

PACT Cyberseminar: Improving Depression Care Following Psychiatric Hospitalization



Paul N. Pfeiffer, MD

VA Center for Clinical Management Research

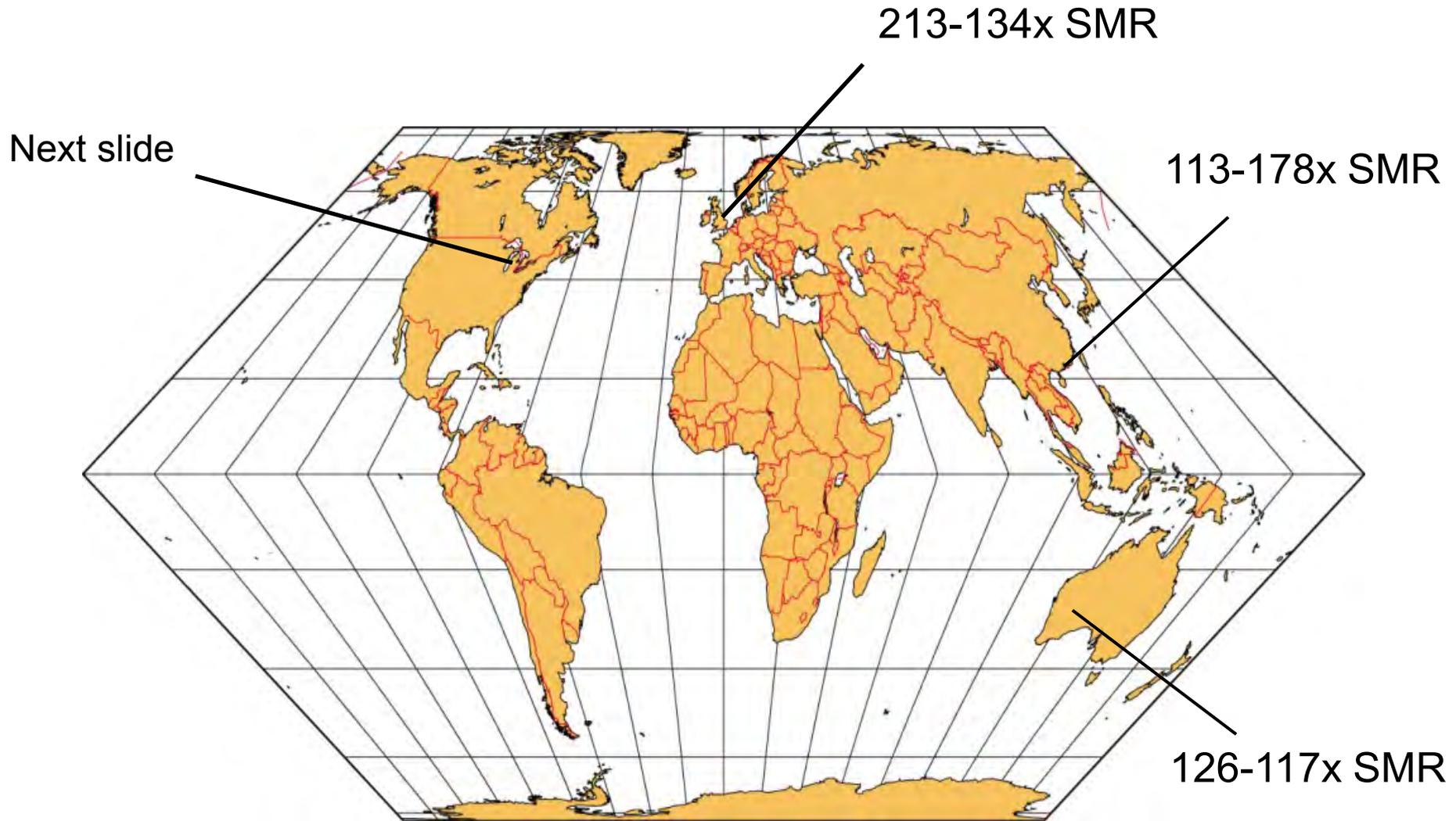
VA Ann Arbor Healthcare System

Poll Question 1

What is your primary relationship to VA patients with depression after they have been discharged from inpatient psychiatry?

- a) Provide direct patient care
- b) Oversee patient care (administrator)
- c) Other clinician/administrator
- d) Researcher
- e) Other

