Certified nurse midwives: Career pathways and employment experiences

Kyla Woodward, PhD, RN
University of Washington School of Nursing
University of Washington Center for Health Workforce Studies

Paula Kett, PhD, MPH, RN
University of Washington Center for Health Workforce Studies

centerforhealth workforcestudies
UNIVERSITY of WASHINGTON

Disclosures

Nothing to disclose

Background

- Midwifery-led care – associated with **improved birth outcomes** and **reduced birth outcome inequities**
- **Underutilization of the midwifery workforce** (~10% births attended)
  - medical model dominant for perinatal care
  - barriers to practice
- Some **growth in recent years** → need for **increased diversity**
- Better understanding of **barriers to entering** this career and **employment experiences** that may contribute to recruitment and retention

Study Objective

- To explore how certified nurse midwives' (CNMs) sociodemographics, career pathways, and job experiences **changed over time** and **compared to that of other APRNs**, including those providing women's health care.

Methods

- **Data:** 2018 and 2022 National Sample Survey of Registered Nurses (NSSRN)
  - HRSA collects data every 4 years (or thereabouts)
  - ~50,000 actively licensed RNs across the US, with and without advanced nursing degrees or roles
  - Public use files available for download
- Limitations
  - Public use crosswalks available but data harmonization not consistent
  - Changes in variables AND coding structures
  - 2018 weighting issues underrepresented Black RNs and overrepresented Hispanic RNs
- We restricted sample to RNs licensed and practicing as APRNs

Methods

- **Primary predictor:**
  - APRN group → CNMs, Women's health care APRNs, all other APRNs
- **Outcomes:**
  - **Career pathways –** prior healthcare jobs, education, financing, remaining debt
  - **Employment experience** – years since highest nursing, setting, earnings (full-time), scope of practice
- **Logistic regression analysis → predicted probabilities (2022 focus)**

Findings – Demographics (N=787,576, weighted sums)

	2022 N=413,747			2018 N=373,829		
	CNM n=12,547	Women's Health n= 21,703	Other APRN n=379,497	CNM n=9,862	Women's Health n=22,529	Other APRN n=341,438
Sex (female)	98.1%	96.3%	82.7%	97.3%	97.9%	88.9%
Age, mean (SD)	51.6 (14.0)	48.6 (11.7)	46.8 (11.3)	50.7 (11.0)	50.5 (11.6)	47.3 (11.7)
≤29	0.4%	0.7%	1.7%	0.9%	2.3%	3.2%
30-39	27.4%	27.2%	31.8%	20.3%	22.6%	29.1%
40-49	24.2%	28.3%	28.5%	23.9%	17.4%	26.6%
50-64	21.2%	30.9%	29.4%	43.8%	45.8%	33.1%
65+	26.9%	12.9%	8.7%	11.3%	11.9%	8.1%
Race						
Asian	7.4%	4.7%	8.2%	3.9%	3.4%	5.3%
Black	15.0%	11.5%	13.3%	1.6%	4.3%	9.0%
White	65.1%	80.3%	73.3%	93.0%	89.1%	80.1%
Other	12.5%	3.5%	5.3%	1.5%	3.3%	5.6%
Hispanic	12.1 %	6.4%	7.7%	4.3%	8.8%	9.5%

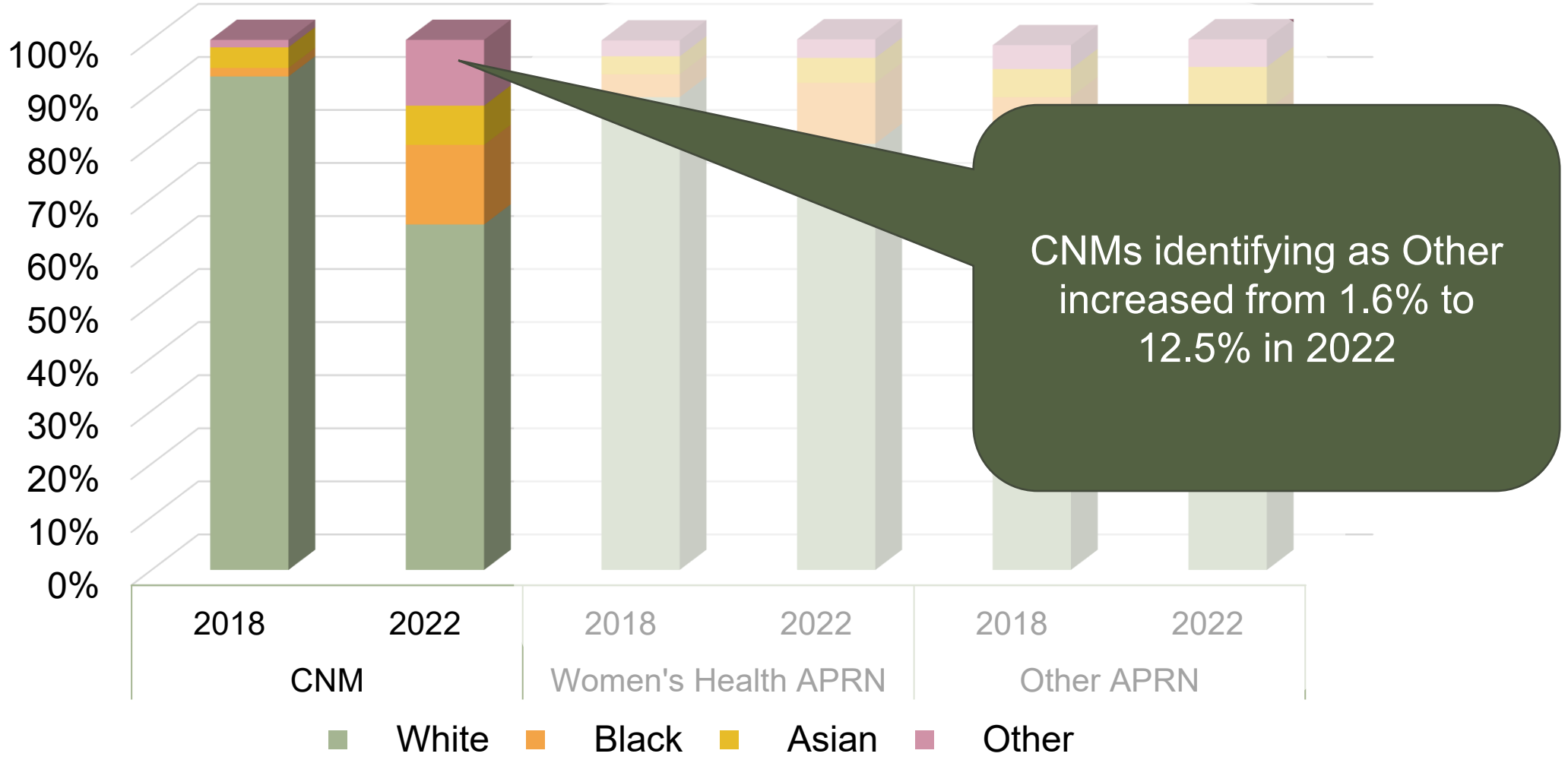
Findings – Demographics (N=787,576, weighted sums)

