

Nurse Practitioner Turnover 2018 vs. 2022

A National Sample Survey of Registered Nurses (NSSRN) Analysis

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Background

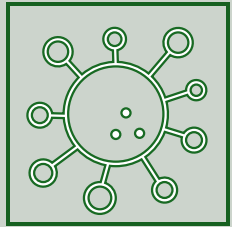
TURNOVER IS EXPENSIVE

PREVIOUS WORK ON TURNOVER FOCUSES LARGELY ON INTENT TO LEAVE

REASONS WHY PEOPLE LEAVE OR STAY MAY DIFFER DURING A “STABLE PERIOD” VS. PANDEMIC

A BETTER UNDERSTANDING OF REASONS CAN HELP TAILOR RECRUITMENT AND RETENTION STRATEGIES

Aims



To compare turnover rates, intention to leave rates, and reasons for leaving or staying during a pre-pandemic (2017-2018) and a mid-pandemic (2021-2022) period for NPs in hospital and outpatient primary care settings.

Methods

- Analysis of 2018 & 2022 National Sample Survey of Registered Nurses data
- Included all actively practicing NPs working in a hospital or outpatient primary care setting on Dec 31, 2017 (NSSRN18) or Dec 31, 2021(NSSRN22).
- A response of “yes” to the question “Have you left the primary nursing position you held on December 31,2017(21)?” was used to signal turnover at the time of survey administration in 2018 and 2022.
- Compared turnover, intention to leave, and reasons for leaving or staying (pre-populated) between 2018 vs. 2022 data
- To account for the complex sampling methods, we applied survey weights in all analyses, as specified by the NSSRN variance estimation guides (NSSRN18 - jackknife replication method, NSSRN22 - successive differences replication method).
 - Inability to combine years of data due to a different number of replicate weights and variance estimation methodologies between years

Methods: Constructing Primary Care vs. Hospital Setting

NSSRN2018

NSSRN2022

Hospital: NPs whose primary employment setting is a critical access hospital, inpatient, emergency, hospital sponsored ambulatory care (includes outpatient surgery and urgent cares), hospital ancillary, or hospital nursing home unit

Outpatient Primary Care:
Primary employment setting is “clinic/ ambulatory” **AND** primary clinical specialty is “ambulatory care – including primary care outpatient settings, except surgical” **or** “primary care”

Outpatient Primary Care:
Primary employment setting is “outpatient” **AND** primary clinical specialty is “ambulatory care – primary care”

Which one of the following best describes the employment **setting** of the primary nursing position you held on December 31, 2017(22)?

For the primary nursing position you held on December 31, 2017(22), in what type of clinical **specialty** did you spend MOST of your patient care time in 2021?

NSSRN 2018 vs 2022 Hospital & PC NP

Demographics Part 1

Turnover doubled
from '18 to '22

Increase in males
and non-white NPs
from '18 to '22

NPs make more in '22
than they did in '18

	2018 (N=12,743, unweighted; 123,680, weighted)			2022 (N=11,208, unweighted; 149,637, weighted)		
Characteristic	Weighted %	95% CI LB	95% CI UB	Weighted %	95% CI LB	95% CI UB
Turnover, Retention, Intent to Leave Dec 2017(21) Job						
Turnover: Left job	10.67%	0.10	0.12	19.25%	0.18	0.20
Retention: Remained in job, no plan to leave	41.85%	0.40	0.44	31.59%	0.30	0.33
Retention: Plan to Leave: < 1 Year	7.26%	0.07	0.08	7.91%	0.07	0.09
Retention: Plan to Leave: 1-3 Years	11.48%	0.11	0.12	11.45%	0.11	0.12
Retention: Plan to Leave: > 3 Years	7.21%	0.07	0.08	6.78%	0.06	0.07
Retention: Plan to Leave: Unsure when	21.52%	0.20	0.23	23.03%	0.22	0.24
Age						
<30	2.72%	0.02	0.03	1.45%	0.01	0.02
30-39	34.66%	0.34	0.36	34.44%	0.33	0.36
40-49	28.67%	0.28	0.30	29.70%	0.29	0.31
50-64	28.68%	0.28	0.30	27.93%	0.27	0.29
65+	5.27%	0.05	0.06	6.48%	0.06	0.07
Sex						
Male	10.19%	0.10	0.11	13.84%	0.13	0.15
Female	89.81%	0.89	0.90	86.16%	0.85	0.87
Race						
White	76.23%	0.75	0.77	67.57%	0.66	0.69
Other	23.77%	0.23	0.25	32.43%	0.31	0.34
Marital Status						
Married, Domestic Partnership	78.54%	0.77	0.80	77.01%	0.76	0.78
Widowed, Divorced, Separated	10.78%	0.10	0.12	12.18%	0.11	0.13
Never Married	10.69%	0.10	0.12	10.81%	0.10	0.12
Household Income						
<\$100,00	15.19%	0.14	0.16	13.52%	0.13	0.14
\$100,001	36.48%	0.35	0.38	33.62%	0.33	0.35
\$150,001	26.35%	0.25	0.28	24.73%	0.24	0.26
>\$200,00	21.98%	0.21	0.23	28.12%	0.27	0.29