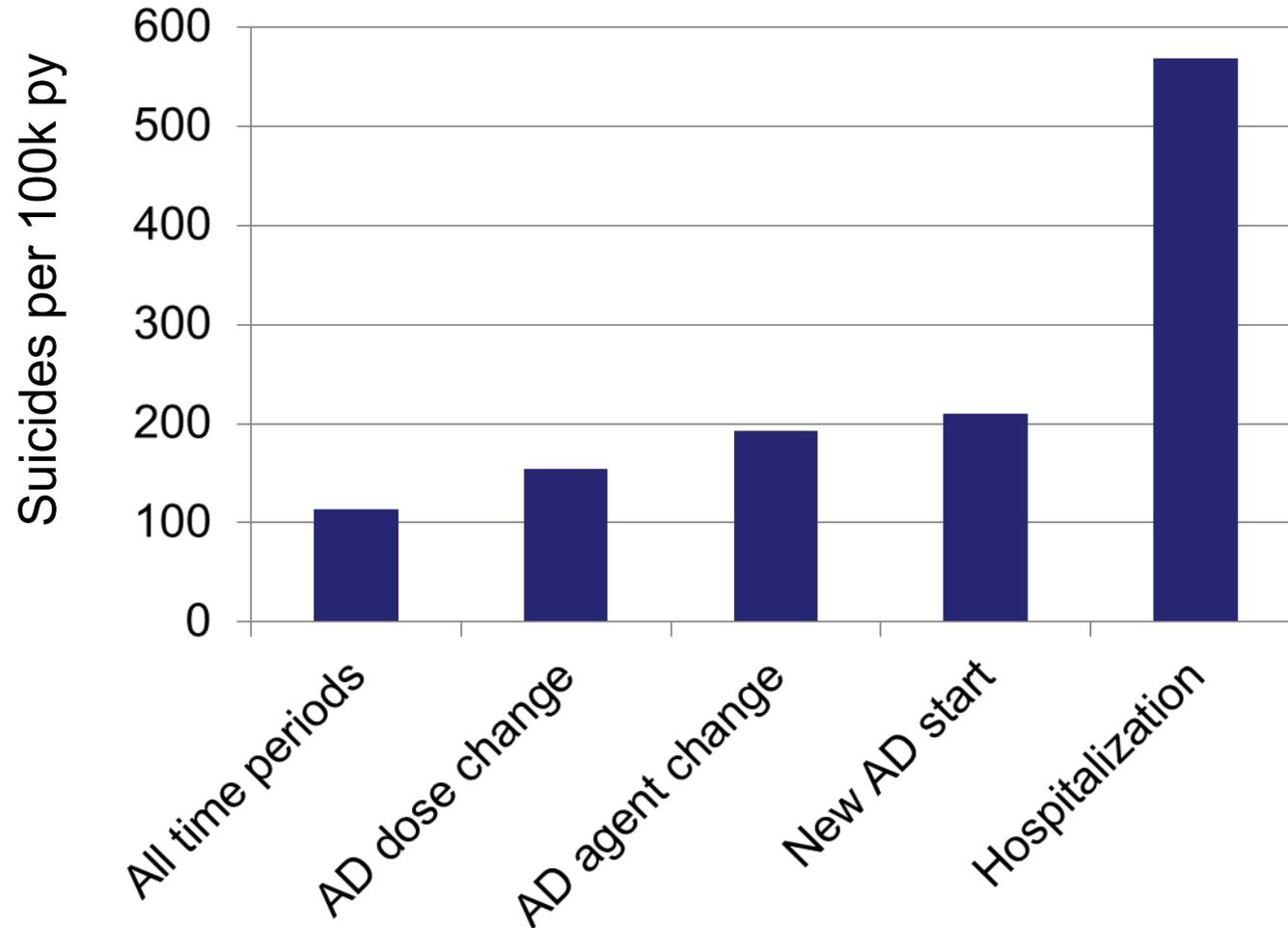
Suicide Risk After Hospitalization



SMR = standardized mortality ratio

Troister, 2008

Suicide Risk Among Depressed VA Patients



Efforts to Reduce Suicide Risk

- **Timely outpatient follow-up visit:**
VA and national standard
- **High-risk list & case management:**
current VA practice
- **Inpatient-based interventions:**
ongoing DoD work using CBT
- **Insuring highest quality depression care:** follow-up, medications (lithium?), and therapy

Patient Characteristics

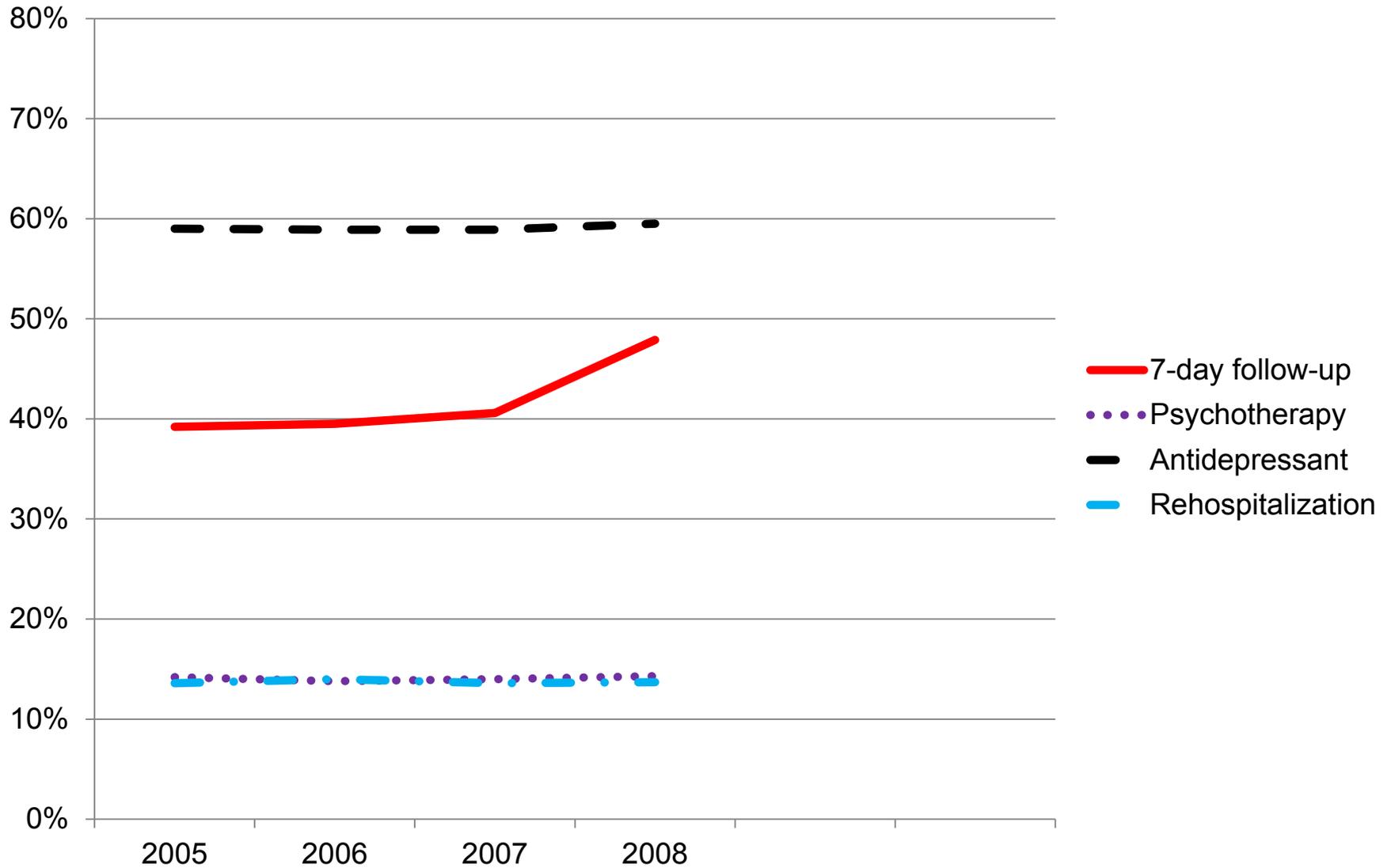
■ **Table 1.** Demographic and Clinical Characteristics of Patients With a Psychiatric Hospitalization for Major Depressive Disorder (N = 45,587)

Variable	N	%
Comorbid mental health conditions		
Substance use disorder	21,183	46.5
Post-traumatic stress disorder	15,382	33.7
Other anxiety disorder	5353	11.7
Personality disorder	5272	11.6
Mental health visit prior to hospitalization		
	27,256	59.8
Antidepressant treatment prior to hospitalization		
	27,559	60.5
Psychotherapy prior to hospitalization		
	17,797	39.0

