

Burnout among VA Primary Care Employees participating in PACT Implementation – National & Regional Perspectives

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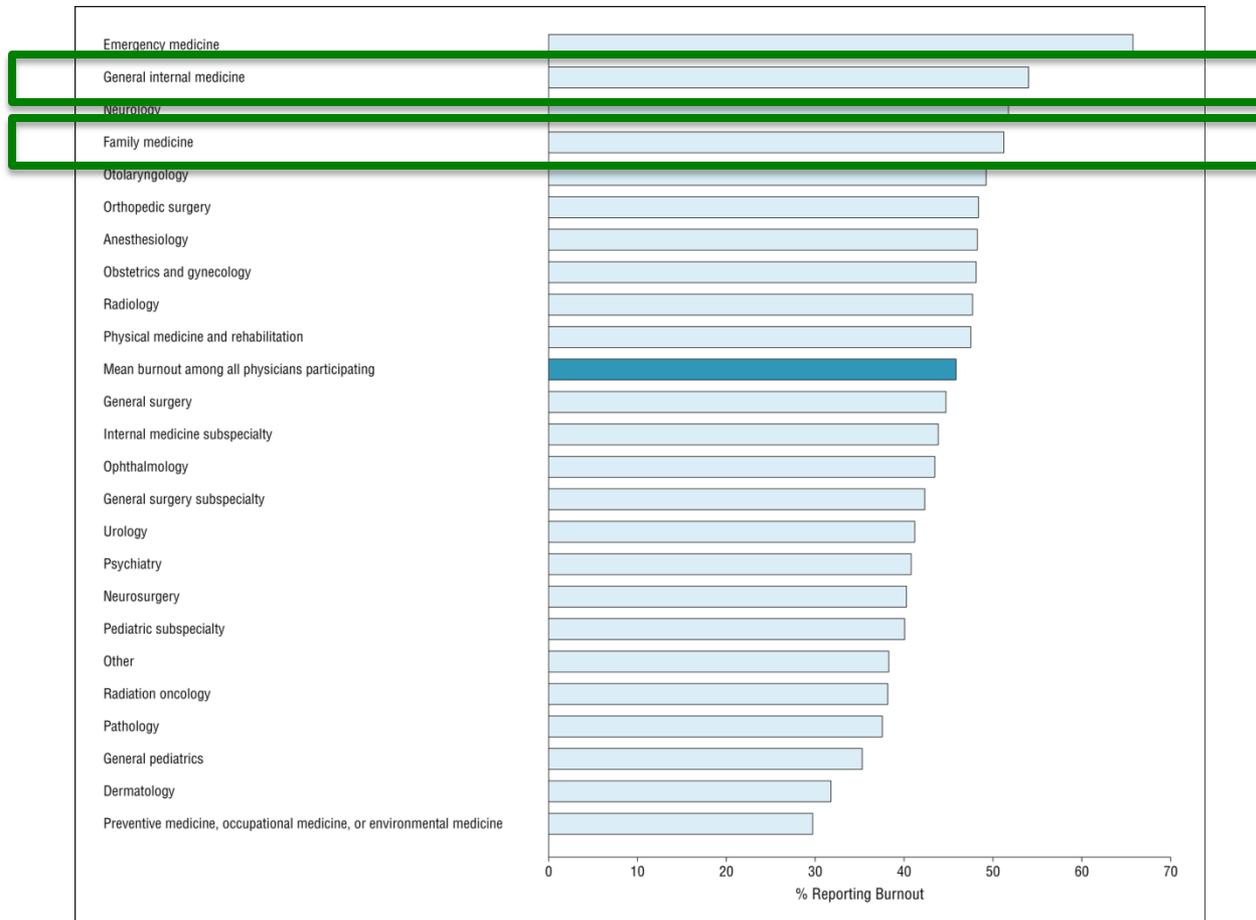
POLL QUESTION 1 of 2

- What's your role within VA (check all that apply)?
 - Provider
 - Nursing
 - Other Primary Care role (e.g., Dietician, Pharmacist, Admin Clerk)
 - VA Leadership
 - Researcher

Burnout

- Burnout is a syndrome characterized by work-related:
 - Emotional exhaustion (i.e., cynicism)
 - Depersonalization
 - Reduced personal accomplishment
- Usually assessed by self-report on employee surveys
- Concept originated in 1970's primarily in reference to work in human services (e.g., social work, health care, police work)¹
- Burnout now widely acknowledged as a critical work force issue¹

