

DATA DRIVEN INSIGHTS TO IMPROVE RECRUITMENT AND RETENTION OF VA PRIMARY CARE PHYSICIANS



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BACKGROUND

- Maintaining a fully staffed and highly functioning workforce is one element of VHA's promise of delivering high quality care to Veterans
- Many VHA facilities facing staffing challenges exacerbated by pandemic
 - In October-December 2021, VHA had 47,310 staff vacancies¹
 - OIG report found 90% of facilities had “severe shortage” in at least one physician specialty²
- 2021 All Employee Survey data indicated 25% of respondents reported ≥ 1 symptom of burnout on a weekly basis³

¹VA Mission Act Section 505 Data - FY2021 Quarter 4, published 2022

²VA Office of the Inspector General, 2021

³Reddy, Marks and Upton, VA HSR&D Forum, Spring 2022

BACKGROUND

- **Objective:** Present findings from HSR&D supported research study
 - Data-driven insights to improve recruitment and retention of VA primary care physicians
 - Advance scientific evidence in area of health care workforce
 - Findings intended to inform VA strategic physician workforce planning

OVERALL SPECIFIC AIMS OF HSR&D FUNDED AWARD

- **Aim 1:** Identify determinants of VA employment consideration among internal medicine residents (i.e., recruitment) using mixed methods
- **Aim 2:** Identify determinants of primary care physician turnover in VA overall and rural VA clinics using quantitative methods



QUALITATIVE PERSPECTIVES OF TRAINING AND WORKING IN VA



REASONS FOR STUDYING EXPERIENCES OF VA MEDICAL RESIDENTS



Largest provider of medical resident training in US

(Geppert, 2016)



VA trainee satisfaction increases likelihood of considering VA post-residency

(Cannon et al., 2008; Keitz et al., 2019)



Initial exposure to an organization (less than 2 years) influences desire to stay or leave

(Cooman et al., 2009)

Objective:
to understand...

Perceptions and experiences of residents and PCPs with limited tenure within primary care in the VA Healthcare System



Mutable factors to improve PCP recruitment and retention

PARTICIPANT RECRUITMENT

- Conducted in collaboration with OAA
- Via email
- Purposive sampling
- **PCPs**
 - All MDs/DOs listed as primary care provider for ≥ 1 VA patient
 - Newly employed (≤ 2 years) with VA
 - Invited 285 PCPs to participate (95 responded, 44 declined, 21 interested but lost to follow-up, zero ineligible)

PARTICIPANT RECRUITMENT

- **Residents**

- All residents with primary care clinic at VA
- Residency years 2 to 4, and recent graduates
- Invited 1768 residents to participate (132 responded, 80 declined, 6 interested but lost to follow-up, 26 ineligible)

- All participants provided informed consent

DATA COLLECTION



- Individual, semi-structured interviews; audio-recorded, transcribed
 - Unstructured → Structured
 - **Essential aspect:** using participants' **verbatim language** (e.g., “Tell me more about ‘difficult’”) in follow-up probes
- Guides iteratively refined



... it's the **best kept secret** for reasons that are unclear to me and I don't understand why more physicians don't want to come work for the VA... I see it as the pinnacle of my professional career.