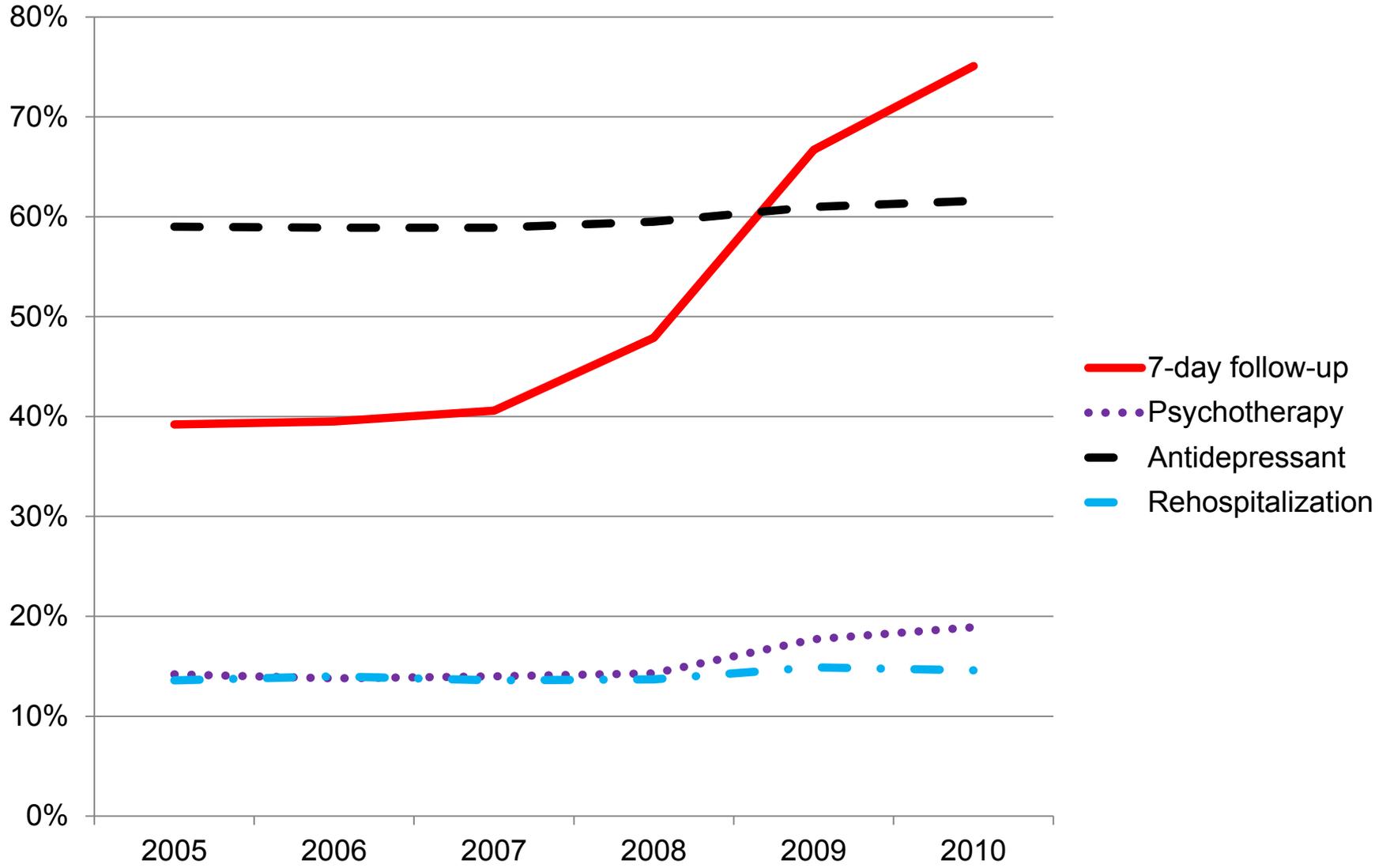
Post-hosp Treatment Indicators

- **Timely outpatient follow-up**
→ 7 or 30 days post-discharge
- **Adequate antidepressant coverage**
→ 72 out of 90 days supply (80%)
- **Psychotherapy**
→ 8 visits in 90 days

Trends in depression care following a psychiatric hospitalization for depression



Trends in depression care following a psychiatric hospitalization for depression



STAIRS

Supporting Transitions and Improving Recovery Services



STAIRS

Goals:

- Assess barriers and preferences for post-hospital depression care

Survey:

- Mailed survey 2-4 weeks post-discharge
- Excluded only dementia patients
- VA Ann Arbor and Battle Creek

Table 1. Response Rate

	Ann Arbor	Battle Creek	Total
Eligible Mailed*	453	313	766
Surveys Completed	189	99	288
Survey Response Rate	41.72%	31.63%	37.60%
Surveys Completed w/HIPAA	160	82	242
Survey w/HIPAA Response Rate	35.32%	26.20%	31.59%

Table 3. Unmet needs for existing post-hospital services
(N = 291)

Service	Desired but did not receive the service	
	n	%
Individual counseling	69	23.7%
Housing assistance	47	16.2%
Employment assistance	47	16.2%
Group counseling or support group	42	14.4%
Family or couples counseling	42	14.4%
Review of medications	33	11.3%
Daily intensive outpatient program	27	9.3%
Electroconvulsive therapy	10	3.4%

Table 4. Barriers to post-hospital counseling (N = 291)

Barrier	Reported barrier as moderately difficult to impossible	
	n	%
Problems with transportation	129	44.3%
Talking about upsetting issues	106	36.4%
Lack of energy or motivation	104	35.7%
Physical symptoms (fatigue, pain, etc.)	95	32.6%
Lack of available services	94	32.3%
Daily responsibilities	93	32.0%
Cost	89	30.6%
Problems aren't severe enough	89	30.6%
Means cannot solve own problems	79	27.1%
Physical problems getting around	77	26.5%
Don't expect it to be helpful	74	25.4%
Having family/friends know	72	24.7%
Heard about or had bad experiences with counseling	71	24.4%
Having counseling in medical record	70	24.1%

Table 5. Preferences for telemental health counseling
(N = 274)

	N	%
Prefer in-person counseling at hospital	212	77.4
Prefer counseling over the phone	36	13.1
Prefer counseling using internet video chat	4	1.5
Prefer no counseling	22	8.0

Table 6. Preferences for new post-hospital services (N = 291)

Service	Reported service as moderately to very helpful	
	n	%
Increasing support from family/friends	203	69.8%
One-to-one support from other Veteran	182	62.5%
Home visit from VA clinician	114	39.2%
Internet-based Veteran support group	64	22.0%
Internet self-help program	60	20.6%

STAIRS: Initial Qualitative Findings

- Patients appreciate phone calls to “check in”, want to know someone cares
 - Doesn’t matter much the discipline of the person calling as long as they have had some training in working with mental health
- Want therapy at the hospital clinic, but not necessarily every week

