

Increasing treatment seeking among  
at-risk service members returning  
from war

# Background

- Rates of PTSD are between 11-20% and depression around 14% among veterans returning from the wars in Iraq and Afghanistan
- Rate of suicidal ideation is between 6-12%
- 22 Veterans die by suicide per day

Poll Question: What is the percentage of suicidal Veterans who seek treatment

- A: 5%
- B: 25%
- C: 50%
- D: 75%

# Suicide among Veterans

- 7% of the US population are Vets, but they account for 20% of the suicides.
- In 2012, 50,000 new veterans were diagnosed with PTSD
- In 2013, the VA spent \$600,000,000 treating PTSD.

# Treatment Utilization Rates

- Among U.S. service members who acknowledge mental health symptoms, only about one-quarter to one-half seeks treatment.

# Aims of trial

- Test the effectiveness of a brief cognitive behavioral intervention designed to modify beliefs about mental health treatment so that OEF/ OIF Veterans at-risk for suicide are more likely to seek treatment.

# Participants (N=1,200)

- U.S. service members who served in the military since 9/11
- Positive screen on #9 on PHQ-9
- Not receiving mental health services

# Measures

1. PCL
2. PHQ-9
3. PASS (Perceptions about Services Scale)
4. ASI
5. CSSR-S
6. Insomnia Severity Scale
7. Pain Scale
8. Burden-Belongingness Scale

# Procedures

Participants randomly assigned to receive intervention or control

All participants complete baseline assessment

Intervention participants receive intervention at baseline and at 1 month

Follow-up interviews conducted at months 1, 3, 6, and 12

# Intervention

- Brief cognitive-behavioral intervention conducted over the phone to modify beliefs about treatment that interfere with treatment seeking.

# Safety Protocol

- VA's National Crisis Line
- Goal is safety. Reduce access to means, etc.
- Approximately half of the callers that call the Crisis Line refuse a treatment referral.

# Characteristics of the Sample Year 1

	Intervention (n=286)	Control (n=284)
Mean age	31.5	30.7
Gender(%male)	90%	91%
Race (%Cauc)	76%	75%

# Branch of Service

	<b>Intervention (n=286)</b>	<b>Control (n=284)</b>
<b>Army</b>	<b>67%</b>	<b>70%</b>
<b>National Guard</b>	<b>36%</b>	<b>31%</b>
<b>Navy</b>	<b>8%</b>	<b>7%</b>
<b>Air Force</b>	<b>8%</b>	<b>7%</b>
<b>Marine</b>	<b>17%</b>	<b>16%</b>

# Baseline Clinical Characteristics

	<b>Intervention</b>	<b>Control</b>
<b>PCL</b>	<b>62.2</b>	<b>62.3</b>
<b>PHQ9</b>	<b>17.8</b>	<b>18.4</b>

# Baseline Substance Use

	<b>Intervention</b>	<b>Control</b>
<b>% using Alcohol</b>	<b>77%</b>	<b>76%</b>
<b>% using Marijuana</b>	<b>36%</b>	<b>39%</b>

# Previous attempts- 35%

211 overdoses

70 cutting

75 firearm injuries

24 hanging

83 other

# "Harry"

- 29 year old Black male who separated from the Navy. Deployed to Iraq

# Harry's symptoms

- PCL=74, PHQ9=25
- Describes himself as the walking dead. "The military trained me to die on the one hand but also trained me to be disciplined."
- Unemployed, not seeking services (whenever I try it doesn't go my way so why try?)
- 2 plans for suicide. Pills and alcohol. Driving into a lake.
- Believes his 4 year old daughter would be better off without him.

# Harry's beliefs about treatment

1. I don't want to be labelled crazy.
2. I'm not sure I want to be here. I wake up every morning questioning whether I want to live or die.

# Harry's alternative beliefs

1. I try for the sake of my little girl but I can't remember who I was anymore. It's all so depressed and dark.
2. On challenge to thought that daughter would be better off without him, he became agitated. Agreed to call from CL and SPC.

