Primary Care - Mental Health Integration: Improving Mental Health Care Access for VA Primary Care Patients

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January 17, 2018

VA HSR&D PACT Cyberseminar

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No relationships to disclose.

Learning points

1. What are challenges in caring for Veterans with mental illness in primary care?
2. How can we better structure primary care to deliver evidence-based mental health care for Veterans?
3. Are team-based models that provide integrated care (i.e., PC-MHI) working as intended in the VA?

Poll Question #1

- What is your primary role in VA?
  a. PACT clinician
  b. PC-MHI or mental health specialty clinician
  c. Researcher
  d. Administrator, manager or policy-maker
  e. Other

Caring for Veterans with mental illness

30% with MH dx[1]

Primary care team models that integrate mental health care

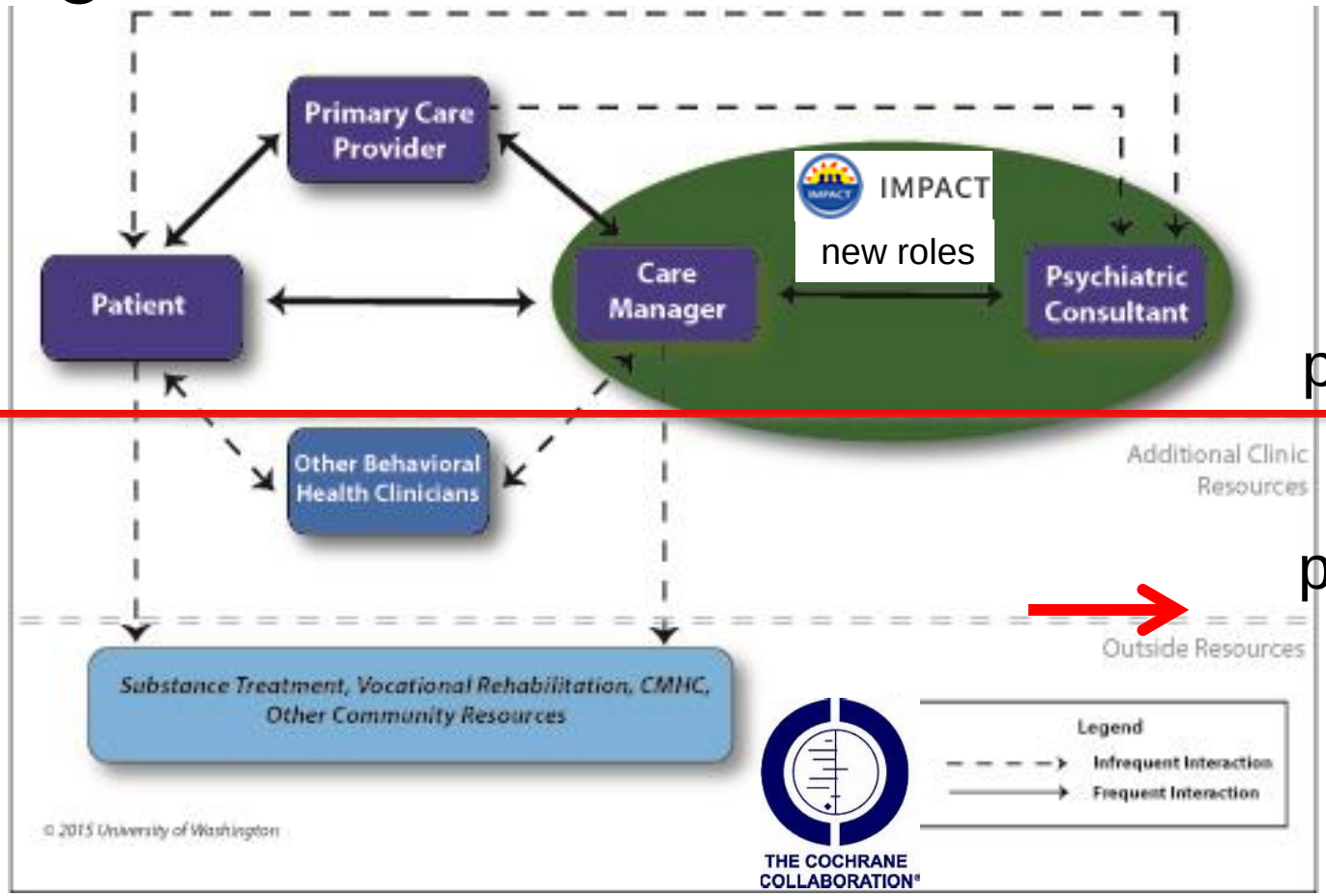
4.2x more admissions[2]

2.7x more costly[2]

Patients with co-morbid depression are dying ~10-20 years earlier from chronic *medical* illness.[3]

[1]Zivin et al, *Med Care*, 2011; [2]Watkins et al, *Health Aff*, 2011; [3]Druss et al, *Med Care*, 2011