NSSRN 2018 vs 2022 Hospital & PC NP Demographics

Part 2

Less new NPs in '22 than '18

More NPs feel they can practice to the fullest extent of their training/education in '22 than '18

More NPs work part time in '22 than '18

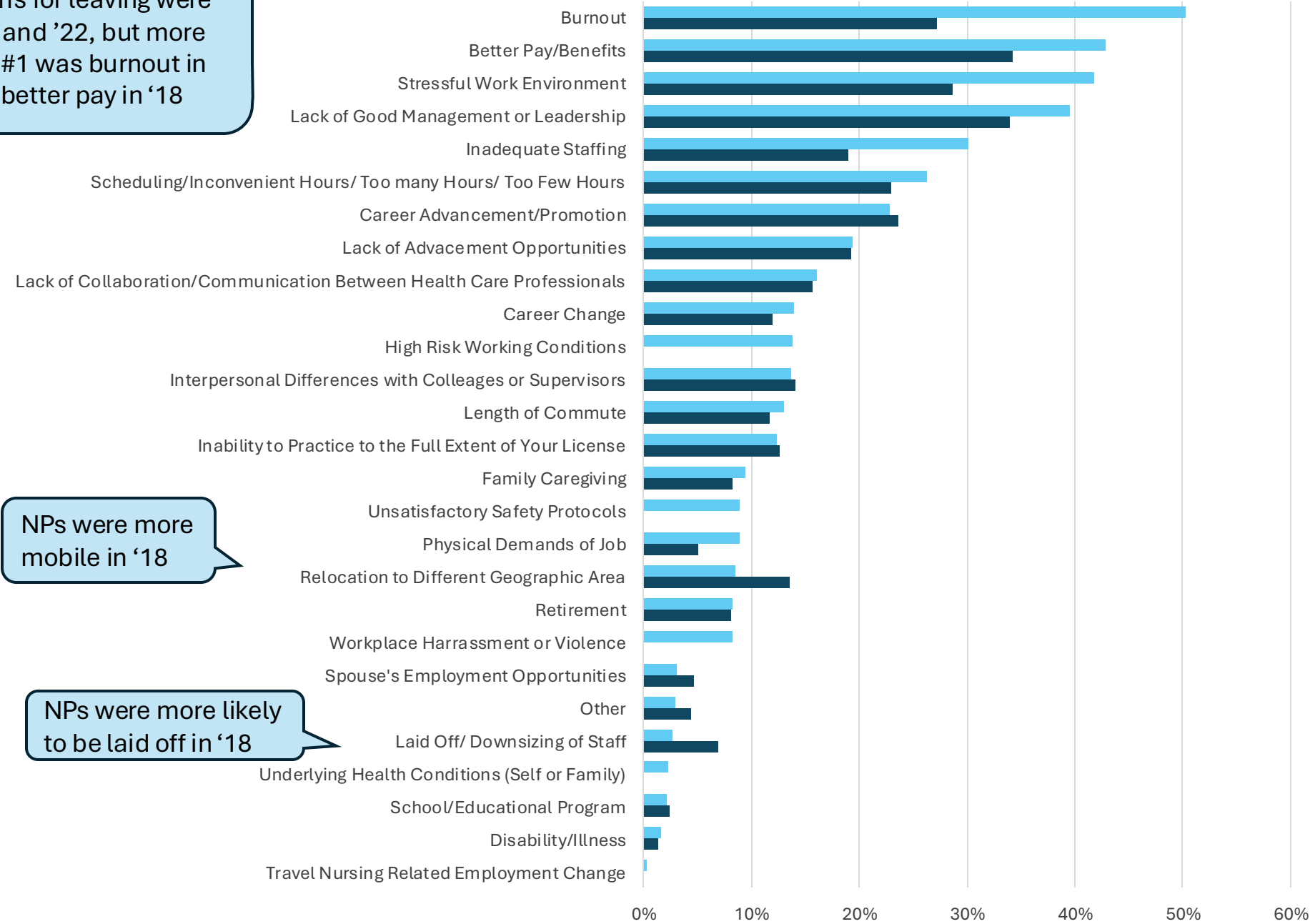
	2018 (N=12,743, unweighted; 123,680, weighted)			2022 (N=11,208, unweighted; 149,637, weighted)		
Characteristic	Weighted %	95% CI LB	95% CI UB	Weighted %	95% CI LB	95% CI UB
Years since NP Degree						
<3 Years	25.78%	0.24	0.27	13.75%	0.13	0.15
3-10 Years	42.71%	0.41	0.44	51.98%	0.51	0.53
11-20 Years	22.36%	0.21	0.23	20.72%	0.20	0.22
21-30 Years	7.11%	0.06	0.08	10.14%	0.09	0.11
>30	2.04%	0.02	0.02	3.41%	0.03	0.04
Organizational Emphasis on Team-Based Care						
A great Extent or Somewhat	85.41%	0.84	0.86	87.05%	0.86	0.88
<Somewhat	14.59%	0.14	0.16	12.95%	0.12	0.14
