, Radiology or Emergency Medicine	595	7.7	17	2.7	578	8.1		
Psychiatry (Adult and Child)	389	5.0	79	12.5	310	4.4		
Obstetrics & Gynecology	358	4.6	13	2.1	345	4.9		
Pediatrics Subspecialties	341	4.4	10	1.6	331	4.7		
Surgical Specialties	241	3.1	18	2.8	223	3.1		
Not in Direct Patient Care	209	2.7	20	3.2	189	2.7		
General Surgery	69	0.9	6	1.0	63	0.9		

² IC 25-1-9.5-6

ADDICTION SERVICES

Like the physician workforce, APRNs have the ability to provide specialized services for addiction and contribute to tackling the addiction crisis in Indiana. Table 3.6 provides a summary of the addiction services which APRNs had reported providing. Of the 7,746 APRNs in the 2019 reporting sample, 953 (12.3%) APRNs reported providing some type of addiction service. The largest percentage of these APRNs (46.1%) reported having an employment specialty in primary care and 21.6% having a specialty in psychiatry. The most commonly reported service to be offered among APRNs was addiction screening (n=532). However, 513 also self-reported providing MAT services: Methadone (n=42), Naltrexone (n=249), or Buprenorphine (n=264).

Table 3.7: Addiction Services by Employment Specialty, Advanced Practice Registered Nurse

APRN Specialty		Addiction Screening		Addiction Counseling		MAT - Methadone		MAT - Naltrexone		MAT - Buprenorphine		Total APRNs Providing Addiction Services	
	Ν	%	N	%	N	%	N	%	N	%	N	%	
Primary Care Specialties	267	50.2	249	45.4	13	31.0	101	40.6	97	36.7	439	46.1	
Internal Medicine Subspecialties	26	4.9	31	5.7	0	0.0	4	1.6	7	2.7	52	5.5	
Pediatric Subspecialties	3	0.6	4	0.7	3	7.1	1	0.4	2	0.8	9	0.9	
Obstetrics & Gynecology	49	9.2	8	1.5	1	2.4	2	0.8	8	3.0	56	5.9	
General Surgery	4	0.8	0	0.0	0	0.0	0	0.0	1	0.4	5	0.5	
Surgical Specialties	11	2.1	8	1.5	0	0.0	0	0.0	0	0.0	15	1.6	
Psychiatry (Adult and Child)	106	19.9	145	26.4	7	16.7	101	40.6	79	29.9	206	21.6	
Anesthesiology, Pathology, Radiology or Emergency Medicine	4	0.8	10	1.8	4	9.5	3	1.2	7	2.7	18	1.9	
Other Specialty	59	11.1	91	16.6	11	26.2	37	14.9	61	23.1	147	15.4	
Not Applicable	3	0.6	3	0.6	3	7.1	0	0.0	2	0.8	6	0.6	
Total	532	100.0	549	100.0	42	100.0	249	100.0	264	100.0	953	100.0	

OBSTETRIC SERVICES

The obstetric services self-reported to be provided by APRNs is summarized in Table 3.7. Out of the 2019 APRN reporting sample, 715 (9.2%) reported providing obstetric services to Indiana residents. The largest proportion of this group had an employment specialty in Obstetrics & Gynecology (41.1%) followed by other Primary Care Specialties (20.8%). The greatest number of APRNs reported providing post-natal services (n=431), pre-natal services (n=408) and labor and delivery (n=319). A smaller number reported providing services regarding high-risk pregnancy treatment (n=213), high-risk pregnancy screening (n=270) and treatment for pregnancies affected by opioid use disorder (OUD) (n=93).

APRN Specialty	High-Risk Pregnancy Treatment		High-Risk Pregnancy Screening		Pre-Natal Services		Labor and Delivery		Post-Natal Services		OUD-affected Pregnancy Treatment		Total APRNs providing Obstetric Services	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Primary Care Specialties	31	14.6	59	21.9	97	23.8	23	7.2	91	21.1	24	25.8	149	20.8
Internal Medicine Subspecialties	2	0.9	2	0.7	2	0.5	0	0.0	1	0.2	1	1.1	7	1.0
Pediatric Subspecialties	14	6.6	3	1.1	16	3.9	17	5.3	59	13.7	1	1.1	64	9.0
Obstetrics & Gynecology	129	60.6	194	71.9	262	64.2	162	50.8	240	55.7	22	23.7	287	40.1
General Surgery	0	0.0	0	0.0	0	0.0	2	0.6	0	0.0	1	1.1	3	0.4
Surgical Specialties	1	0.5	0	0.0	1	0.3	1	0.3	1	0.2	0	0.0	2	0.3
Psychiatry (Adult and Child)	0	0.0	3	1.1	4	1.0	0	0.0	5	1.2	23	24.7	27	3.8
Anesthesiology, Pathology, Radiology or Emergency Medicine	14	6.6	2	0.7	3	0.7	98	30.7	0	0.0	1	1.1	101	14.1
Other Specialty	15	7.0	5	1.9	17	4.2	8	2.5	25	5.8	18	19.4	58	8.1
Not Applicable	7	3.3	2	0.7	6	1.5	8	2.5	9	2.1	2	2.2	17	2.4
Total	213	100.0	270	100.0	408	100.0	319	100.0	431	100.0	93	100.0	715	100.0

 Table 3.8: Obstetric Services by Employment Specialty, Advanced Practice Registered Nurse

PEDIATRIC POPULATIONS SERVED

Table 3.8 presents a summary of APRNs who self-reported serving pediatric populations. Overall, 4,581 APRNs (59.1%) from the 2019 reporting sample had reported serving these age group. Unsurprisingly, 46.8% which had a primary care specialty in primary care, and another 16.4% had another specialty not listed. The greatest number of APRNs reported serving adolescents ages 11 - 19 (n=4,499) followed by children ages 2 - 10 (n=3,503). The smallest number reported serving newborns (n=2,143).

