



2024 SCIENTIFIC SYMPOSIUM

From Data to Policy

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Examining the Impact of the COVID-19 Pandemic on the APRN Workforce

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2024 SCIENTIFIC SYMPOSIUM



Agenda

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

2022 National Nursing Workforce Survey

Supplement

The 2017 National Nursing Workforce Survey

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Supplement

The 2020 National Nursing Workforce Survey

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Supplement

The 2022 National Nursing Workforce Survey

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The 2022 National Nursing Workforce Survey

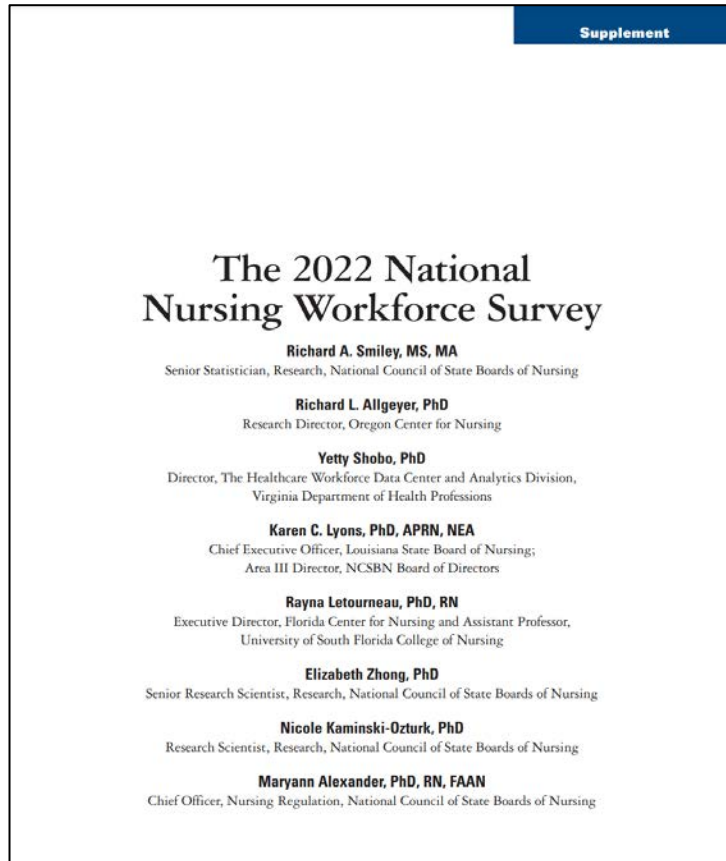
Smiley, R.A., Allgeyer, R.L., Shobo, Y., Lyons, K.C., Letourneau, R., Zhong, E., Kaminski-Ozturk, N., Alexander, M. "The 2022 national nursing workforce survey." *Journal of Nursing Regulation* 14(1) S1-S90.

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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

