



CSHIIP

Center for the Study of Healthcare
Innovation, Implementation & Policy

Burnout, Turnover, and Telehealth among VA PCPs during the COVID-19 Pandemic

Eric Apaydin, PhD, MPP, MS
Lucinda Leung, MD, PhD, MPH

Center for the Study of Healthcare Innovation, Implementation, & Policy
VA Greater Los Angeles Healthcare System

September 20, 2023



Disclosures

- The presenters have no conflicts to disclose.
- The views expressed are those of the authors and do not represent the views of the U.S. Department of Veterans Affairs or the United States Government.



Poll Question #1

What is your primary role in healthcare?

- Clinical care
- Research
- Administrative
- Other



Poll Question #2

Do you work in primary care?

- Yes – full-time
- Yes – part-time
- No



Objectives

1. Identify the prevalence of burnout in VA primary care before and during the COVID-19 pandemic
2. Understand the relationship between burnout and turnover in primary care
3. Recognize the varying relationships between primary care telework, telehealth, and burnout
4. Explore potential solutions to primary care burnout in the post-pandemic period





A familiar scenario...

Dr. Smith is a VA primary care physician. He usually loves his patients and colleagues, but lately he's been having some issues. Dr. Smith feels emotionally drained at the end of his workday, and is still tired when he gets up the next morning. He notices that he is starting to treat patients as tasks to be completed, rather than people to care for, and at times, he doesn't really care what happens to them. Dr. Smith feels that he doesn't accomplish much in the clinic anymore, and doesn't think that he is meaningfully changing patients' lives.





A familiar scenario...

Dr. Smith is a VA primary care physician. He usually loves his patients and colleagues, but lately he's been having some issues. Dr. Smith feels emotionally drained at the end of his workday, and is still tired when he gets up the next morning. He notices that he is starting to treat patients as tasks to be completed, rather than people to care for, and at times, he doesn't really care what happens to them. Dr. Smith feels that he doesn't accomplish much in the clinic anymore, and doesn't think that he is meaningfully changing patients' lives.

What is Dr. Smith experiencing?



A familiar scenario...

Dr. Smith is a VA primary care physician. He usually loves his patients and colleagues, but lately he's been having some issues. Dr. Smith feels emotionally drained at the end of his workday, and is still tired when he gets up the next morning. He notices that he is starting to treat patients as tasks to be completed, rather than people to care for, and at times, he doesn't really care what happens to them. Dr. Smith feels that he doesn't accomplish much in the clinic anymore, and doesn't think that he is meaningfully changing patients' lives.

What is Dr. Smith experiencing?

Burnout



A familiar scenario...

Dr. Smith is a VA primary care physician. He usually loves his patients and colleagues, but lately he has been having some issues. Dr. Smith feels **emotionally drained** at the end of his workday, and is still tired when he gets up the next morning. He notices that he is starting to **treat patients as tasks** to be completed **rather than people** to care for, and at times, he doesn't really care what happens to them. Dr. Smith feels that he **doesn't accomplish much** in the clinic anymore, and doesn't think that he is meaningfully changing patients' lives.

What is Dr. Smith experiencing?

Burnout



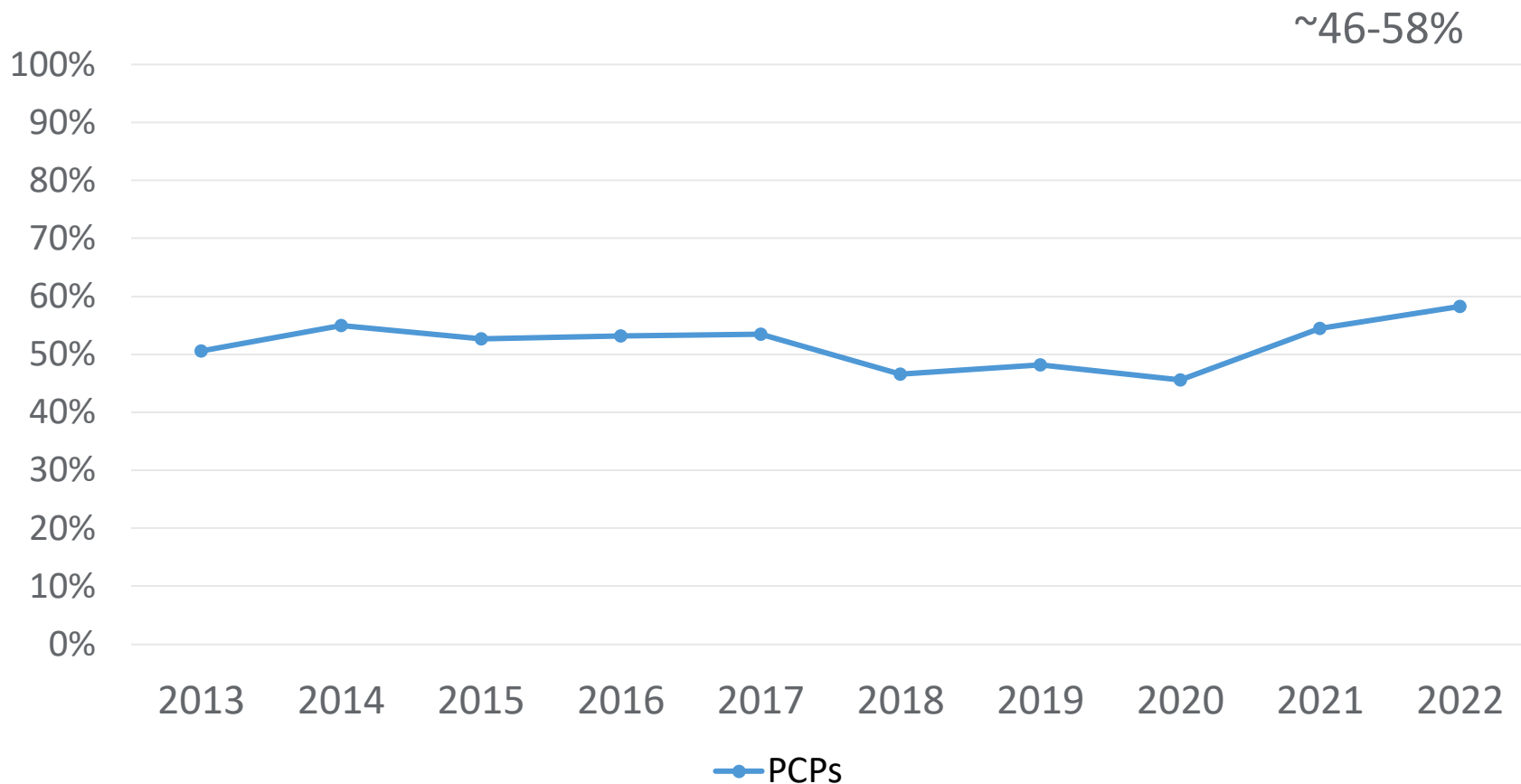
What is burnout?

- **Emotional exhaustion (EE)**
- **Depersonalization (DP)**
- **Reduced personal accomplishment (PA)**