Organizational Emphasis on Evidence-Based Care						
A great Extent or Somewhat	94.46%	0.94	0.95	93.77%	0.93	0.94
<Somewhat	5.54%	0.05	0.06	6.23%	0.06	0.07
Able to Practice to the Fullest Extent of Training/Education						
Yes	81.25%	0.80	0.82	88.30%	0.88	0.89
No	18.75%	0.18	0.20	11.70%	0.11	0.12
Hospital vs. PC						
Hospital	54.87%	0.53	0.56	57.82%	0.57	0.59
PC	45.13%	0.44	0.47	42.18%	0.41	0.43
Hours/Week						
<30	17.35%	0.16	0.18	37.09%	0.36	0.38
31-40	76.34%	0.75	0.77	53.55%	0.52	0.55
>40hrs	6.31%	0.06	0.07	9.35%	0.09	0.10
Dominant Job Function						
Patient Care	82.25%	0.81	0.83	81.94%	0.81	0.83
Other (Coordination, Supervision, Research, Teaching)	2.65%	0.02	0.03	2.26%	0.02	0.03
No dominant function	15.10%	0.14	0.16	15.80%	0.15	0.17

The top 5 reasons for leaving were the same in '18 and '22, but more frequent in '22; #1 was burnout in '22 and #1 was better pay in '18