-PCP



KEY THEMES



**CULTURE &
VALUES**



**TEAM-BASED
CARE**

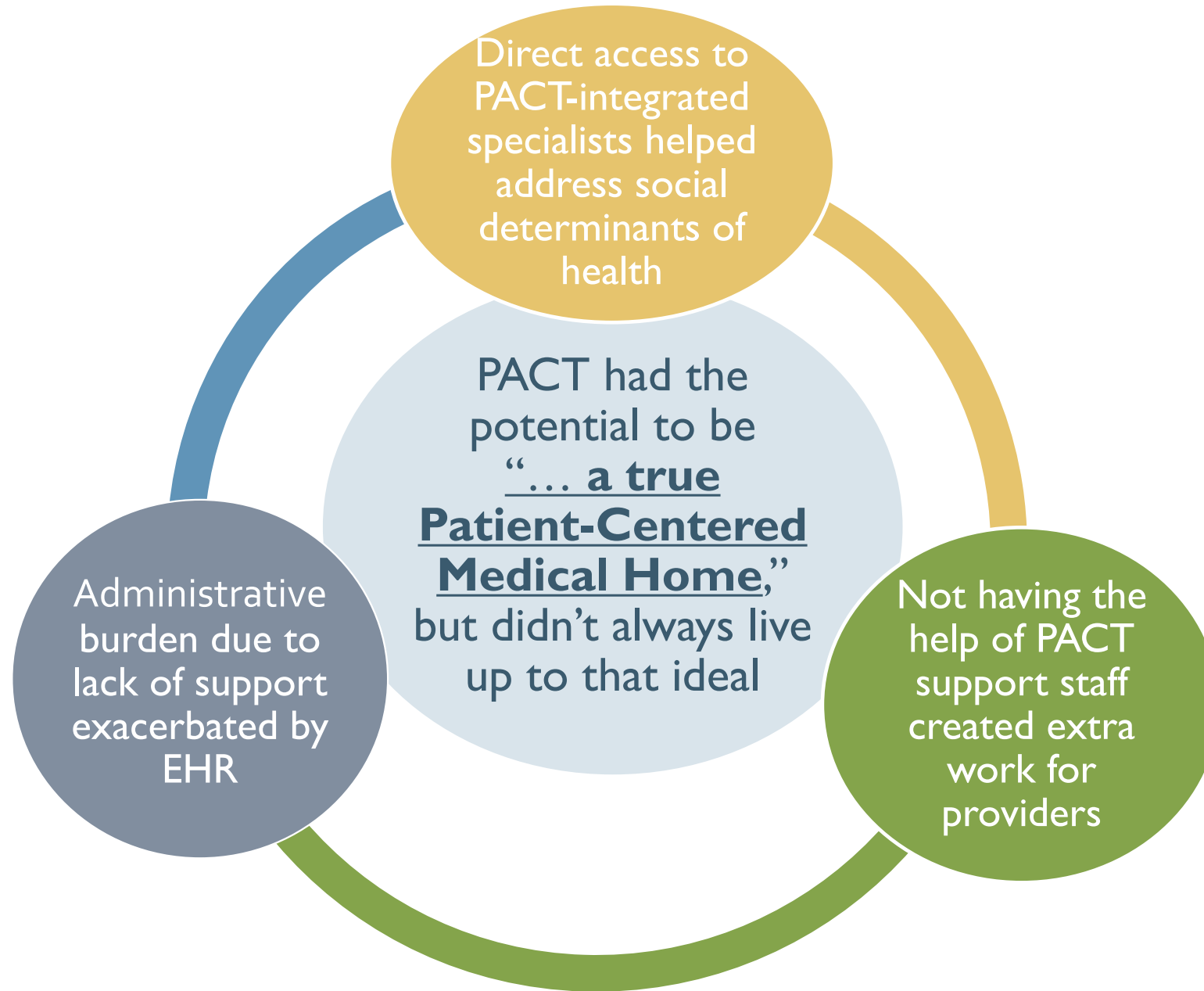


**NEEDED
CHANGES**

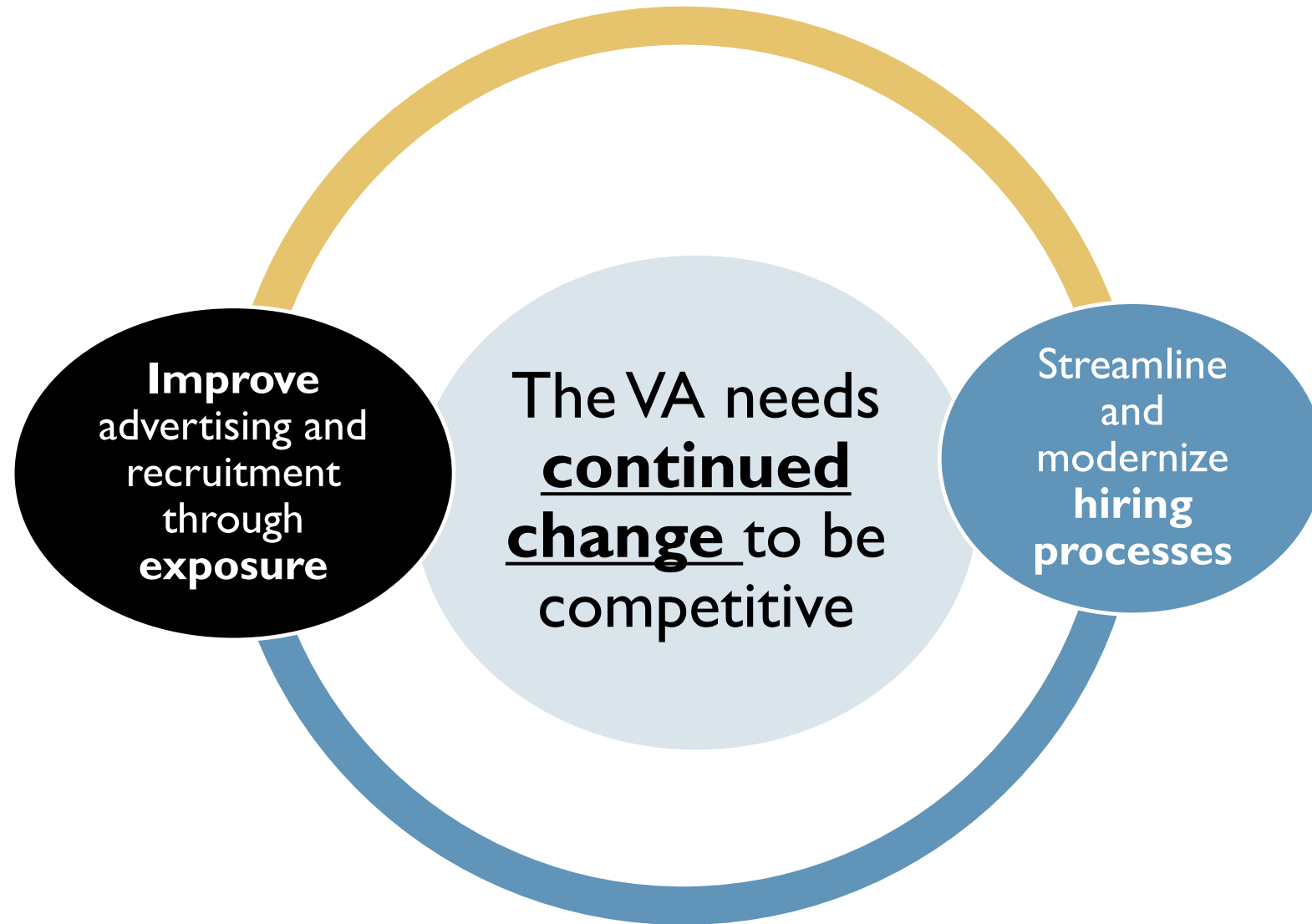
Theme 1



Theme 2



Theme 3



IMPLICATIONS FOR VA WORKFORCE PLANNING

- Alignment of personal values and the values of an organization increases the likelihood of remaining in that organization
 - VA's mission, service-oriented values, and work-life balance underscores the role of culture
 - Indicated as important aspects of VA by both residents and new PCPs
 - Recruiting physicians that rank these values highly may yield best results for maintaining strong VA PCP workforce



SURVEY DATA TO IMPROVE RECRUITMENT OF VA MEDICAL RESIDENTS

STUDY OBJECTIVE

- Quantify how factors associated with considering permanent VA employment among internal medicine residents
 - Demographics
 - Experiences with VA training
 - Job preferences

STUDY SAMPLE

- Medical residents rotating through VA primary care between December 2020 and July 2021
 - Assigned a primary care panel
 - Identified in OAA HPT list
- 4,545 residents invited to participate