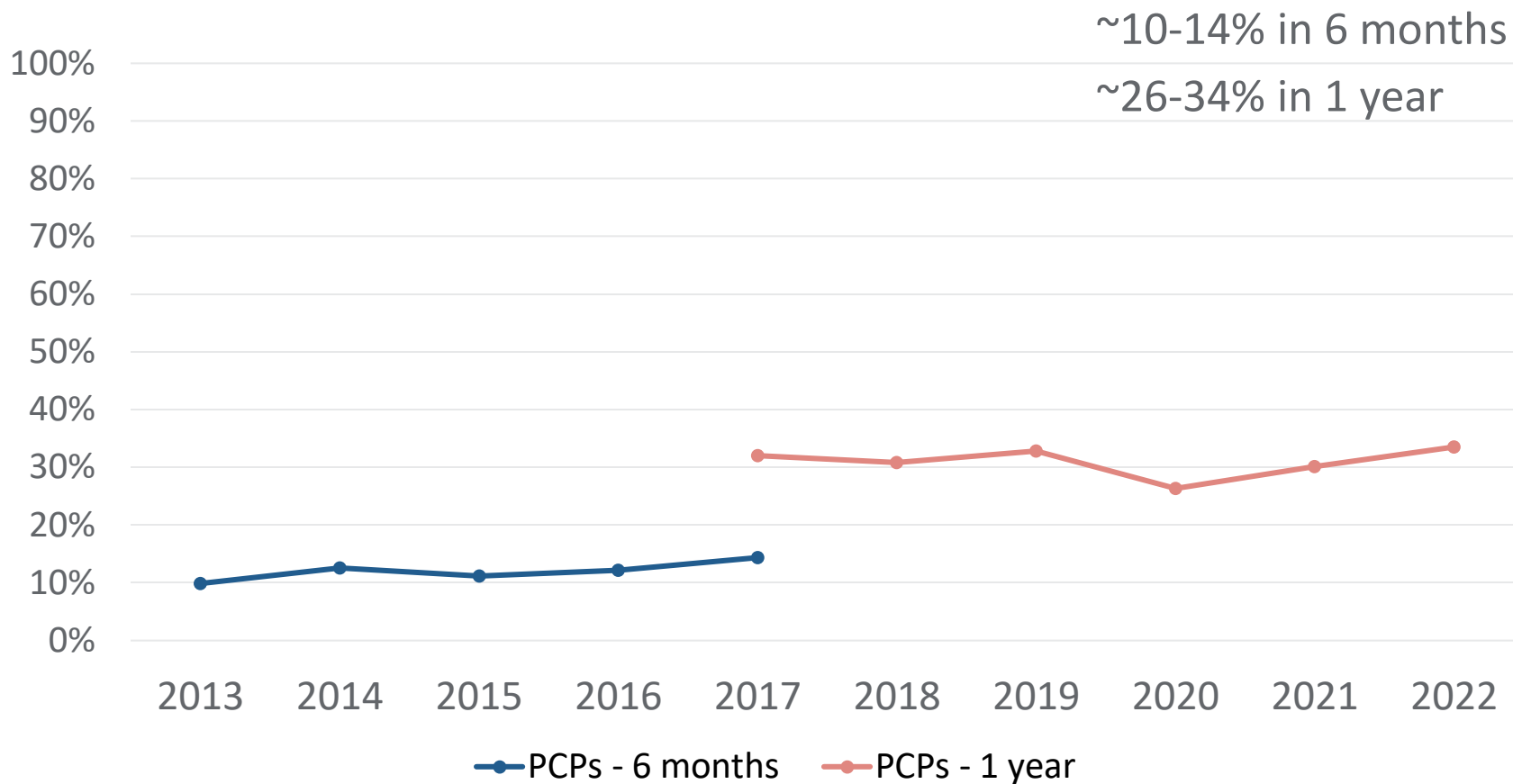
VA PCP Burnout



Note: All Employee Survey data; individual-level national averages; “once a week” or more of EE or DP symptoms



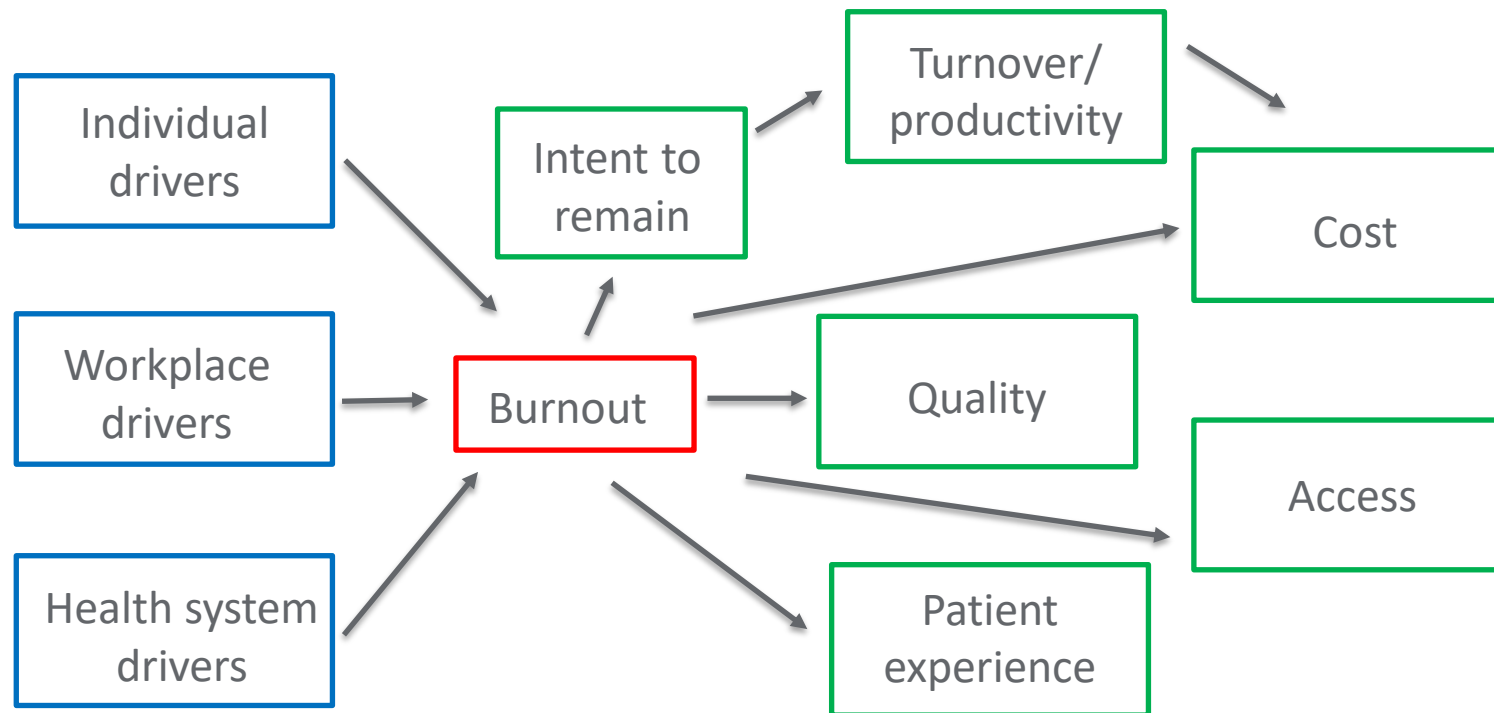
VA Primary Care Turnover Intent



Note: All Employee Survey data; individual-level national averages; question changed from turnover intent in 6 months to 1 year in 2017



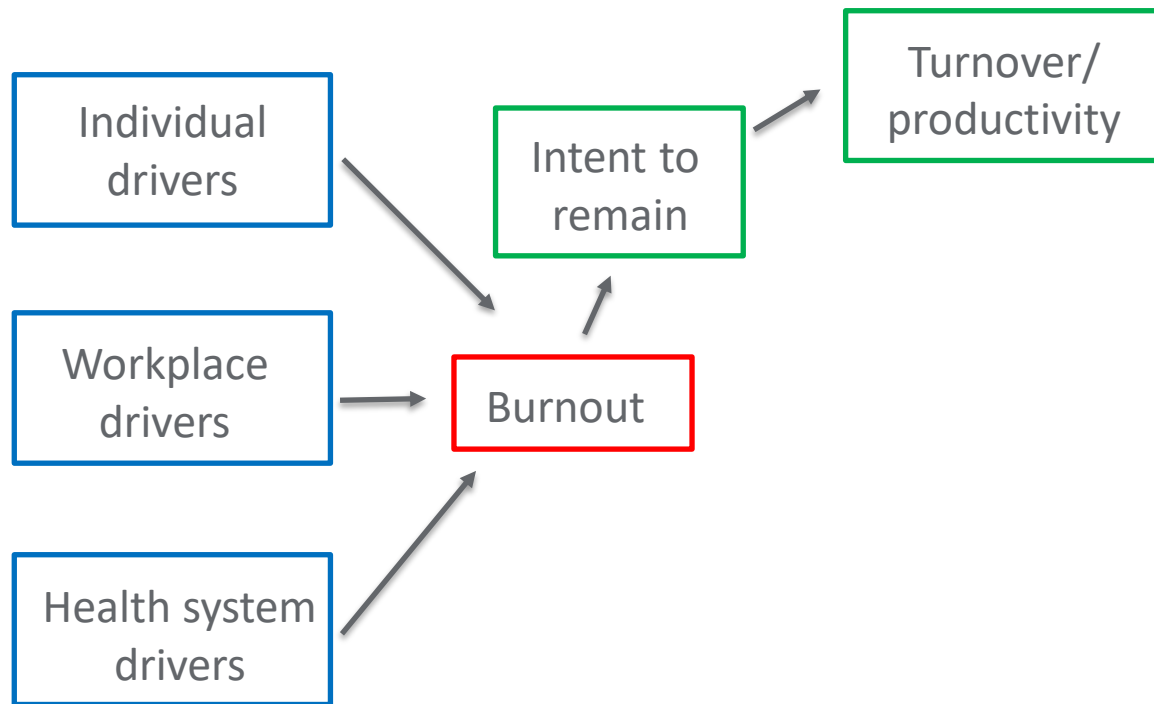
Burnout conceptual framework



Drivers → Intermediate Outcome → Downstream Outcomes



Burnout conceptual framework



Drivers → Intermediate Outcome → Downstream Outcomes



How is burnout related to turnover?

