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.
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)

Source: Maslach, et al. 2018
VA PCP Burnout

~46-58%

Note: All Employee Survey data; individual-level national averages; “once a week” or more of EE or DP symptoms.
VA Primary Care Turnover Intent

~10-14% in 6 months
~26-34% in 1 year

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

Adapted from: Rathert, et al. 2018 & West, et al. 2018
Burnout conceptual framework

- Individual drivers
- Workplace drivers
- Health system drivers

Drivers → Intermediate Outcome → Downstream Outcomes

Adapted from: Rathert, et al. 2018 & West, et al. 2018
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)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>72%</td>
</tr>
<tr>
<td>Female</td>
<td>55%</td>
</tr>
<tr>
<td>55+ years old</td>
<td>45%</td>
</tr>
</tbody>
</table>
VA PCP Turnover from 2017-2021

Turnover

- 2017: 6%
- 2018: 7%
- 2019: 6%
- 2020: 6%
- 2021: 9%
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.

Predicted Turnover (# of PCPs)

- High HCS-level burnout (vs. medium)
- High HCS-level turnover intent (vs. medium)
- High HCS-level panel overcapacity (vs. low)
- Low/medium HCS complexity (vs. high)
- 2020 (vs. 2017)

p<0.05 for all predicted counts shown.
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.

p<0.05 for all predicted counts shown.
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

- **Video Visits**
- **Secure Messages**

Number of visits/messages per 1000 patients
More Video Visits and Secure Messages in PCPs w/ Burnout

Unadjusted average counts, 2020-2022

Video Visits

Secure Messages

Number of visits/messages per 1000 patients

Not Burned Out  Burned Out
~1.1% increase in PCP burnout for each add’l 40 secure msgs

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
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.
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

Sources: DeChant, et al. 2019; Panagioti, et al. 2017
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.

Source: Panagioti, et al. 2017
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
Thank You!

Questions?

Contact:
Eric Apaydin
eric.apaydin@va.gov
References


Predicted VA PCP Turnover: Burnout Model

Burnout Model

Healthcare System-Level Burnout
- Low (vs. Medium)
- High (vs. Medium) *

Healthcare System-Level Panel Overcapacity
- High (vs. Low) *

Healthcare System Complexity
- Low/Medium (vs. High) **

Profession
- Nurse Practitioner (vs. Physician [MD/DO])
- Physician Assistant (vs. Physician [MD/DO])

Gender
- Female (vs. Male)

Age
- 55-64 (vs. 18-54) ***
- 65+ (vs. 18-54) ***

Fiscal Year
- 2018 (vs. 2017)
- 2019 (vs. 2017)
- 2020 (vs. 2017) *
- 2021 (vs. 2017)

Predicted Turnover (95% CI)
- 21.0 PCPs (-24.1, 66.0)
- 47.4 PCPs (1.3, 93.6)
- 50.2 PCPs (7.9, 92.5)
- 94.8 PCPs (30.0, 159.6)
- 42.8 PCPs (-8.9, 94.5)
- 48.1 PCPs (-36.9, 133.1)
- 36.1 PCPs (-2.4, 74.7)
- 135.6 PCPs (102.4, 168.9)
- 836.4 PCPs (765.3, 907.4)
- 7.6 PCPs (-38.4, 53.7)
- 45.5 PCPs (-99.5, 8.6)
- 60.5 PCPs (-110.7, -10.4)
- 45.4 PCPs (-15.0, 105.8)

Predicted National VA Primary Care Provider Turnover and Confidence Intervals Per Year
Predicted VA PCP Turnover: Turnover Intent Model

Turnover Intent Model

- Healthcare System-Level Turnover Intent
  - Low (vs. Medium)
  - High (vs. Medium) *

- Healthcare System-Level Panel Overcapacity
  - High (vs. Low) *

- Healthcare System Complexity
  - Low/Medium (vs. High) **

- Profession
  - Nurse Practitioner (vs. Physician [MD/DO])
  - Physician Assistant (vs. Physician [MD/DO])

- Gender
  - Female (vs. Male)

- Age
  - 55-64 (vs. 18-54) ***
  - 65+ (vs. 18-54) ***

- Fiscal Year
  - 2018 (vs. 2017)
  - 2019 (vs. 2017)
  - 2020 (vs. 2017) *
  - 2021 (vs. 2017)

Predicted Turnover (95% CI)

- -36.5 PCPs (-76.7, 3.7)
- 59.6 PCPs (7.8, 111.4)
- 49.5 PCPs (2.9, 98.8)
- 86.7 PCPs (24.0, 149.4)
- 41.5 PCPs (-9.9, 92.9)
- 49.3 PCPs (-36.3, 134.8)
- 36.7 PCPs (-1.7, 75.1)
- 134.8 PCPs (101.7, 167.9)
- 834.9 PCPs (763.9, 905.9)
- 6.9 PCPs (-38.6, 52.5)
- -45.1 PCPs (-98.7, 8.6)
- -60.8 PCPs (-112.2, -9.5)
- 44.1 PCPs (-17.8, 106.0)

Predicted National VA Primary Care Provider Turnover and Confidence Intervals Per Year