Integrated care models are effective

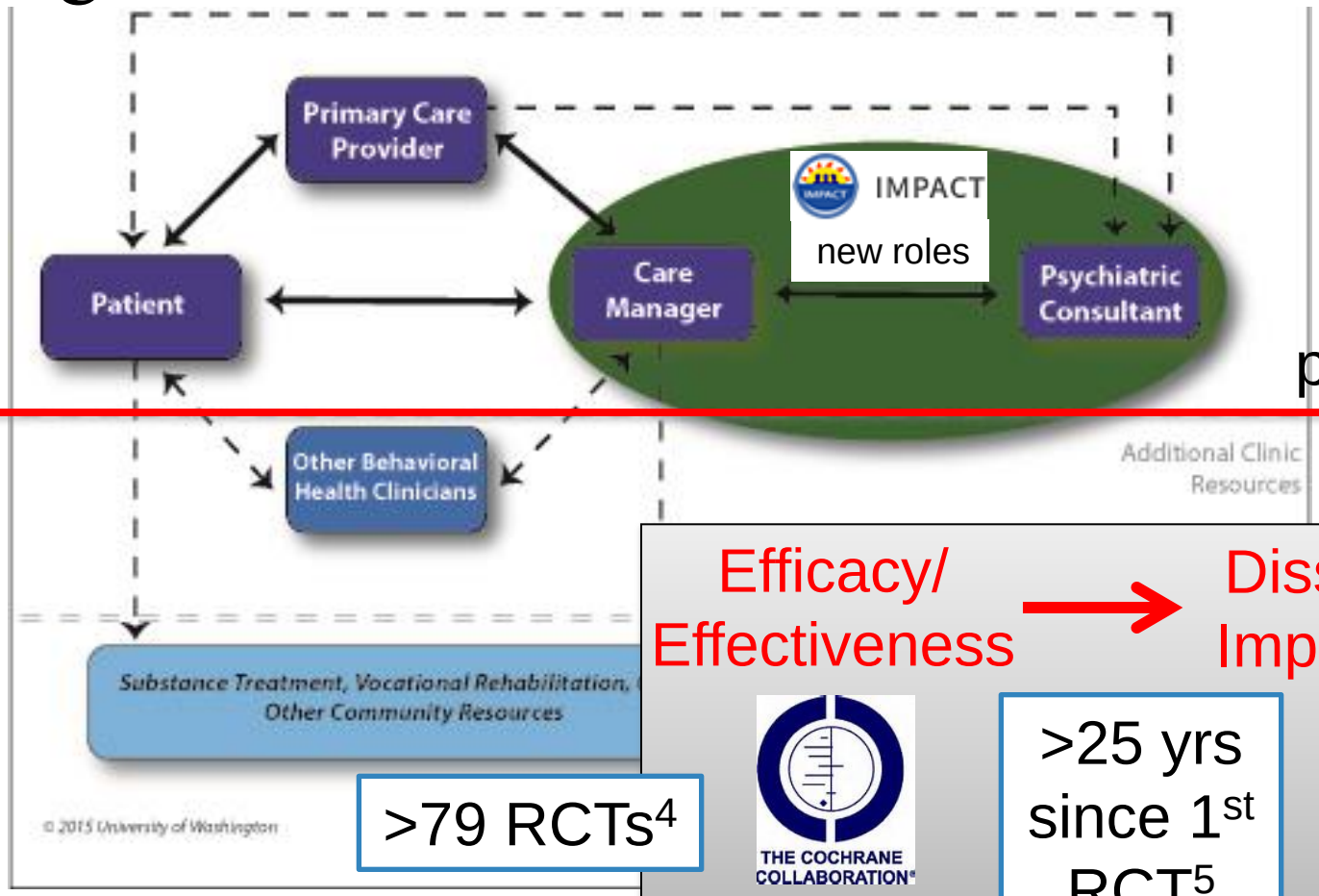


Inside primary care

Outside primary care

[4]Archer et al, *Cochrane Database Syst Rev*, 2012; [5]Katzelnick et al, *Psychiatr Serv*, 2015

Integrated care models are effective



Inside primary care

Outside

Efficacy/ Effectiveness → Dissemination/ Implementation

>79 RCTs[4]

THE COCHRANE COLLABORATION

>25 yrs since 1st RCT[5]

[4]Archer et al, *Cochrane Database Syst Rev*, 2012; [5]Katzelnick et al, *Psychiatr Serv*, 2015

Primary Care - Mental Health Integration

"Blended model that includes co-located collaborative care and care management"
-- VHA Handbook 1160.01, Section 21

PC-MHI

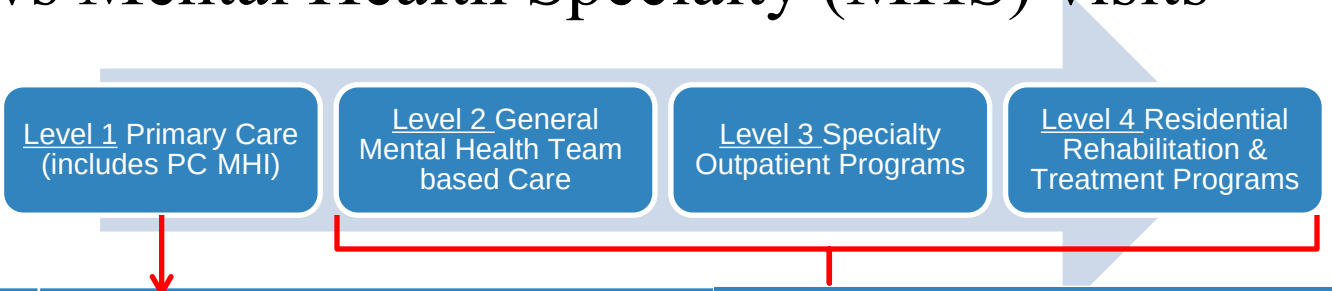
Primary Care-Mental Health Integration

- Nationally implemented in VA clinics[6]
- Aims to improve access to care for common mental illnesses (depression)

[6]Pomerantz et al, *Fam Syst Health*, 2010

PC-MHI vs Mental Health Specialty (MHS) visits

Levels of Mental Health Care



	PC-MHI (inside primary care)	MHS (outside primary care)
Location	On-site	Different floor or building
Target diagnoses	Mild-to-moderate depression, anxiety, alcohol misuse	Serious mental illness (SMI), often psychotic disorders
Service delivery structure	Limited number of brief appointments	50-90 min appointments for a minimum of 14 weeks
Typical provider	Nurse care managers, psychologists, social workers	Psychiatrists, psychiatric nurse practitioners