# Summary

- Veterans may have beliefs about treatment that interfere with treatment seeking.
- Talking through these beliefs may help Veterans seek help earlier.

VA



U.S. Department  
of Veterans Affairs



# Connecting Veterans at Risk for Suicide with Care through the Home-Based Mental Health Evaluation (HOME) Program

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## Funding

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## Poll Question #1

What is your primary role in VA?

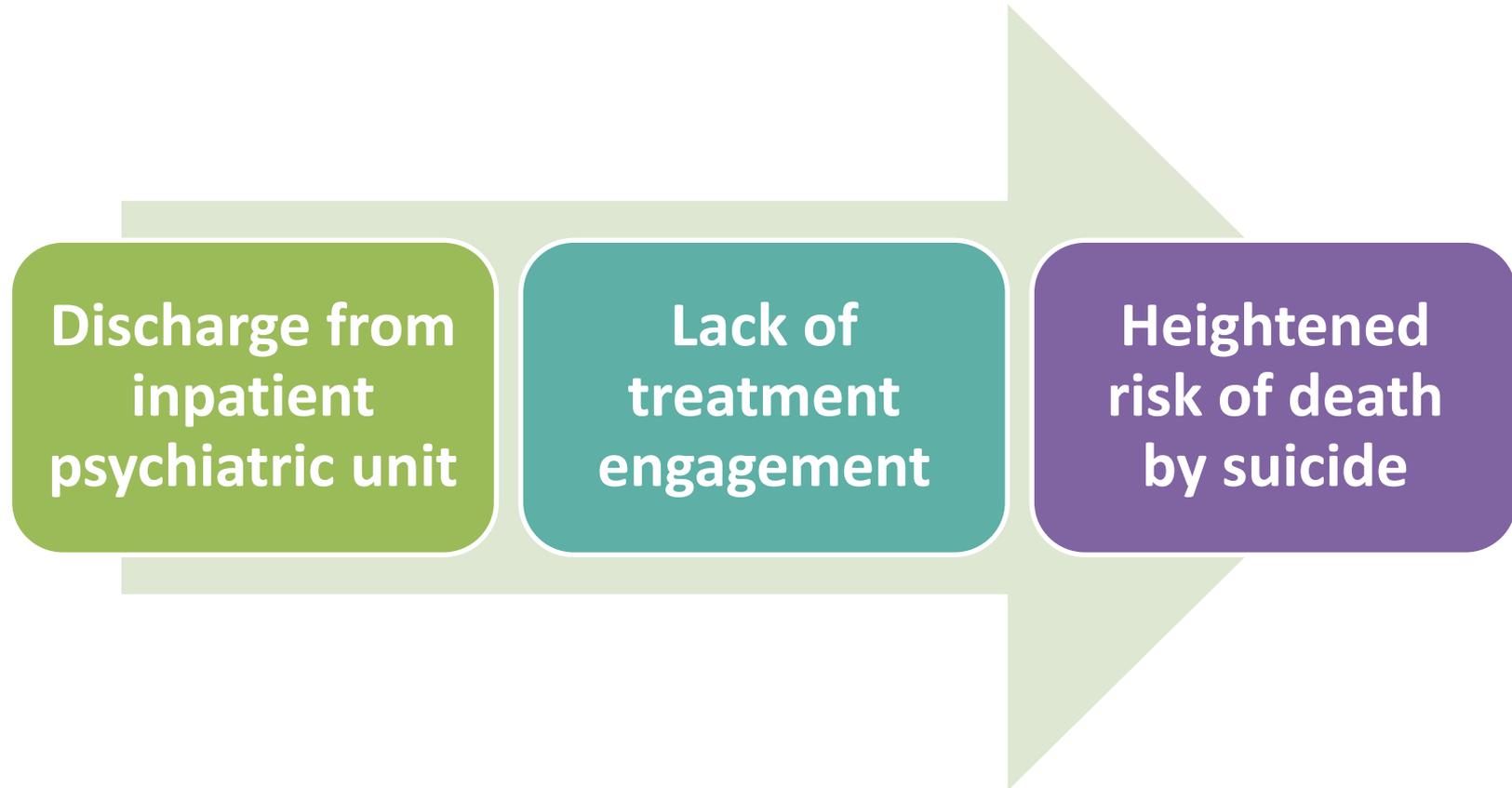
- A. Student, trainee or Fellow
- B. Clinician
- C. Researcher
- D. Manager or policy maker
- E. Other



