

RCT of Behavioral Activation for Depression and Suicidality in Primary Care

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Conflicts of Interests & Acknowledgements

- No conflicts of interests
- The views in this presentation are those of the authors and do not reflect the views or official policy of the Department of Veterans Affairs or other departments of the U.S. government.
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Acknowledge Research Team

- **Co-Investigators:** Stephen A. Maisto, Michael Wade, Laura Wray
- **BA-PC Manual Development:** Derek Hopko
- **Project Coordinator:** John Acker
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VA Center for Integrated Healthcare & Center of Excellence for Suicide Prevention

- **VA Center for Integrated Healthcare**

- Mission: To improve the quality of Veterans health care by enhancing the integration of mental health services into primary care
- Research, education, clinical and implementation initiatives to enhance integration
- <http://www.mirecc.va.gov/cih-visn2/> -



- **Center of Excellence for Suicide Prevention**

- Mission—To integrate surveillance with intervention development through research to inform the implementation of effective Veteran suicide prevention strategies
- <https://www.mirecc.va.gov/suicideprevention/index.asp>



■ Presentation Overview

- 1) Overview of Depressive Symptoms in Primary Care, Need for Evidence-Based Interventions, Behavioral Activation as Ideal Candidate
- 2) Revised Brief Behavioral Activation Treatment
- 3) Initial Results from Multisite Randomized Controlled Trial

Poll Question #1

What is your primary role in the VA?

- 1) Primary Care Team Member (including PCMH Provider)
- 2) Specialty Mental or Medical Setting Provider
- 4) Researcher
- 5) Administrator, manager, or policy-maker
- 5) Other

Poll Question #2:

Rate Your Level of Familiarity With the Role of a PCMH Provider

- 1) Not at All Familiar
- 2) Somewhat Familiar
- 3) Moderately Familiar
- 4) Very Familiar

Depressive Symptoms in Primary Care

- Depressive symptoms are associated with:
 - Mortality^a
 - Morbidity^a
 - Quality of Life Decrements^a
 - Lost Work Days^b
 - Healthcare Utilization^c
- Where do Patients Seek Help? **PRIMARY CARE**^d



^a(Ferrari et al., 2013; Mack et al., 2015; World Health Organization, 2017)

^b(Agency for Healthcare Research and Quality, 2002)

VETERANS HEALTH ADMINISTRATION ^c(Bhattarai, Charlton, Rudisill & Gulliford, 2012)

^d(Olson, Kroenke, Wang, & Blanco, 2014)

■ OPPORTUNITY

• PCMH INITIATIVE

- Annual PHQ-2 + suicide item followed by PHQ-9
- Allows for same-day access
- Average appointment length: 30-minutes
- 1-4 appointments



Wray, L. O., Szymanski, B. R., Kearney, L. K., & McCarthy, J. F. (2012). Implementation of primary care-mental health integration services in the Veterans Health Administration: Program activity and associations with engagement in specialty mental health services. *Journal of Clinical Psychology in Medical Settings, 19*(1), 105-116.

Funderburk, J. S., Sugarman, D. E., Labbe, A. K., Rodrigues, A., Maisto, S. A., & Nelson, B. (2011). Behavioral health interventions being implemented in a VA primary care system. *Journal of Clinical Psychology in Medical Settings, 18*, 22-29. doi: 10.1007/s10880-011-9230-y