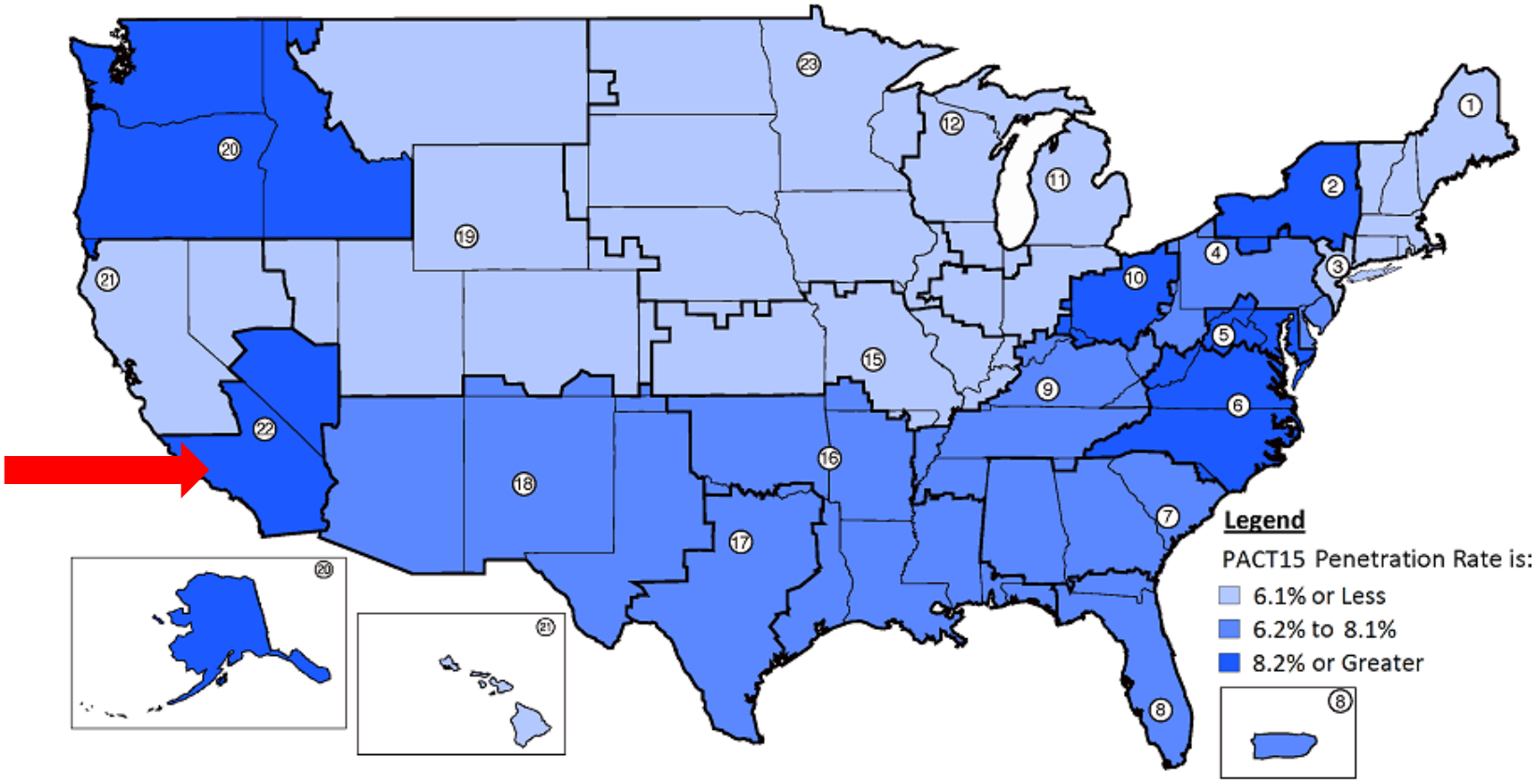
Poll Question #2

- Which best describes mental health (MH) arrangements in your primary care clinic?
  a. Embedded MH clinicians providing PC-MHI care
  b. Embedded MH clinicians & MH nurse care mgmt.
  c. Co-located MH clinicians providing independent MHS care
  d. No on-site MH clinicians, but MH nurse care mgmt. available
  e. No on-site MH clinicians, but tele-mental health available

PC-MHI Penetration (PACT 15)

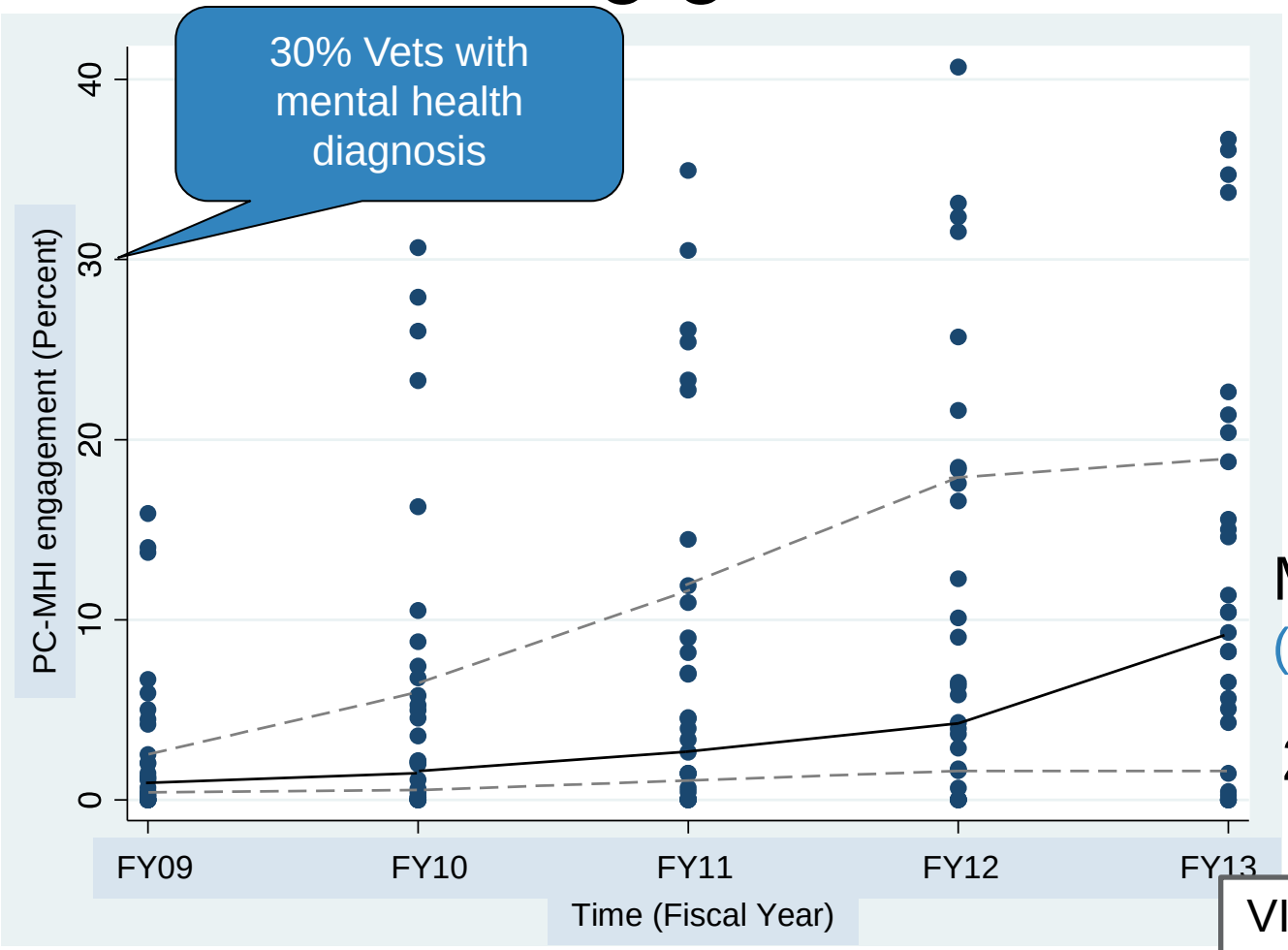
- The percent of assigned primary care patients seen in a primary care mental health integration (PCMHI) clinic
  - PC-MHI primary stop code (534, 539)
  - HBPC MH provider primary stop code (156, 157)
  - Telephone encounters primary stop code (338, 527) and secondary stop code (534)
- Only required for large (5,000 or more core uniques) and very large (10,000 or more core uniques) divisions