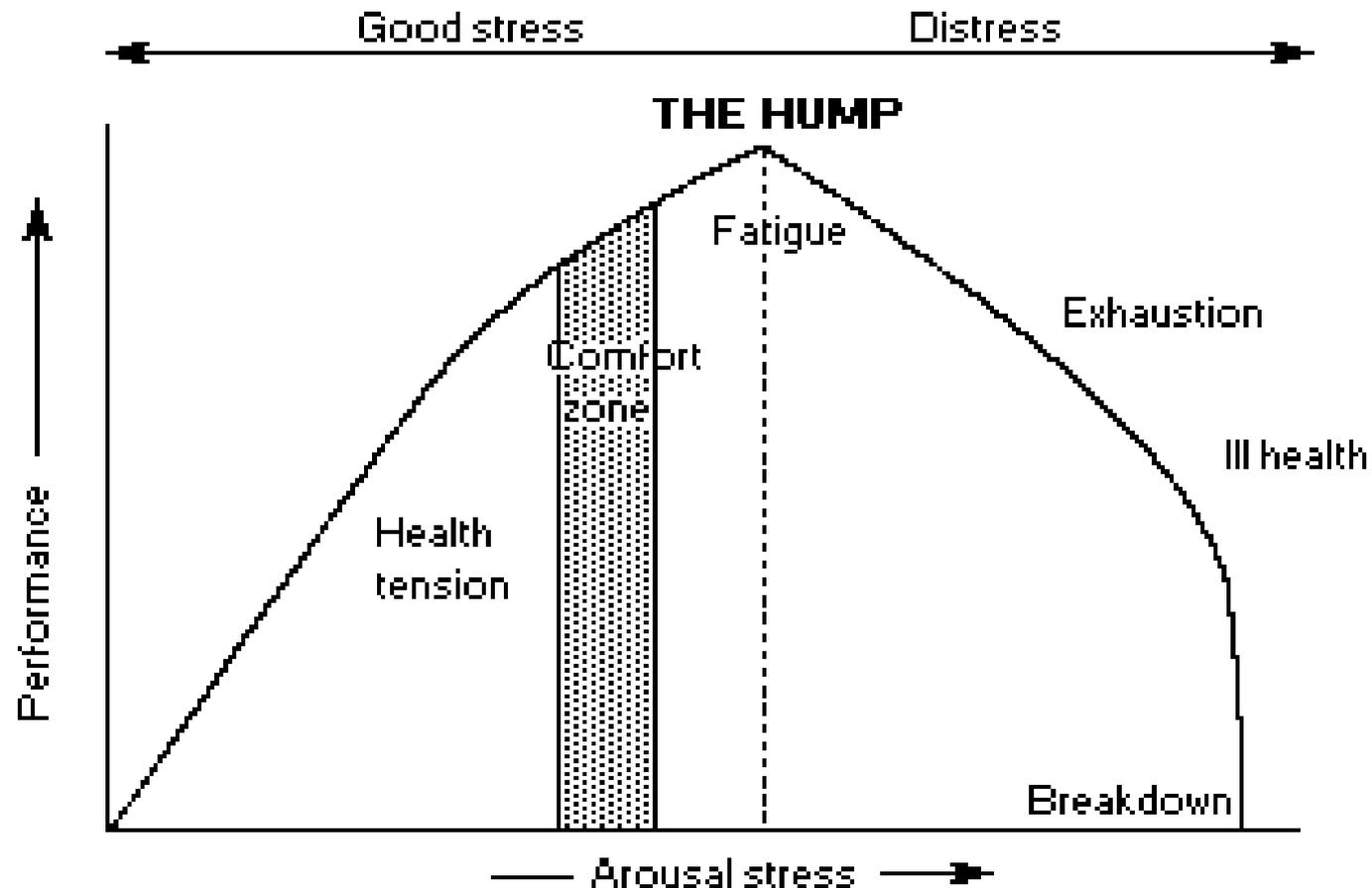
Burnout & the US Healthcare Workforce



Shanafelt et al, *JAMA IM* 2012

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The Stress Response Curve

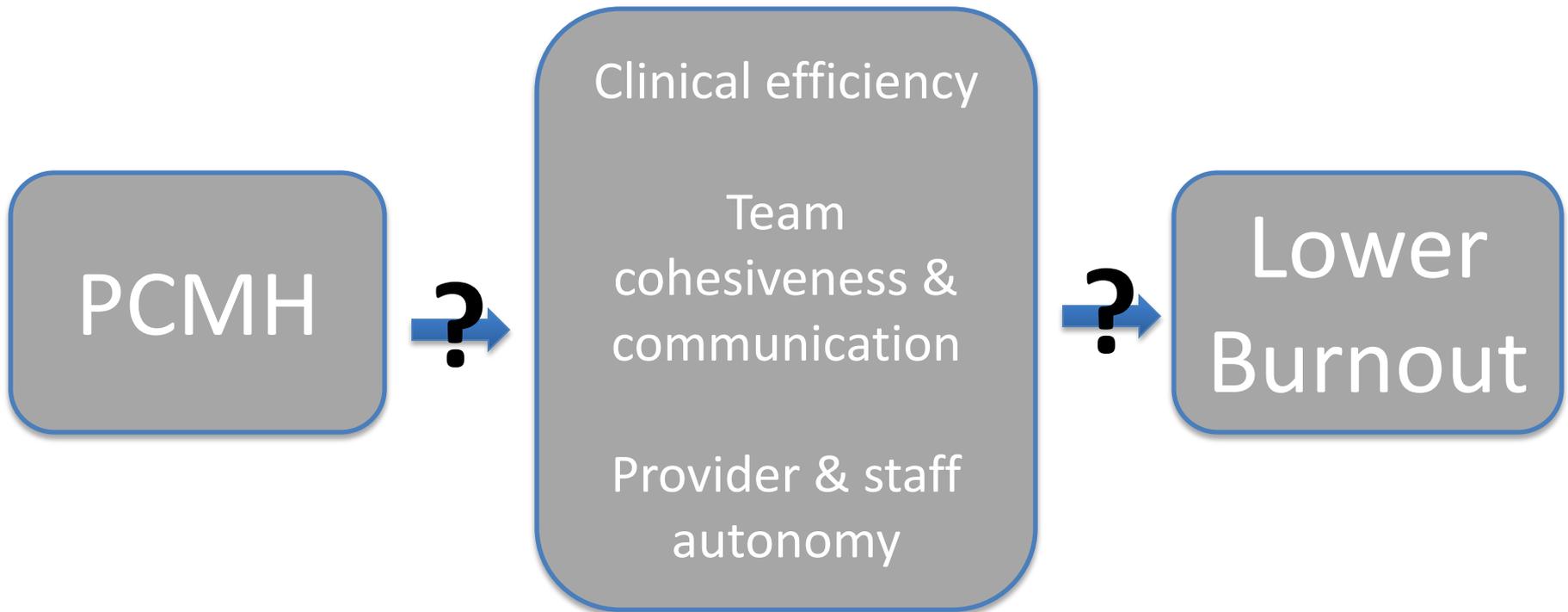


Adapted from Nixon, P. Practitioner 1979
Image from mentalhealth.com

The Consequences of Burnout

- Patients cared for by providers with burnout...
 - Less satisfied with care³⁻⁴
 - Receive suboptimal care⁵⁻⁹
- Providers with burnout...
 - Mental health and relationship problems¹⁰⁻¹²
 - Job absenteeism¹³
 - Intention to quit¹⁴⁻¹⁵
 - Leave clinical practice^{16,17}

The PCMH and Burnout



PACT & Burnout

- In 2010, the VA launched the Patient-Aligned Care Team (PACT) initiative to implement a medical home model in more than 900 primary care clinics
- In 2012, 39% of primary care employees participating in PACT transformation screened positive for burnout, including 45% of providers¹⁸
- Qualitative studies¹⁹ and “the word on the street” have suggested that the transformation has been stressful
- However, a recent study showed that clinics with more extensive implementation of the PACT model had lower staff burnout²⁰

18-Helfrich et al, *JGIM* 2014

19-Ladebue et al, *Health Care Man Rev* 2016

20-Nelson et al, *JAMA IM* 2014

Aims

1. Estimate the change in burnout prevalence among VA primary care staff from 2012 to 2013
2. Assess whether extent of clinic-level PACT implementation in 2013 was independently associated with burnout prevalence in 2013

Data Source & Study Sample

- 2012 and 2013 VA All Employee Surveys (AES)
 - Anonymous and fielded annually to all VA employees
 - Response rates 62% and 56%
- Data from respondents who:
 - Reported working in primary care
 - Provider
 - Nurse Care Manager
 - LPN / Medical Technician
 - Administrative Clerk
 - In a clinic with respondents in both years

Physician Worklife Study Burnout Measure

Rate your burnout:		
Burnout	1	I enjoy my work. I have no symptoms of burnout
	2	Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out
	3	I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion
	4	The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot
	5	I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help