	2022 N=413,747			2018 N=373,829		
	CNM n=12,547	Women's Health n= 21,703	Other APRN n=379,497	CNM n=9,862	Women's Health n=22,529	Other APRN n=341,438
Sex (female)	98.1%	96.3%	82.7%	97.3%	97.9%	88.9%
Age, mean (SD)	51.6 (14.0)	48.6 (11.7)	46.8 (11.3)	50.7 (11.0)	50.5 (11.6)	47.3 (11.7)
≤29	0.4%	0.7%	1.7%	0.9%	2.3%	3.2%
30-39	27.4%	27.2%	31.8%	20.3%	22.6%	29.1%
40-49	24.2%	28.3%	28.5%	23.9%	17.4%	26.6%
50-64	21.2%	30.9%	29.4%	43.8%	45.8%	33.1%
65+	26.9%	12.9%	8.7%	11.3%	11.9%	8.1%
Race						
Asian	7.4%	4.7%	8.2%	3.9%	3.4%	5.3%
Black	15.0%	11.5%	13.3%	1.6%	4.3%	9.0%
White	65.1%	80.3%	73.3%	93.0%	89.1%	80.1%
Other	12.5%	3.5%	5.3%	1.5%	3.3%	5.6%
Hispanic	12.1 %	6.4%	7.7%	4.3%	8.8%	9.5%

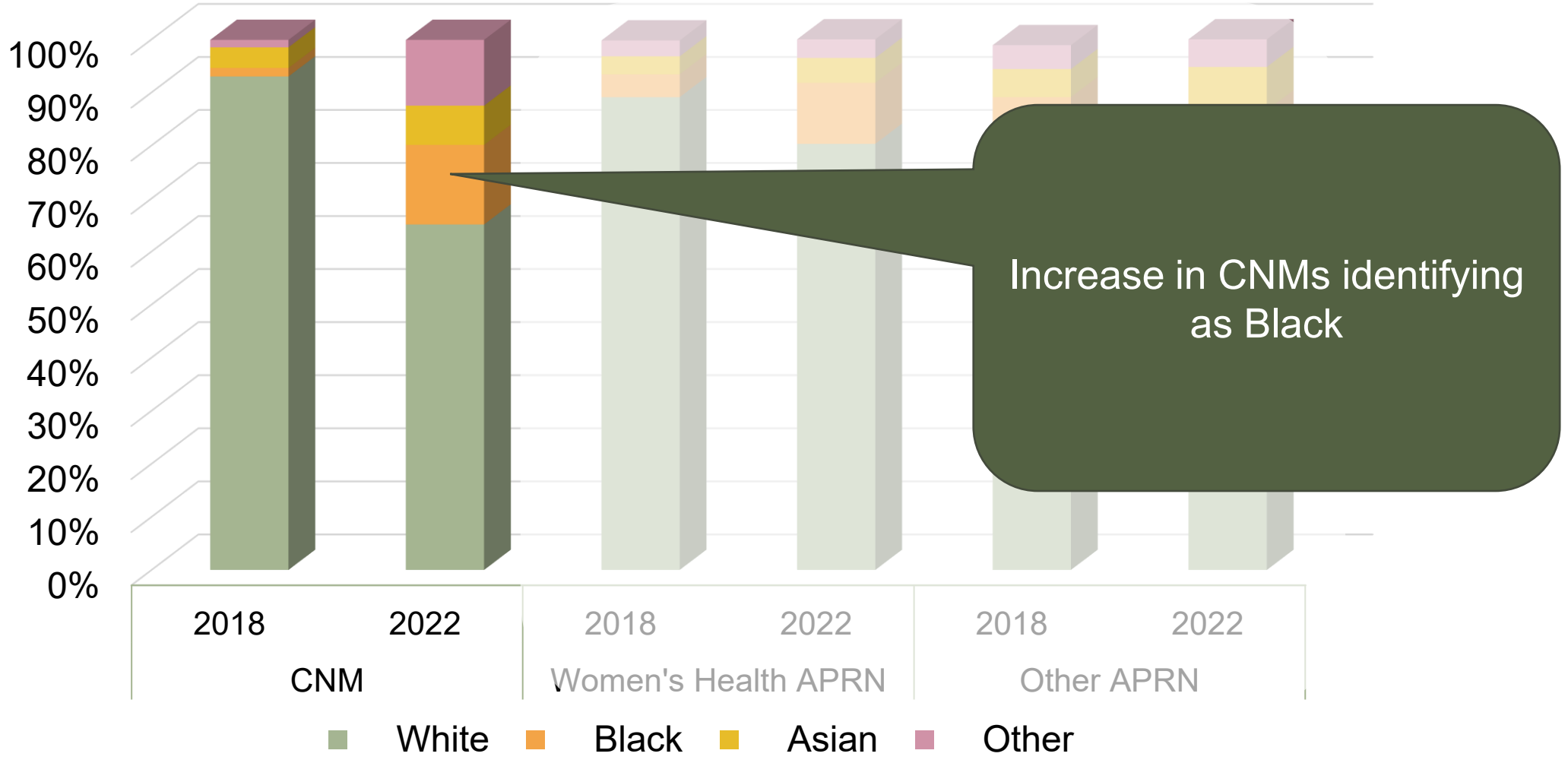
Findings – Demographics (N=787,576, weighted sums)

	2022 N=413,747			2018 N=373,829		
	CNM n=12,547	Women's Health n= 21,703	Other APRN n=379,497	CNM n=9,862	Women's Health n=22,529	Other APRN n=341,438
Sex (female)	98.1%	96.3%	82.7%	97.3%	97.9%	88.9%
Age, mean (SD)	51.6 (14.0)	48.6 (11.7)	46.8 (11.3)	50.7 (11.0)	50.5 (11.6)	47.3 (11.7)
≤29	0.4%	0.7%	1.7%	0.9%	2.3%	3.2%
30-39	27.4%	27.2%	31.8%	20.3%	22.6%	29.1%
40-49	24.2%	28.3%	28.5%	23.9%	17.4%	26.6%
50-64	21.2%	30.9%	29.4%	43.8%	45.8%	33.1%
65+	26.9%	12.9%	8.7%	11.3%	11.9%	8.1%
Race						
Asian	7.4%	4.7%	8.2%	3.9%	3.4%	5.3%
Black	15.0%	11.5%	13.3%	1.6%	4.3%	9.0%
White	65.1%	80.3%	73.3%	93.0%	89.1%	80.1%
Other	12.5%	3.5%	5.3%	1.5%	3.3%	5.6%
Hispanic	12.1 %	6.4%	7.7%	4.3%	8.8%	9.5%