- This is unclear; most literature examines turnover intent rather than actual turnover.
- **Research question:**
 - What is the relationship between VA PCP burnout and turnover?



VA PCP Burnout and Turnover from 2017-2021

- **Data Sources:**

- VA Personnel and Accounting Integrated Data (individual-level data)
- All Employee Surveys (facility-level data)
- Corporate Data Warehouse (facility-level data)
- COVID Shared Data Resource (facility-level data)



VA PCP Burnout and Turnover from 2017-2021

- **Outcome:**

- Individual-level: Turnover (2 quarters of a \$0 paycheck)

- **Exposure Variables:**

- Facility-level: Burnout; turnover intent

- **Driver Variables:**

- Individual-level: Age; gender; profession (MD/DO, NP, or PA)

- Facility-level: COVID-19 burden (total tests); panel size ratio; facility complexity

- Year

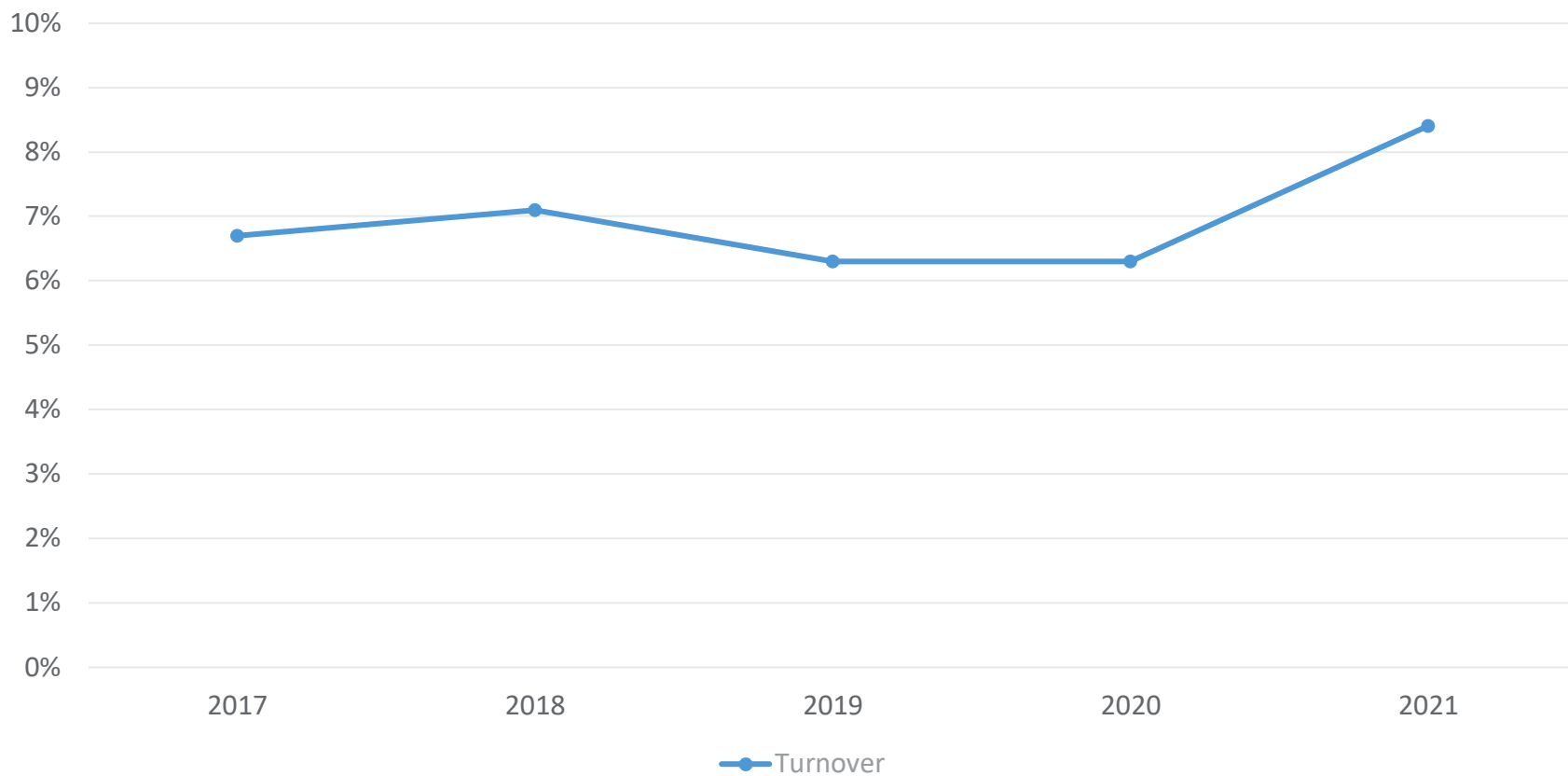


VA PCP Burnout and Turnover: Individual characteristics (n=6444)