Peer Support Interventions

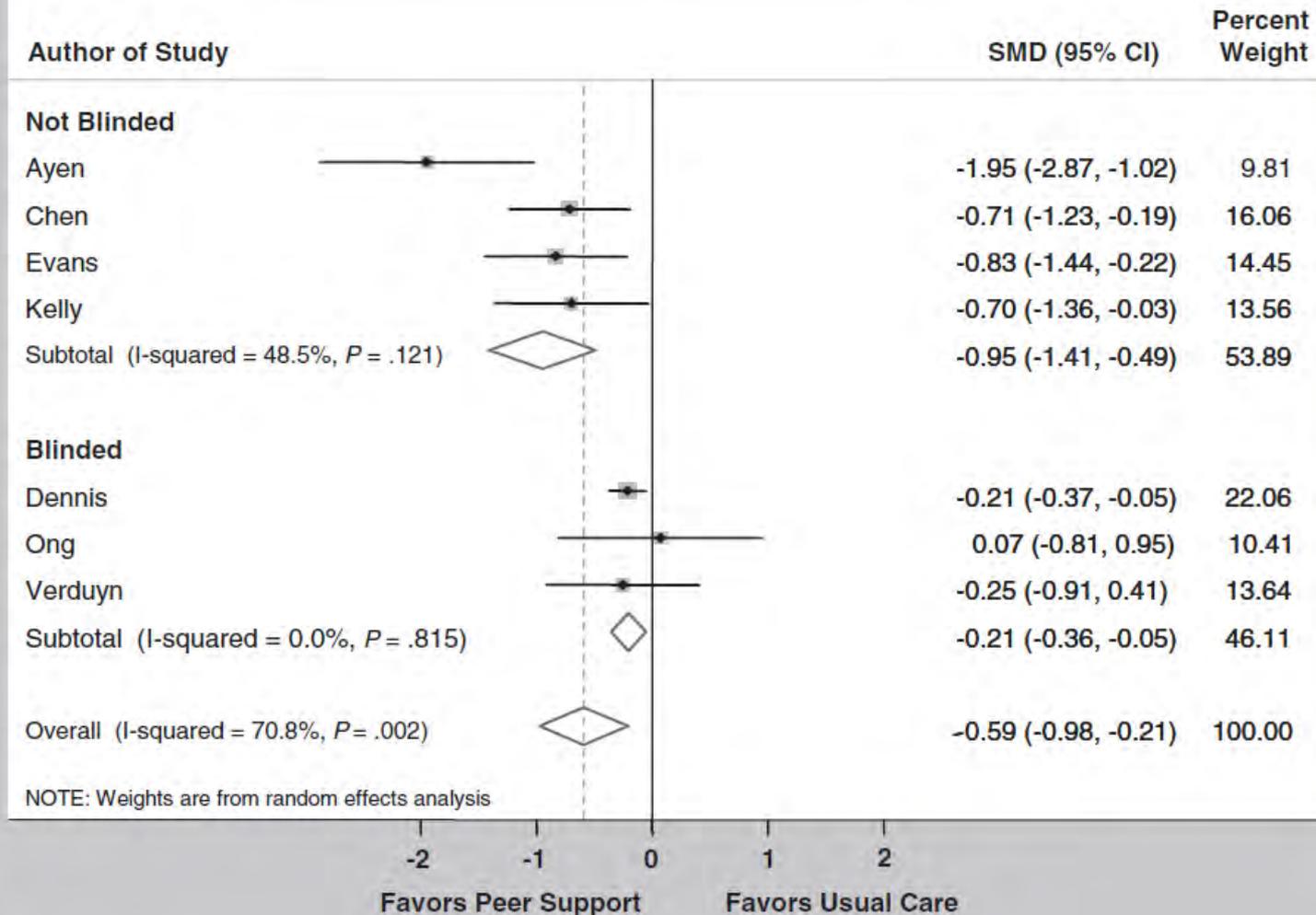
- Peers can:
 - Provide various types of social support: emotional, tangible, informational, companionship
 - Support outside and between health visits
 - Role model recovery
 - Identify red flags
 - Assist in navigating/advocating within health system

Post-hospital Peer Support

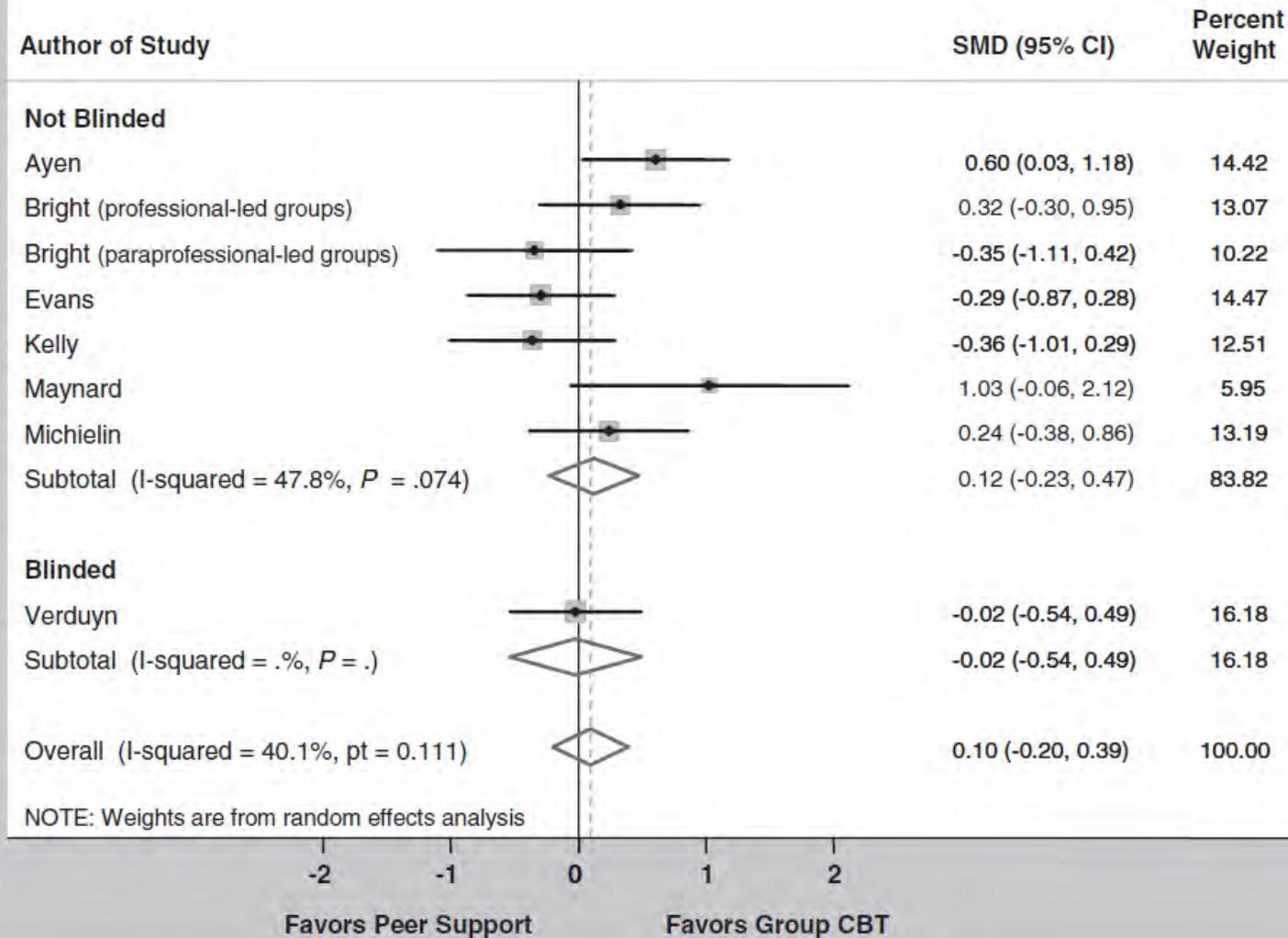
- Observational studies suggest peer support services helpful in reducing use of crisis services and readmission
- Most trials of mixed SMI population
- None of VA population
- Only 1 single-site, small RCT (N = 74), positive effect of peer support on readmission*