Findings – Changes in Racial Composition



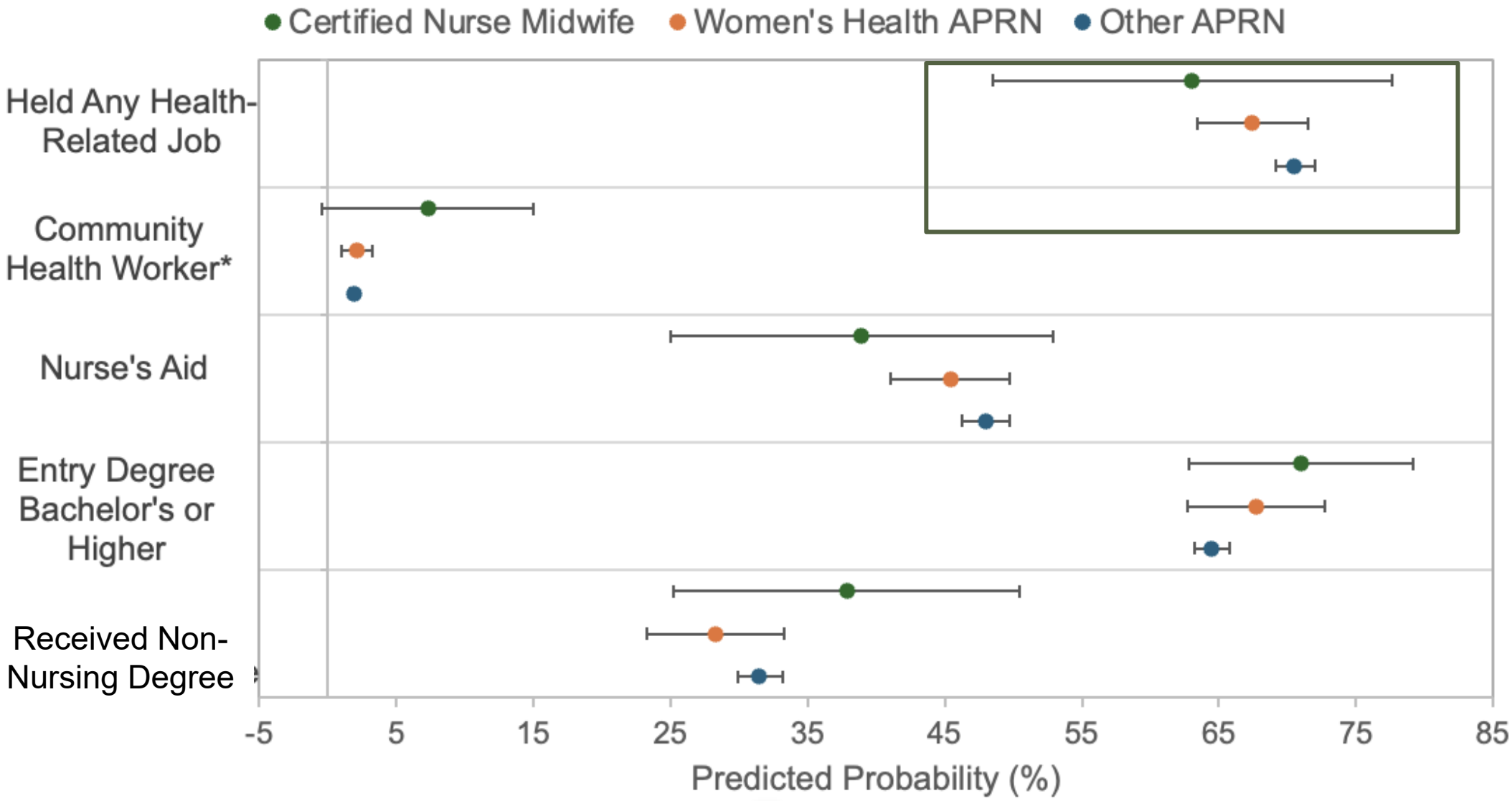
Findings – Changes in Racial Composition