Characteristic	n (%)
Physician	72%
Female	55%
55+ years old	45%



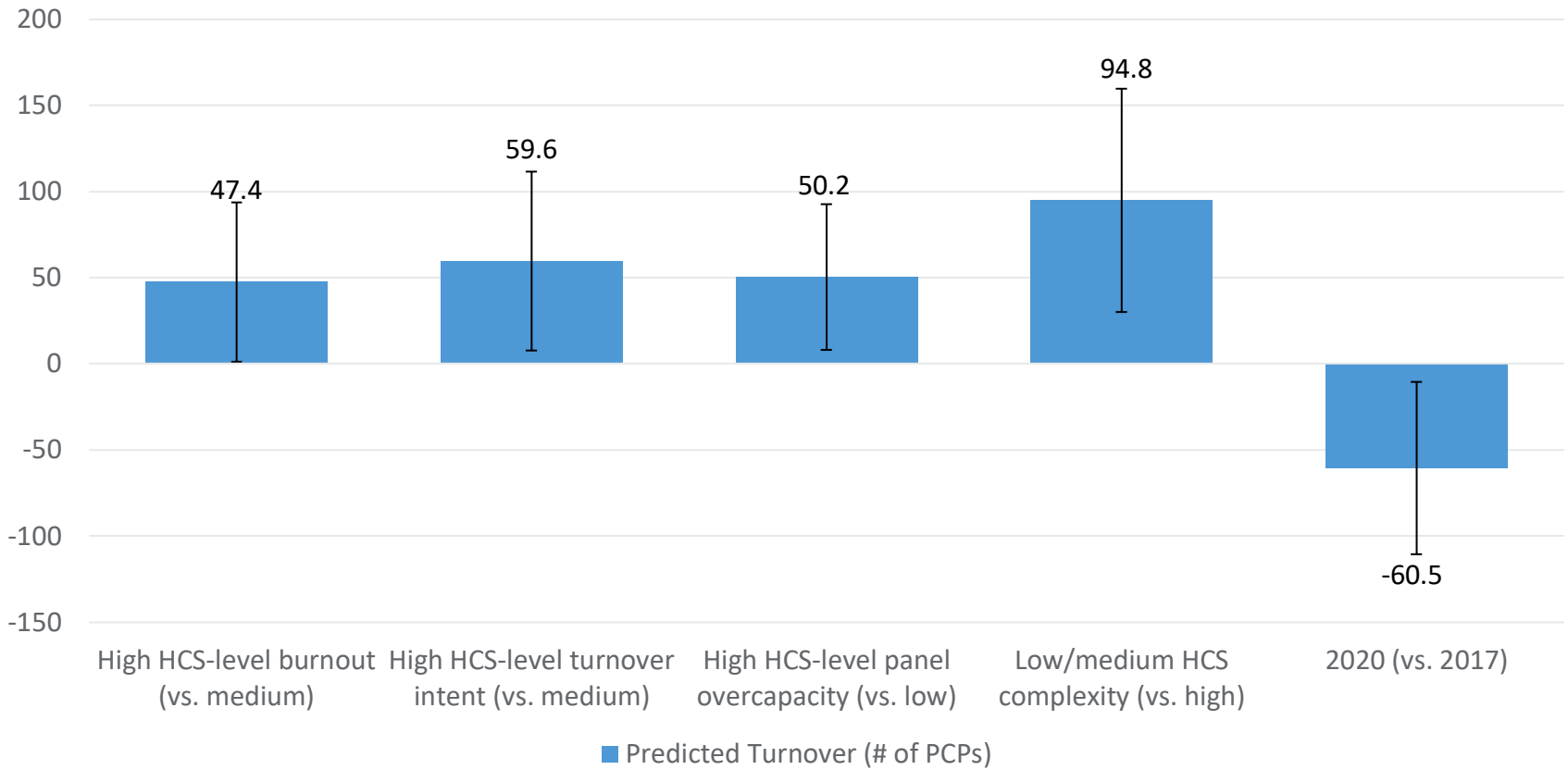
VA PCP Turnover from 2017-2021





VA PCP Turnover from 2017-2021

Average PCP
turnover:
391/year

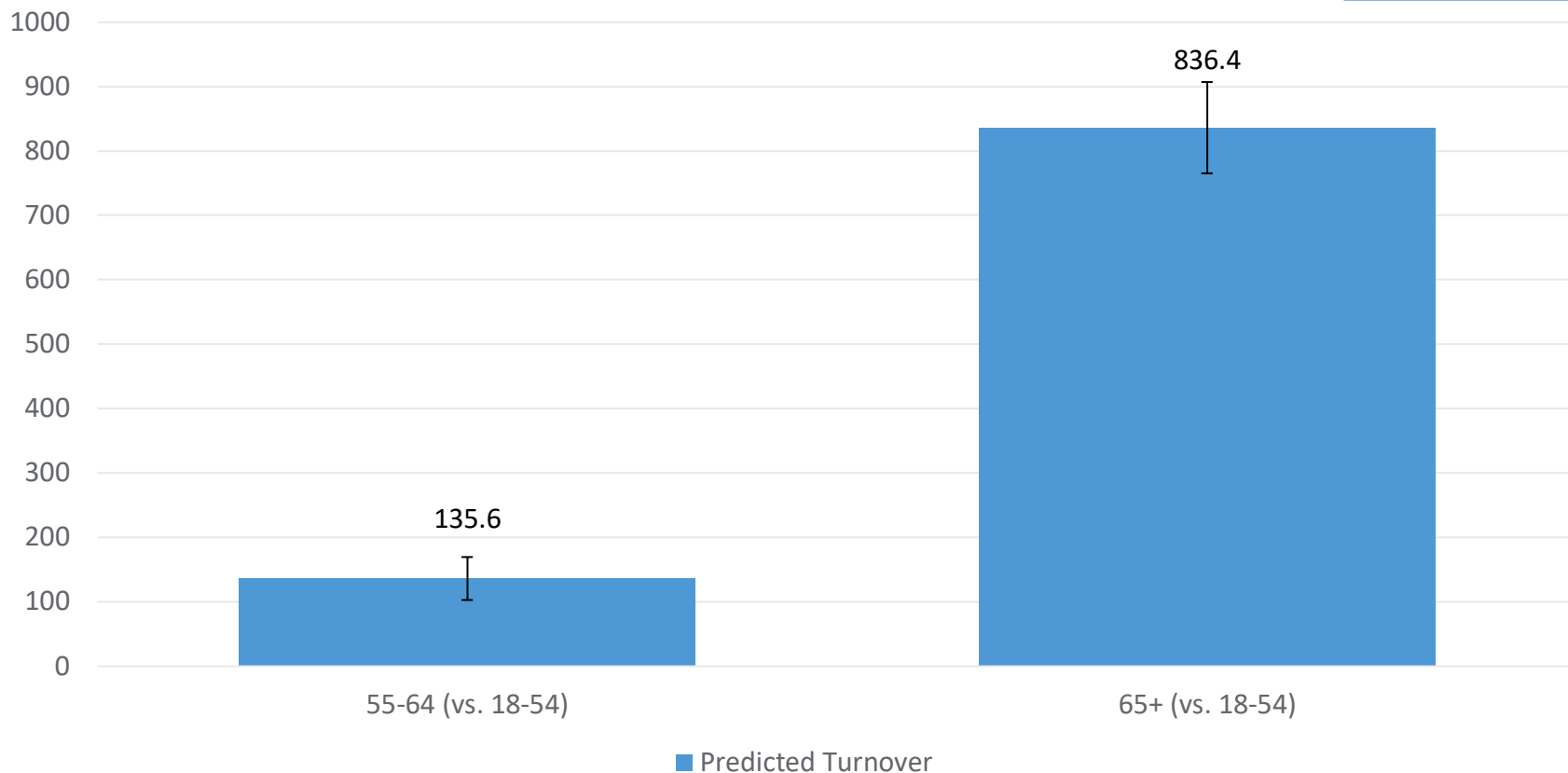


Predicted national, annual counts shown; estimated from a logistic regression model with burnout or turnover intent and all other driver covariates. Standard errors clustered facility.



VA PCP Turnover from 2017-2021

Average PCP
turnover:
391/year



Predicted national, annual counts shown; estimated from a logistic regression model with burnout or turnover intent and all other driver covariates. Standard errors clustered facility.



VA PCP Burnout and Turnover

- PCP turnover **stayed constant in 2020** as the pandemic began, but **increased in 2021**.



- **High burnout** and **turnover intent** among PCPs are related to **actual turnover**.



- Only **age** and **facility complexity** drive more turnover than burnout or turnover intent.





Did telehealth expansion impact PCP burnout?

- The COVID-19 pandemic necessitated healthcare systems to expand policies that implement telehealth to engage patients in essential primary care services.
- **Research Question:**
 - Is PCP burnout associated with greater healthcare system volume of video visits and secure messages during the pandemic?



Telehealth and VA PCP Burnout, 2020-2022

- **Sample:**

- 12,544 VA PCPs (MDs, NPs, PAs) completed surveys in 2020, 2021, and 2022 (average response rate=69%)

- **Data Sources:**

- All Employee Surveys (individual-level data)
 - Corporate Data Warehouse (facility-level data)