PWS Measure vs. MBI-EE among VHA employees

Test Characteristics	
Sensitivity	83.2%
Specificity	87.4%
AUC	0.93
Negative Predictive Value	79.3%
Positive Predictive Value	90.0%

Analysis

- Estimated overall prevalence of burnout in 2012 & 2013
- PACT Implementation Progress Index (PI²), a validated metric measuring implementation among VA clinics
 - Scores range from -8 to 8; higher scores = more extensive implementation
- Logistic regression to calculate predicted prevalence, adjusting for:
 - Respondent characteristics (occupation, supervisory role)
 - Clinic characteristics (VAMC, panel size, panel complexity, proportion of providers with panel sizes over recommended cap)
- Multiple imputation of missing burnout responses in 2013 & sensitivity analysis substituting the MBI burnout measure

Poll Question # 2

Rate your burnout:		
	1	I enjoy my work. I have no symptoms of burnout
	2	Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out
Burnout	3	I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion
	4	The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot
	5	I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help

Poll Question # 2

- Rate your level of burnout:
 1. No symptoms of burnout
 2. Occasionally I am under stress
 3. I am definitely burning out
 4. My burnout symptoms won't go away
 5. I feel completely burned out

Respondent Characteristics

	2012	2013
	(n=8,135)	(n=7,510)
Occupation		
Provider	26.2%	26.6%
Nurse Care Manager	36.0%	38.6%
LPN / Med Tech	30.0%	27.7%
Administrative Clerk	7.8%	7.1%
Supervisory role	6.6%	7.4%

Clinic Characteristics

	2012	2013
VA Medical Center	67.3%	68.2%
Mean clinic panel size	1103 patients	1116 patients
PACT Implementation (PI² Score)		
Low (-8 to -2)	29.0%	20.7%
Middle (-1 to +1)	42.5%	48.9%
High (+2 to +8)	28.5%	30.4%