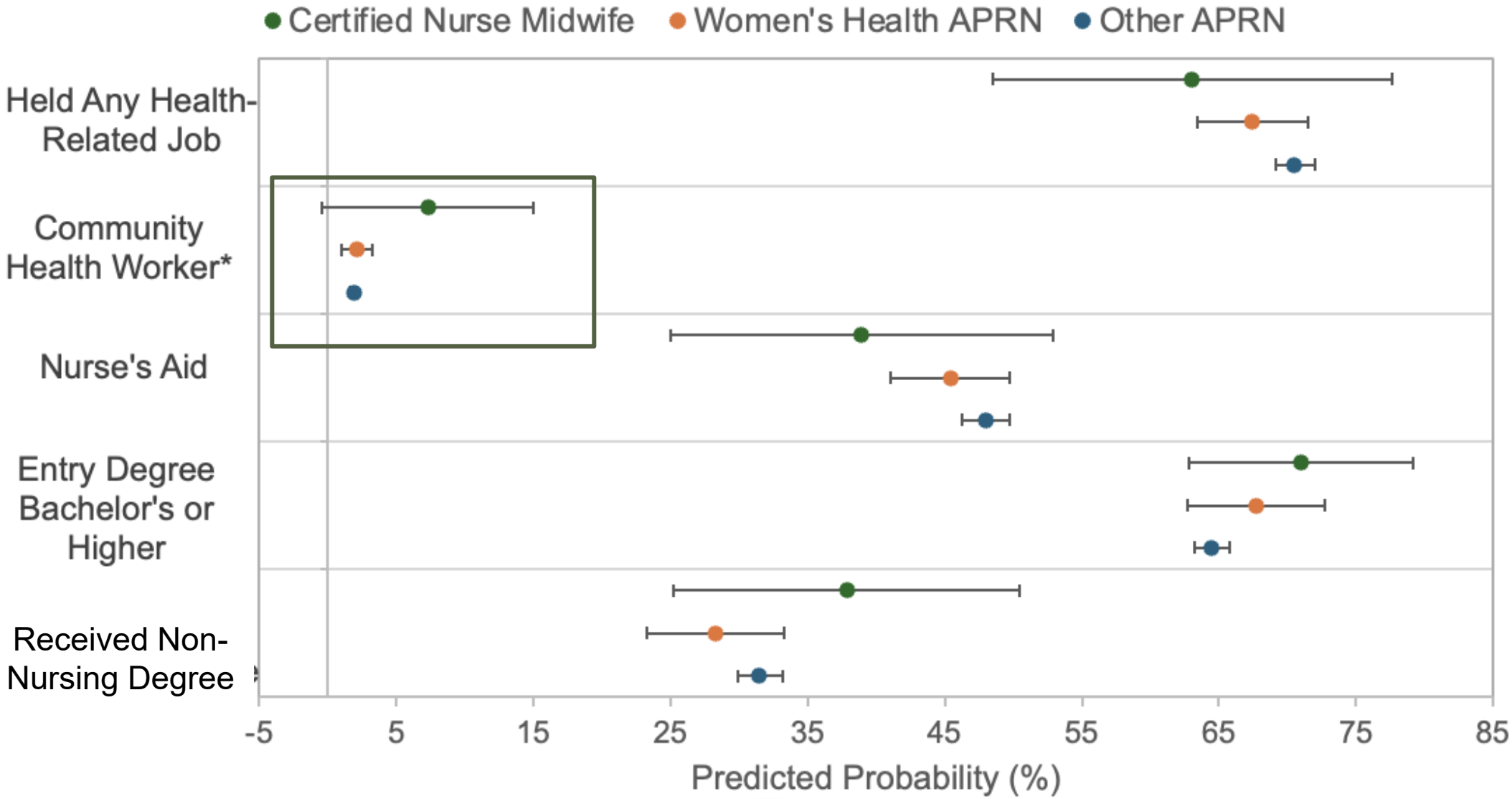
Findings – Career Pathways CNMs/APRNs

	CNM n=12,547	Women's Health APRN n=21,703	Other APRN n=379,497
Health-related job prior to RN	35.8%	32.0%	29.6%
Community health worker (CHW)*	8.8%	1.9%	1.9%
Post-secondary degree prior to RN	42.5%	30.3%	38.9%
First RN degree			
Less than bachelor's degree	31.7%	33.8%	35.3%
Bachelor's degree	59.2%	57.7%	55.2%
Master's or doctoral degree	9.1%	8.5%	9.5%
Received non-nursing academic degree	38.5%	27.7%	31.6%

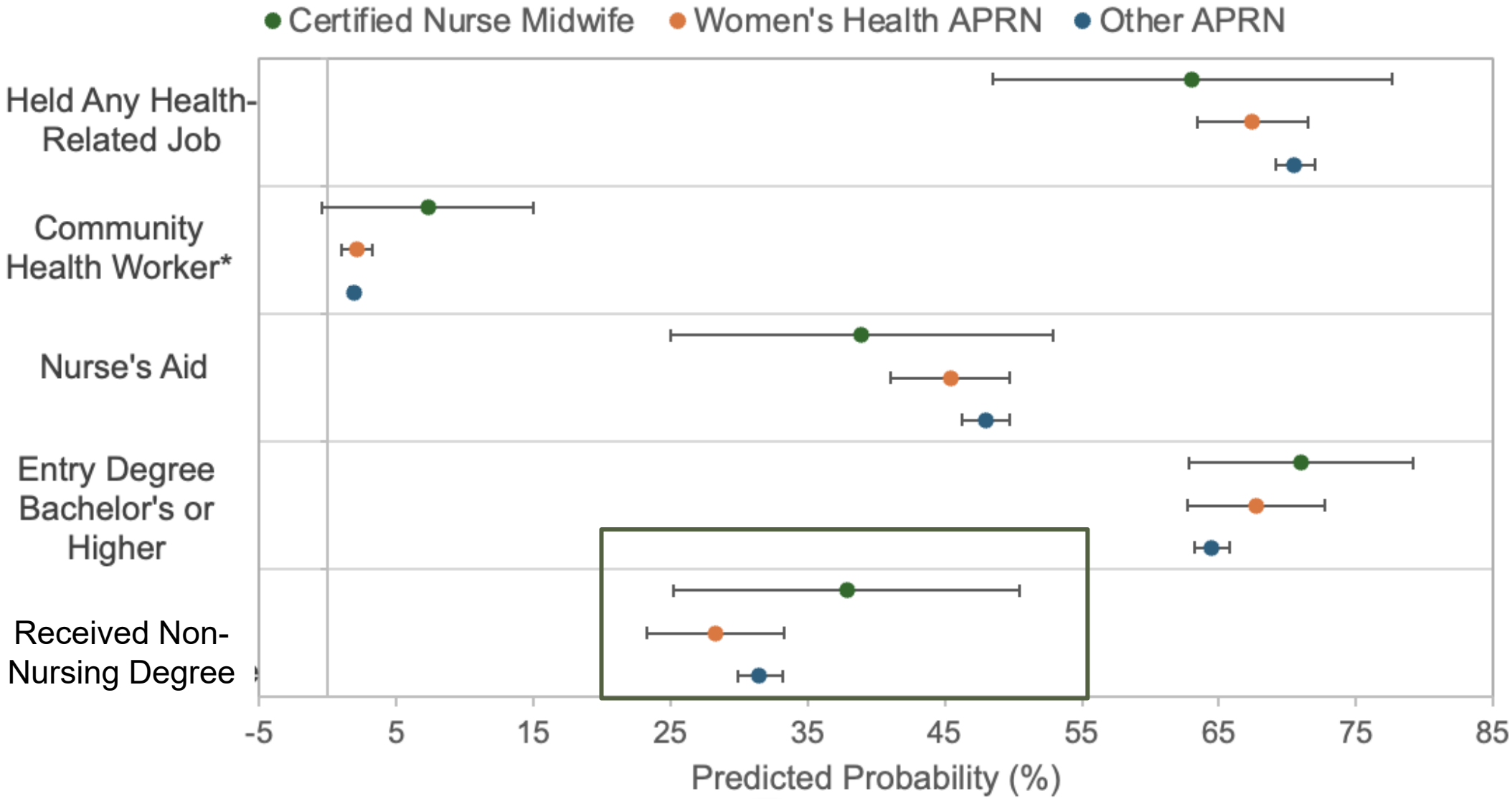
Career Pathway Predicted Probabilities by APRN Status from NSSRN 2022



