# Gender Differences in Self-reported Burnout Among New York State Clinicians During the Early Stages of the COVID-19 Pandemic

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### Center for Health Workforce Studies

- The Center for Health Workforce Studies (CHWS) —established in 1996—
  is an academic research center based at the School of Public Health at
  the University at Albany, State University of New York (SUNY)
- Mission: To provide timely, accurate information and conduct policyrelevant research about the health workforce
- Goal: To assist health, professional, and educational organizations, policy makers, planners, and other stakeholders to understand issues related to the supply, demand, distribution, and the use of health workers



# **A Collaborative Project**

- Center for Health Workforce Studies, University at Albany
  - Shen Wang, MPA, MPH
- New York Chapter of American College of Physicians
  - Amanda Allen
  - o Heather Bennett, JD, PhD
  - Lynn Cleary, MD
  - o Louis Snitkoff, MD, MACP
- Dean Akinleye, MPH



### Clinician Stress and Burnout: A Public Health Crisis

- Clinician burnout affects both clinicians and patients
  - Clinician depersonalization and impairment of clinician attention, memory, and executive function
  - Clinician attrition (middle-career physicians)
  - Patient outcomes

(AHRQ, 2017; \*as cited in Linzer, 2018; AAFP, 2017)



### Clinician Stress and Burnout: Stressors/Drivers

- Work-related processes, environments, and culture
- Individual-related factors



Retrieved from <a href="https://www.ahrq.gov/prevention/clinician/ahrq-works/burnout/index.html">https://www.ahrq.gov/prevention/clinician/ahrq-works/burnout/index.html</a>

(Linzer, 2018; West et al., 2018; Shanafelt et al., 2011, 2014, as cited in Alexander, A.G., & Ballou, K.A., 2018; Panagioti et al., 2018, as cited in Linzer, 2018; AHRQ, 2017b; AAFP, 3027; Kane, 2020-a)



# Clinician Wellness Survey Methods

- 34 questions (56 total w/ demographics)
- Distribution method: Email with Survey Monkey link
- Recruitment period: 8/24/2020 9/27/2020
- Intended/target population size: 50,481 NYS clinicians
- With a valid email address: 44,954 clinicians
- **Response rate:** 4,241 clinicians (9.5%)
- Exclusion criteria for burnout analysis: Respondents who
  - Selected "No, I do not provide care and/or serve in an administrative role"
  - Did not complete both questions regarding their burnout status
  - Did not provide a gender of male or female
- Sample size (after exclusion criteria met): 2,544 clinicians



### **Burnout Analysis**

- Gold standard= Maslach Burnout Inventory (MBI)
  - Scores 3 domains:
    - Emotional exhaustion
    - Depersonalization
    - Personal accomplishment
- Dichotomize Burnout
  - No Burnout
    - I enjoyed my work. I had no symptoms of burnout.
    - I was under stress. I didn't have as much energy as I needed, but I didn't feel burned out.
  - o Burnout
    - I was definitely burning out, and I had one or more symptoms of burnout (eg, emotional exhaustion, finding it difficult to concentrate, lack of satisfaction with my achievements, etc.).
    - The symptoms of burnout that I was experiencing wouldn't go away. I thought about work frustrations a lot.
    - I felt completely burned out. I was at the point where I needed to seek help.

### **Potential Confounders**

#### **Self-reported Demographic Variables:**

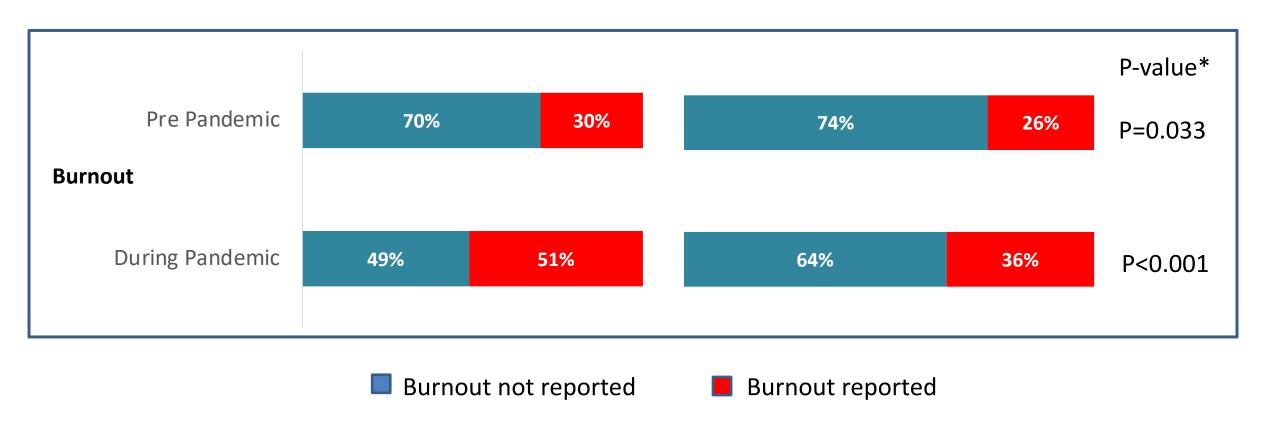
- Gender
- Age
- Race
- Ethnicity
- Clinician type (MD/DO, NP, PA)
- Clinician role (direct patient care, administrative, both)
- MD/DO professional level (Resident, Fellow, Attending)
- Specialty type (PCP, specialist)
- Years of experience as a clinician