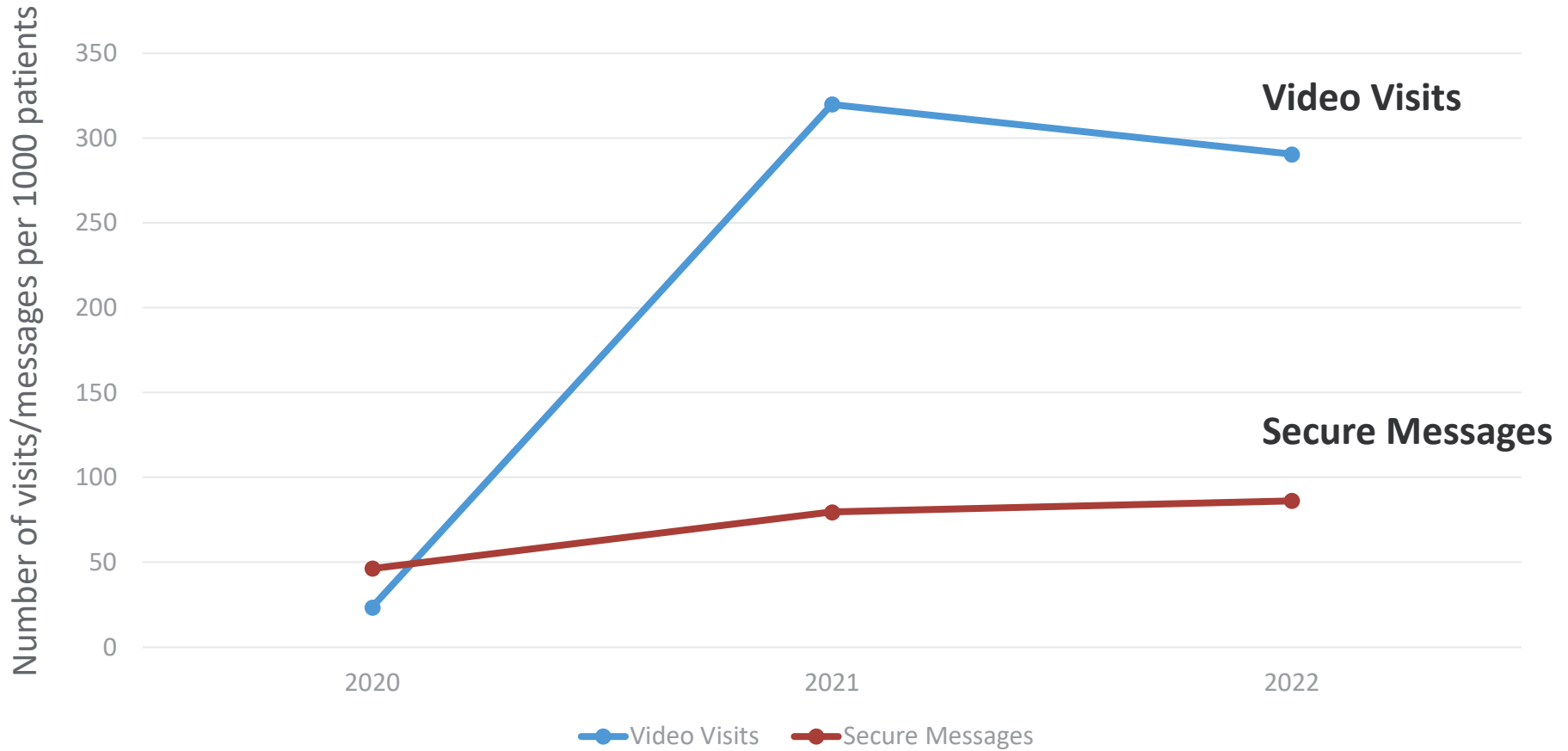


Telehealth and VA PCP Burnout, 2020-2022

- **Outcome:** Individual-level composite of Maslach Burnout Inventory
 - “I feel burned out from my work” (emotional exhaustion)
 - “I worry that this job is hardening me emotionally” (depersonalization)
- **Exposure variable:** VA healthcare system volume of
 - Video Visits (synchronous)
 - Secure messages (asynchronous)
- **Driver variables:**
 - Individual-level: Age; gender; race-ethnicity; VA employment duration
 - Facility-level: VA healthcare system complexity (case-mix, rurality)
 - Year