# **Suicide Risk Following Psychiatric Hospitalization**



## Trajectory of Suicide Risk





## Re-Assessment Post-Discharge

Patients had significantly lower self-esteem and higher worry (both suicide risk factors) than when in the hospital

35% didn't remember discharge plans

86% who said they didn't need care post-discharge changed their minds

Re-assessment may:

- enhance the accuracy of assessments,
- improve treatment planning,
- encourage follow-up care

(Verwey et al., 2010)

# The HOME Program





# HOME

HOME-BASED MENTAL HEALTH EVALUATION

Meet the Veteran on the inpatient unit.



Telephone follow-up within one day of discharge.



Home visit during first week post-discharge



Ongoing telephone follow-up until engaged in care



## Primary Aim: Treatment Engagement

Relative to matched controls, Veterans participating in HOME will:

**Hypothesis 1-** be significantly more likely to engage in treatment

**Hypothesis 2-** will engage in treatment in a significantly shorter period of time



## Secondary Aim: Collect data on participants' post-discharge symptoms

**Hypothesis 3-** Comparing scores obtained pre-discharge (Time 1) and within one week post-discharge (Time 2), Veterans will report significant increases in mood related symptoms and suicidal ideation

**Hypothesis 4-** Comparing scores obtained within one week post-discharge (Time 2) and 3 months post-discharge (Time 4), Veterans who engage in treatment (as defined below) will report significant decreases in mood related symptoms and suicidal ideation

# Methods





## Methods - Participants

68 Veterans admitted to inpatient psychiatric unit endorsing suicidal ideation and/or behavior

Intervention group (n=34)

Gender and age matched archival control group (n=34)



## Methods - Data Collection

### Primary Aim- Treatment Engagement (n=68)

Data collection via electronic medical record  
90 days post-discharge

### Secondary Aim- Participant Characteristics (n=34)

Longitudinal prospective data collection

- Time 1- on the inpatient unit
- Time 2- prior to home visit (first week post-discharge)
- Time 3- one week post-disenrollment
- Time 4- three months post-discharge