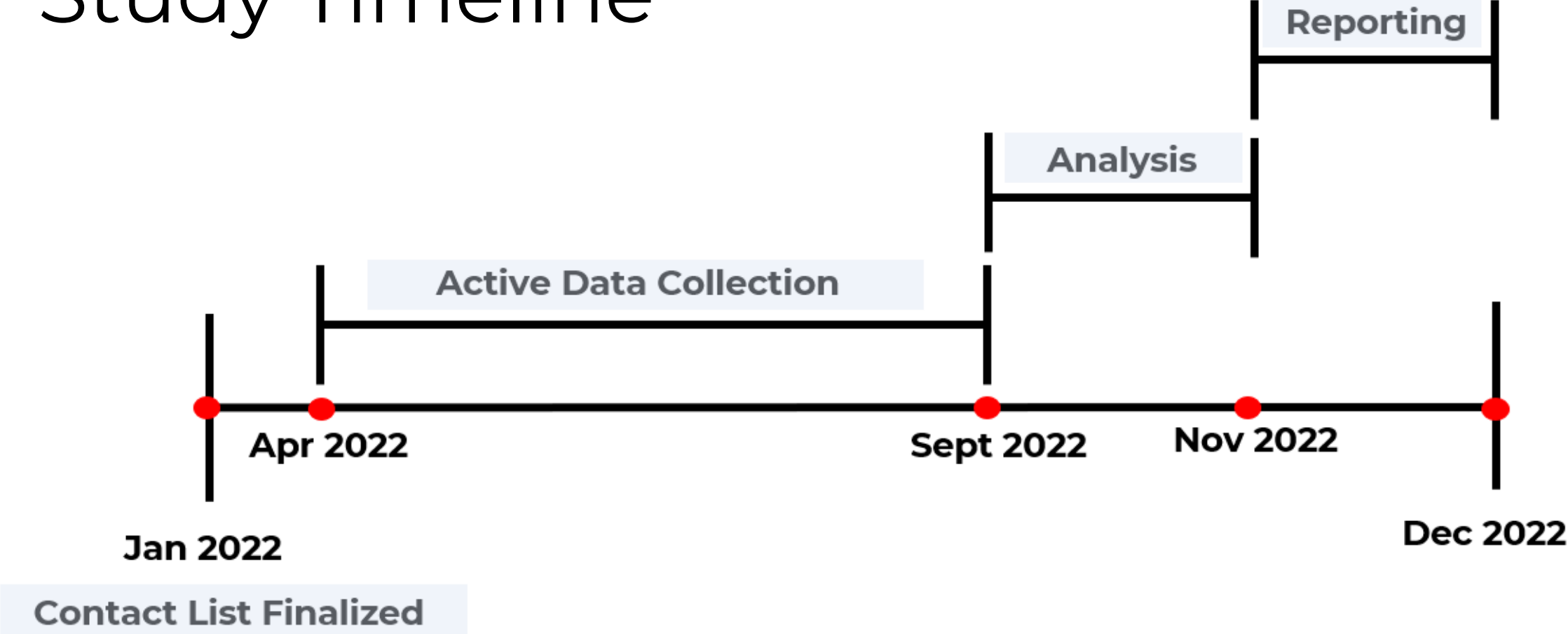
**4. What type of license do you currently hold?
(Select all that apply)**

- 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

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



Examining the Impact of the COVID-19 Pandemic on the Advanced Practice Registered Nurse Workforce in the United States

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:

- APRN (69.6%)
- Family Health (13.3%)
- Hospital (38.5%)
- Direct Patient Care (79.1%)
- 24 years experience (SD: 14.5)
- 40 hours a week (SD: 11.3)
- Median pay highest among CRNAs

Employed in Nursing	Total
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)
Top 5 Professional Title	
Advanced Practice Registered Nurse	324,133 (69.6%)
Staff Nurse	57,704 (12.4%)
Nurse Faculty/Educator	20,141 (4.3%)
Other-Health Related	19,297 (4.1%)
Case Manager	12,605 (2.7%)
Top 5 Primary Specialties	
Family Health	52,105 (13.3%)
Acute Care/Critical Care	43,400 (11.1%)
Other Clinical Specialties	25,124 (6.4%)
Primary Care	23,510 (6.0%)
Pediatrics	22,460 (5.7%)
Top 5 Practice Settings	
Hospital	176,407 (38.5%)
Ambulatory Care Setting	108,957 (23.8%)
Other	69,755 (15.2%)
Community Health	28,248 (6.2%)
School of Nursing	18,671 (4.1%)
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)

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 <i>N</i> for each item varies based on observed non-response rates; all proportions are reported based on item-level Valid <i>N</i> .	

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)
<p>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.</p> <p>Abbreviations: CNP = Certified Nurse Practitioner, CRNA = Certified Registered Nurse Anesthetist, CNM = Certified Nurse Midwife, CNS = Certified Nurse Specialist</p>					

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**)

Key Takeaways

- 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