Career Pathway Predicted Probabilities by APRN Status from NSSRN 2022



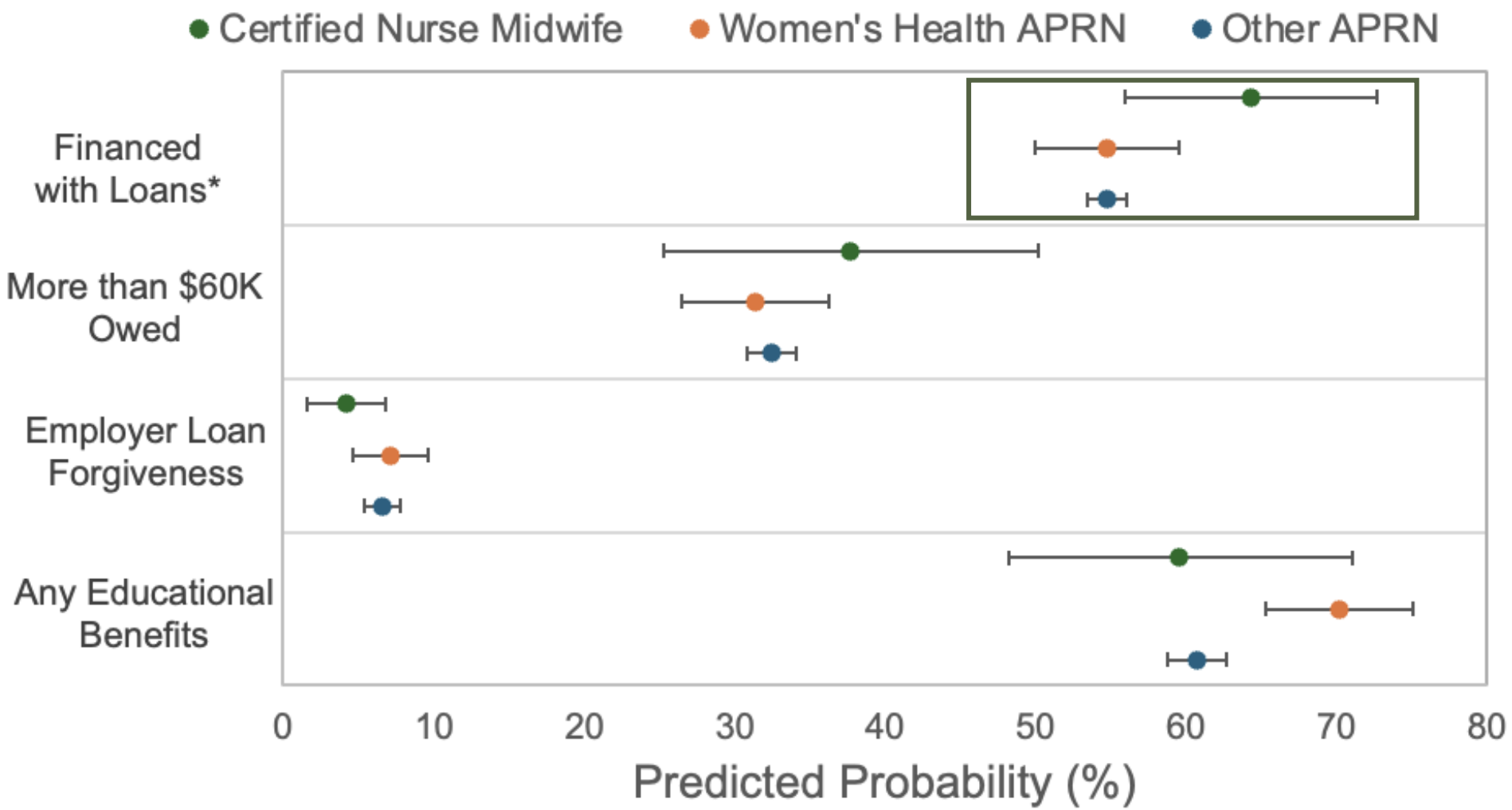
Career Pathway Predicted Probabilities by APRN Status from NSSRN 2022