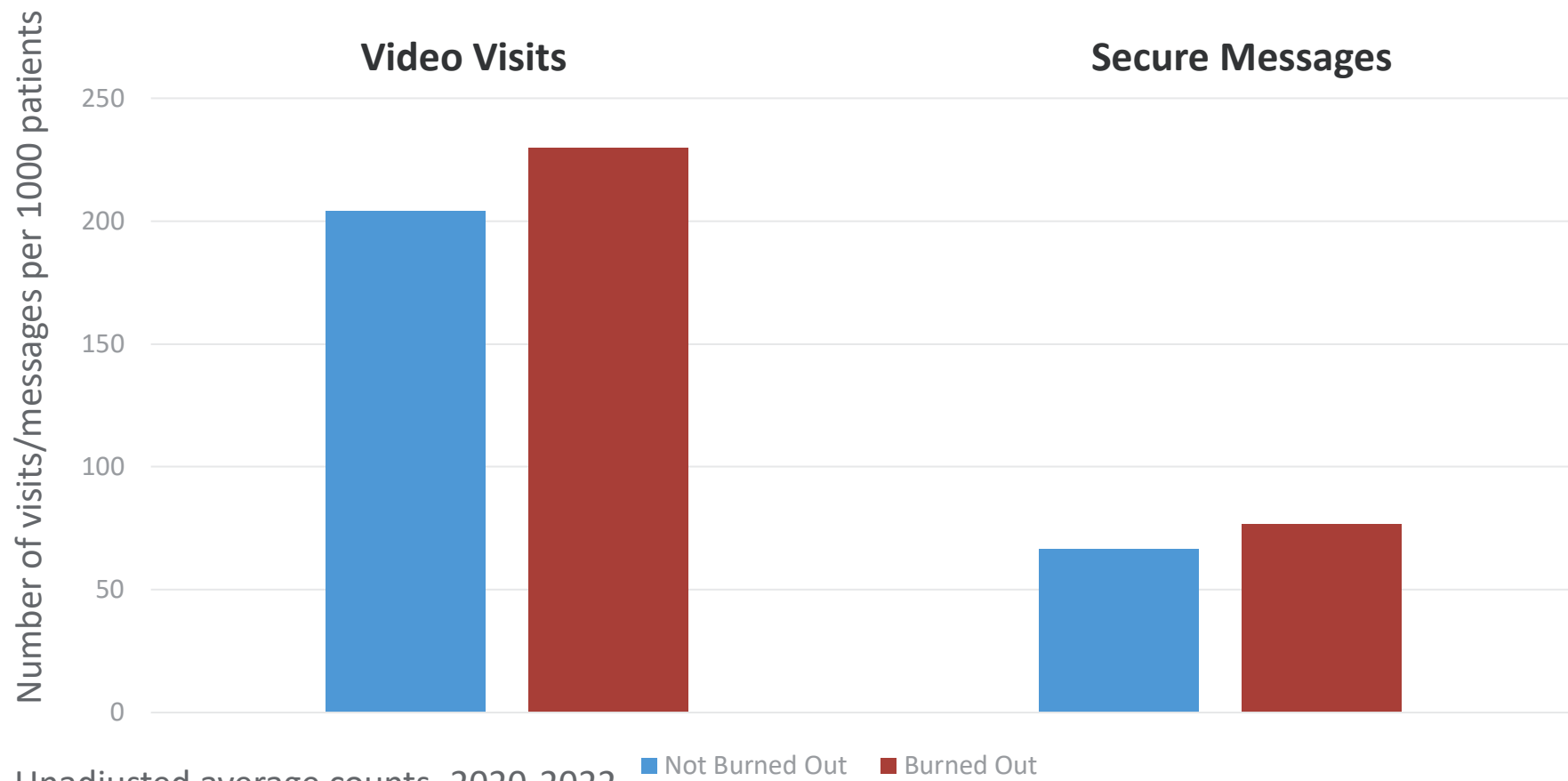


Video Visits and # Secure Messages Increased Over Time





More Video Visits and Secure Messages in PCPs w/ Burnout



Unadjusted average counts, 2020-2022

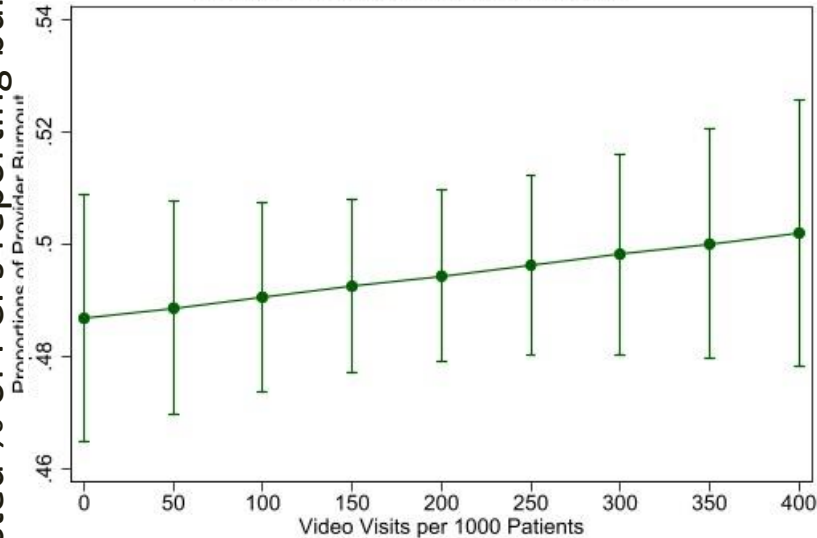


~1.1% increase in PCP burnout for each add'l 40 secure msgs

Predicted % of PCPs reporting burnout

Video Visits

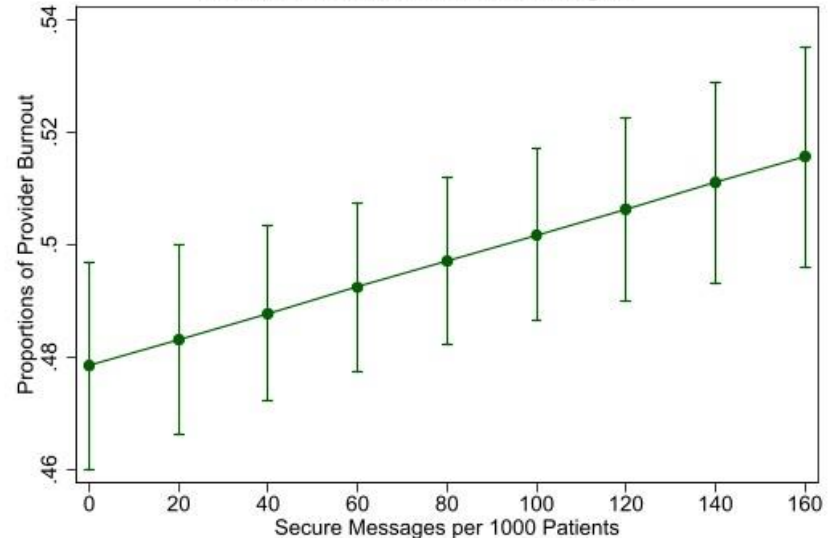
Provider Burnout, Predictive Margins



p=0.379

Secure Messages

Provider Burnout, Predictive Margins



p=0.002***

Logistic regression models predicted PCP burnout and their VA healthcare system's video visit or secure message volume, adjusting for year, PCP age, gender, race-ethnicity, VA employment duration, and healthcare system complexity.



Telehealth and VA PCP Burnout, 2020-2022

- Rapid expansion of different virtual care modalities may differentially impact PCP wellbeing.
- Implementation support may be adequate for PCPs to handle the increased volume of video visits, but more may be needed to address the volume of secure messages (e.g., sufficient staff, triage protocols).



Are telework arrangements related to burnout?

- Many physicians were allowed to deliver telehealth remotely from home during the early COVID-19 pandemic, but few still telework. It is unclear whether telework can mitigate physician burnout.
- **Research Question:**
 - Was physician burnout associated with telework arrangements during the pandemic?



Telework and VA PCP Burnout, 2020-2022

- **Sample:**

- 48,848 VA physicians completed survey in 2020, 2021, and 2022 (average response rate=69%).

- 10,863 from primary care
- 6,129 from psychiatry
- 8,105 from surgery/anesthesia/emergency

- **Data Sources:**

- All Employee Surveys (facility-level data)
- Corporate Data Warehouse (facility-level data)

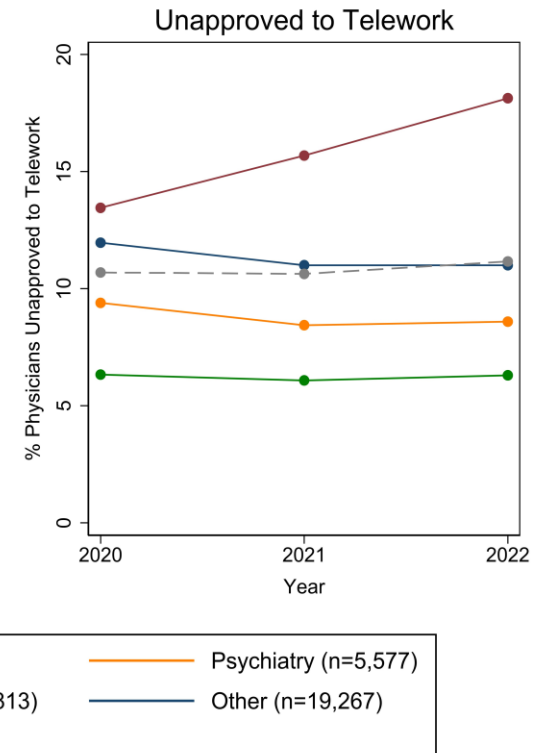
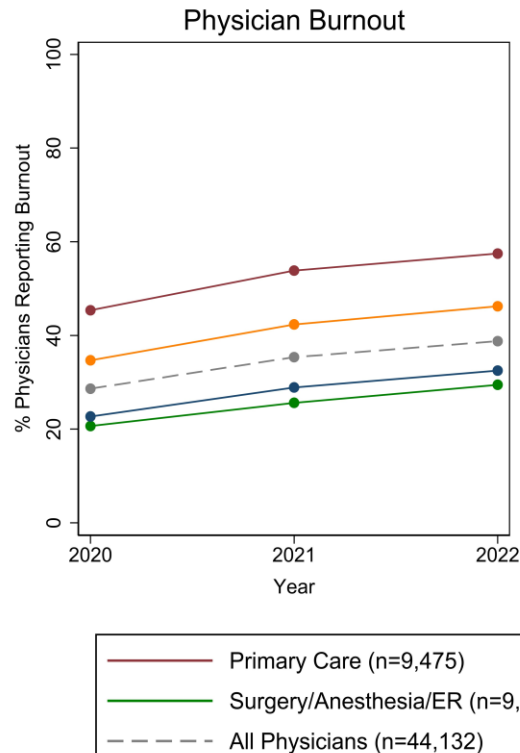
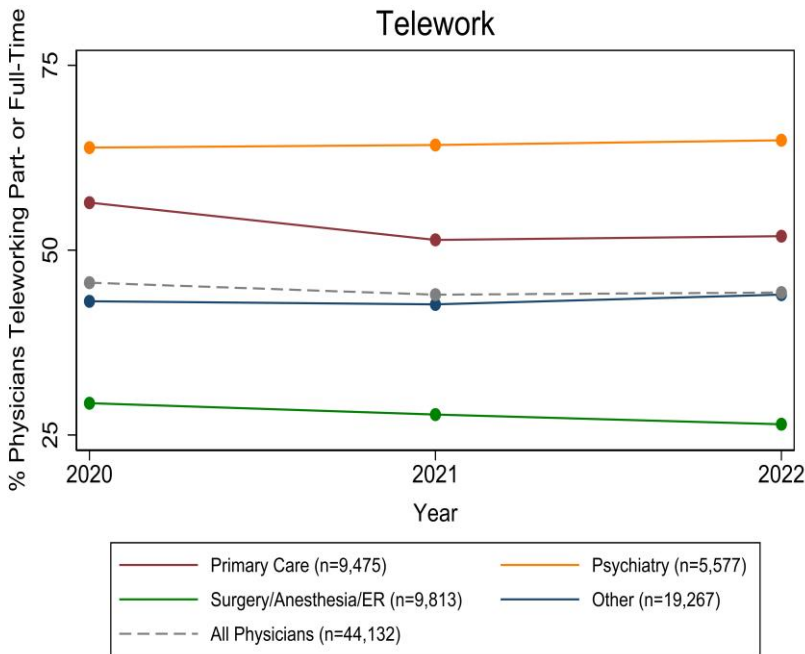


Telework and VA PCP Burnout, 2020-2022

- **Outcomes:** Composite of Maslach Burnout Inventory
- **Exposure Variable:** Telework Arrangements
 - No telework by choice
 - Unable to telework (*cannot* perform duties from home)
 - Unapproved to telework (*can* perform duties from home)
 - Part-time telework
 - Full-time telework
- **Driver Variables:**
 - Individual-level: Age; gender; race-ethnicity; VA employment duration; specialty
 - Facility-level: VA healthcare system complexity
 - Year