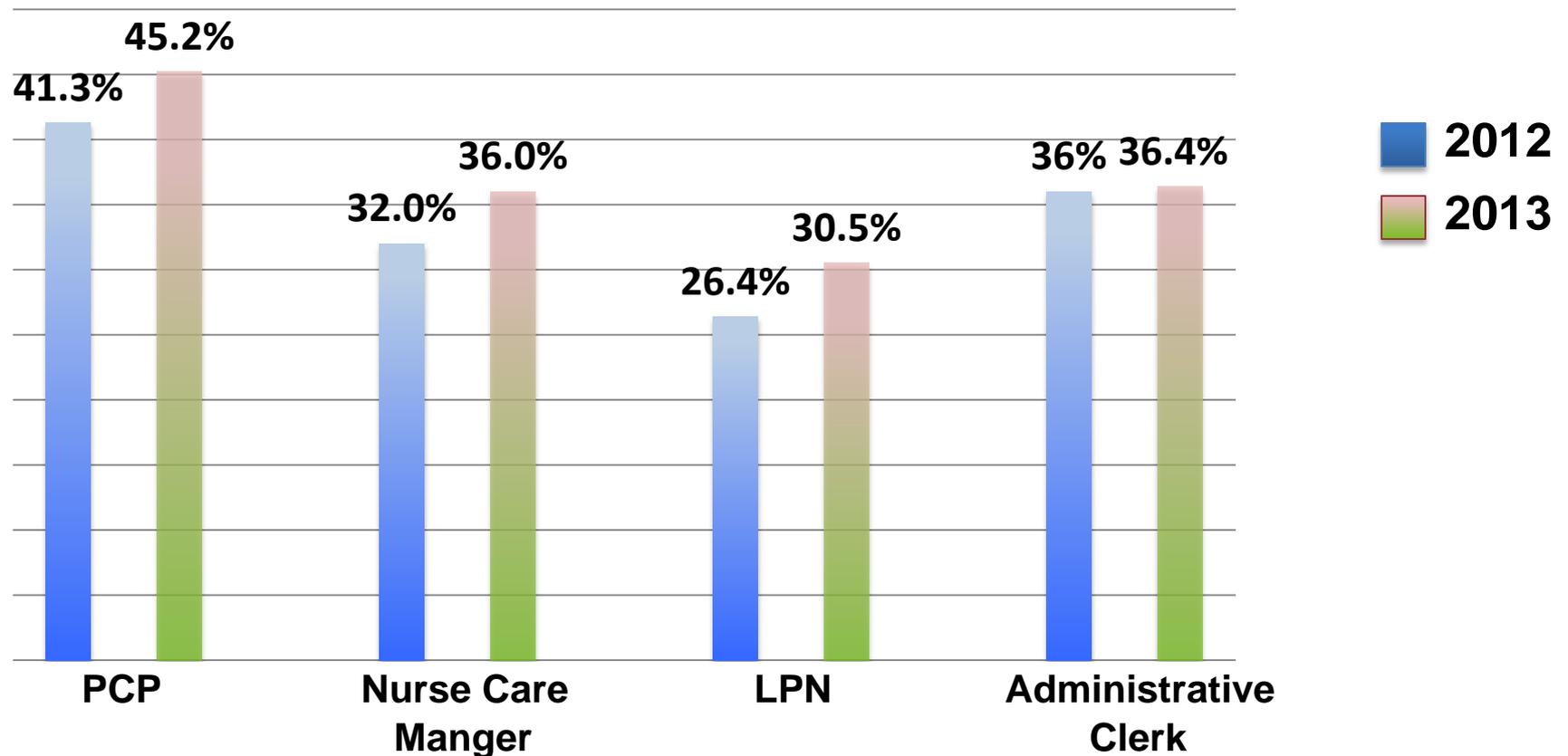
Prevalence of Burnout

	2012	2013
Burnout Prevalence	33.0%	36.9%

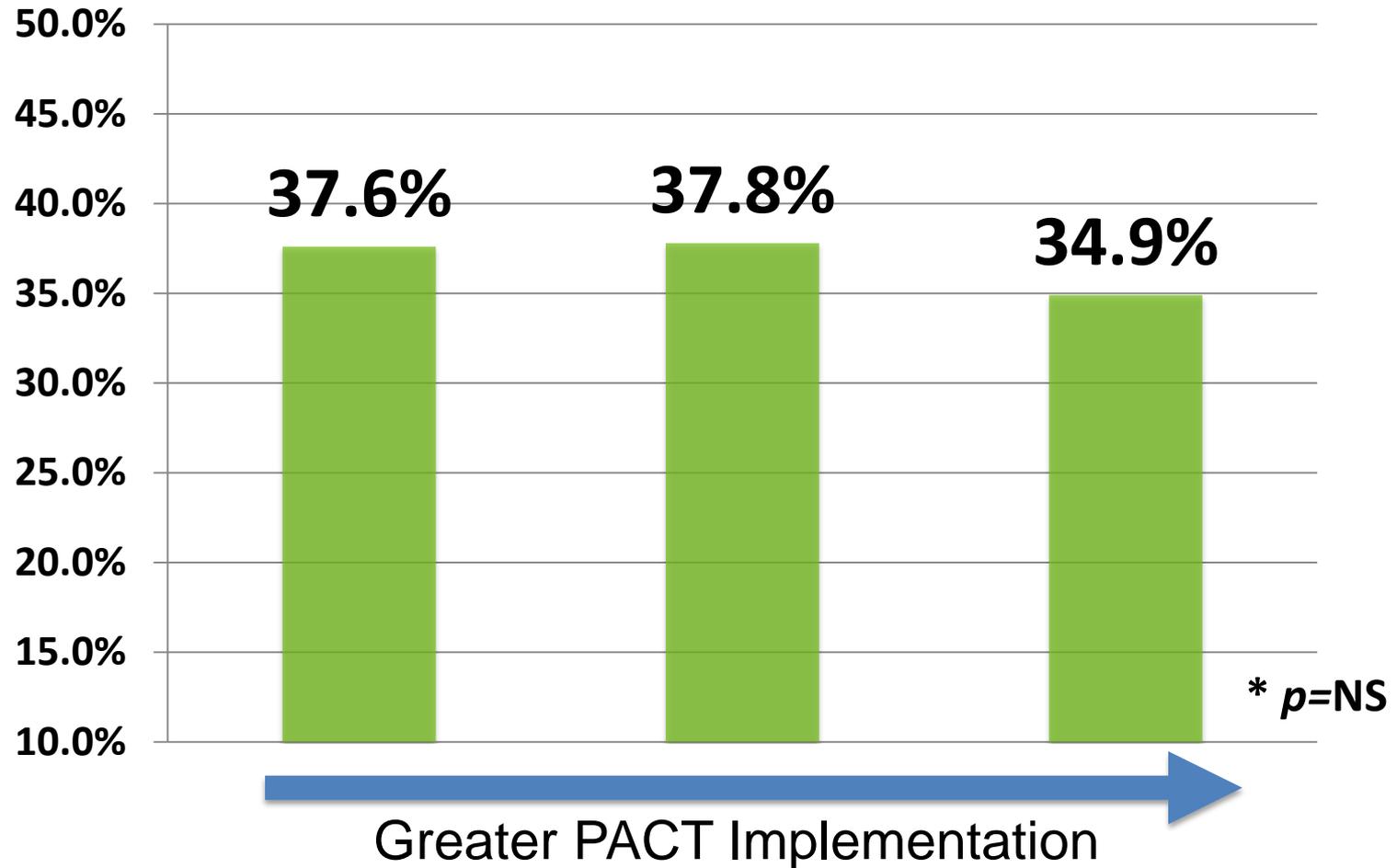


Adjusted Difference Between Years	
+4.0%	$p < 0.001$

Burnout by Occupation from 2012-2013



2013 PACT Implementation & 2013 Burnout



Limitations

- Unable to comment on a causal relationship
 - Observational study design
 - Other VA initiatives during this time period
- Short time period studied
- Potential for response bias
 - Response rates were 62% and 56%
 - 421 of >900 VA clinics included in analysis
 - Do burned out employees respond to surveys?
- Inconsistency in burnout measures included in 2012 & 2013 AES modules requiring imputation of burnout for some 2013 respondents

Conclusions

- Consistent with previous studies, burnout among VA primary care employees is highly prevalent
- Burnout increased from 2012 to 2013 (+4%)
- The extent to which clinics had implemented PACT in 2013 was not associated with burnout

Nelson et al, *JAMA Intern Med.* 2014;174(8)

Original Investigation

Implementation of the Patient-Centered Medical Home in the Veterans Health Administration

Associations With Patient Satisfaction, Quality of Care,
Staff Burnout, and Hospital and Emergency Department Use



- Different survey
- Different number of clinics
- Different burnout measure
- Unadjusted

2012 PACT Implementation & Burnout in Nelson et al

	Burnout Measure	
<u>PI² Score</u>	<u>MBI-EE</u>	<u>PWS</u>
(Highest) 5 to 8	2.29 (Lowest)	37%
2 to 4	2.47	36%
-1 to 1	2.56	36%
-4 to -2	2.63	37%
-8 to -5	2.80	37%
	<i>p</i> =.02	<i>p</i> =NS

Implications

- VA is the largest system to implement a medical home model in the U.S.
- As the VA and other large health care systems continue transforming their delivery models, improving our understanding of these transitions as they affect the health care workforce is critical.
- While medical home models, including PACT, may prove to lower burnout, their effectiveness in doing so in the short term remains unclear.
- Additional work is needed to identify specific PACT elements that most influence burnout and to follow long-term trends in burnout among VA primary care staff.

Work Force & Patient Access Implications

Providers with burnout have higher job absenteeism, intention to quit and are more likely to leave clinical practice¹³⁻¹⁷



Burnout disproportionately affects primary care²



Decreasing interest in primary care among medical trainees^{23,24}



VA Patient access issues



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Burnout among VA Primary Care Employees – A Regional Perspective



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Background

- Opportunity to explore impact of participatory decision-making and efficacy for PACT and other provider and clinic level factors on burnout
- Challenges in VA primary care pre-date PACT implementation in 2009
 - Farmer et al (2014) described management challenges
 - Schwartz et al (2014) described PC clinic chaos

Background

- From Meredith et al (2014), correlates of Maslach Burnout Index's Emotional Exhaustion scale:
 - Participatory decision-making and efficacy for PACTchange *inversely* associated with burnout
 - Not associated with burnout:
 - Satisfaction with teamlet
 - Information sharing
 - Communication
 - Perceived organization leadership (e.g., readiness to change)

Background

- Findings from Helfrich et al (2014), correlates of burnout:
 - Adequate staffing, and higher levels of participatory decision-making and efficacy for PACT changes were protective against burnout
 - Higher levels of perceived chaos or stress in clinic were associated with burnout

Objective

- To explore burnout over time
 - Are participatory decision-making and efficacy for PACT, do they impact burnout (emotional exhaustion) over time?
 - Are there healthcare system differences in associations between clinic factors and burnout over time?

