



APRN **ROUNDTABLE**

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APRN Regulation:
Every Moment Matters

Tuesday, April 9, 2024 | Virtual





A Descriptive Summary of the Advanced Practice Registered Nurse Workforce in the United States: Targeted Findings from the 2022 National Nursing Workforce Survey

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2024 APRN **ROUNDTABLE**

Agenda

1. Background
2. Methodology
3. Results
4. Q&A

National Nursing Workforce Survey

- HRSA's National Survey Sample of Registered Nurses stopped after 2008
- NCSBN stepped up to fill the void in 2013
- Partnership with the National Forum of State Nursing Workforce Centers

Survey Methods

- **Materials**

- Minimum Data Set used for bulk of questions
- Questions added for telehealth, NLC, retirement, travel nursing, direct care
- 2022 Survey added COVID questions

- **Mailout Survey Sample (43 Jurisdictions)**

- All active RN & LPN licensees eligible
- Sampling was stratified by state
- **154,757** RNs & **154,490** LPNs selected

Survey Methods (Cont'd)

- **Email Survey Sample (4 Jurisdictions)**
 - All active RN & LPN licensees eligible
 - Sampling was stratified by state
 - **26,697** RNs & **18,710** LPNs selected
- **e-Notify Data (5 Jurisdictions)**
 - A comprehensive review of data collected through the e-Notify system
 - Five jurisdictions had data of sufficient quality to use for survey

Survey Analysis

Weighting

- Nonresponse bias analysis conducted
- Survey responses weighted based on:
 - Age (nonresponse weight)
 - Gender (nonresponse weight)
 - State nursing population size (stratification weight)

Descriptive Analysis

- Counts, and Mean/Median Values

Survey Response Rates

Mailout Survey

- **26,757** RNs responded - **17.8%** response rate
- **22,634** LPNs responded - **15.2%** response rate

Email Survey

- **2,458** RNs responded - **9.2%** response rate
- **2,176** LPNs responded - **11.6%** response rate

E-Notify Data

E-Notify Data

- **249,416** RNs records
- **30,693** LPNs records
- Data for RNs (including APRNs) and LPN/LVNs analyzed separately and published in a comprehensive supplement to the Journal of Nursing Regulation.



The 2022 National Nursing Workforce Survey

Smiley, Richard A., Richard L. Allgeyer, Yetty Shobo, Karen C. Lyons, Rayna Letourneau, Elizabeth Zhong, Nicole Kaminski-Ozturk, and Maryann Alexander. "The 2022 national nursing workforce survey." *Journal of Nursing Regulation* 14, no. 1 (2023): S1-S90.

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National Nursing Workforce Survey

Supplement

The 2015 National Nursing Workforce Survey

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Supplement

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Supplement

The 2020 National Nursing Workforce Survey

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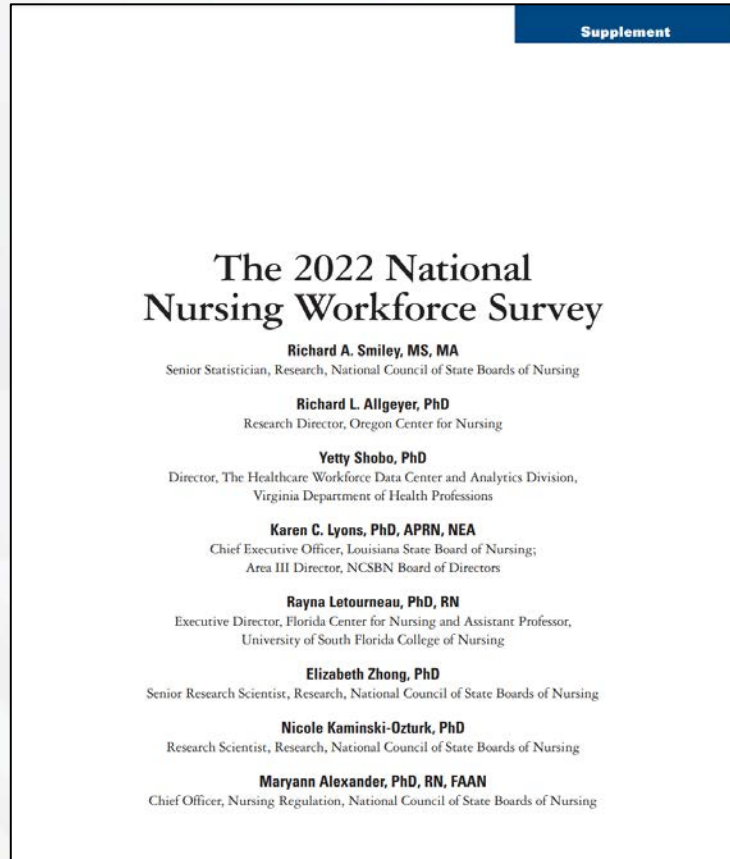
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Workforce Sub-Analyses