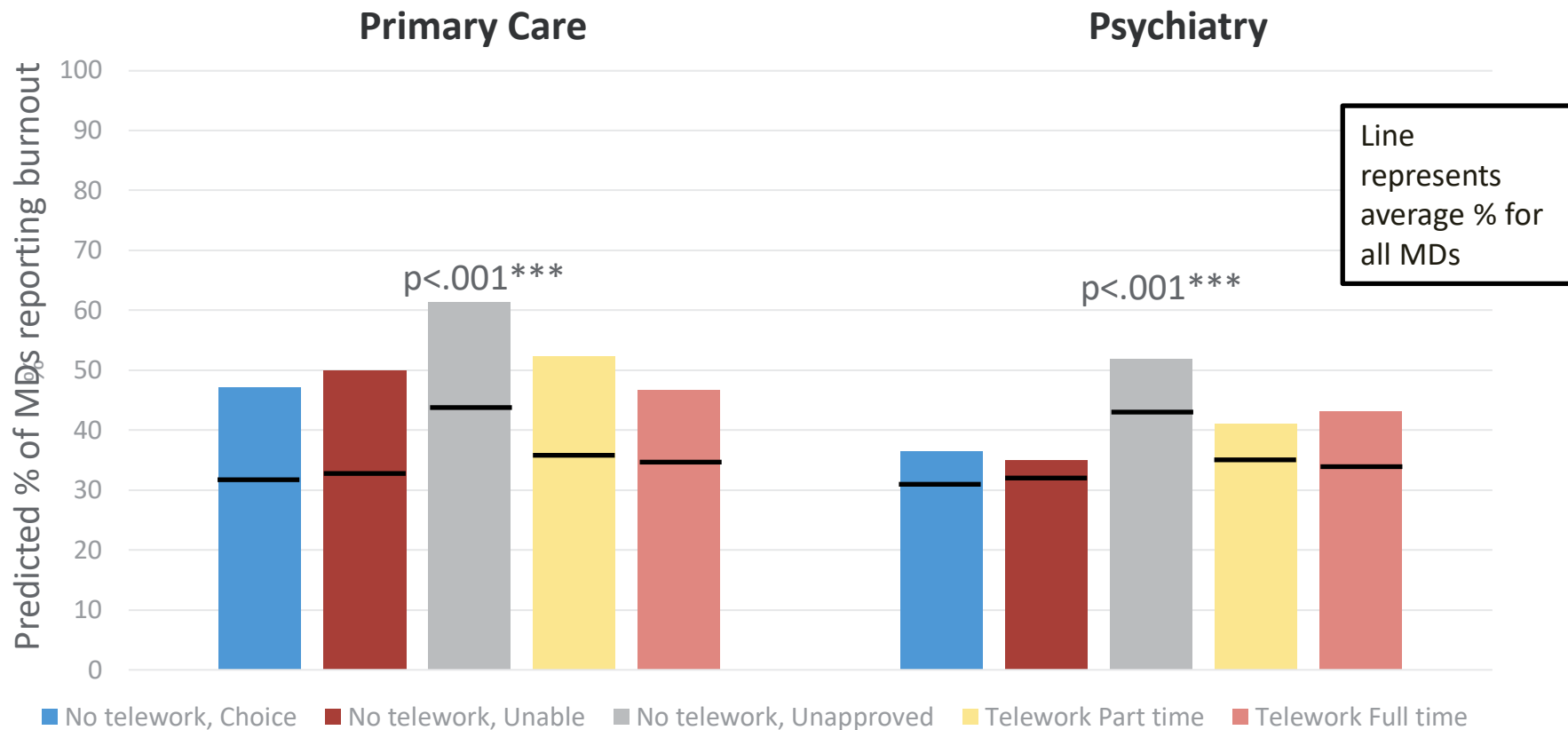


More Primary Care MDs Unapproved to Telework Over Time





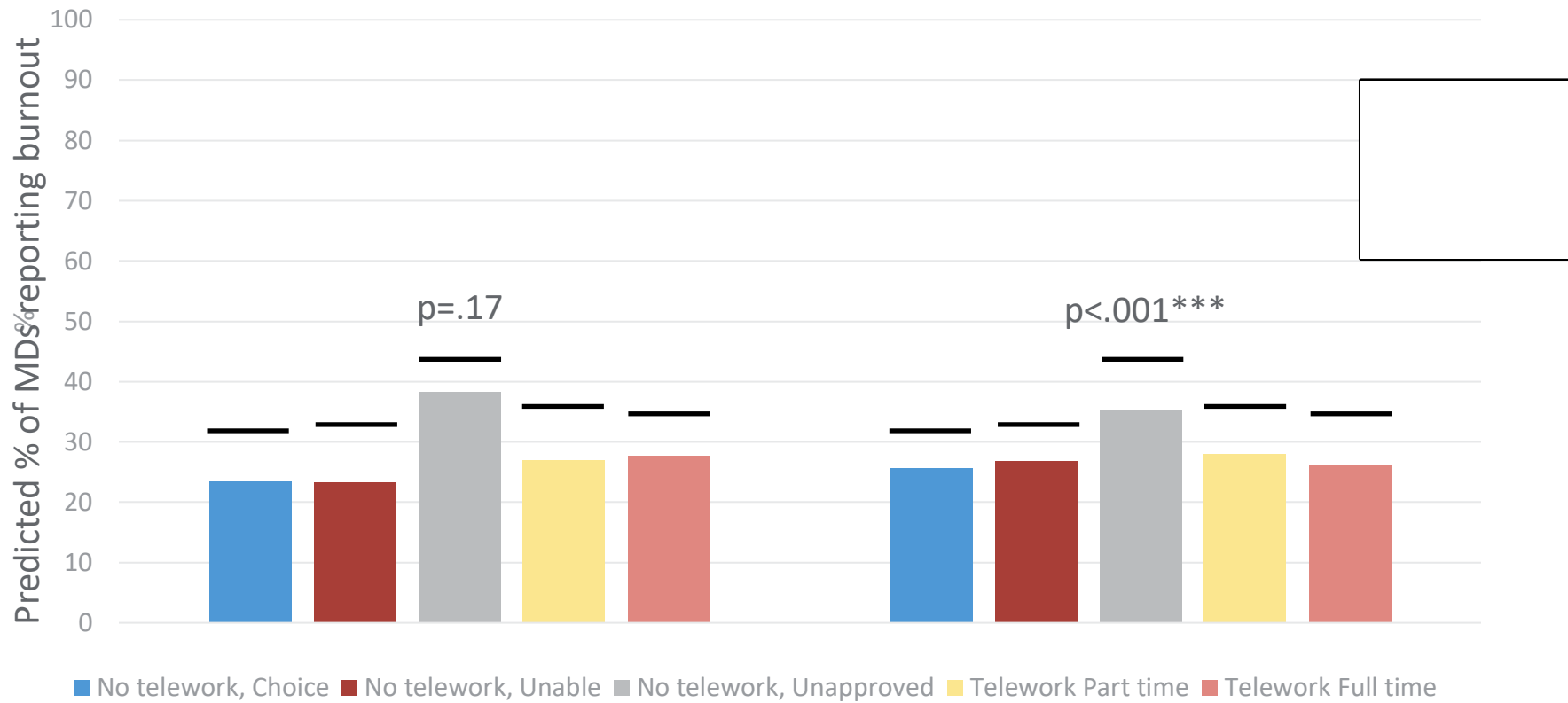
Highest Burnout among MDs Unapproved to Telework



Logistic regression models predicted physician burnout and telework arrangements, adjusting for survey year, physician characteristics (age, gender, race-ethnicity, VA employment duration), and healthcare system complexity.



No Burnout & Telework Association among Surg/Anes/ER



Logistic regression models predicted physician burnout and telework arrangements, adjusting for survey year, physician characteristics (age, gender, race-ethnicity, VA employment duration), and healthcare system complexity.



Telework and VA PCP Burnout, 2020-2022

- Primary care physicians and psychiatrists report highest levels of burnout.
- Telework arrangements are available to many but not all physicians (and to fewer PCPs over time).
- There were significant associations between physician burnout and telework not being approved, except for surgeons/anesthesiologists/emergency physicians.
- Further study is needed to understand circumstances whereby physicians are approved/unapproved to telework.