TYPES OF INTERVENTIONS THAT ARE NEEDED



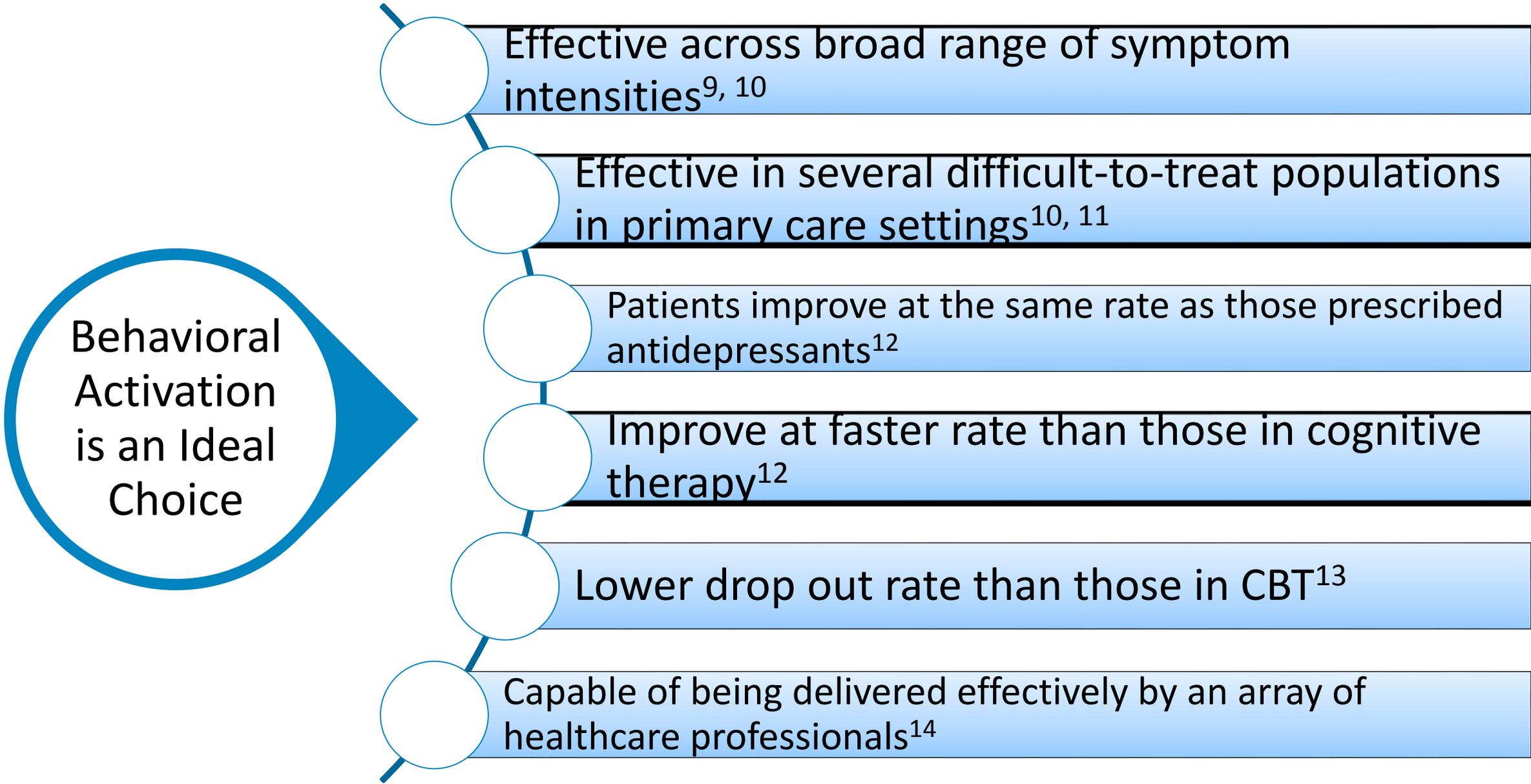
BRIEF



**FLEXIBLE TO BE
USEFUL FOR
PATIENTS WITH
RANGE OF
SYMPTOMS**



**DIFFERENT
GOALS**



Behavioral
Activation
is an Ideal
Choice

Effective across broad range of symptom intensities^{9, 10}

Effective in several difficult-to-treat populations in primary care settings^{10, 11}