*Sledge, 2011

Peer Support vs. UC for Depression



Peer Support vs. Grp CBT for Depression

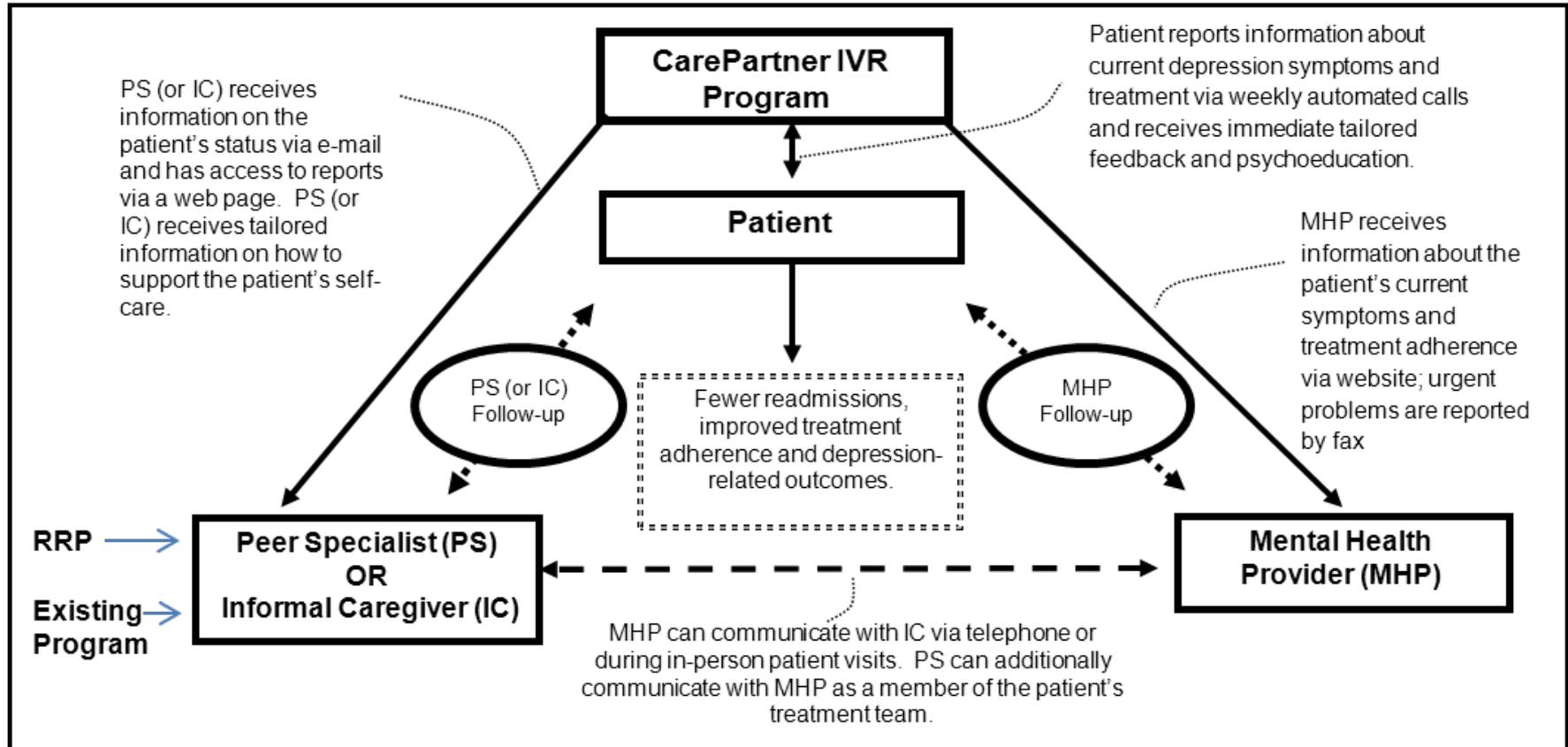


Peer Support Implementation in VHA

- VHA has hired 800+ Peer Specialists in past 1-2 years
- VA Peer Specialists often experience role confusion and could benefit from “more training, supervision, and discussion about the content and process of their jobs”

Chinman (2008)

Post-hospital Intervention Model



Current Pilot Intervention

- Acceptability:
 - Out of 42 patients approached:
 - 21 chose Peer Specialist, 7 chose family/friend
 - Mean calls completed: 9
- 90-day outcomes (N = 17)
 - Change in PHQ-9: 16.7 (baseline) to 11.8
 - Readmission: 12%

Acknowledgments

- **Co-Investigators:** Marcia Valenstein, Fred Blow, John McCarthy, Kara Zivin, Nick Bowersox, Jane Foreman, John Piette
- **Research Coordinators:** Erin Miller, Jennifer Burgess, Jennifer Henry
- **Data Analyst:** Dara Ganoczy
- **Funding:** VA Ann Arbor PACT Demo Lab, QUERI

References

1. Pfeiffer PN, Ganoczy D, Zivin K, McCarthy JF, Valenstein M, Blow FC. Outpatient follow-up after psychiatric hospitalization for depression and later readmission and treatment adequacy. *Psychiatr Serv.* 2012;63(12):1239-42.
2. Troister T, Links PS, Cutcliffe J. Review of predictors of suicide within 1 year of discharge from a psychiatric hospital. *Curr Psychiatry Rep.* 2008;10(1):60-5.
3. Valenstein M, Kim HM, Ganoczy D, McCarthy JF, Zivin K, Austin KL, et al. Higher-risk periods for suicide among VA patients receiving depression treatment: Prioritizing suicide prevention efforts. *J Affect Disord.* 2009;112(1-3):50-8.
4. Bowersox NW, Bohnert ASB, Ganoczy D, Pfeiffer PN. Inpatient Psychiatric Care Experience and Its Relationship to Posthospitalization Treatment Participation. *Psychiatr Serv.* 2013;64(6):554-62.
5. Pfeiffer PN, Ganoczy D, Bowersox NW, McCarthy JF, Blow FC, Valenstein M. Depression Care Following Psychiatric Hospitalization in the Veterans Health Administration. *Am J Manag Care.* 2011;17(9):E358-E64.
6. Sledge WH, Lawless M, Sells D, Wieland M, O'Connell MJ, Davidson L. Effectiveness of peer support in reducing readmissions of persons with multiple psychiatric hospitalizations. *Psychiatr Serv.* 2011;62(5):541-4.
7. Pfeiffer PN, Heisler M, Piette JD, Rogers MA, Valenstein M. Efficacy of peer support interventions for depression: a meta-analysis. *Gen Hosp Psychiatry.* 2011;33(1):29-36.
8. Chinman M, Lucksted A, Gresen R, Davis M, Losonczy M, Sussner B, et al. Early experiences of employing consumer-providers in the VA. *Psychiatr Serv.* 2008;59(11):1315-21.