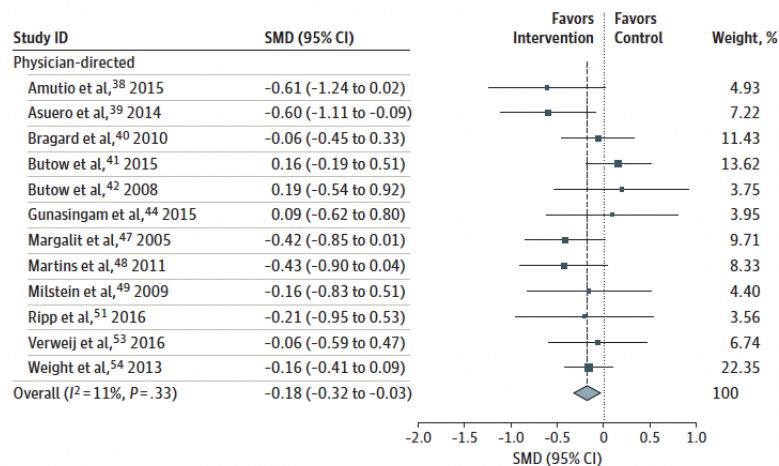
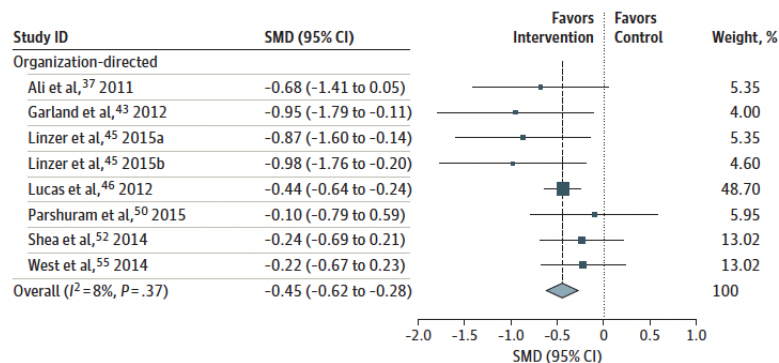
How do we reduce burnout?

- **Individual interventions:**
 - Mindfulness training
 - Counseling
 - Stress management
 - Group education
- **Organizational interventions:**
 - Team-based care
 - Use of scribes
 - Schedule adjustments
 - Quality improvement



Individual or organizational interventions?

- **Organizational** interventions have a **medium** effect on burnout
- **Individual** interventions only have a **small** effect
- **Organizational** interventions are over **twice as effective**





Which organizational intervention is best?

- **Organizational** interventions are **more effective**, but it is not clear which intervention is ideal.
- Facilities and clinics all differ, so the **most effective** intervention for any individual workplace **may differ** too.





What is VA doing?

Office of Primary Care FY23-25 Strategic Plan includes optimizing use of virtual care delivery within PACT, including **expanding virtual care** and **promoting telework**.



VACO is creating and testing several organizational interventions under the **Reduce Employee Burnout and Optimize Organizational Thriving (REBOOT)** initiative:



– More info here: vaww.insider.va.gov/reducing-employee-burnout/

Dr. Apaydin is starting a new **pilot** to evaluate a process to **collaboratively develop burnout reduction interventions** with primary care providers, staff, and leadership.





Acknowledgements

We'd like to thank...

Study Funding

Veterans Assessment and Improvement Laboratory for
Patient-Centered Care, Office of Primary Care
(Stockdale; XVA 65-018)

Office of Connected Care (Der-Martirosian/Leung; XVA
65-127)

HSR&D Career Development Award
(Leung; CDA 19-108)

Partners

Primary Care Analytics Team (PCAT)

Co-Investigators

Nicholas Jackson, PhD

David Mohr, PhD

Claudia Der-Martirosian, PhD

Danielle Rose, PhD

Susan Stockdale, PhD

Caroline Yoo, MS

Karen Chu, MS

**VA Primary Care Providers and Staff
Veterans**



CONNECTED CARE



CSHIIP

Center for the Study of Healthcare
Innovation, Implementation & Policy

Thank You!

Questions?

Contact:

Eric Apaydin

eric.apaydin@va.gov



References

1. Maslach C, Jackson SE, Leiter MP, Schaufeli WB, Schwab RL. Maslach Burnout Inventory Manual: Fourth Edition. Mind Garden, Inc.; 2018.
2. Rathert C, Williams ES, Linhart H. Evidence for the Quadruple Aim: A Systematic Review of the Literature on Physician Burnout and Patient Outcomes. *Med Care*. Dec 2018;56(12):976-984. doi:10.1097/MLR.0000000000000999.
3. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. *J Intern Med*. Jun 2018;283(6):516-529. doi:10.1111/joim.12752..
4. Panagioti M, Panagopoulou E, Bower P, et al. Controlled Interventions to Reduce Burnout in Physicians: A Systematic Review and Meta-analysis. *JAMA Intern Med*. Feb 1 2017;177(2):195-205. doi:10.1001/jamainternmed.2016.7674.
5. DeChant PF, Acs A, Rhee KB, et al. Effect of Organization-Directed Workplace Interventions on Physician Burnout: A Systematic Review. *Mayo Clin Proc Innov Qual Outcomes*. Dec 2019;3(4):384-408. doi:10.1016/j.mayocpiqo.2019.07.006.



CSHIIP

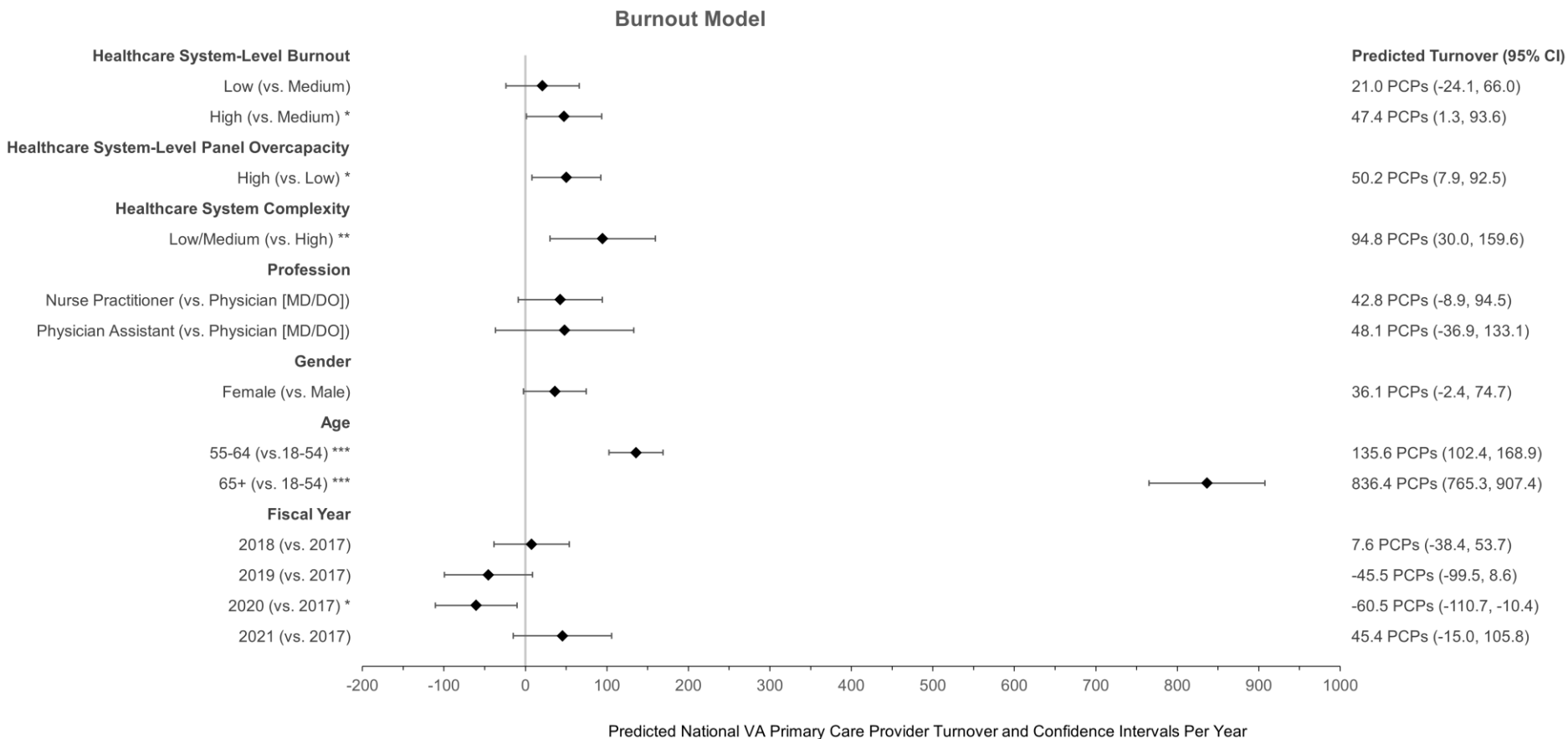
Center for the Study of Healthcare
Innovation, Implementation & Policy

Backup





Predicted VA PCP Turnover: Burnout Model





Predicted VA PCP Turnover: Turnover Intent Model