PC-MHI penetration map by VISN in 2017



Primary Care-Mental Health Integration Dashboard on VSSC

↑ VISN 22 clinic engagement in PC-MHI (FY09-13)



Clinic PC-MHI engagement =

PC-MHI patients / # primary care patients

75% (3rd quartile)

Median

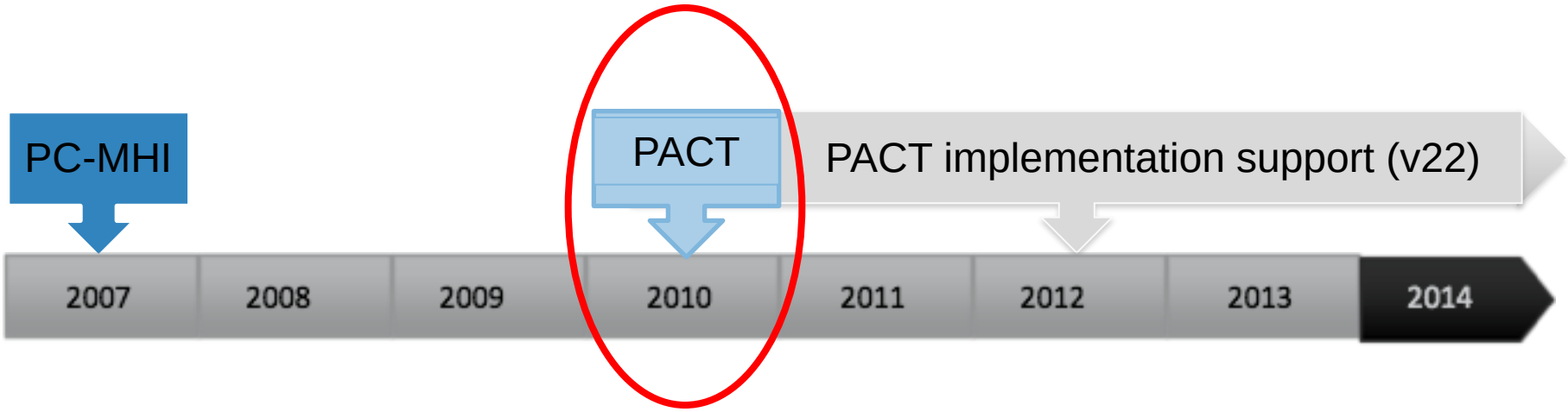
(↑8.2% points)

25% (1st quartile)

VISN 22 (n=29 clinics)

[7]Leung et al, *J Am Board Fam Med*, 2018

Innovations in VA primary care



PACT
PATIENT ALIGNED CARE TEAM

Implemented nationally in all primary care clinics

PACT builds on PC-MHI

- Based on Patient-Centered Medical Home model
- All patients assigned to a PACT teamlet
- Enhanced primary care staffing
  - Core team - 3 staff:1 PCP
  - Expanded (specialty) team - pharmacists, social workers, mental health providers, etc.

Study Rationale

Did PC-MHI also play a role in recent reductions in MHS visits and total VA costs?

ACOS & MEDICAL HOMES

By Paul L. Hebert, Chuan-Fen Liu, Edwin S. Wong, Susan E. Hernandez, Adam Batten, Sophie Lo, Jaclyn M. Lemon, Douglas A. Conrad, David Grembowski, Karin Nelson, and Stephan D. Fihn

Patient-Centered Medical Home Initiative Produced Modest Economic Results For Veterans Health Administration, 2010–12

ABSTRACT In 2010 the Veterans Health Administration (VHA) began a nationwide initiative called Patient Aligned Care Teams (PACT) that reorganized care at all VHA primary care clinics in accordance with the patient-centered medical home model. We analyzed data for fiscal years 2003–12 to assess how trends in health care use and costs changed after the implementation of PACT. We found that PACT was associated with modest increases in primary care visits and with modest decreases in both hospitalizations for ambulatory care–sensitive conditions and outpatient visits with mental health specialists. We estimated that these changes avoided $596 million in costs, compared to the investment in PACT of $774 million, for a potential net loss of $178 million in the study period. Although PACT has not generated a positive return, it is still maturing, and trends in costs and use are favorable. Adopting patient-centered care does not appear to have been a major financial risk for the VHA.

Do PC-MHI visits…

- Improve mental health care access?
- Substitute (and reduce) MHS visits?
- Decrease total cost of VA care?