Patients improve at the same rate as those prescribed antidepressants¹²

Improve at faster rate than those in cognitive therapy¹²

Lower drop out rate than those in CBT¹³

Capable of being delivered effectively by an array of healthcare professionals¹⁴

9 Cuijpers, P., van Straten, A., Warmerdam, L. (2007).

10 Daughters, S.B., Braun, A.R., Sargeant, M.N., et al. (2008).

11. Hopko, D.R., Lejuez, C.W., Ruggiero, K.J., et al. (2003).

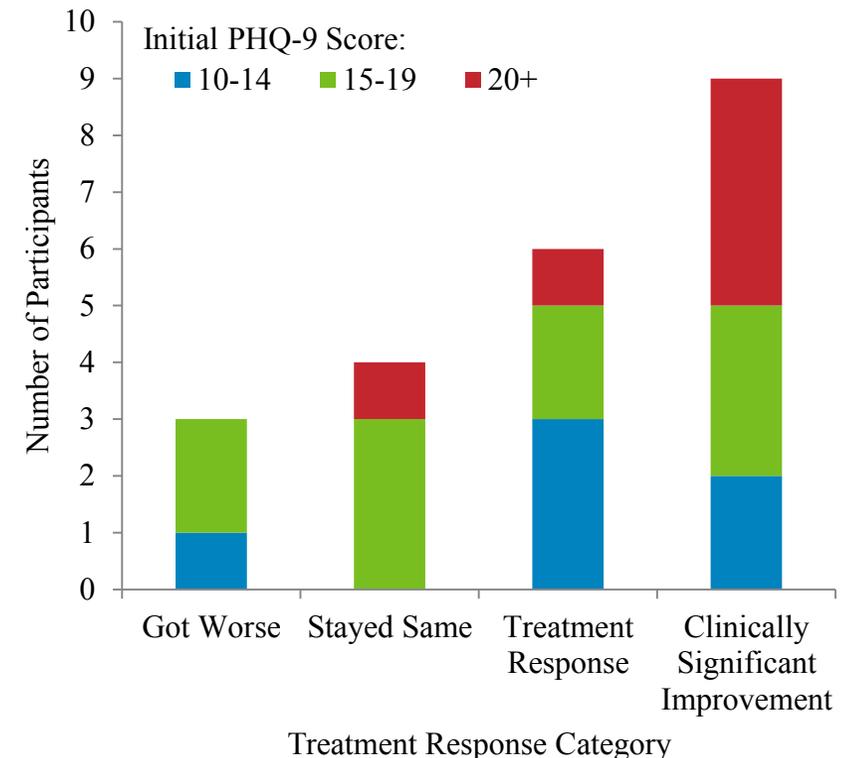
12 Dimidjian et al., 2006

13 Sturmey, 2009

14 Richards et al., 2016

Behavioral Activation-Primary Care

- Pilot Work
 - Modified from 10-appointment treatment manual for depression (Lejuez et al., 2011)
 - BA-PC---2 30-minute & 2 booster appointments
 - 22 Veterans participated in open trial
 - Feasibility, acceptability, and utility of BA-PC high



CORE CONTENT DELIVERED IN APPOINTMENT 1 OF BA-PC

- **Provided psychoeducation about depressive symptoms**
 - Overview of thoughts, behaviors, mood
 - BA treatment rationale
- **Provided rationale and instructions for activity log**
- **Explained values worksheet**
- **Assessed readiness to make a change in behaviors and set an appropriate S.M.A.R.T. goal**