1. APRN Workforce

2. Demographic Breakdown of the RN Workforce

3. Demographic Breakdown of the LPN/LVN Workforce

4. Faculty Workforce

5. Telehealth Usage Trends

6. Travel/Agency Workforce

7. Early Career Workforce

8. Urban/Rural

Purpose of Study

To provide a descriptive summary of the APRN workforce, and to identify the personal and professional characteristics of APRNs experiencing heightened workplace burnout and stress.

APRN Sample

- **Represents 500k+**
APRNs
- **50** U.S. states, DC, &
the Northern Mariana
Islands



APRN Survey Items

Tell Us About Your License

4. What type of license do you currently hold?
(Select all that apply)

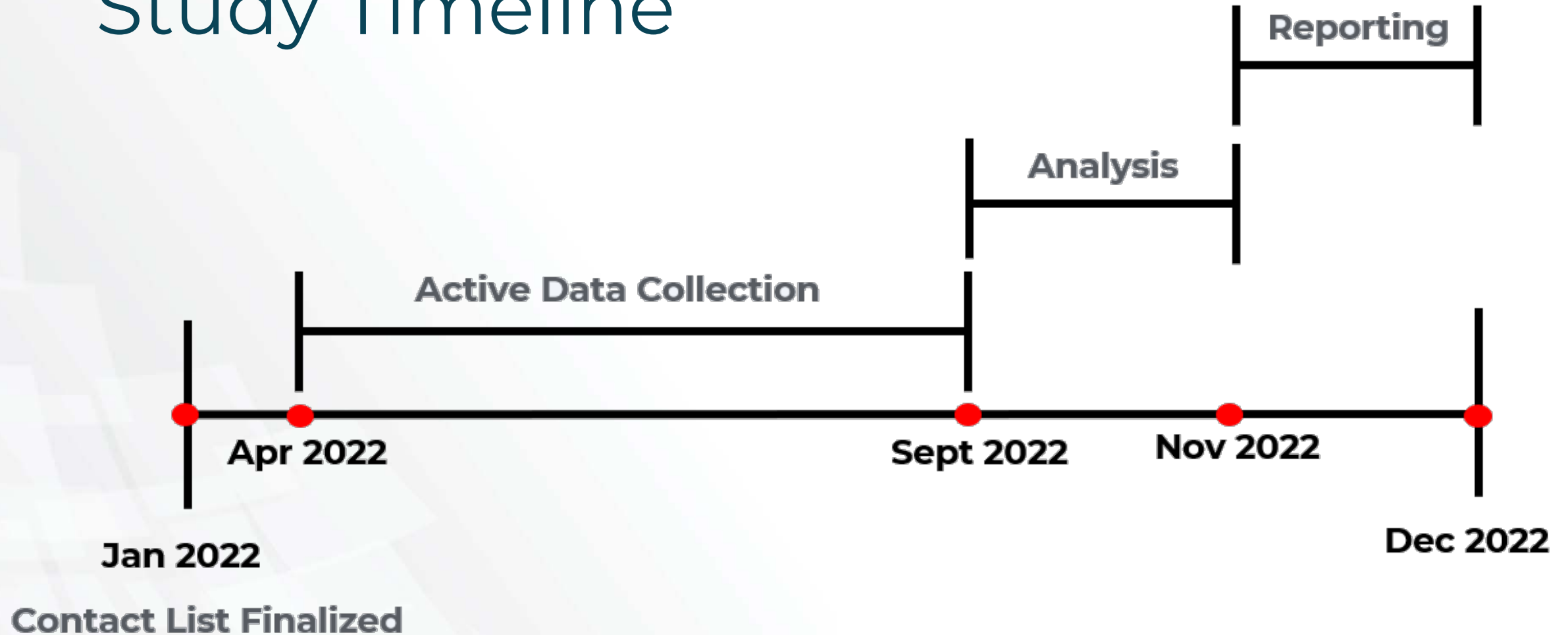
- RN LPN APRN

9. Indicate whether you are credentialed in your state to practice as any of the following: (Select all that apply)

- Certified Nurse Practitioner
 Clinical Nurse Specialist
 Certified Registered Nurse Anesthetist
 Certified Nurse Midwife
 Not credentialed as any of the above