Specific Aims

To assess whether increased clinic engagement in PC-MHI is associated with changes in mental health visits and costs

Hypothesis 1: (Utilization)

↑PC-MHI engagement → ↑ all VA mental health visits

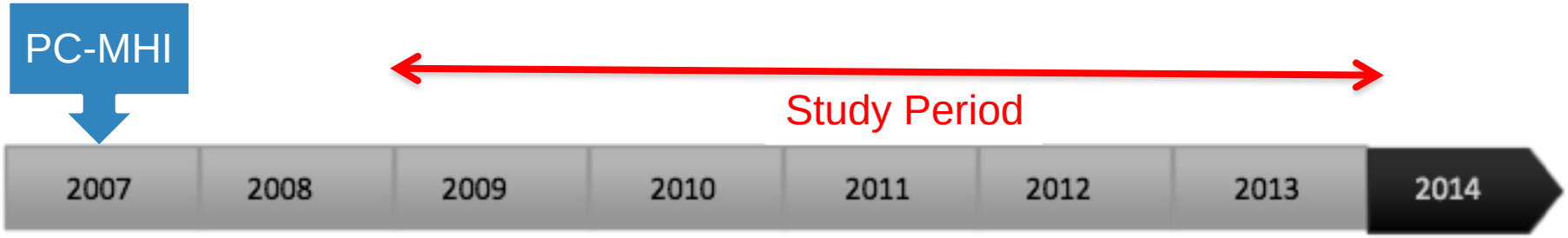
↓non-PC based MHS visits

Hypothesis 2: (Cost)

↑PC-MHI engagement → ↓Total cost of VA care

Study design

Retrospective longitudinal cohort study using VA data



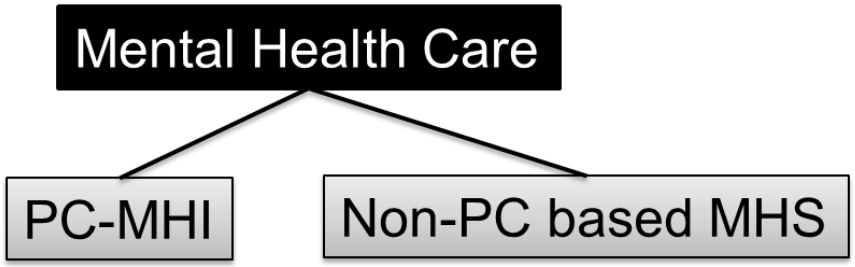
Setting: 29 VA primary care practices in S. California

Patients: Had ≥2 primary care visits in FY09 & ≥1 mental health diagnosis over study period (n=66,638)

- Assigned to a "home clinic" where he/she received majority of primary care services in initial year

Study outcomes
(patient-level)

Healthcare utilization



Secondary outcomes: Primary care, other specialty care, emergency (ED) visits, hospital stays

Total costs of VA-directly provided care

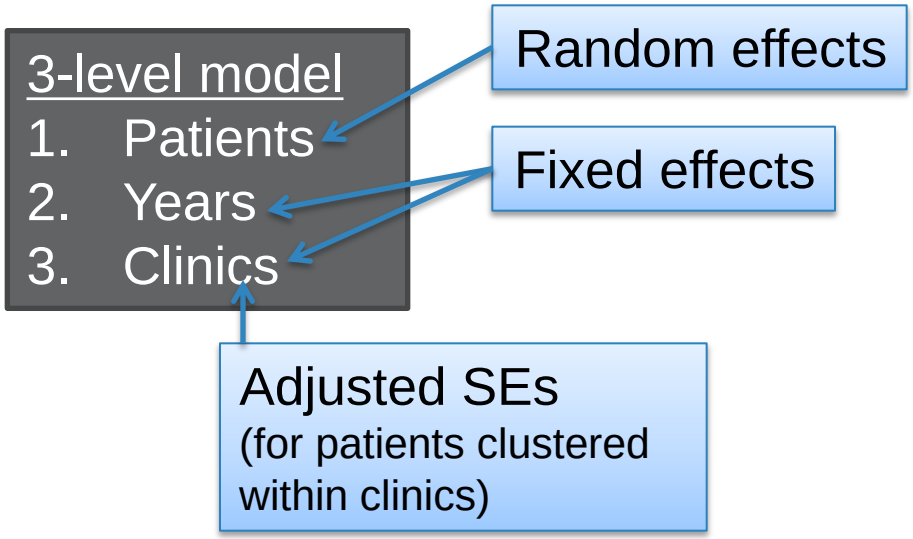
Main Predictor
(clinic-level)

Clinic PC-MHI engagement =

$$\frac{\text{\# PC-MHI patients}}{\text{\# primary care patients}}$$

Multivariable analyses

Multi-level negative binomial & linear regression models



- Patient characteristics (age, gender race/ethnicity, marital status, VA eligibility, disability service connection, health insurance, homelessness, distance from home to primary care clinic, Charlson Comorbidity Index, mental health diagnoses)
- Time-variant clinic characteristics (medical home implementation support)

Clinic and patient differences (high vs low PC-MHI clinics)

High PC-MHI clinics

- Bigger, ≥5000 patients/year
- VA medical center-based
- Received medical home implementation support

Patients in high PC-MHI clinics

Predominantly

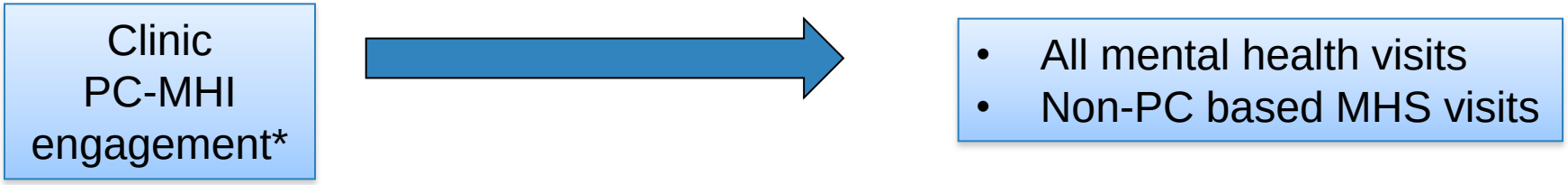
- Older, ≥65 years
- Male
- Black
- Single/Divorced
- Chronically ill
- Homeless
- Uninsured
- Lived farther away