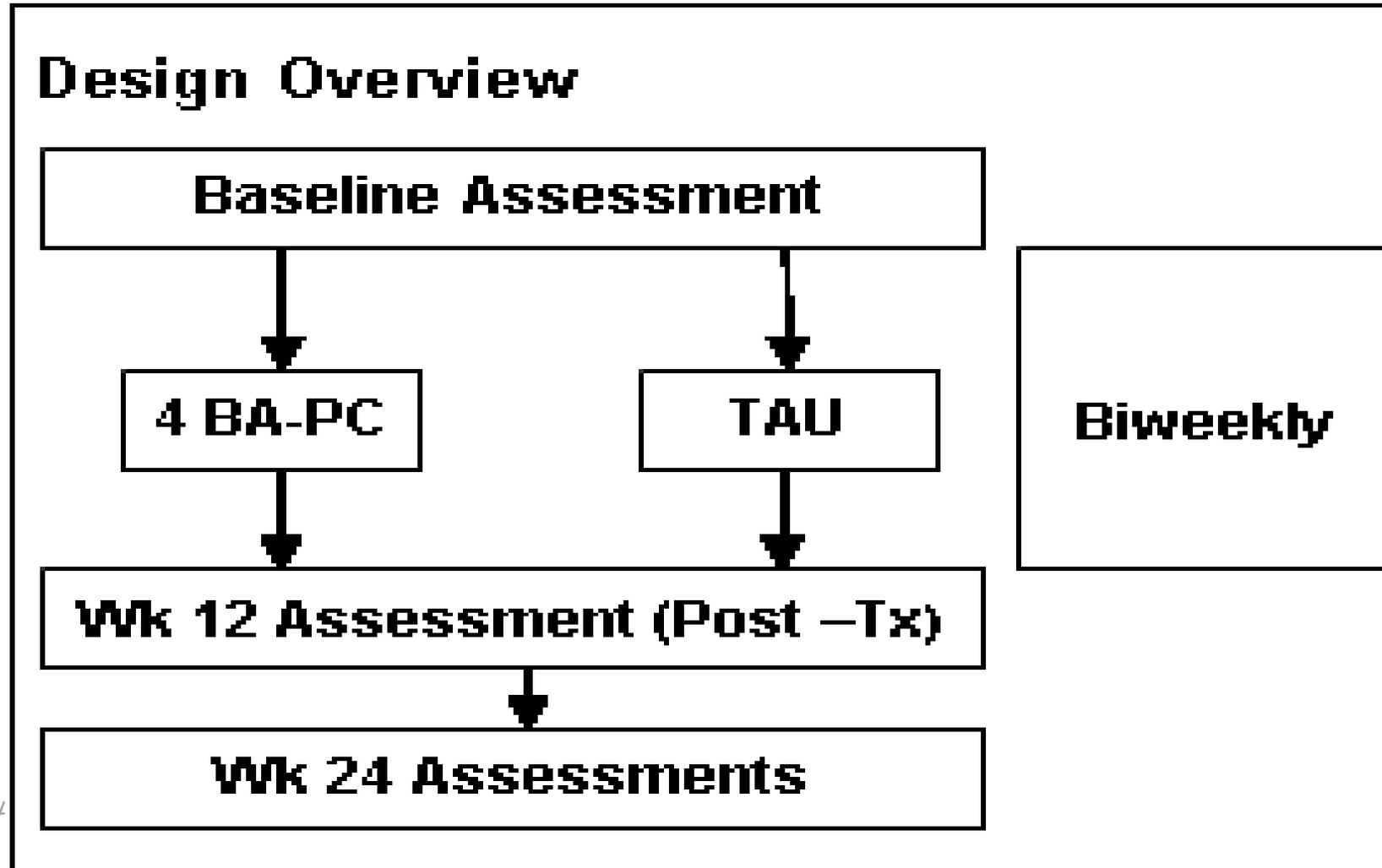
CORE CONTENT DELIVERED IN APPOINTMENT 2 OF BA-PC

- Reviewed depressive symptoms
- Reviewed activities based on log
- Discussed life goals in values sheet and how current activities map on to priorities
- Discussed setting another goal based on readiness to change

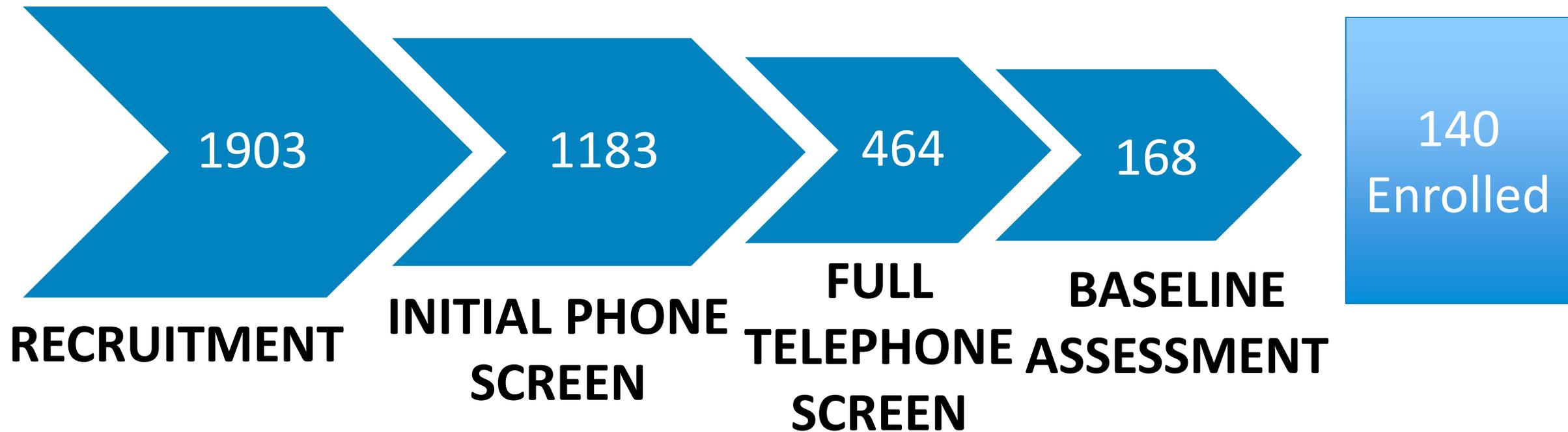
■ HSRD funded Multi-Site RCT (IIR 14-047)