- Practice type
- Practice ownership and size
- Practice location (zip code, county, region)
- Professional organization membership (ACP, AAFP, AAP)
- Insurance mix (Medicaid, Medicare, commercial)
- Marital status
- Dependents and their age groups



### **Potential Confounders**

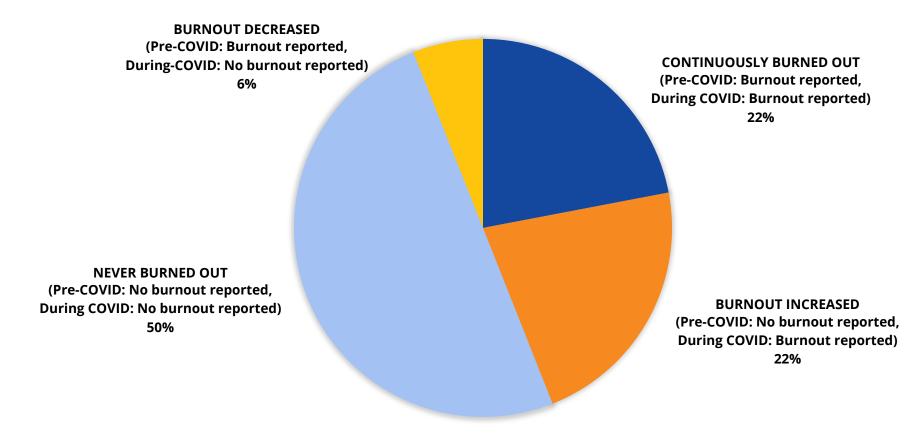
#### **Burnout Rates by Gender Among NYS Clinicians During the Early COVID-19 Pandemic**





# Nearly 1/4th of Respondents Reported an Increase in Burnout

#### NYS Clinicians Reporting Varying Levels of Burnout Change During the Early COVID-19 Period





## Personal and Job Characteristics Associated With Burnout

#### Univariate and Multivariable Analysis of Factors Associated With the Reporting of Increased Burnout

		Proportion reporting		Univariable		Multivariable
	N	increased burnout	uPR (95% C.I.)	P value	aPR (95% CI)	P value
Gender						
Women	1,505	27%	2.02 (1.65 - 2.48)	P<0.0001	1.63 (1.29 - 2.07)	P=<0.0001
Men	1,039	15%	ref		ref	
Clinician Type	1		100			
Administrative duties + patient care	1,038	24%	1.21 (1.00 - 1.46)	P=0.047	1.48 (1.19 - 1.84)	P=0.0004
Patient care only	1,506	21%	ref		ref	
Occupation			60			
Nurse Practitioner or Physician	608	30%	1.79 (1.46 - 2.20)	P<0.0001	1.45 (1.13 - 1.87)	P=0.0041
Assistant			100		300	
Physician (MD/DO)	1,936	20%	ref		ref	
Missing	0					
Age			452	4 4		
35 or younger	237	33%	2.83 (2.06 - 3.89)	P<0.0001	2.55 (1.79 - 3.64)	P<0.0001
36 to 55	1,178	27%	2.15 (1.75 - 2.65)	P<0.0001	2.07 (1.64 - 2.61)	P<0.0001
Over 56 years old	1,124	15%	ref		ref	
Race / Ethnicity		8				
White, non-Hispanic -3	1,633	23%	1.35 (1.00 - 1.81)	P=0.048	1.49 (1.10 - 2.04)	p=0.011
Black, non-Hispanic -2	170	26%	1.59 (1.03 - 2.47)	P=0.038	1.39 (0.88 - 2.18)	P=0.159
Asian - 4	350	18%	ref	ref	-	1 - 1
Hispanic -1	103	24%	1.46 (0.86 - 2.47)	P=0.159	1.45 (0.85 - 2.49)	P=0.172
Other -5	220	22%	1.27 (0.84 - 1.94)	P=0.263	1.41 (0.91 – 2.17)	P=0.121



# **Conclusion and Implications**

- Among NYS clinicians, women were at greater risk of increased burnout following the COVID pandemic, even after controlling for their professional role, age, and race
- The emergency stemming from COVID-19 has specific impacts on women in the healthcare workforce
  - This requires a gender perspective be central to crisis mitigation
- Policies are needed to address clinician burnout, looking both at work and home environments



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### **Questions?**

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