Reasons for Leaving, 2018 vs. 2022

NPs were more mobile in '18

NPs were more likely to be laid off in '18



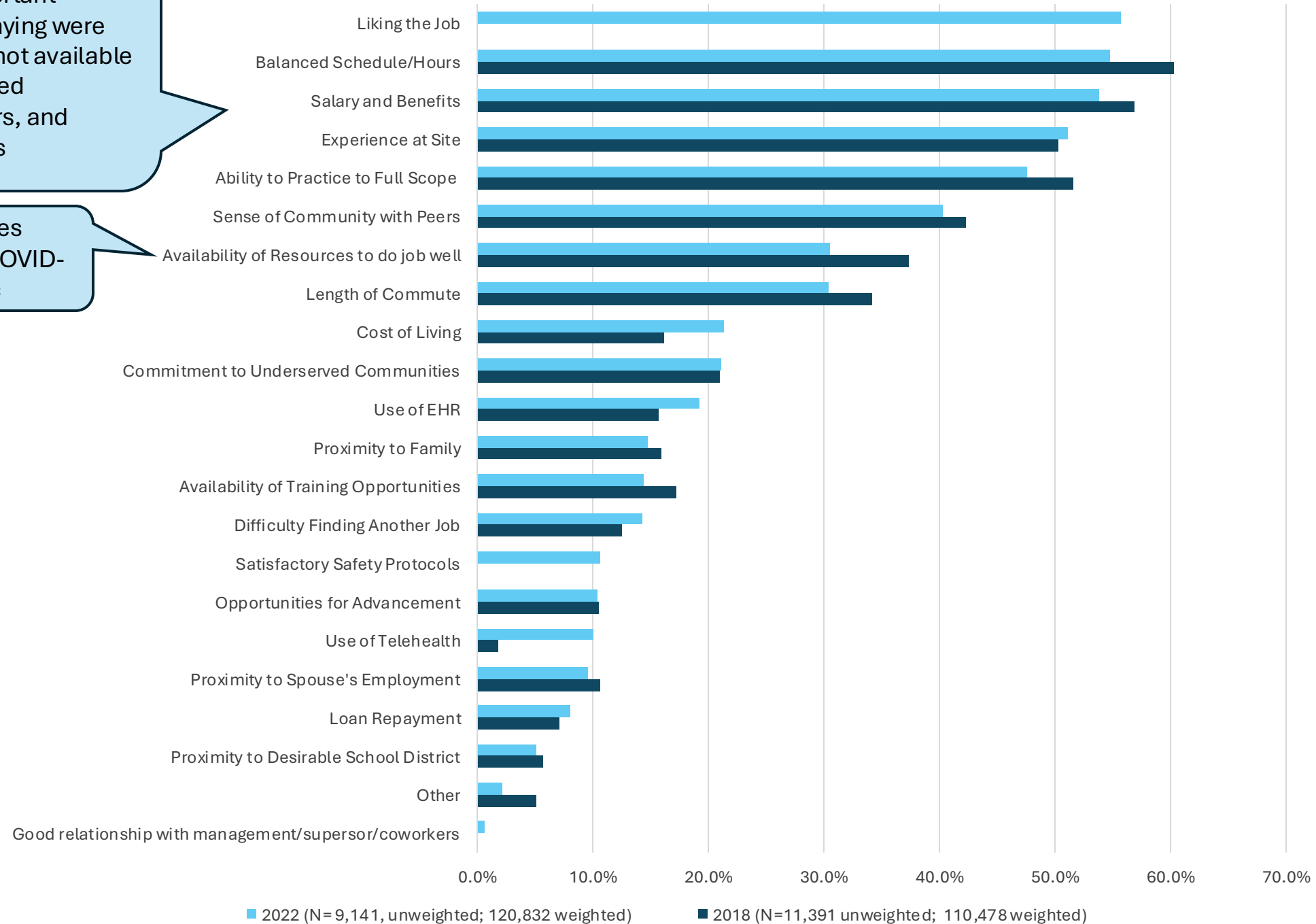
■ Year 2022 (N=2067 weighted, 28805 unweighted)

■ Year 2018 (N=1,352 weighted, 13,202 unweighted)

Reasons for Staying, 2018 vs.2022

The most important reasons for staying were liking the job (not available in '18), balanced schedule/hours, and salary/benefits

Less resources (PPE?) mid COVID-19 pandemic



Logistic Regression: Drivers of Leaving Employment Setting

Part 1

Age not important in '18, but those in middle years were less likely to leave in '22

Females, non-white race, those with lower incomes, and newer NPs are more likely to leave in '18 and '22