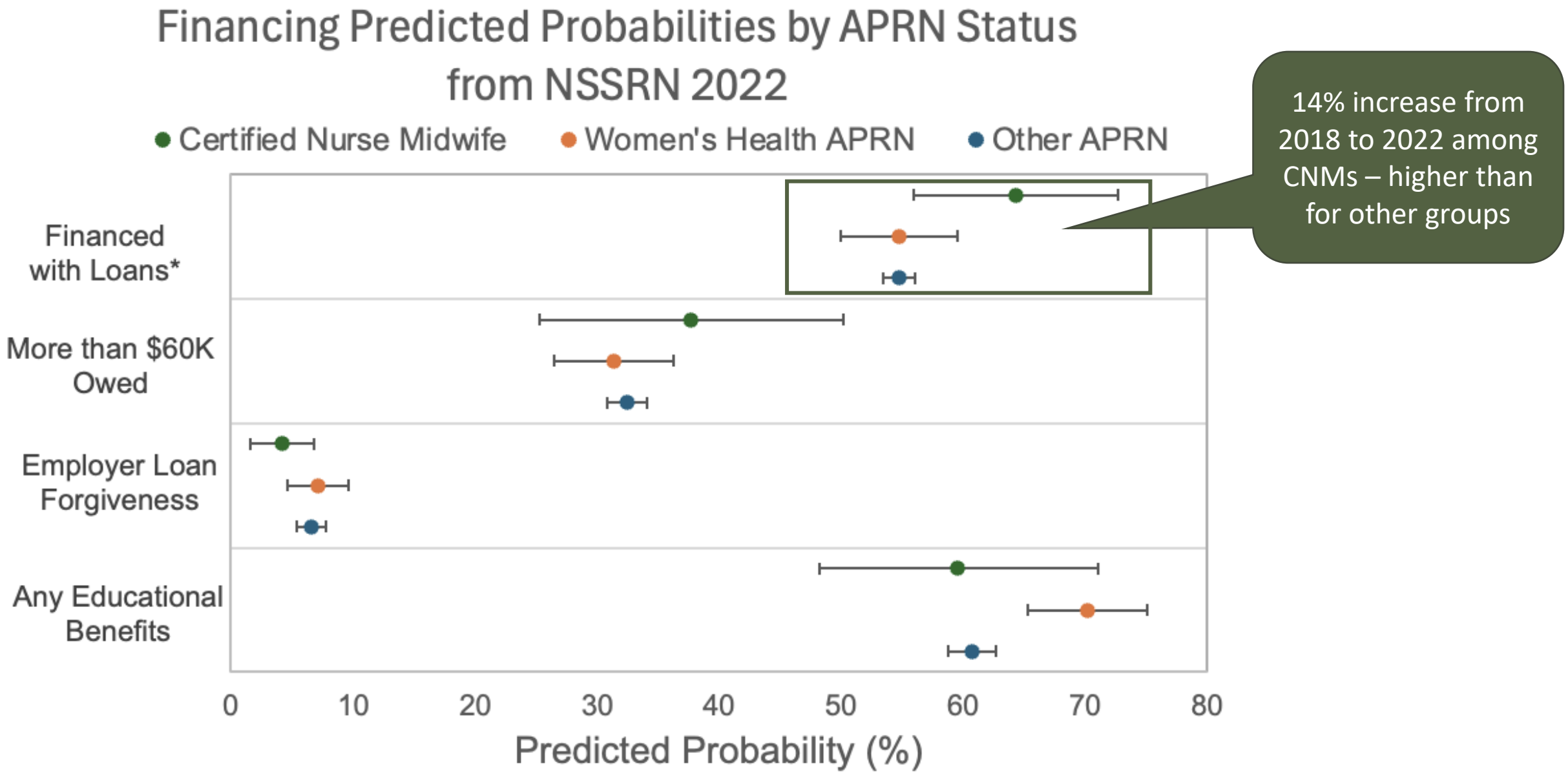


Findings – Financing

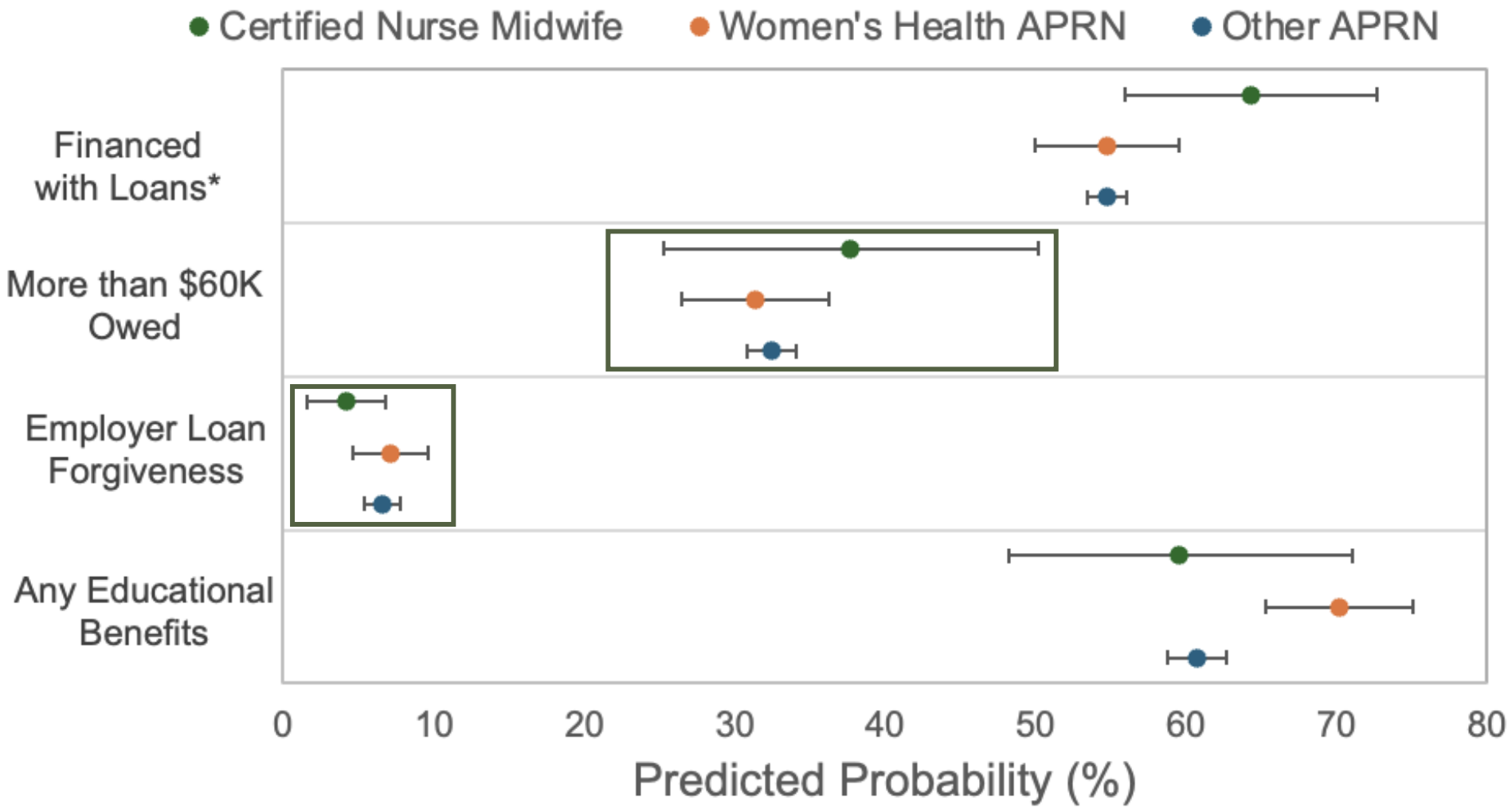
	CNM n=12,547	Women's Health n=21,703	Other APRN n=379,497
Financed initial RN degree with loans	62.7%	55.1%	54.8%
Money borrowed for nursing degrees	75.4%	69.5%	70.6%
Debt still owed from nursing degrees	59.1%	61.6%	64.6%
$60,001 or more	34.0%	27.9%	32.8%
Any education benefits offered	63.3%	71.0%	60.6%
Employer loan forgiveness	4.6%	6.9%	6.6%

Financing Predicted Probabilities by APRN Status from NSSRN 2022



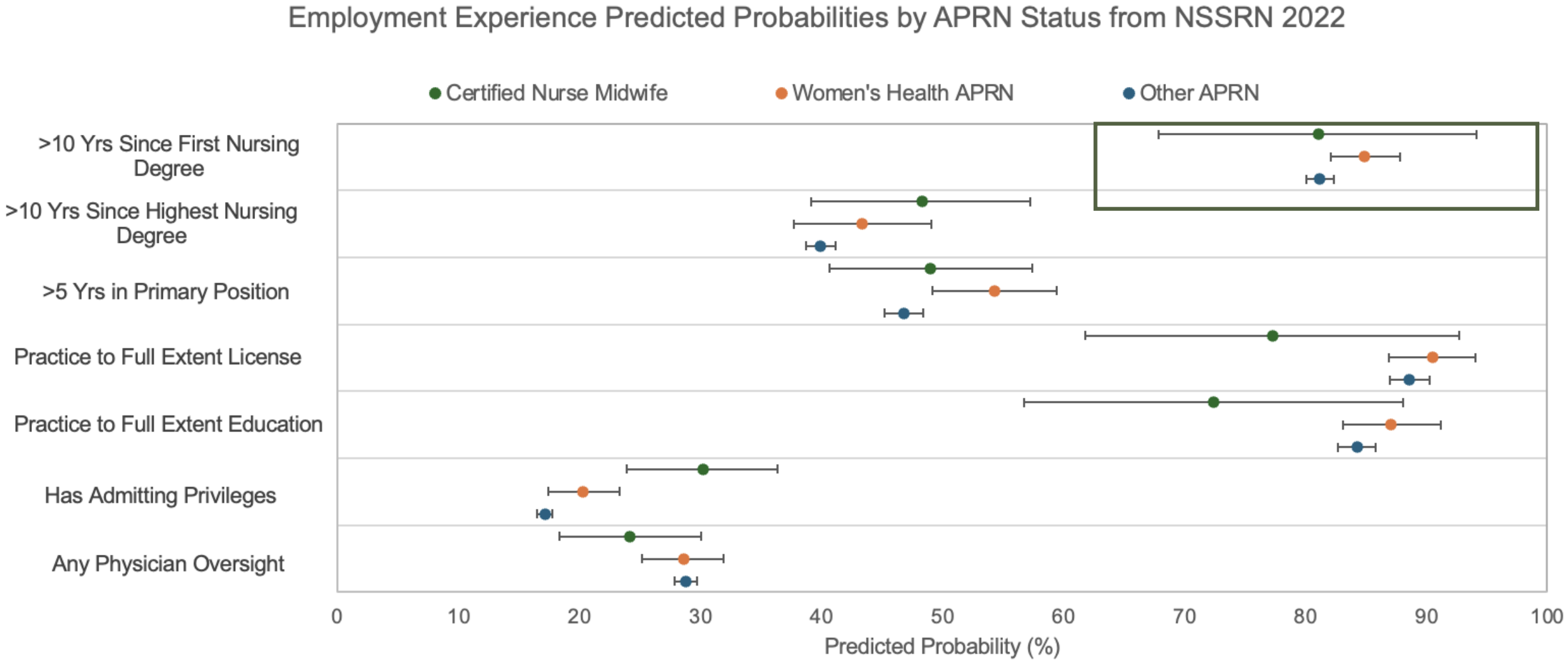

Financing Predicted Probabilities by APRN Status from NSSRN 2022
Certified Nurse Midwife
Women's Health APRN
Other APRN
Financed with Loans*
More than $60K Owed
Employer Loan Forgiveness
Any Educational Benefits
0
10
20
30
40
50
60
70
80
Predicted Probability (%)
14% increase from 2018 to 2022 among CNMs – higher than for other groups