SURVEY PROCEDURES

- Online survey through VA approved platform
- Residents invited through email address listed in OAA HPT database
- Expected time to complete: 5-10 minutes

EXAMPLE SURVEY ITEMS

VA Exposure / Experience

- EMR system - usability
- EMR remote access
- Quality of facilities
- Satisfaction with VA training
- Perceived quality of life of VA attendings

Individual preferences

- Preferred FTE - clinical / research / teaching / admin
- Work/life integration
- Identification with VA mission
- Prefer to have longitudinal relationships
- Workload expectation

4. Thinking about the VA facility where you trained/are training, rate your satisfaction with the following areas: (If you trained at more than one VA facility, think about your most recent training experience.)

	Very Dissatisfied (1)	2	3	4	Very Satisfied (5)
Trainee onboarding experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical environment (e.g., clinic rooms, offices, public spaces)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of clinical staff and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of non-clinical staff and services (e.g. HR, tech support)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Continuity with patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ownership / personal responsibility for your patients' care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relationship with patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appreciation of your work by patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of care your patients receive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. When you decide where to practice in the future, to what extent are the following important to you? Please select one response for each factor.

	Not Important At All (1)	(2)	(3)	(4)	Extremely Important (5)
Geographic location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partner's career and/or preference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good place to raise a family (e.g., educational environment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work/life balance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of hours worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Income / compensation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Additional benefits (e.g., retirement, life insurance)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of educational loan forgiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DATA ANALYSIS

- Descriptive comparisons of job preferences and experiences with VA training
- Multivariable analysis examining adjusted associations between consideration of VA employment, job preferences and VA training experiences
 - Weighted to account for differences in non-response rates by gender, email type and time of the year
 - LASSO procedure to eliminate non-influential factors

INTEREST IN VA CAREERS

- How likely would you consider future employment at a VA medical facility?

Response Category	Percentage
I have already decided to work at VA	7.8
Very likely	21.2
Likely	25.3
Neutral	18.2
Unlikely	11.9
Very Unlikely	8.2
I have already decided <u>not</u> to work at VA	4.8
Undecided	2.6

Percentages may not sum to 100 due to rounding

TAKEAWAY POINTS

- More positive experiences with VA training associated with a greater odds of considering VA for future employment
 - Perceptions of VA careers supporting work-life balance a consistent theme
 - Quality of clinical staff and services
- VA a particularly appealing for some residents interested in pursuing primary care careers

SURVEY DATA USE CASES

- Identify attractive aspects of VA positions to promote during recruitment
- Design of recruitment packages and positions
- Pinpoint which residents to target recruitment efforts



MODIFIABLE DETERMINANTS OF TURNOVER



MODIFIABLE DETERMINANTS OF TURNOVER

- Quantify effect of three key factors:
 - Compensation
 - Dimensions of workplace climate
 - Elements of the PACT primary care model
- **Impact:** Identify the components of programs to reduce turnover that are likely to succeed

ANALYTICAL FRAMEWORK

- Developed a longitudinal database of primary care physicians employed in VA between FY2003 through FY2016
 - Algorithm to identify physicians using primary care management module (PCMM)
 - Tracked physician characteristics and turnover outcomes
- Applied econometric techniques for time-to-event data
 - Discrete hazard models

EXAMPLE DATA SOURCES AND VARIABLES

Category	Example Variables	Data Sources
Demographics	Age, gender, Veteran status, experience	CDW, PAID
Job Attributes	Wage rate, performance bonus, panel size, full vs. part time, permanent status	CDW, PAID
Clinic Factors	Rural location, CBOC, geographical region	VAST, CDW
Workplace Climate	Adequate resources, supervisory support, innovation, perceptions of workload	AES
PACT Implementation	Degree to which clinics deliver continuous, comprehensive care	OPC
Local Area	Wage of non-VA primary care physicians, number of non-federal physicians	AHRF*, OES*