Reductions in Ambulatory Care Sensitive Condition (ACSC)-Related Hospitalizations among Veterans with Mental Illness seen in the VHA Patient Centered Medical Home

Ranak Trivedi, PhD

Center for Innovation to Implementation, VA Palo Alto Health Care System

Dept. of Psychiatry and Behavioral Sciences, Stanford University

Acknowledgements

- Phillip Sylling, MS
- Karin Nelson, MD, MSHS
- Stephan D. Fihn, MD, MPH
- Dan Kivlahan, PhD
- Edward Post, MD, PhD
- Andrew Pomerantz, MD
- Idamay Curtis, MS
- Paul L. Hebert, PhD
- Edwin Wong, PhD
- Chuan-Fen Liu, PhD

Funding:

- PACT Demonstration Lab Coordinating Center, Office of Analytics and Business Intelligence
- VA HSR&D CDA-09-206 (Trivedi) and VA HSR&D CDA 13-024 (Wong)

Poll Question #1

- What is your primary role in VA?
 - student, trainee, or fellow
 - clinician
 - researcher
 - manager or policy-maker
 - Other

Poll Question #2

- What, if any, is your involvement with patient aligned care teams (PACT)?
 - VA Operations
 - Physician
 - Nurse Practitioner
 - Case manager
 - Social worker
 - Mental health provider (psychologist, psychiatrist)
 - Trainee (intern, resident, postdoctoral fellow)
 - Other staff
 - Not involved with PACT

Background

- Ambulatory care sensitive conditions (ACSCs) are medical conditions thought to be sensitive to the receipt of high quality primary care
- Mental illness is associated with higher ACSC-related hospitalization rates
- Veterans have a high rate of mental illness and may be especially vulnerable
 - Depression: 13.5%
 - PTSD: 9.5%

Background

- To address the needs of Veterans with mental illness, VA integrated mental health in primary care in 2007
- In April 2010, the VA further implemented a patient centered medical home model, Patient Aligned Care Teams (PACT)
- Therefore, it is important to evaluate effect of PACT rollout on outcomes among mentally ill Veterans

Objective

To determine the association of PACT on the rate of ACSC-related hospitalizations among Veterans with depression and PTSD

Methods

- Included Veterans seen in VHA primary care between 2003Q4 to 2012Q3 (N= 8,068,030)
- ICD9 codes used to determine a diagnosis of depression (296.XX, 300.4, 311) or PTSD (309.81)
 - 1+ inpatient or 2+outpatient dx in previous year
- Observation unit: facility-diagnosis cohort-quarter level

Methods

- Interrupted time series analysis with Poisson model of hospitalizations
 - Changes in hospitalizations using a PACT indicator = 1 after FY10 Q3
 - Control for seasonality, existing trend in hospitalizations, patient age, sex, health risk, facility size, and facility area economic climate
 - Include facility-cohort level random effects for time trend and pre-PACT and post-PACT intercepts

Methods

- Predicted rate of admissions based on pre-PACT ACSC hospitalization data
- Calculated differences between observed and predicted rate of ACSC-related admissions
- Separate models:
 - Depression and PTSD
 - Veterans ≥ 65 y and < 65 y

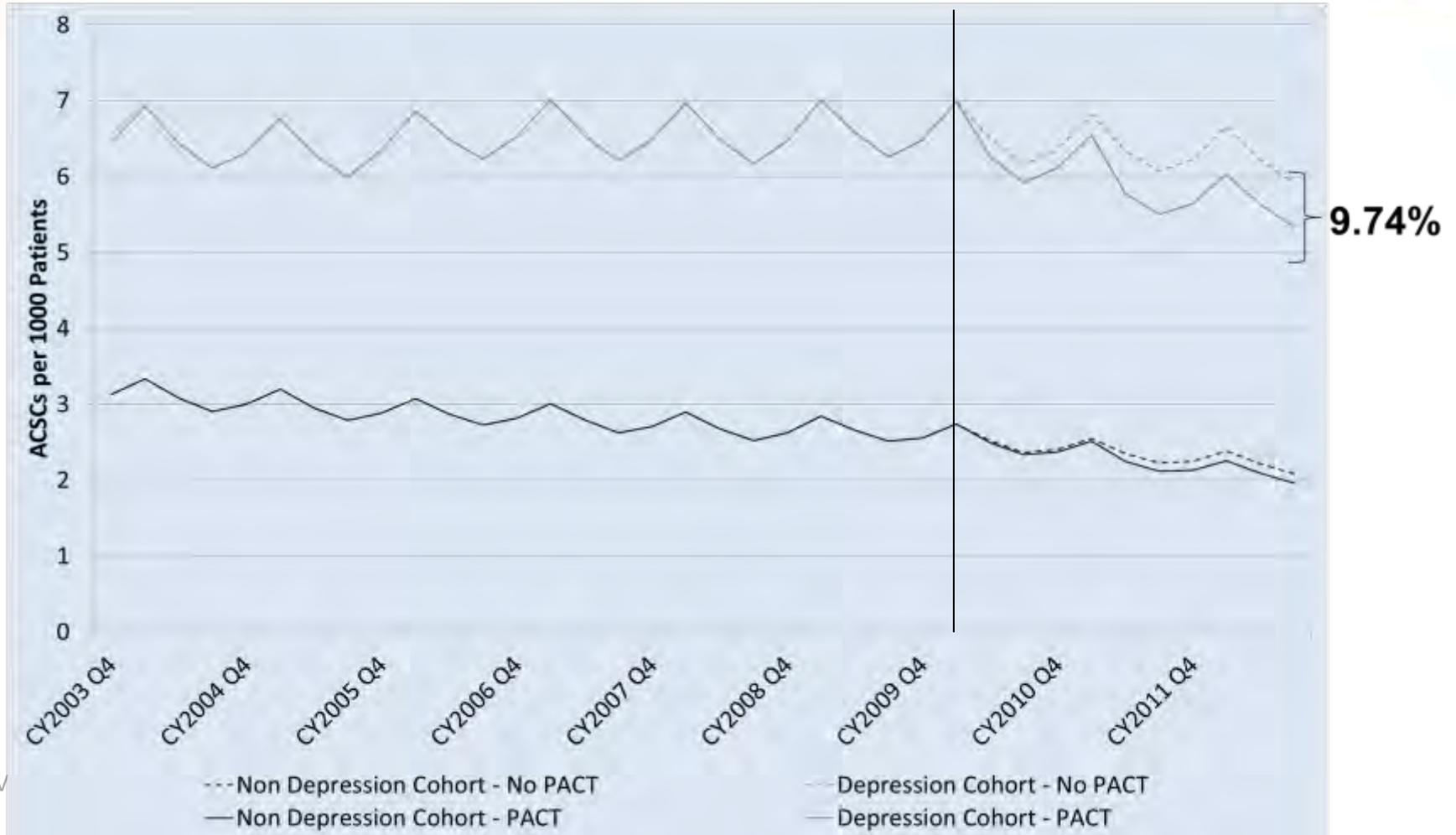
Table 1: ACSC-hospitalization rates among Veterans with depression