- Similar rates of schizophrenia and bipolar disorder

High PC-MHI clinics have sicker patients

[7]Leung et al, *J Am Board Fam Med*, 2018

PC-MHI substitutes non-primary care MHS visits



Substitution of ↑1.5 PC-MHI per ↓1 non-PC based MHS visit

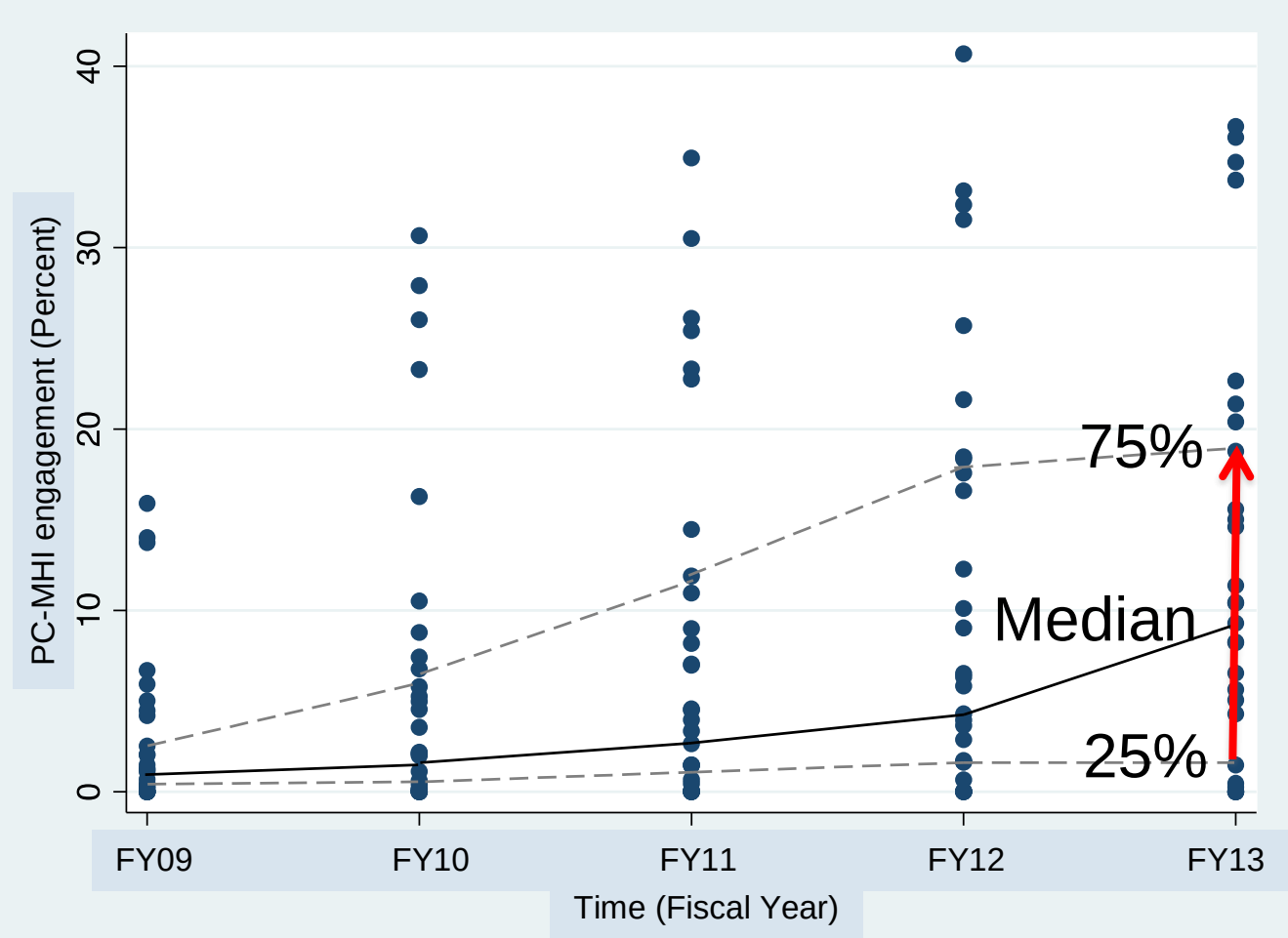
↑1%-point clinic PC-MHI engagement →

- ↑0.5% (0.2%, 0.9%) all VA mental health care (including PC-MHI) (p=0.003)
- ↓1.0% (-1.6%, -0.3%) non-primary care based MHS visits (p=0.002)

[7]Leung et al, *J Am Board Fam Med*, 2018

*Clinic PC-MHI engagement = # PC-MHI patients / # Primary Care patients

↑20%-point clinic PC-MHI engagement



- →↑10% all mental health visits
- →↓20% non-PC MHS visits

No PC-MHI effect on other utilization/cost outcomes

Healthcare Utilization	Adjusted Δ (CI)
Primary Care	-0.2% (-0.7%, 0.3%)
Specialty	-0.02% (-0.3%, 0.2%)
ED	0.5% (-0.1%, 1.0%)
Hospitalizations	0.1% (-0.4%, 0.6%)

Costs	Adjusted β (SE)
Log of VA healthcare costs	-0.2 (0.2)

** p<0.05

Clinic PC-MHI engagement*

- Primary care
- Specialty care
- ER/Hospitalizations
- Total VA costs of care

Corroborating previous research

- Covariates associated with ↓mental health utilization
  - Over time, clinics with PACT implementation support, older patients, male patients
- Covariates associated with ↑mental health utilization
  - Single, service-connected disability, uninsured, homeless, shorter distance to clinic, chronically ill, mentally ill (except sociopathy) patients
- No significant racial-ethnic differences

Sensitivity and additional analyses

- Mortality outcome
- Clinics where PC-MHI programs are required or not
- Others:
  - All primary care patients, including those without mental illness
  - Medical comorbidities (≥2 Charlson Comorbidity Index)
  - 65 years or older (eligible for Medicare)
  - Died or left VA outpatient care (no FY13 visits)

Study Rationale

Substitution of ↑1.5 PC-MHI per ↓1 non-PC based MHS visit

Does this substitution reflect appropriate assessment/triage in primary care or indiscriminate reduction of MHS visits?

Poll Question #3

- For which condition is your PC-MHI team most helpful?
  a. Depression
  b. Alcohol and substance use disorder
  c. PTSD and anxiety
  d. Schizophrenia and bipolar disorder
  e. Other (sleep, pain, etc.)