- **Start Date – End Date** : *3/1/15 – 2/28/19*
- Aim 1: Evaluate the effectiveness of BA-PC in reducing depressive symptoms as measured by the Patient Health Questionnaire-9 and improving other related outcomes.
- Aim 2: Measure Veteran satisfaction, receptivity, and adherence to BA-PC
- Aim 3: (exploratory) Evaluate the effectiveness of BA-PC in reducing suicidal ideation

■ HSRD funded Multi-Site RCT (IIR 14-047)



Behavioral Activation-Primary Care RCT



Eligibility Criteria

INCLUSION

PHQ \geq 10

No anti-depressants or on stable dose for \geq 6 weeks

Stable therapy for anx or SUD (3+ months)

No more than one session with an integrated MHP*

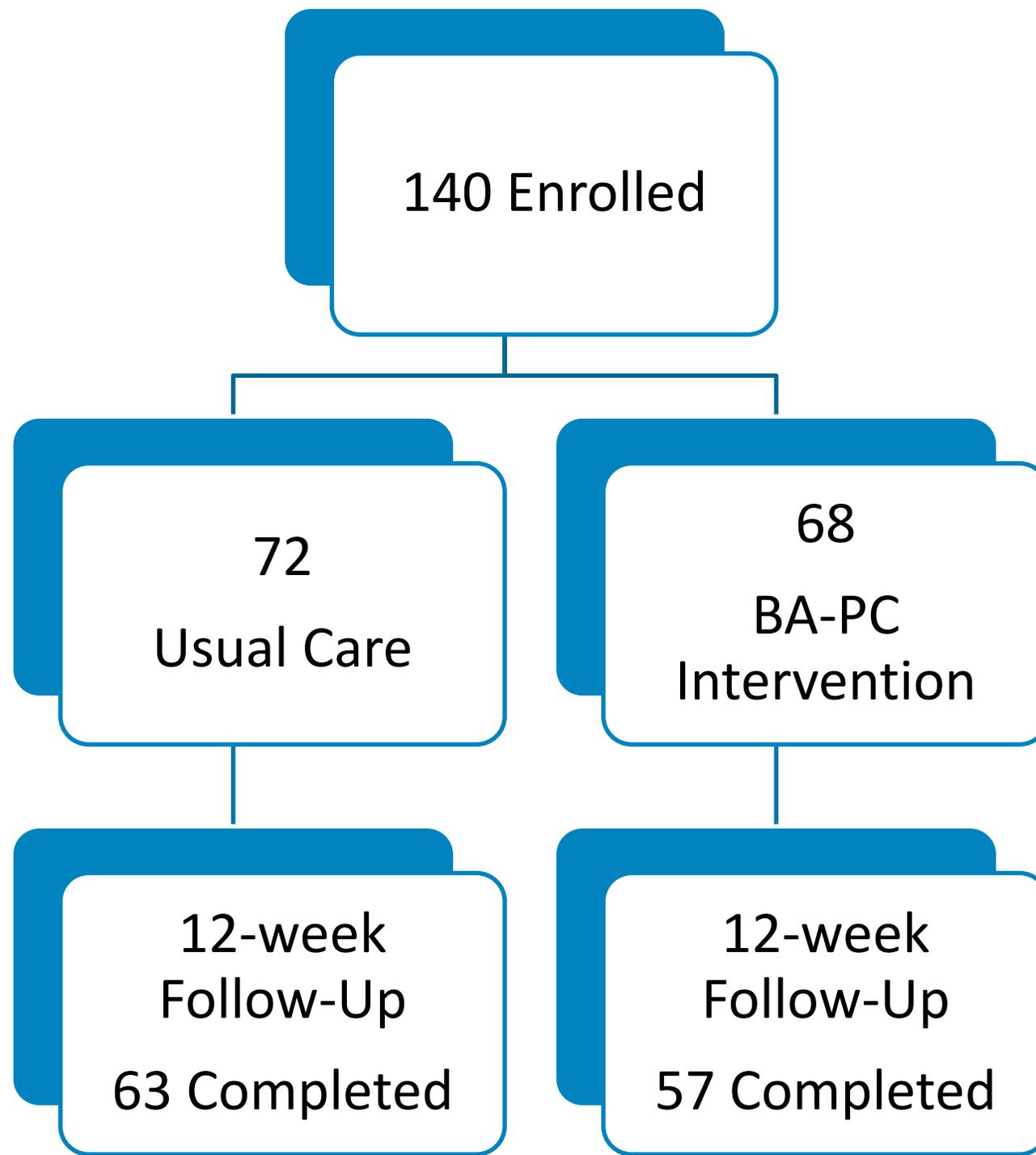
EXCLUSION

Imminent suicide risk

Unstable psychiatric condition or history of Bipolar Disorder

Recently started antidepressants or had dosage change

Current or recent partial hospitalization***



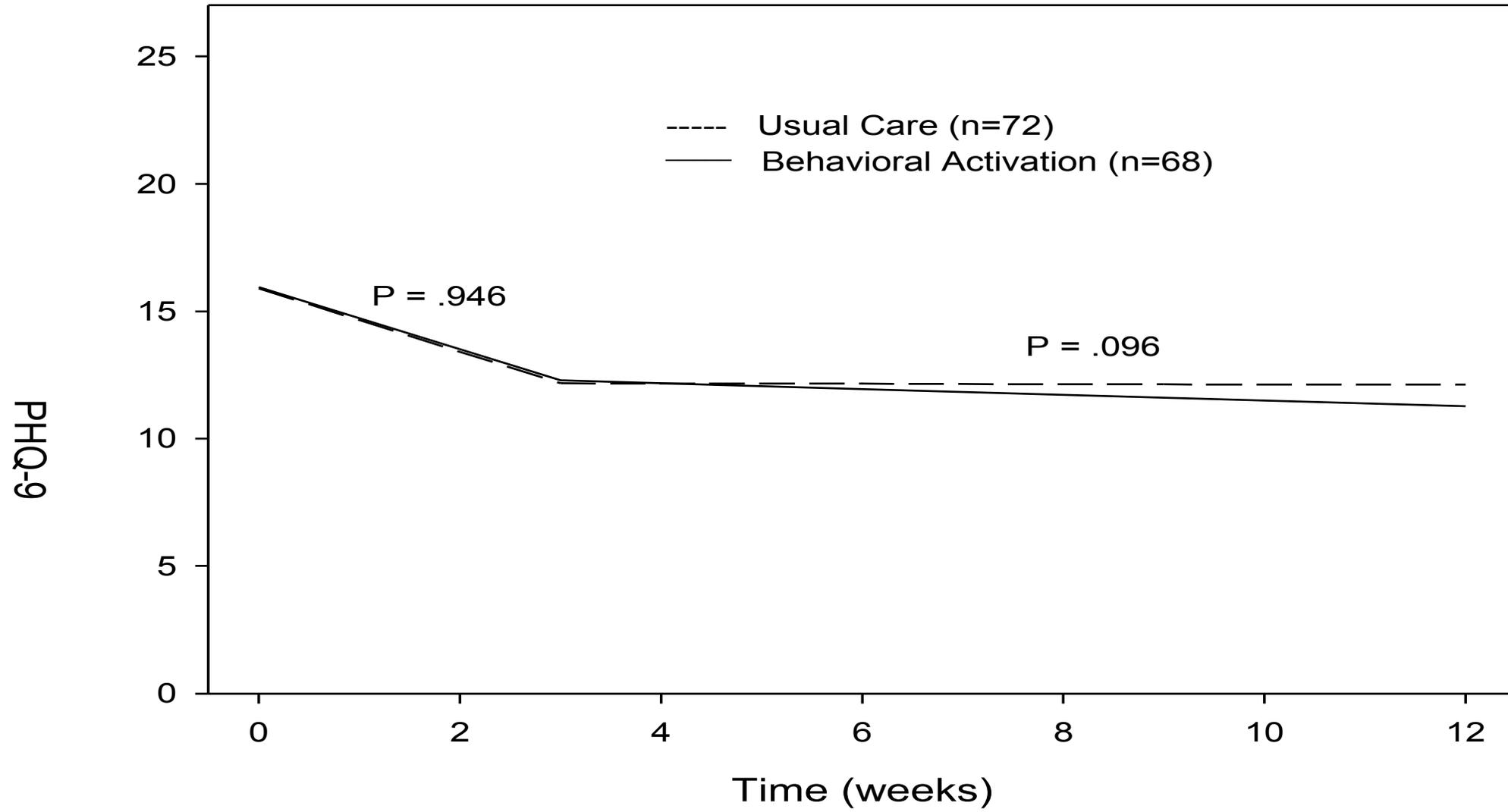
Participant Characteristics of the Total Sample