	<65 y	≥65 y
Depression	5.34%	16.19%
No Depression	2.68%	4.48%

Trends in ACSC-related hospitalizations

Veterans with Depression, <65 y

PACT Rollout



Veterans with Depression, ≥ 65 y

PACT Rollout

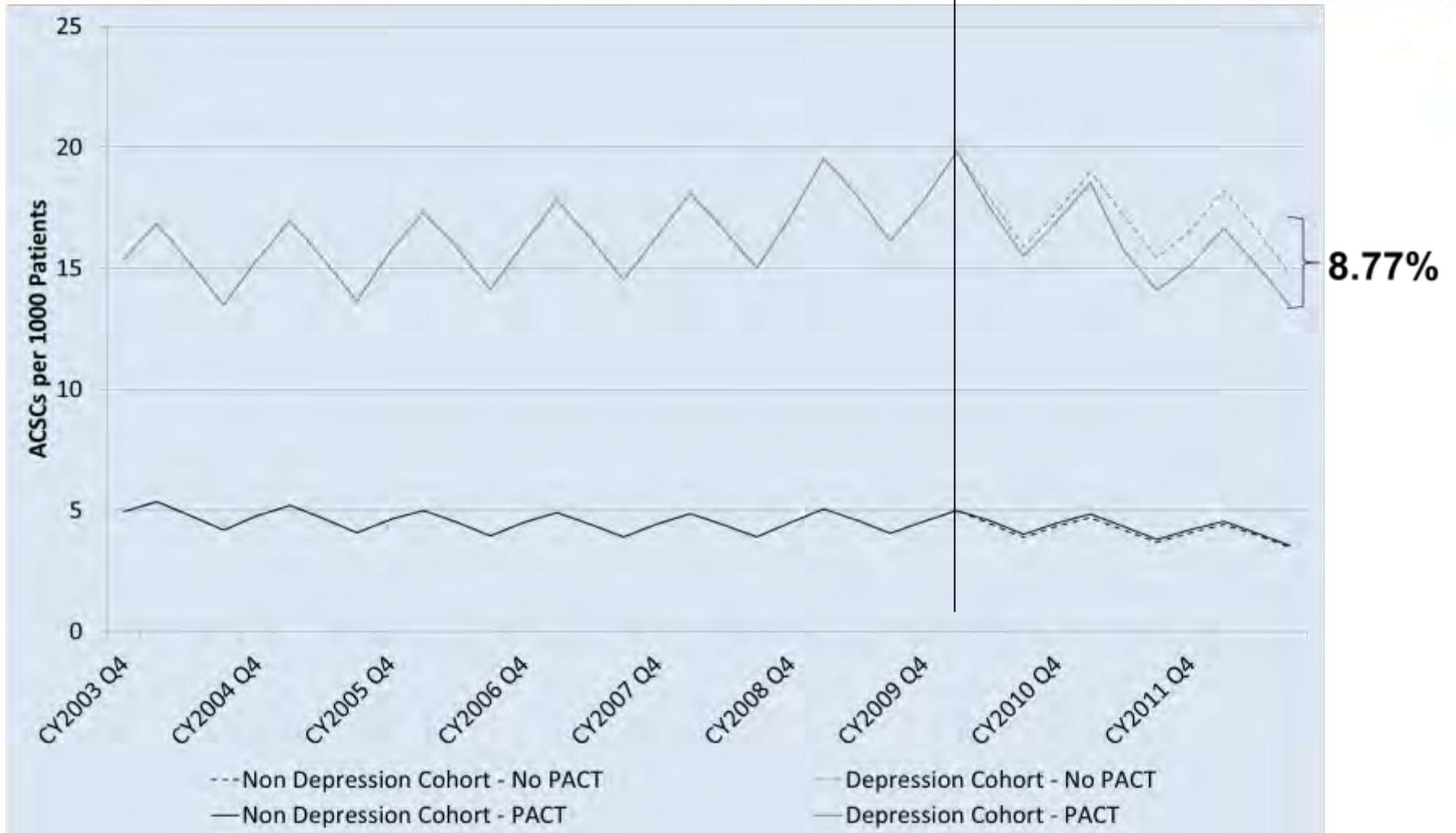
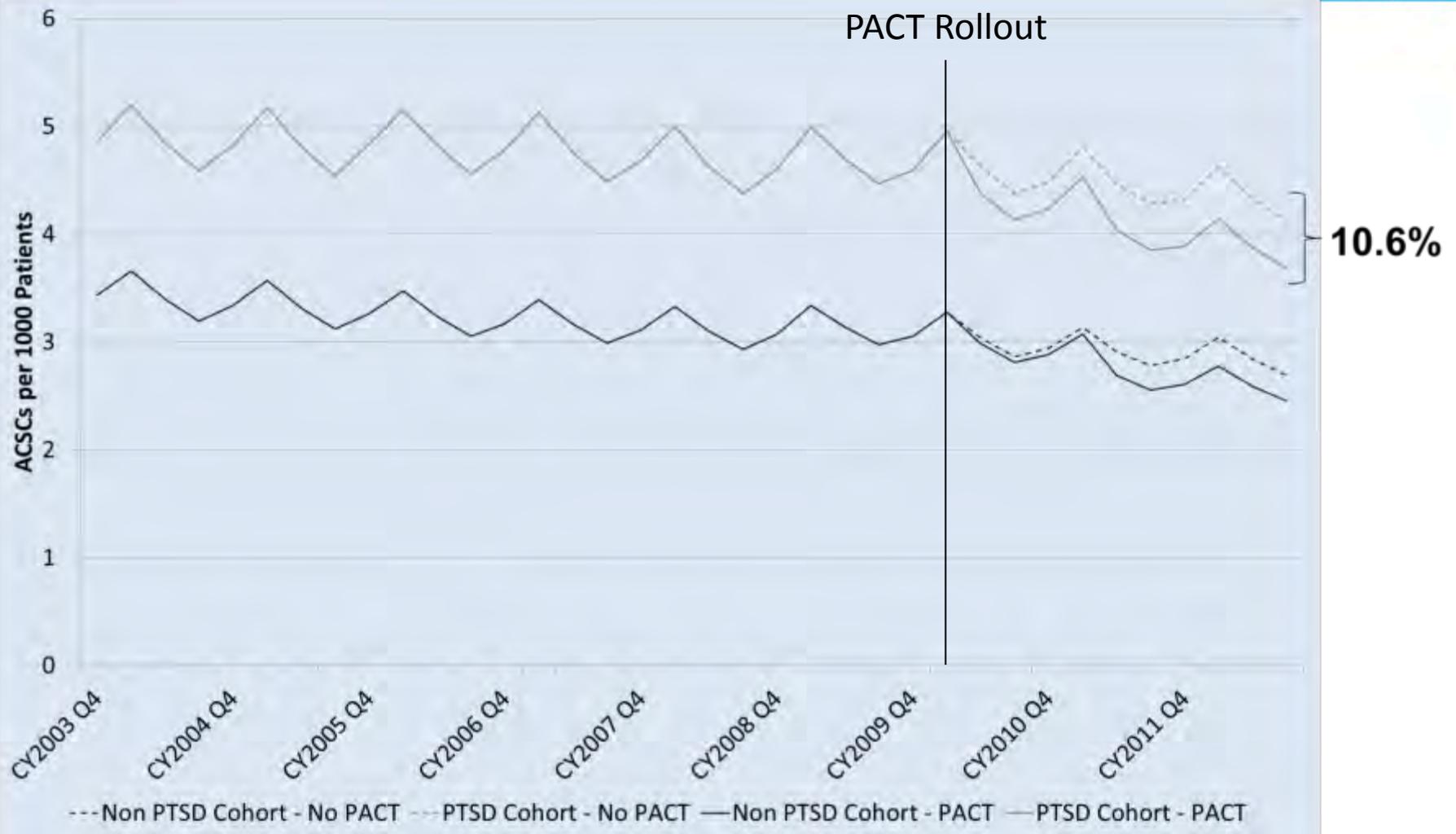