Data Sources

- PACT Provider Survey
 - For Wave 1 (12/2011-3/2012) (n=813)
 - For Wave 2 (8/2013-1/2014) (n=1,007)
- Domains
 - Organizational context, barriers to patient centered care, clinic characteristics
 - Teamlet composition and characteristics
 - Individual perceptions and experiences
 - Respondent professional background and personal characteristics

Dependent Measure

- Burnout – Emotional Exhaustion measures from Maslach Burnout Inventory
- Sample Items:
 - I feel emotionally drained from my work
 - Working with people all day is really a strain for me
 - I feel fatigued when I get up in the morning and have to face another day on the job

Response options: Never/A few times a year.../A few times a week/Every day Maslach et al 1981

Independent Measures

- Participatory decision-making
- Efficacy for PACT changes
- Healthcare systems (with one VISN)
- Discipline:
 - Primary care providers (MDs, NPs or PAs)
 - Nurse care managers
 - Licensed vocational or practical nurses
 - Clerks
- Time (Wave 1 or 2)

Sample Participatory Decision-making Items

- This clinic encourages staff and clinicians' input for making changes and improvements
- This clinic defines success as teamwork and concern for people
- All of the staff and clinicians participate in important decisions about clinical operations (e.g., workflow)

Response options: 5-point Likert scale: Strongly disagree... Strongly agree... Survey of Organizational Attributes for Primary Care Ohman-Strickland et al 2007

Efficacy for PACT Items

- As we implement PACT, I feel I can handle my role with ease*
- I have the skills that are needed to make my role in PACT successful
- My past experiences make me confident that I will be able to perform successfully as PACT-related changes are made
- There are some PACT-related tasks that I don't think I can do well (reverse scored)

Response options: 5-point Likert scale: Strongly disagree ... Strongly agree
Readiness for Change item -- Holt et al. 2007 *Only efficacy item used in Wave 2

Statistical Methods

- Linear regression, testing for clustering of responses (within respondents over time)
- Tested for 3-way interaction between time, healthcare system, discipline
- Tested associations between participatory decision-making (high v. low) and efficacy for PACT (high v. low) with burnout
 - By healthcare system
 - By discipline

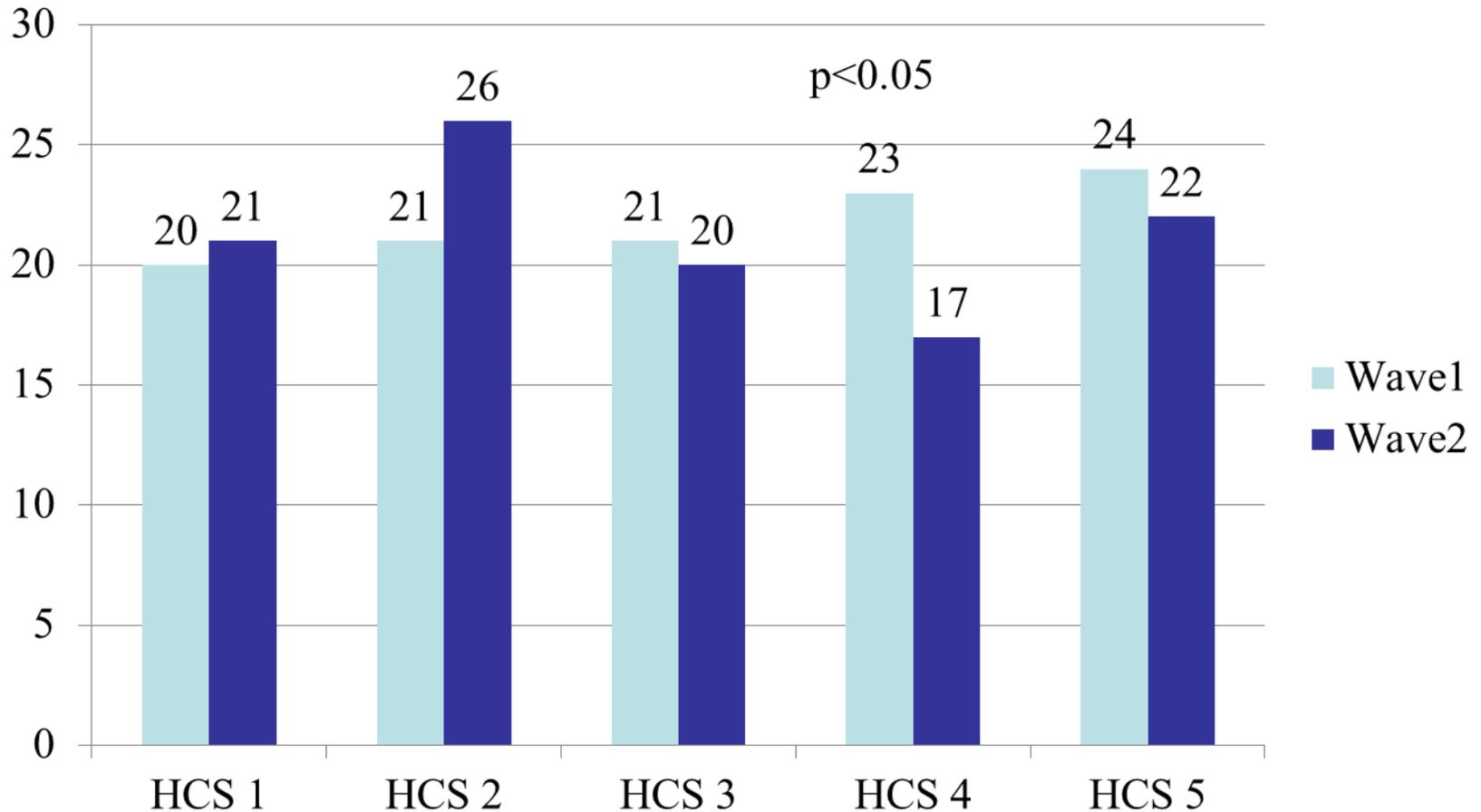
Results

- Wave 1: 515 respondents
 - 191 VA PC clinicians; 324 staff
 - Response rate: 64%
- Wave 2: 484 respondents
 - 136 VA PC clinicians; 348 staff
 - Response rate: 48%
 - 266 respondents participated in both waves