- 52.99 M (14.15 SD) Years Old
- 91% Male
- 66% White, 93% not Hispanic
- 62.9% had income less than \$40,000
- 72% had some college or less
- 36% currently married, 34% currently divorced
- 34% were currently on a stable dose of a psychotropic medication

Results: Primary Outcome PHQ-9

- 16.4% attrition during the 12-weeks of the study
- 67.7% had all PHQ-9 data for all assessments (0, 2, 4, 6, 8, 10, 12 weeks)
- Linear modeling proposed to examine the impact of BA-PC on depressive symptoms compared to treatment as usual
 - Piecewise linear modeling---0-3 weeks and 3-12 weeks

Piecewise Linear Model

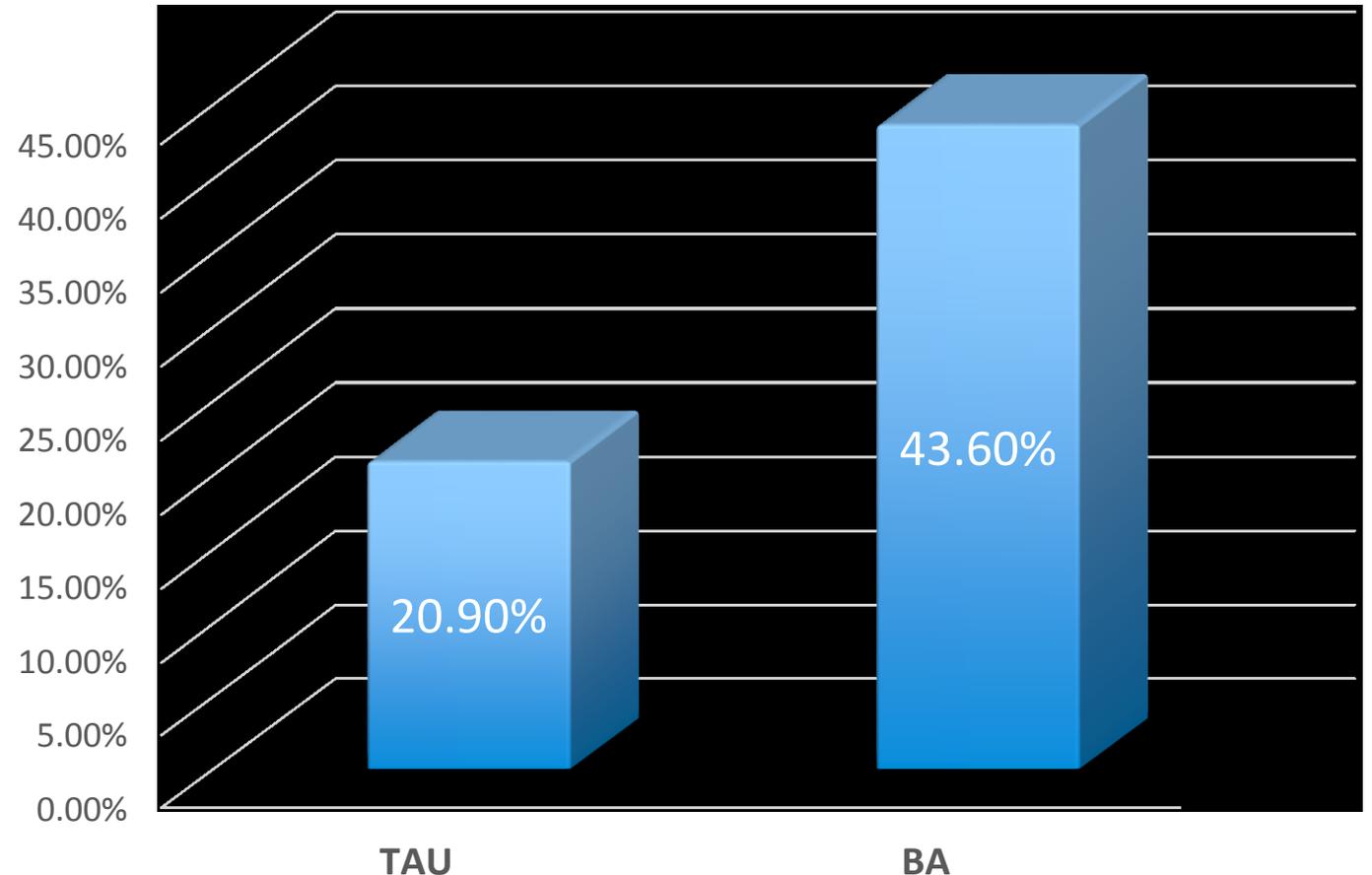


■ Interesting Preliminary Results

When Look a Little Closer at 3-12 week period

- Of participants who still reported moderate depressive symptoms (PHQ > 9), the number who achieved a PHQ score less than 10 at 12-week follow up differed by treatment

Percentage of PHQ Scores Below 10 at 12-week Follow Up



Does BA-PC Work Better for Certain Subgroups?

- Participants reporting severe depressive symptoms at baseline (PHQ total > 19) who received BA-PC had a greater reduction in reported symptoms at the 12- and 24-week follow ups