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Study Timeline




Mixed Methods Approach

- **Methods:** Survey
- **Data Collection:** Direct Mail, Qualtrics, e-Notify
- **Survey Analysis:** Detailed descriptive; graphical depiction of summary trends; univariable and multivariable binary logistic regression models; natural language processing

Data Coding Notes

- **Dependent Variables:** Maslach Burnout Inventory-Human Services Survey (MBI-HSS)
- **Primary Independent Variable:** Years' Experience
 - ≤ 12 Years
 - 12 to 21 Years
 - 21 to 36 Years
 - ≥ 36 Years



A Descriptive Summary of the Advanced Practice Registered Nurse Workforce in the United States: Targeted Findings from the 2022 National Nursing Workforce Survey

Martin, B., Zhong, E., Reid, M., O'Hara, C., & Buck, M. (2024). Examining the Impact of the COVID-19 Pandemic on the Advanced Practice Registered Nurse Workforce in the United States. *Journal of Nursing Regulation*. **Pending publication in April 2024.**

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Demographic Characteristics

APRN Role:

- CNP (71.1%)
- CNS (16.8%)
- CRNA (9.1%)
- CNM (3.0%)

Key demographics:

- 50 years old (SD: 11.9)
- Female (86.7%)
- Non-Hispanic (92.5%)
- White (78.6%)

License Type	Total
Certified Nurse Practitioner	369,972 (71.1%)
Certified Nurse Specialist	87,212 (16.8%)
Certified Registered Nurse Anesthetist	47,220 (9.1%)
Certified Nurse Midwife	15,863 (3.0%)
Age (Mean, SD)	49.8 (11.9)
Sex	
Female	447,741 (86.7%)
Male	66,589 (12.9%)
Non-Binary	21,06 (0.4%)
Race	
White/Caucasian	403,953 (78.6%)
Asian	38,881 (7.6%)
Black/African American	34,503 (6.7%)
Other	19,289 (3.8%)
Mixed Race	12,957 (2.5%)
Native Hawaiian/Pacific Islander	2,962 (0.6%)
Native American/Alaska Native	1,503 (0.3%)
Ethnicity	
Not Hispanic or Latino	472,921 (92.5%)
Hispanic or Latino	38,440 (7.5%)

Professional Characteristics

Most common practice profile:

- Actively Employed in Nursing (90.4%)
- Direct Patient Care (79.1%)
- 24 years experience
- 40 hours a week
- Primary practice setting varied by role
- Median pay highest among CRNAs

Professional Characteristics, Primary Position		Total
Employed in Nursing		
	Yes	472,406 (90.4%)
	No	50,009 (9.6%)
Direct Patient Care		
	Yes	345,771 (79.1%)
	No	91,619 (20.9%)
Experience, in Years		23.8 (14.5)
Work Hours, per Week		40.0 (11.3)
Salary, by License Type (Median, IQR)		
	Certified Nurse Practitioner	\$109,000 (\$86,400 – \$130,000)
	Certified Nurse Specialist	\$90,000 (\$70,000 – \$120,000)
	Certified Registered Nurse Anesthetist	\$193,000 (\$155,000 - \$225,000)
	Certified Nurse Midwife	\$104,000 (\$60,000 - \$120,000)
Data Notes: Valid N for each item varies based on observed non-response rates; all proportions are reported based on item-level Valid N.		
Abbreviations: SD = Standard Deviation, IQR = Interquarile range.		

Telehealth Results

- Telehealth usage is common among APRNs (65.2%), and most employ more than one modality (65.6%).
- Video calls account for the bulk of practice (63.1%) and most remote services are delivered within a single jurisdiction.