CDW=Corporate Data Warehouse, PAID=Personnel Accounting Integrated Data, VAST=VA Site Tracking System, AES=All Employee Survey, OPC=Office of Primary Care data, AHRF*=Area Health Resource File, OES*=Occupational Employment Statistics

* Non-VA Public Use Data

ELEMENTS OF PACT IMPLEMENTATION

Pi ² Domains	Total Items, No.	Items From Each Data Source, No.			Example Item ^d
		CAHPS PCMH ^a	CDW ^b	Personnel Survey ^c	
Access	11	6	5	0	How often did you get an appointment as soon as you needed? ^a When you phoned this provider's office, how often did you get an answer to your medical question that same day? ^a Same-day access to appointments (% of clinics) ^b Enhanced access: telephone clinics (%) ^b
Continuity of care	3	1	2	0	How long have you been going to this provider? ^a Proportion of visits to assigned primary care provider ^b
Care coordination	7	5	2	0	When this provider ordered a test, how often did someone from this provider's office follow up to give you those results? ^a Did the provider seem informed and up to date about the care you got from specialists? ^a Percentage of patients contacted 2 d after hospital discharge ^b
Comprehensiveness	3	3		0	Did you and anyone in this provider's office talk about things in your life that worry you or cause you stress? ^a
Self-management support	2	2		0	Did anyone in this provider's office talk with you about specific goals for your health? ^a
Patient-centered care and communication	6	6		0	How often did this provider explain things in a way that was easy to understand? ^a
Shared decision making	3	3		0	When you talked about starting a prescription medicine, did this provider ask you what you thought was best for you? ^a
Delegation, staffing, and team functioning	18	0	0	18	Primary care provider relies on registered nurse care manager for tasks including gathering patient preventive services, responding to prescription refills ^c Percentage reporting recommended staffing ratio ^c Time spent in team huddles: percentage spending >30 min/d ^c

EFFECT OF PACT ELEMENTS

PACT Domain	OR	Lower 95%	Upper 95%
Access	0.663	0.449	0.980
Care Coordination	1.117	0.680	1.837
Comprehensiveness	1.071	0.768	1.492
Self-Management	0.707	0.511	0.978
Communication	0.959	0.725	1.267
Shared Decision Making	1.175	0.883	1.563
Team-Based Care	0.925	0.776	1.103

Physicians employed in clinics that provide better access to care and greater self-management support have lower odds of turnover

DIMENSIONS OF WORKPLACE CLIMATE

- Employees' satisfaction with workload was the most consistent workplace climate factor associated with turnover
- **Workload Satisfaction:** Responses to the AES question:
 - *How satisfied are you with the amount of work that you currently do?*
 - 1= very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, 5=very satisfied
 - Averaged responses among all primary care employees within a facility

EFFECT OF WORKLOAD

- Average rate of quarterly turnover over period FY2008-FY2016 was 1.8%
- Average employment tenure as of FY2016-Q4 was 34.7 quarters (~8.7 years)
- 1-point increase in facility-level workload satisfaction score associated with:
 - 0.7 percentage point decrease in quarterly turnover probability
 - 0.35 quarter increase in employment tenure

Greater satisfaction with workload among primary care staff associated lower turnover probability and longer employment tenure

QUANTIFYING EFFECT OF WAGES

	OR	Lower 95%	Upper 95%
Hourly Wage Rate (Inclusive of Benefits)	0.950	0.945	0.952

Estimates reflect change in odds of turnover associated with a \$1 increase in total employee wage

An approximately \$2,000 increase in salary reduces the odds of turnover by approximately 5%

SUMMARY

- Highlighted key findings from HSR&D funded multi-methods study identifying key determinants of recruitment and retention of VA primary care physicians
- As largest provider of medical training, VHA has unique opportunity to reinforce desirable aspects of VHA employment during residency
- Examined a database of primary care physicians practicing at VHA facilities to identify job and system-level factors associated with lower turnover
 - Influential factors may form the basis for strategic approaches targeting recruitment and retention of the VA health workforce

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