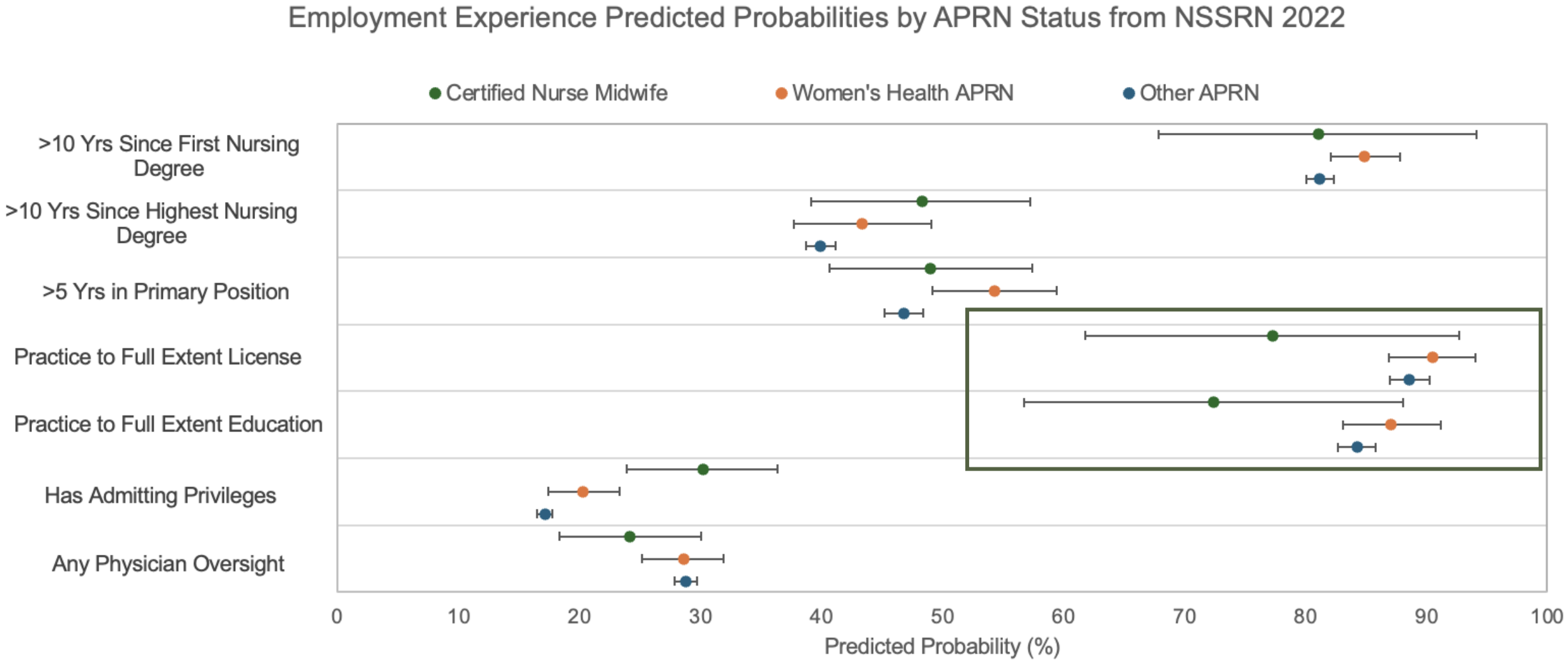
Financing Predicted Probabilities by APRN Status from NSSRN 2022



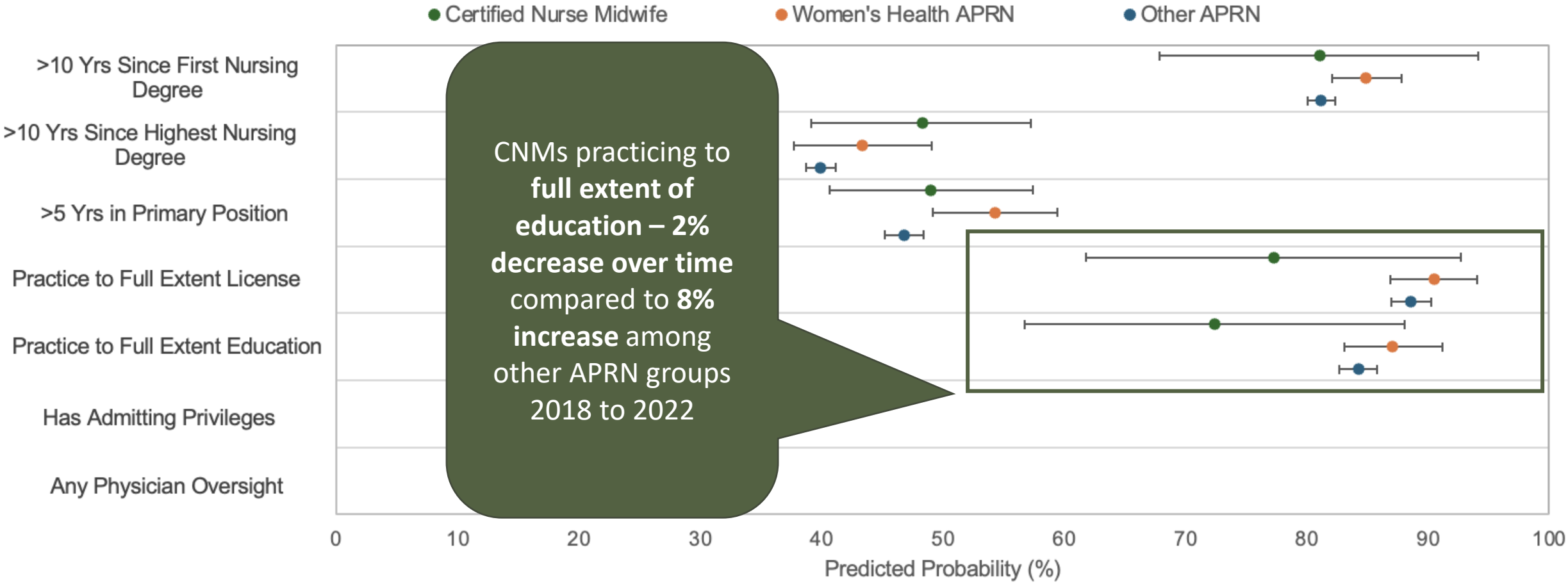
Findings – Employment Experiences

	CNM n=12,547	Women's Health APRN n=21,703	Other APRN n=379,497
Years since completing first RN program*, mean (SD)	25.1 (13.4)	23.2 (11.9)	20.2 (11.1)
Time at primary nursing position			
<1 year	4.7%	10.1%	13.3%
1-5 years	40.9%	32.6%	40.2%
>5 years	54.5%	57.3%	46.4%
Can practice to full extent of license	79.1%	91.5%	88.5%
Can practice to full extent of education	73.8%	88.3%	84.2%
Has hospital admitting privileges*	29.4%	19.2%	17.3%
Annual earnings if employed full time*, mean (SD)	$98,972 (41,666)	$113,661 (44,433)	$124,496 (51,980)