APRN Specialty	New	vborn	-	dren 2 - 10)		scents 1 - 19)	Total APRNs Serving Pediatric Populations	
	N	%	N	%	N	%	N	%
Primary Care Specialties	1,192	55.6	1,906	54.4	2,173	48.3	2,197	46.8
Internal Medicine Subspecialties	9	0.4	36	1.0	106	2.4	108	2.3
Pediatric Subspecialties	299	14.0	237	6.8	239	5.3	229	7.2
Obstetrics & Gynecology	40	1.9	11	0.3	278	6.2	291	6.2
General Surgery	11	0.5	23	0.7	37	0.8	37	0.8
Surgical Specialties	20	0.9	55	1.6	108	2.4	109	2.3
Psychiatry (Adult and Child)	2	0.1	160	4.6	241	5.4	242	5.2
Anesthesiology, Pathology, Radiology or Emergency Medicine	223	10.4	468	13.4	504	11.2	509	10.9
Other Specialty	298	13.9	543	15.5	729	16.2	768	16.4
Not in Direct Patient Care	49	2.3	64	1.8	84	1.9	91	1.9
Total	2,143	100.0	3,503	100.0	4,499	100.0	4,581	100.0

Table 3.9 Pediatric Populations Served by Advanced Practice Registered Nurses

ADULT AND SPECIALTY POPULATIONS SERVED

Table 3.9 below provides a summary of the APRNs who reported serving adults and other populations. Overall, nearly all (92.6%; n=7,179) APRNS reported providing services to these groups, with 40.3% having a specialty in primary care and 25.0% having another unlisted specialty. The largest number of APRNs reported providing services to adults (n=6,878) followed by 5,824 who reported serving geriatric patients. On the other hand, the smallest number of APRNs reported serving inmates (n=1,011). APRNs also reported serving pregnant women (n=2,446), disabled persons (n=2,985) and individuals in recovery (n=1,506).

APRN Specialty	Ad	ults	Geri	Geriatric		Pregnant Women		Inmates		Disabled Persons		Individuals in Recovery		Total APRNs Serving Adults and Special Populations	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Primary Care Specialties	2,789	40.6	2,535	43.5	903	36.9	231	22.9	1,310	43.9	623	41.4	2,891	40.3	
Internal Medicine Subspecialties	600	8.7	527	9.1	86	3.5	71	7.0	187	6.3	75	5.0	627	8.7	
Pediatric Subspecialties	37	0.5	4	0.1	11	0.5	0	0.0	23	0.8	1	0.1	63	0.9	
Obstetrics & Gynecology	318	4.6	180	3.1	291	11.9	53	5.2	77	2.6	41	2.7	354	4.9	
General Surgery	65	1.0	51	0.9	22	0.9	15	1.5	24	0.8	12	0.8	65	0.9	
Surgical Specialties	236	3.4	196	3.4	46	1.9	56	5.5	88	3.0	30	2.0	238	3.3	
Psychiatry (Adult and Child)	367	5.3	275	4.7	136	5.6	35	3.5	173	5.8	184	12.2	374	5.2	
Anesthesiology, Pathology, Radiology or Emergency Medicine	573	8.3	513	8.8	404	16.5	259	25.6	391	13.1	248	16.5	584	8.1	
Other Specialty	1,719	25.0	1,406	24.1	495	20.2	250	24.7	643	21.5	264	17.5	1,796	25.0	
Not applicable/I am not an APN	174	2.5	137	2.4	52	2.1	41	4.1	69	2.3	28	1.9	187	2.6	
Total	6,878	100.0	5,824	100.0	2,446	100.0	1,011	100.0	2,985	100.0	1,506	100.0	7,179	100.0	

Table 3.10 Adult and Special Populations Served by Advanced Practice Registered Nurses

DISCUSSION AND CONCLUSION

The 2019 Registered Nurse Workforce Data Report provides an overview of the supply and characteristics of RNs licensed in the State of Indiana and the subset identified as Advanced Practice Registered Nurses. Longitudinal trends provided in Section I demonstrate the impact new data management strategies have had on Indiana's ability to quantify this workforce. Between the 2017 and 2019 license renewal periods, the number of RNs included in the biennial reporting sample increased by about 17%. This significant increase can be attributed to data management standards and structured surveys which now capture data on all license health professions providing health care to Indiana residents.

There are a number of notable trends within Indiana's 2019 RN workforce (Section II). Demographically, RNs have an average age around 45 and the majority are female and white. Male RNs, however, are slightly younger and have greater diversity than their female counterparts. This is the first report in which RNs located outside of the state that reported providing healthcare services to Indiana residents through telemedicine were included in the reporting sample. Their characteristics were comparable to those located inside the State of Indiana; however, a slightly greater percentage of in-state RNs reported intention to pursue a BSN or MSN in the next 2 years.

Changes in the 2019 supplemental survey allowed for RNs to indicated the services they provide and populations they serve. As such, a number of RNs and APRNs reported providing services related to addiction treatment and obstetrics. The same is also true for the number of RNs and APRNs providing services to populations such as adolescents and geriatric patients. Gathering information on services provided and populations served will undoubtedly be useful to workforce planning initiatives.

The 2019 Indiana Registered Nurse Workforce Data Report provides key information on Indiana's RN workforce and also demonstrates the ability of these data to inform initiatives related to health policy, education and graduate training, health system planning, and workforce development. With the implementation of standard surveys for data collection, the Bowen Center anticipates presenting longitudinal data trends in future data reports. This will undoubtedly enhance the information that can be gleaned from these data and used to inform workforce planning initiatives in Indiana.