Results 1

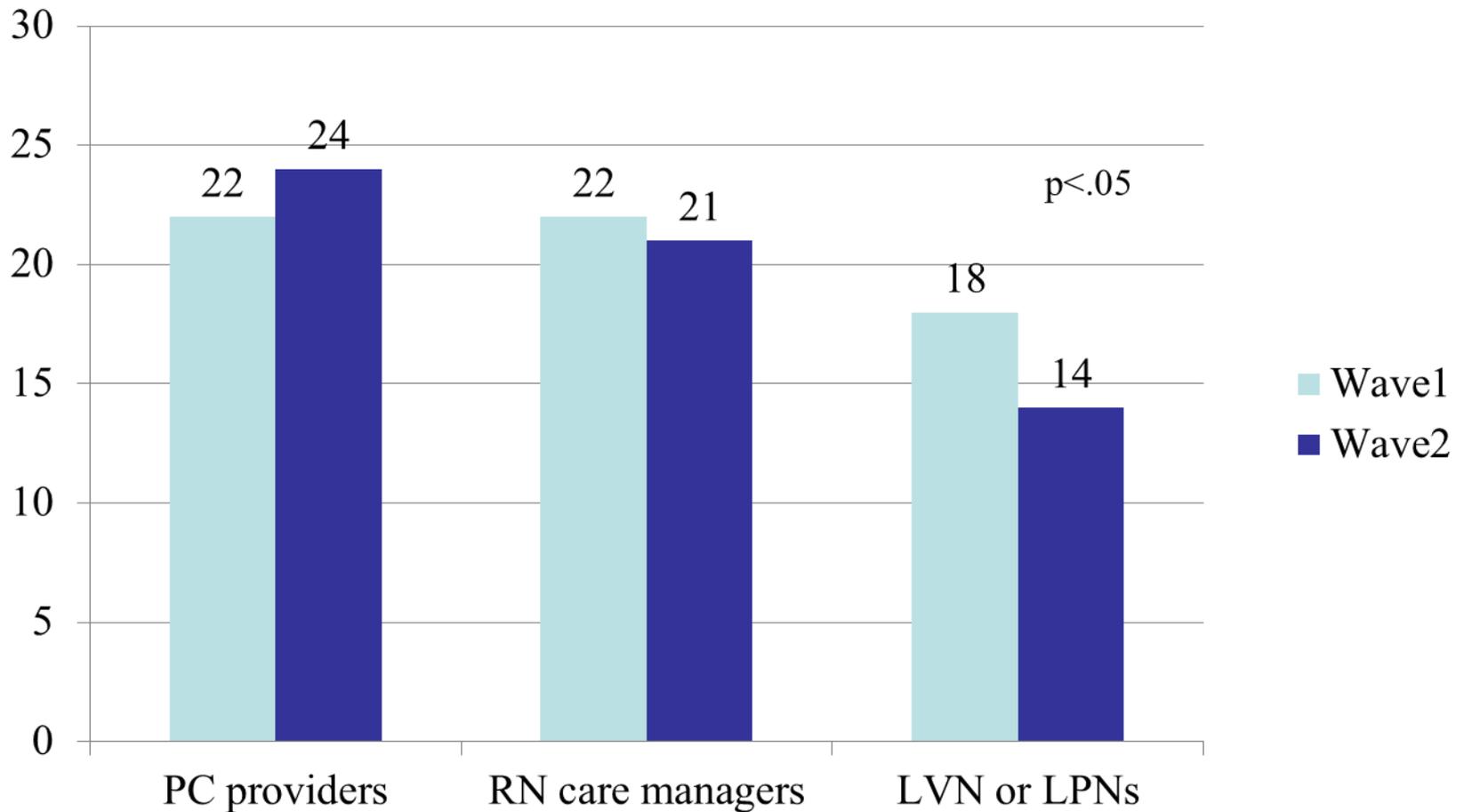
- Significant clustering among respondents who participated in both waves (Intraclass correlation= .58)
- Adjusting for clustering over time, the average burnout (emotional exhaustion) score for the sample was: 20.4, SD 1.4

Results 2: Burnout = f(Healthcare System*Time)



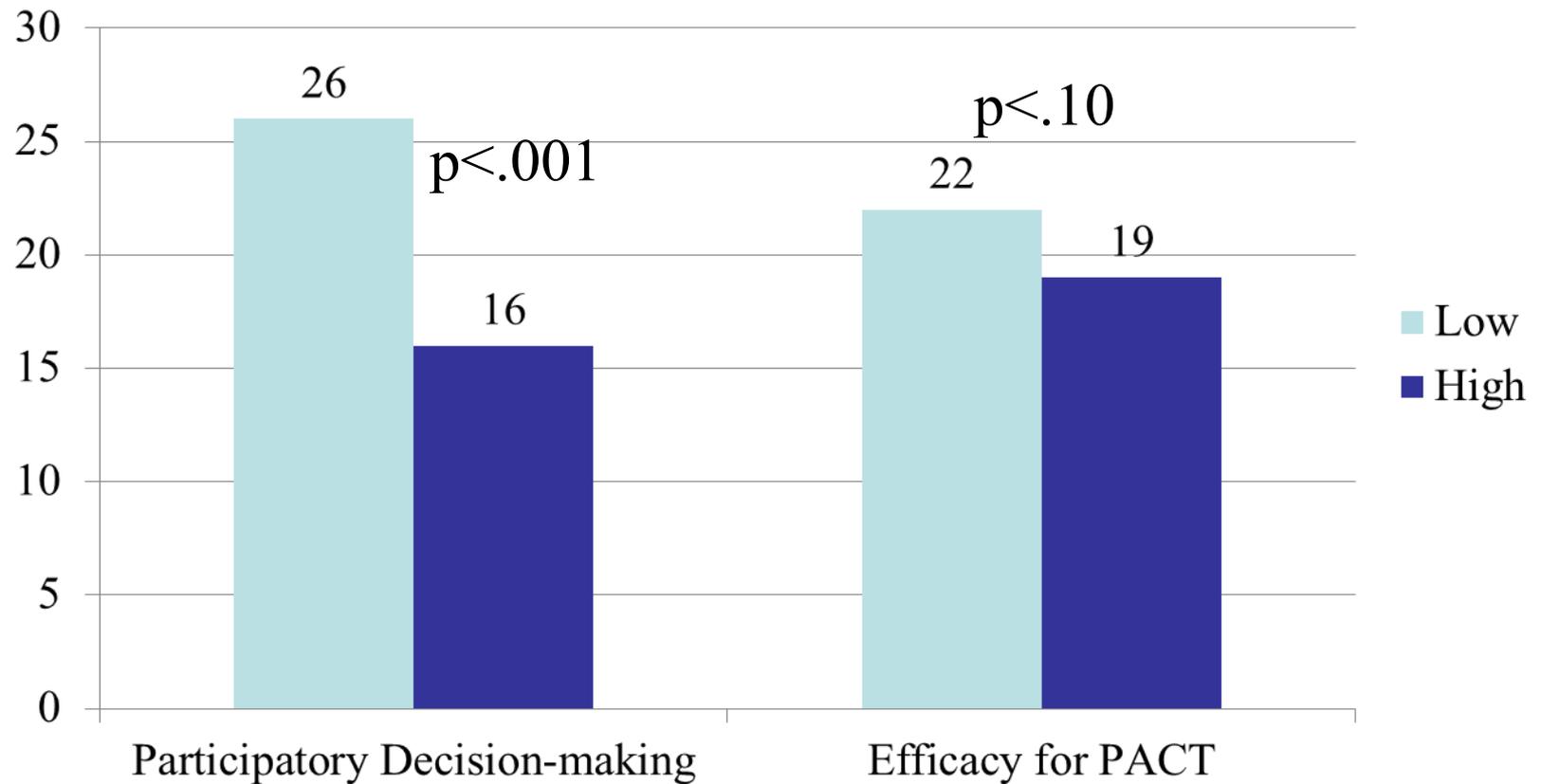
Controlling for Discipline*Time, contrast 2.45, $p > .0449$