Specific aims

To assess

(1) which non-PC based MHS visits are reduced by increasing clinic PC-MHI engagement over time

(2) which patient subgroups are affected by this reduction

Hypothesis 1:

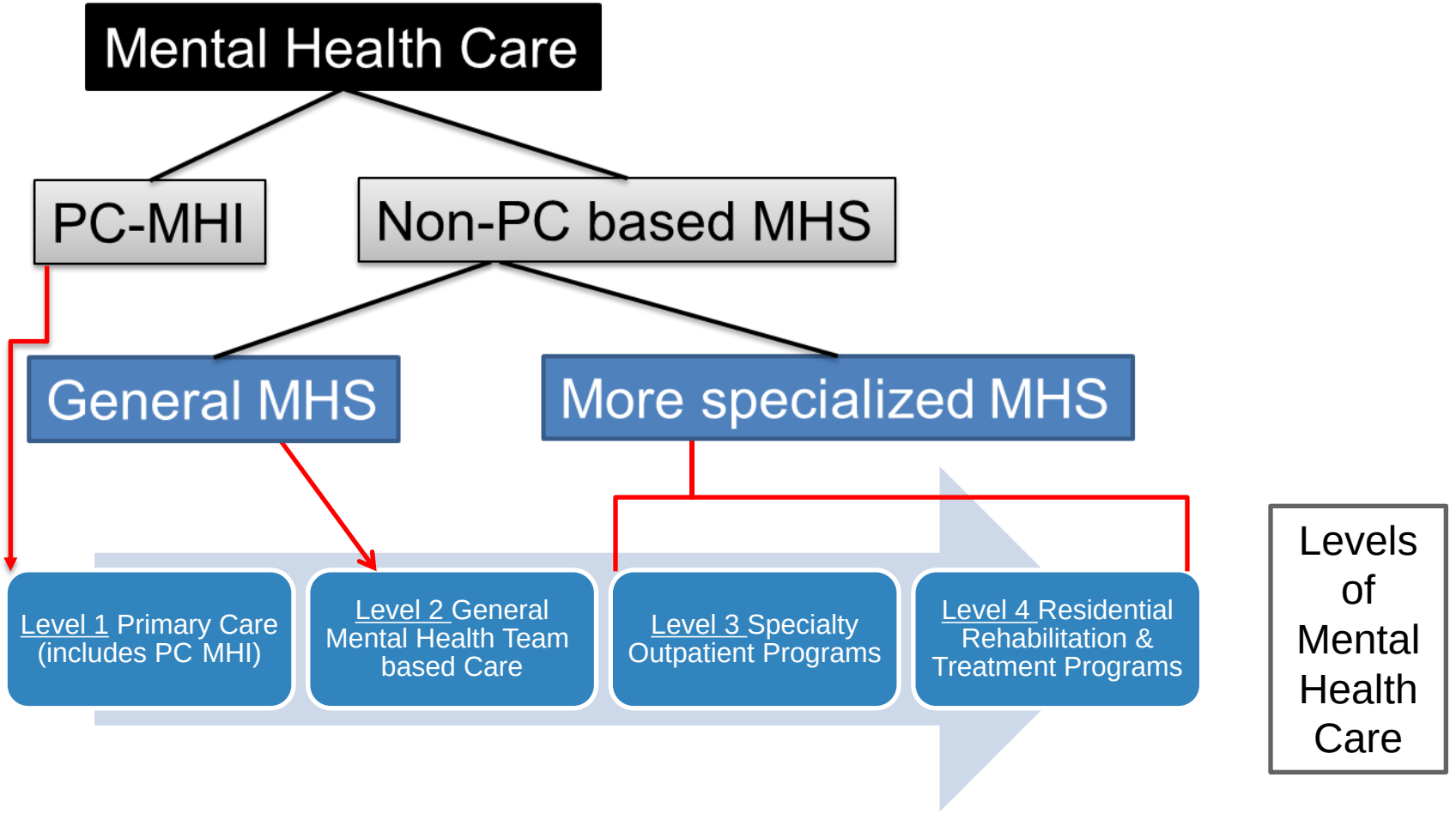
↑Clinic PC-MHI → engagement ↓ general MHS visits

No Δ in more specialized MHS visits

Hypothesis 2:

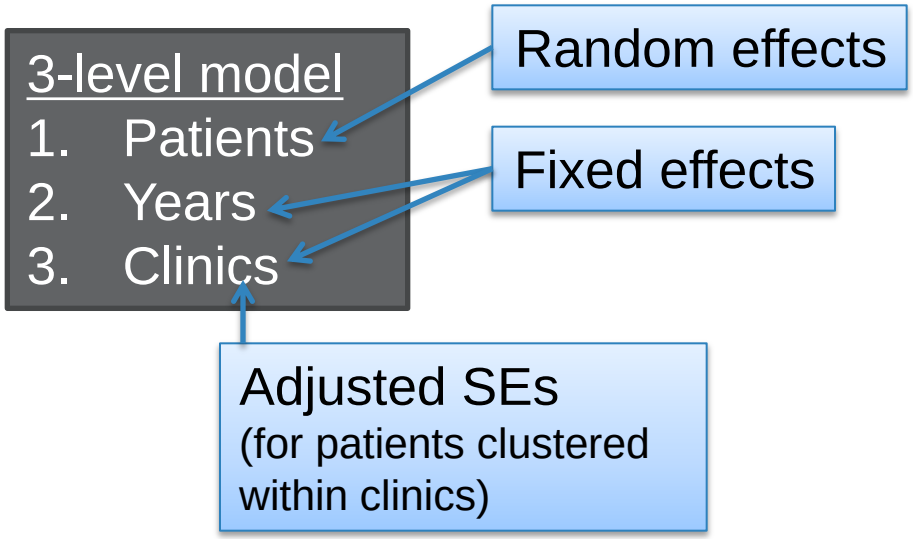
↓ in general MHS visits, occurring in only patients with depression and <u>not</u> in patients with schizophrenia and bipolar disorder

More mental health utilization outcomes



Multivariable analyses

Multi-level negative binomial & linear regression models



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- Time-variant clinic characteristics (medical home implementation support)