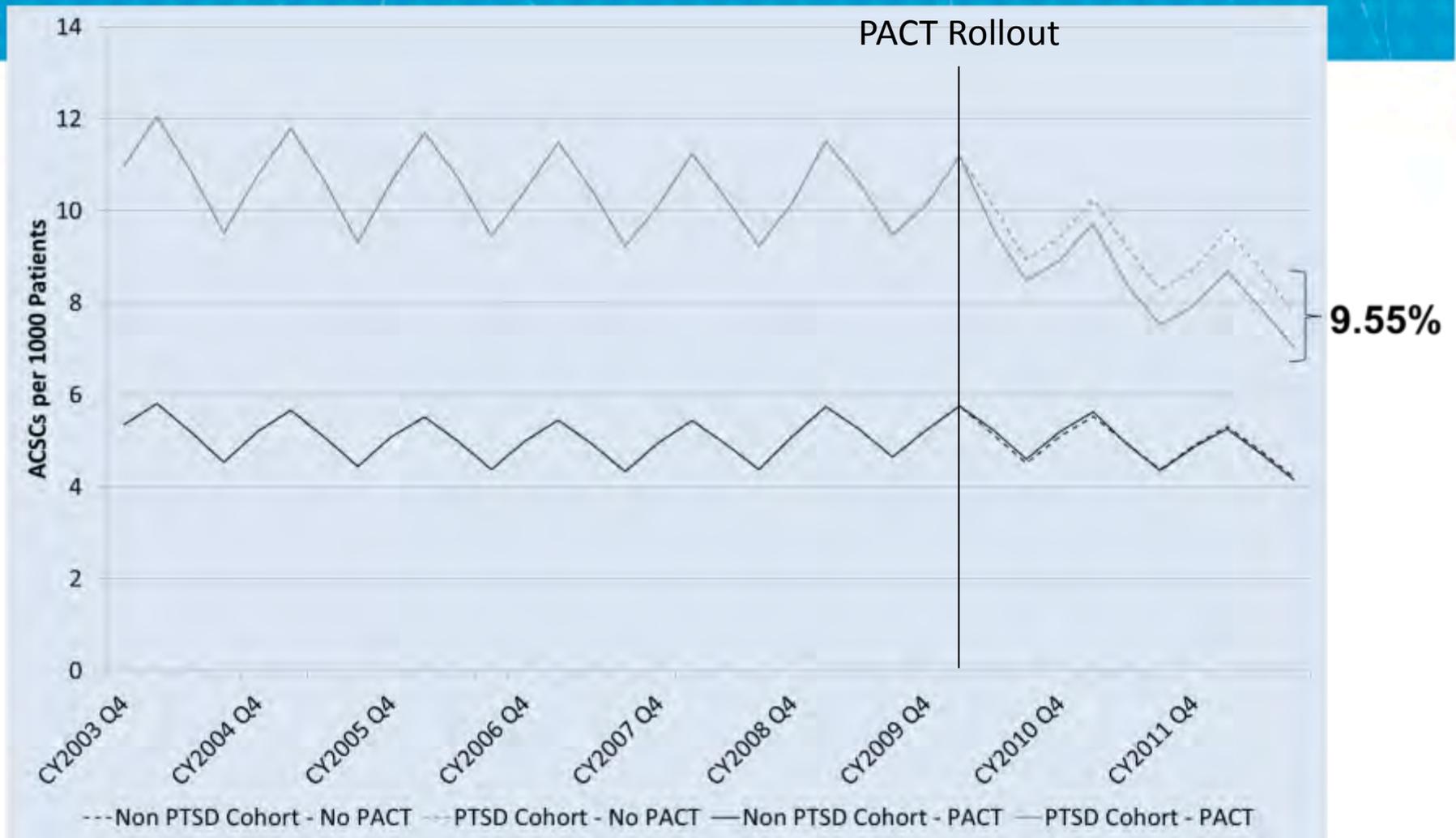
Table 2: ACSC-hospitalization rates among Veterans with PTSD

	<65 y	≥65 y
PTSD	4.59%	9.95%
No PTSD	3.10%	5.04%

Veterans with PTSD, <65 y



Veterans with PTSD, ≥65 y



Discussion

- ACSC–related hospitalization rates high among Veterans with depression or PTSD
- Veterans with depression or PTSD show decreases in ACSC-related hospitalizations since PACT
 - Especially among those <65 y

Limitations

- Use of administrative data
 - Cannot determine illness severity of depression or PTSD
- Observational data limits causal inferences
- Limited to Veterans seen in primary care and patients seen in an integrated medical systems

Conclusions

- Depression and PTSD are potentially modifiable causes of ACSC-related hospitalizations
- The PACT model of patient centered medical home may result in better management of these conditions
 - In addition to VA's PCMH and primary care program

Questions?

Contact Information:

Email: Ranak.trivedi@va.gov

Ph: 650493500 x25225 (2 for Menlo Park)

Paul Pfeiffer, MD

E-mail: paul.pfeiffer@va.gov

Phone: 734-845-3645