Results 2: Burnout=f(Discipline*Time)



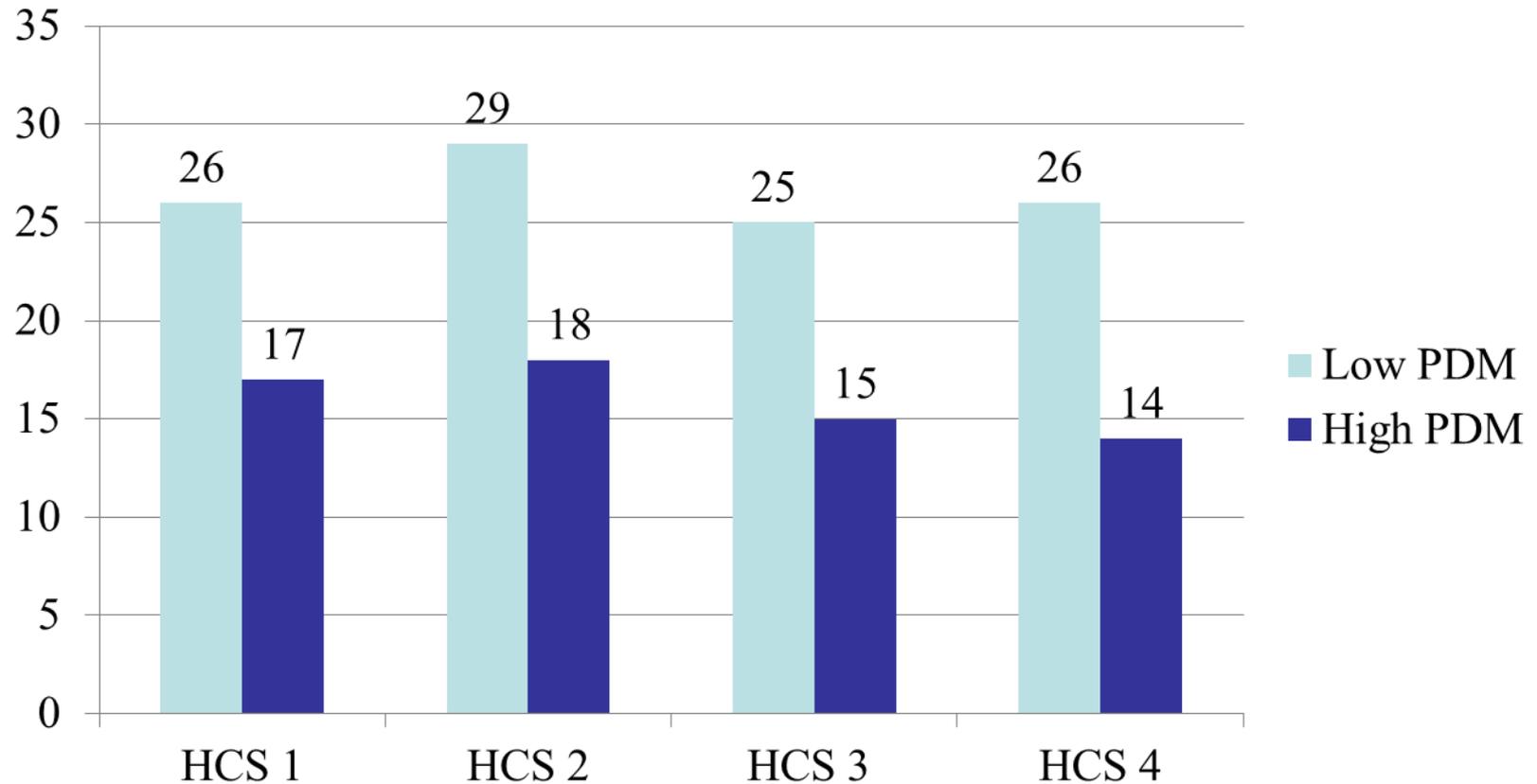
Controlling for Healthcare System*Time, contrast =.0370

Results 3: Burnout = f(Participatory Decision-making) and Burnout=f(Efficacy for PACT)



Controlling for Healthcare System*Time, Discipline*Time

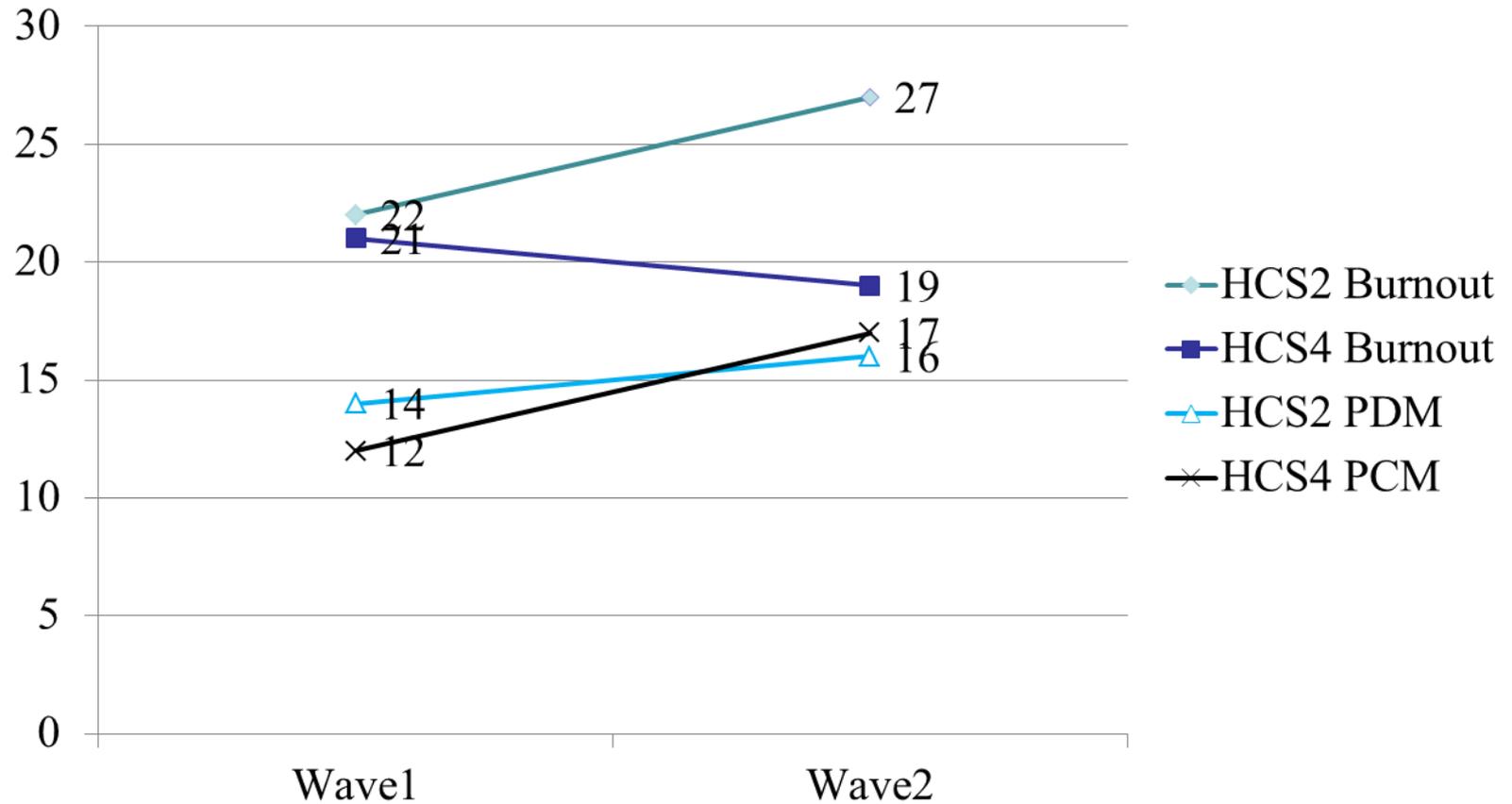
Results 3a: Burnout=f(Healthcare System*Participatory Decision-making)