Multivariable analyses

Multi-level negative binomial & linear regression models

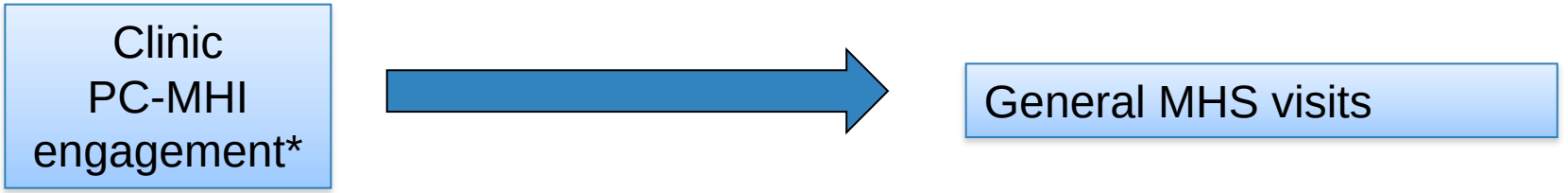
l model

Random effects

Stratified analysis by patients with…

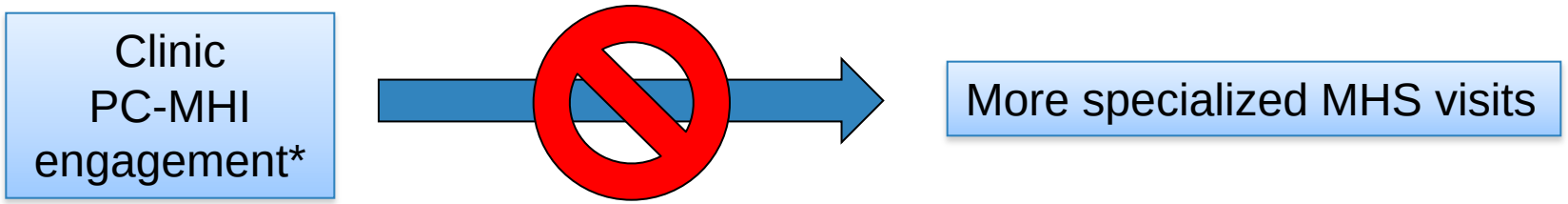
- Depression (n=37,616)
- Psychotic disorders (i.e., schizophrenia, bipolar disorder) (n=7,662)
- Interactive effect (diagnosis*clinic PC-MHI engagement)

PC-MHI substitutes lower level MHS visits



↑1%-point clinic PC-MHI engagement →

↓1.2% general MHS visits (CI=-2.0, -0.4%; p<0.001)

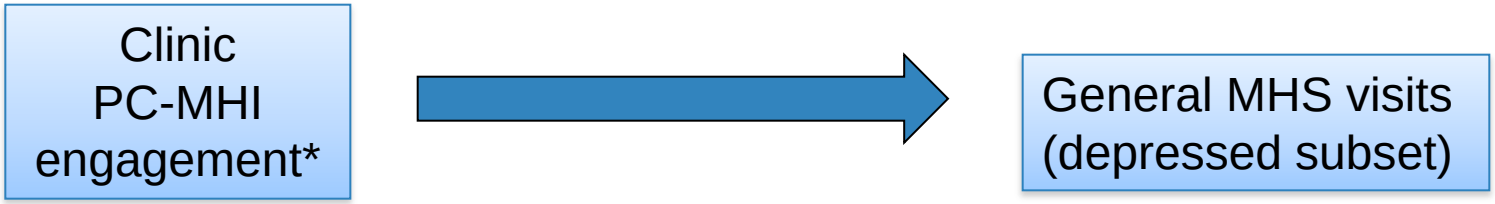


No PC-MHI effect on more specialized MHS visits

[8]Leung et al, *Psychiatr Serv*, 2017

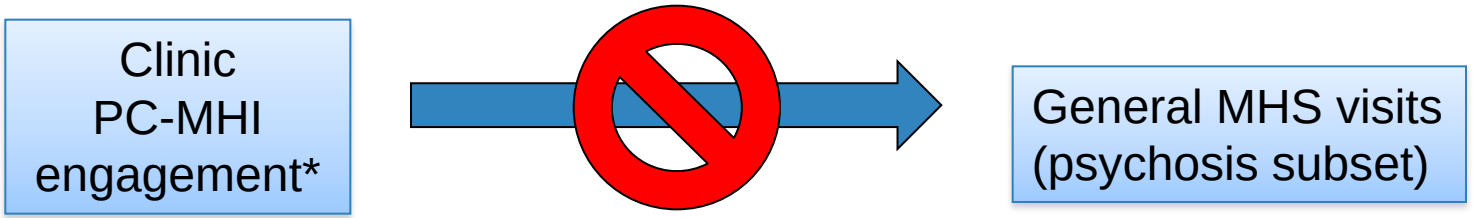
*Clinic PC-MHI engagement = # PC-MHI patients / # Primary Care patients

PC-MHI substitution targets depressed patients



↑1%-point clinic PC-MHI engagement →

↓1.1% general MHS visits (CI=-1.8%. -1.4%; p=0.01)



No PC-MHI effect on general MHS visits for patients with schizophrenia and bipolar disorder. *Subset difference was not statistically significant when PC-MHI interactive effect included*.

[8]Leung et al, *Psychiatr Serv*, 2018

*Clinic PC-MHI engagement = # PC-MHI patients / # Primary Care patients

Limitations

- Administrative data limited by incompleteness/inaccuracies
- Longitudinal cohort study affected by patient dropouts or clinic switches
- Study represents VA primary care clinics in S. California

Strengths

- First longitudinal examination of full-range of healthcare utilization and costs related to PC-MHI
- Early effort toward development of quality measures for dissemination and implementation of integrated care

Conclusions

As intended, PC-MHI shifts mental health care from specialty to primary care for targeted Veterans – improving access to mental health care, without increasing costs, acute care use, or mortality.

Policy implications

Recommend VA continue to increase availability of PC-MHI services, expanding prompt access to mental health care for primary care patients

- Substitute shorter term mental health care within primary care for less severely affected patients
- Preserve access to traditional VA mental health services required by those with severe, chronic mental illness

Future research

1. How does PC-MHI vary from primary care clinic to clinic?
   - PC-MHI organizational survey *targeting primary care lead clinicians* in collaboration with VISN 22 primary care and mental health leadership
2. How should PC-MHI be tailored for women Vets?
3. Do these findings generalize to…
   - All VA primary care clinics across the country (serving ~6 million Veterans)?

With gratitude to PACT Demo Lab Initiative & VA HSR&D CSHIIP

Questions/Comments? Thank you!

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Special thanks to all my collaborators

Lisa V. Rubenstein, José J. Escarce,
Jean Yoon, Elizabeth T. Yano,
Edward P. Post, Maureen E. Metzger,
Kenneth B. Wells, Catherine A. Sugar…

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