left 0 "no" 1"yes"	2018					2022				
Characteristic (ref group)	Odds Ratio	Jknife SE	P>t	95% CI LB	95% CI UB	Odds Ratio	SDR* SE	P>z	95% CI LB	95% CI UB
Age (<30 years)										
30-39	0.86	0.21	0.54	0.53	1.39	0.81	0.14	0.21	0.58	1.13
40-49	0.79	0.20	0.37	0.48	1.32	0.59	0.10	0.00	0.42	0.82
50-64	0.84	0.21	0.50	0.51	1.39	0.70	0.12	0.04	0.49	0.98
65+	1.74	0.51	0.06	0.97	3.11	1.10	0.23	0.65	0.73	1.64
Sex (male)										
FEMALE	1.38	0.21	0.04	1.02	1.87	1.24	0.15	0.07	0.98	1.57
Marital Status (Married or in domestic partnership)										
WIDOWED, DIVORCED	0.96	0.15	0.79	0.70	1.31	1.02	0.09	0.79	0.86	1.22
NEVER MARRIED	0.91	0.16	0.57	0.64	1.27	1.05	0.12	0.68	0.84	1.32
Race (White)										
OTHER	1.39	0.18	0.01	1.07	1.80	1.17	0.08	0.02	1.02	1.34
Household Income (<\$100,000)										
\$100,001 TO \$150,000	0.57	0.08	0.00	0.44	0.75	0.73	0.09	0.01	0.58	0.92
\$150,001 TO \$200,000	0.68	0.10	0.01	0.50	0.91	0.72	0.11	0.03	0.53	0.96
>\$200,000	0.58	0.09	0.00	0.43	0.79	0.69	0.10	0.01	0.52	0.91
Years since NP Degree (<3years)										
3-10 years	0.74	0.09	0.02	0.58	0.94	0.74	0.06	0.00	0.63	0.85
11-20 years	0.55	0.08	0.00	0.42	0.73	0.49	0.07	0.00	0.37	0.63
21-30 years	0.61	0.10	0.00	0.45	0.84	0.51	0.08	0.00	0.37	0.68
>30 years	0.60	0.32	0.34	0.21	1.74	0.45	0.08	0.00	0.32	0.65

Logistic Regression: Drivers of Leaving Employment Setting

Part 2

Organizational emphasis of team-based care mattered in both years, but evidence-based care mattered more in '22.

There was an increase in NPs reporting ability to practice to their full scope from '18 to '22.

Setting (and part-time) did not matter in '18 but PC more likely to leave compared to hospital in '22 (and >40 hrs more likely to leave vs. <30 hrs)

left 0 "no" 1"yes"	2018					2022				
Characteristic (ref group)	Odds Ratio	Jknife SE	P>t	95% CI LB	95% CI UB	Odds Ratio	SDR* SE	P>z	95% CI LB	95% CI UB
Organizational Emphasis on Team Based Care (<i>a great extent or somewhat</i>)										
<Somewhat	1.42	0.18	0.01	1.10	1.83	1.33	0.13	0.00	1.09	1.62
Organizational Emphasis on Evidence Based Care (<i>a great extent or somewhat</i>)										
<Somewhat	1.18	0.24	0.41	0.79	1.75	1.43	0.20	0.01	1.09	1.89
Ability to Practice to Full Extent of Training/Education (<i>Yes</i>)										
NO	2.26	0.24	0.00	1.84	2.78	1.45	0.16	0.00	1.17	1.79
Hospital										
Primary Care	1.04	0.10	0.69	0.86	1.27	1.30	0.11	0.00	1.10	1.53
Hours/Week (<30 hrs)										
31-40 hrs	0.99	0.11	0.91	0.79	1.23	0.90	0.07	0.19	0.78	1.05
>40hrs	0.92	0.20	0.70	0.59	1.42	1.36	0.16	0.01	1.09	1.70
Dominant Job Function (<i>Patient Care</i>)										
Other	1.35	0.40	0.32	0.75	2.44	1.46	0.35	0.12	0.91	2.34
No Dominant Fun	1.03	0.15	0.85	0.77	1.38	0.89	0.10	0.30	0.72	1.11

So what?

NP turnover nearly doubled between 2018 and 2022.

Burnout and a stressful work environment were cited as top reasons for leaving at higher rates in 2022.

Although turnover did not vary by hospital vs. primary care setting in 2018, NPs in primary care were more likely to leave than hospital NPs in 2022

The relative “importance” of reasons people leave or stay is similar between years.

Modifiable factors could reduce NP turnover: Better pay/benefits, balanced schedule, good management/leadership, ability to practice to one’s full scope, attention to identifying/addressing burnout, fostering a less stressful work environment

Thank You



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