All Differences $p < .05$, differences for HCS 5 not ss

For HCS 1-4, burnout diff, $p < .01$, no ss diff for Efficacy for PACT

Changes in Burnout and SDM



Discussion

- Similar to findings by Meredith and Helfrich et al, participatory decision-making and efficacy for PACT are associated with lower burnout scores
 - Varies by healthcare system and discipline
- Burnout is mutable
 - Changes over time within sites
- Limitations
 - Limited evidence about efficacy for PACT may be due to change in number of measures used in Wave 2
 - Clerks not included in analysis

Conclusion

- Burnout is a significant challenge in VA primary care
 - Significant variations in participatory decision-making and efficacy for PACT show potential for change through interventions

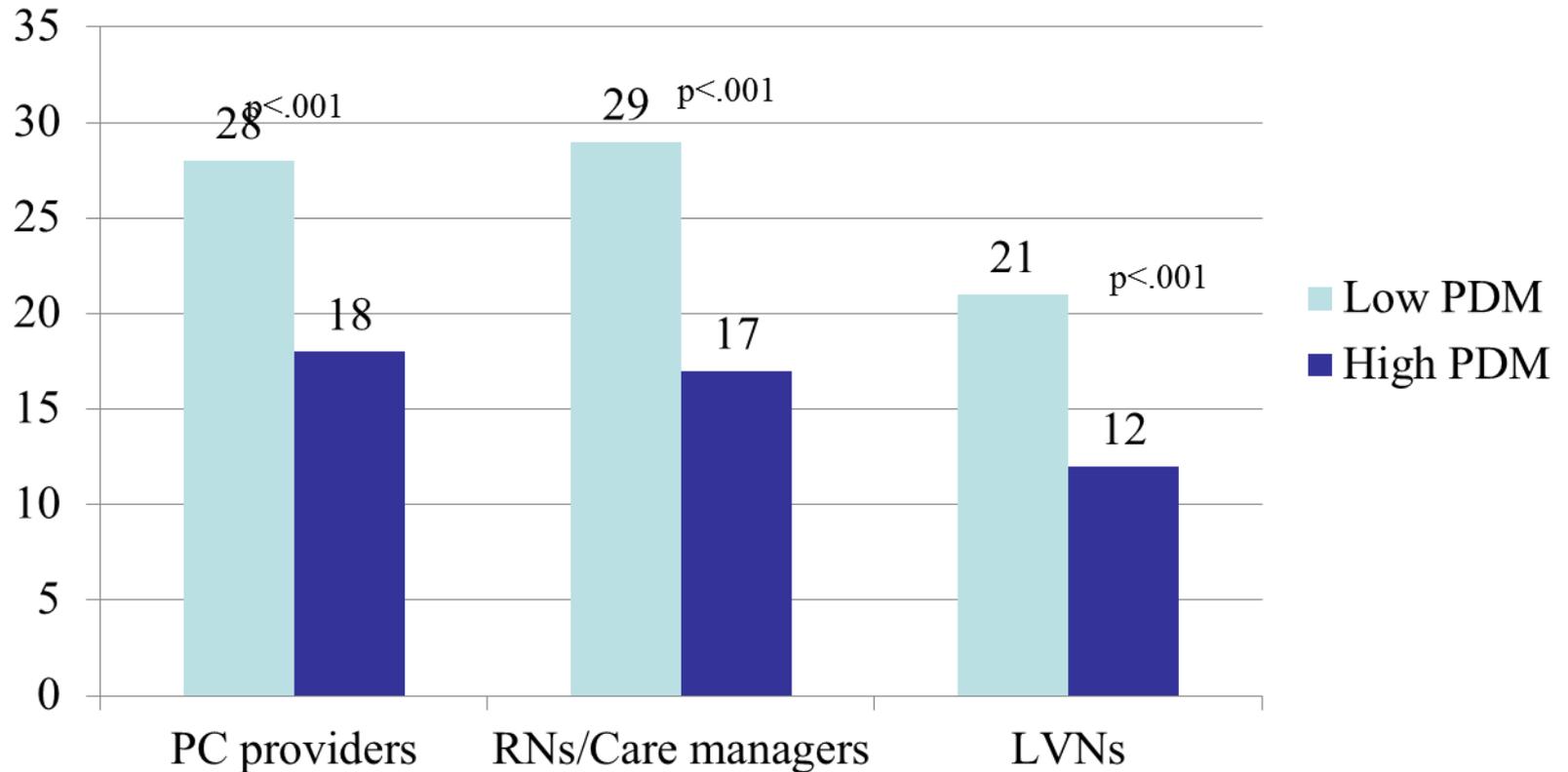
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Results 3b: Burnout = f(Discipline*Shared Decision-making, Discipline*Wave)



Results not shown, for PC providers, burnout increased over time, $p < .01$

Questions or Comments?

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