Telehealth/Cross Jurisdiction Practice	Total n (%)
Telehealth Practice	
Yes	267,034 (65.2%)
No	142,314 (34.8%)
Number of Telehealth Modalities Employed	
One	91,783 (34.4%)
Two	78,219 (29.3%)
Three	64,800 (24.3%)
Four	28,101 (10.5%)
Five or more	4,131 (1.5%)
Modes of Telehealth Communication	
Electronic Messaging	91,899 (34.4%)
Virtual ICU	8,773 (3.3%)
Telephone	56,884 (21.3%)
Email	79,488 (29.8%)
Video Call	168,356 (63.1%)
Other	174,055 (6.4%)
Proportion of Telehealth Work (Mean, Range)	
Different Location	22% (0, 100%)
Across State Borders	10% (0, 100%)
Across International Borders	1% (0, 100%)
Multistate License	
Yes	116,402 (26.9%)
No	316,399 (73.1%)
Multistate License Use	
Disaster support	3,204 (2.6%)
Distance education	7,139 (5.9%)
Telehealth/Communicating across state borders	17,230 (14.2%)
Other	17,528 (14.4%)
Data Notes: Valid N for each item varies based on observed non-response rates; all proportions are reported based on item-level Valid N.	

Univariable Findings

	Emotionally Drained, % (n)	Used Up, % (n)	Fatigued, % (n)	Burned Out, % (n)	End of Rope, % (n)
APRN Role					
CNP	47.9% (158,598)	53.7% (178,090)	41.7% (138,156)	41.2% (135,597)	21.9% (72,547)
CNS	49.6% (40,510)	52.7% (42,603)	46.2% (37,856)	40.9% (33,386)	32.1% (25,914)
CRNA	31.3% (12,221)	36.8% (14,349)	30.1% (11,710)	22.0% (8,504)	15.5% (6,039)
CNM	47.5% (6,637)	49.7% (6,883)	42.3% (5,870)	32.3% (4,490)	25.3% (3,522)
Years' Experience					
<= 12 Years	52.0% (61,099)	58.9% (68,926)	45.9% (54,132)	44.9% (52,604)	26.4% (30,890)
12 to 21 Years	46.5% (51,263)	52.0% (57,406)	44.6% (49,539)	43.8% (48,469)	24.2% (26,699)
21 to 36 Years	45.2% (48,667)	49.8% (53,611)	39.5% (42,770)	37.2% (39,956)	22.6% (24,423)
>= 36 Years	33.6% (24,301)	37.7% (27,362)	29.0% (20,864)	23.4% (16,736)	16.5% (11,884)
Increased Workload					
No	34.1% (68,306)	38.0% (76,039)	28.3% (56,650)	27.9% (55,757)	15.2% (30,404)
Yes	57.2% (149,677)	63.2% (165,079)	52.2% (137,141)	48.8% (127,150)	30.5% (79,686)
Direct Patient Care					
No	40.8% (36,864)	43.2% (39,129)	35.3% (31,951)	32.6% (29,243)	19.4% (17,527)
Yes	48.6% (165,944)	54.7% (186,345)	42.9% (146,997)	40.7% (138,790)	24.3% (82,908)

Note: Dependent variables are binned to identify and isolate respondent characteristics that align with a reported frequency of 'A few times a week' or 'Every day' across each of the five outcomes. Valid N for each item varies based on observed non-response rates; all proportions are reported based on item-level Valid N.

Abbreviations: CNP = Certified Nurse Practitioner, CRNA = Certified Registered Nurse Anesthetist, CNM = Certified Nurse Midwife, CNS = Certified Nurse Specialist

Years' Experience (Deeper Dive)

- **Multivariable Results:**
 - Emotionally Drained (AOR: **1.71**, 95 CI: **1.53 – 1.91**)
 - Used up (AOR: **1.83**, 95 CI: **1.65 – 2.04**)
 - Fatigued (AOR: **2.08**, 95 CI: **1.87 – 2.32**)
 - Burned Out (AOR: **2.17**, 95 CI: **1.93 – 2.44**)
 - End of Their Rope (AOR: **1.95**, 95 CI: **1.70 – 2.24**)

Increased Workload (Deeper Dive)

- **Multivariable Results:**
 - Emotionally Drained (AOR: **3.38**, 95 CI: **3.14 – 3.63**)
 - Used up (AOR: **3.31**, 95 CI: **3.08 – 3.55**)
 - Fatigued (AOR: **2.86**, 95 CI: **2.66 – 3.08**)
 - Burned Out (AOR: **2.84**, 95 CI: **2.63 – 3.07**)
 - End of Their Rope (AOR: **2.57**, 95 CI: **2.35 – 2.82**)

Increased Workload (Deeper Dive)

- 1) Effects of the pandemic are widespread, but most acute among younger APRNs
- 2) Generational shifts
- 3) Value in and unique contributions from all four APRN roles

Questions/Comments