Employment Experience Predicted Probabilities by APRN Status from NSSRN 2022
Certified Nurse Midwife
Women's Health APRN
Other APRN
>10 Yrs Since First Nursing Degree
>10 Yrs Since Highest Nursing Degree
>5 Yrs in Primary Position
Practice to Full Extent License
Practice to Full Extent Education
Has Admitting Privileges
Any Physician Oversight
0
10
20
30
40
50
60
70
80
90
100
Predicted Probability (%)

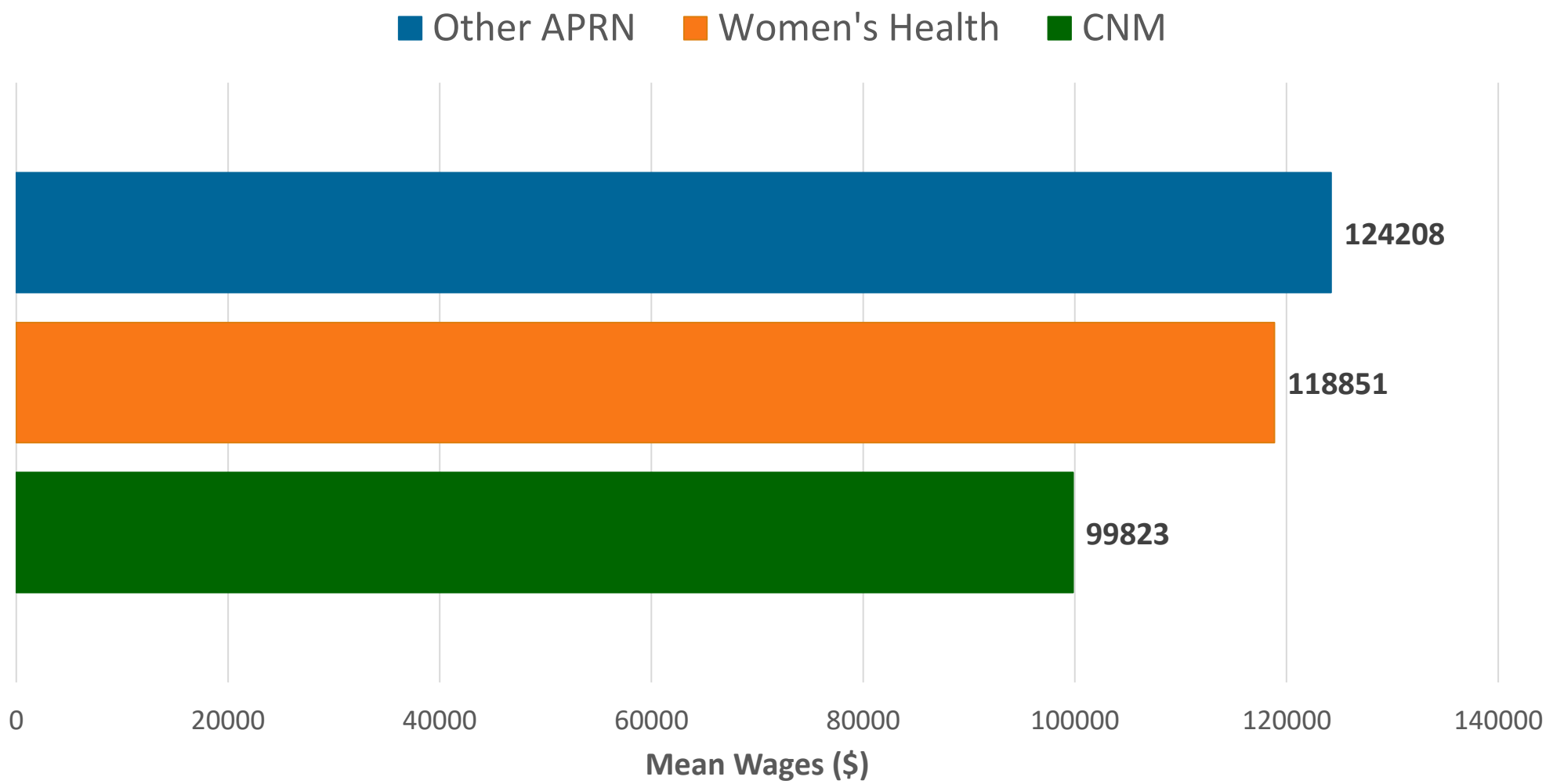

Employment Experience Predicted Probabilities by APRN Status from NSSRN 2022
Certified Nurse Midwife
Women's Health APRN
Other APRN
>10 Yrs Since First Nursing Degree
>10 Yrs Since Highest Nursing Degree
>5 Yrs in Primary Position
Practice to Full Extent License
Practice to Full Extent Education
Has Admitting Privileges
Any Physician Oversight
0
10
20
30
40
50
60
70
80
90
100
Predicted Probability (%)

Employment Experience Predicted Probabilities by APRN Status from NSSRN 2022



CNMs practicing to **full extent of education – 2% decrease over time** compared to **8% increase** among other APRN groups 2018 to 2022

Predicted Mean Wages for 2022



CNMs compared to other APRNs - implications

- Increased size and diversity of CNM workforce
- Unique assets → **More** entering the workforce **with a bachelor's**, higher proportion **worked as CHW**; more have a **non-nursing degree**
- Challenges as well → **Fewer** report being able to **practice at full scope**, have **higher financial burden** (educational debt; lower salaries; fewer with employer loan forgiveness)
- **Policies** needed for addressing **scope of practice barriers** and **salary equity**
- More research needed **examining impact of scope of practice restrictions on career entry**

Acknowledgements

- Thank you to the study team –Shahida Shahrir, Selina Mohammed

This study was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $500,000 with zero percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government. For more information, please visit HRSA.gov.
https://www.hrsa.gov/grants/manage/acknowledge-hrsa-funding

centerforhealth workforcestudies
UNIVERSITY of WASHINGTON

More details and information:
https://familymedicine.uw.edu/chws/

Contact:

Kyla Woodward – kylas@uw.edu
Paula Kett – pmk@uw.edu

Follow us on Facebook and Twitter @uwchws

centerforhealth workforcestudies
UNIVERSITY of WASHINGTON