	TAU		BA-PC	
	M (SD)	n (%)	M (SD)	n (%)
Baseline	22.29 (1.90)	17 (100)	22.20 (2.51)	15 (100)
6 weeks	15.36 (6.57)	14 (82.4)	15.69 (4.91)	13 (86.7)
12 weeks*	16.13 (5.46)	15 (88.2)	12.17 (5.39)	12 (80.0)
24 weeks*	14.54 (5.30)	13 (76.5)	8.44 (4.56)	9 (60.0)

Do We See the Change In Perceived Enjoyment/Reward With Activities?

Environmental Reward Observation Scale	TAU		BA-PC	
	M (SD)	n (%)	M (SD)	n (%)
Baseline	21.00 (3.85)	72 (100)	21.72 (3.48)	67 (98.5)
6 weeks*	21.05 (3.97)	61 (84.7)	23.08 (4.01)	60 (88.2)
12 weeks**	21.17 (4.91)	58 (80.6)	24.13 (3.92)	55 (80.9)
24 weeks*	22.12 (4.49)	51 (70.8)	24.81 (4.73)	48 (70.6)

what
does
it all
mean?



Key References

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Resources

- **VA Center for Integrated Healthcare**

- <http://www.mirecc.va.gov/cih-visn2/> -



- **VA Center for Integrated Healthcare Evidence-Informed Interventions for PCMH Clinicians**

- <http://vhasyrapp6.v02.med.va.gov/mriWeb/mriWeb.dll?I.Project=EII>

Center of Excellence for Suicide Prevention

- <https://www.mirecc.va.gov/suicideprevention/index.asp>



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