# Results



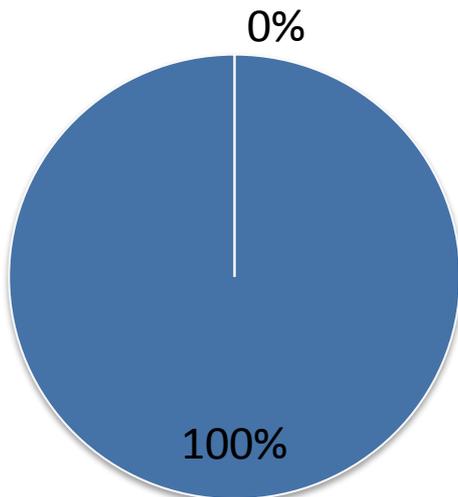


# Treatment Engagement

$p = .02$

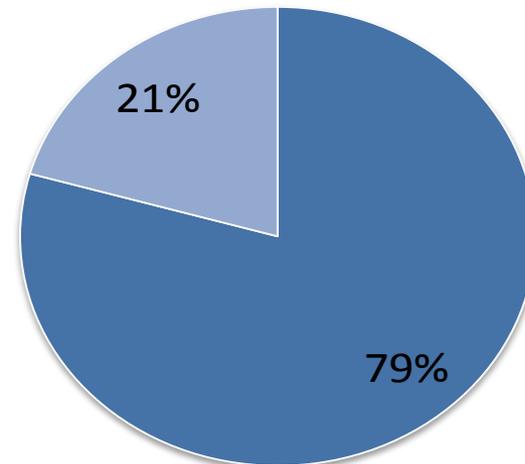
## HOME Group

■ Engaged ■ Not Engaged



## Control Group

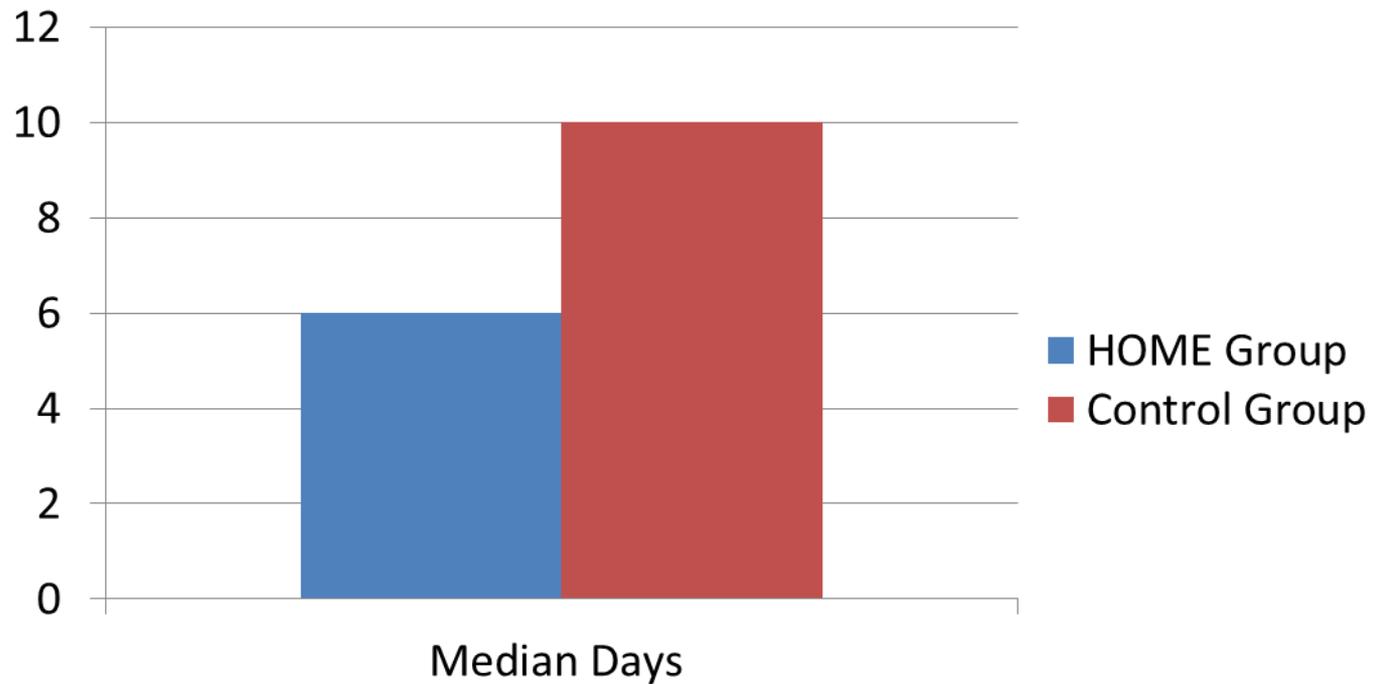
■ Engaged ■ Not Engaged





## Days Until Treatment Engagement

$p = .04$





## Additional Analyses- # of Appointments Attended

Outcome	Mean Difference (SE)	p-value
Individual MH	1.41 (0.70)	<b>0.05</b>
Group MH	-0.65 (1.86)	0.73
Individual SA	0.44 (0.29)	0.14
Group SA	-0.82 (1.83)	0.66
All Individual	1.85 (0.78)	<b>0.02</b>
All Group	-1.47 (2.59)	0.57



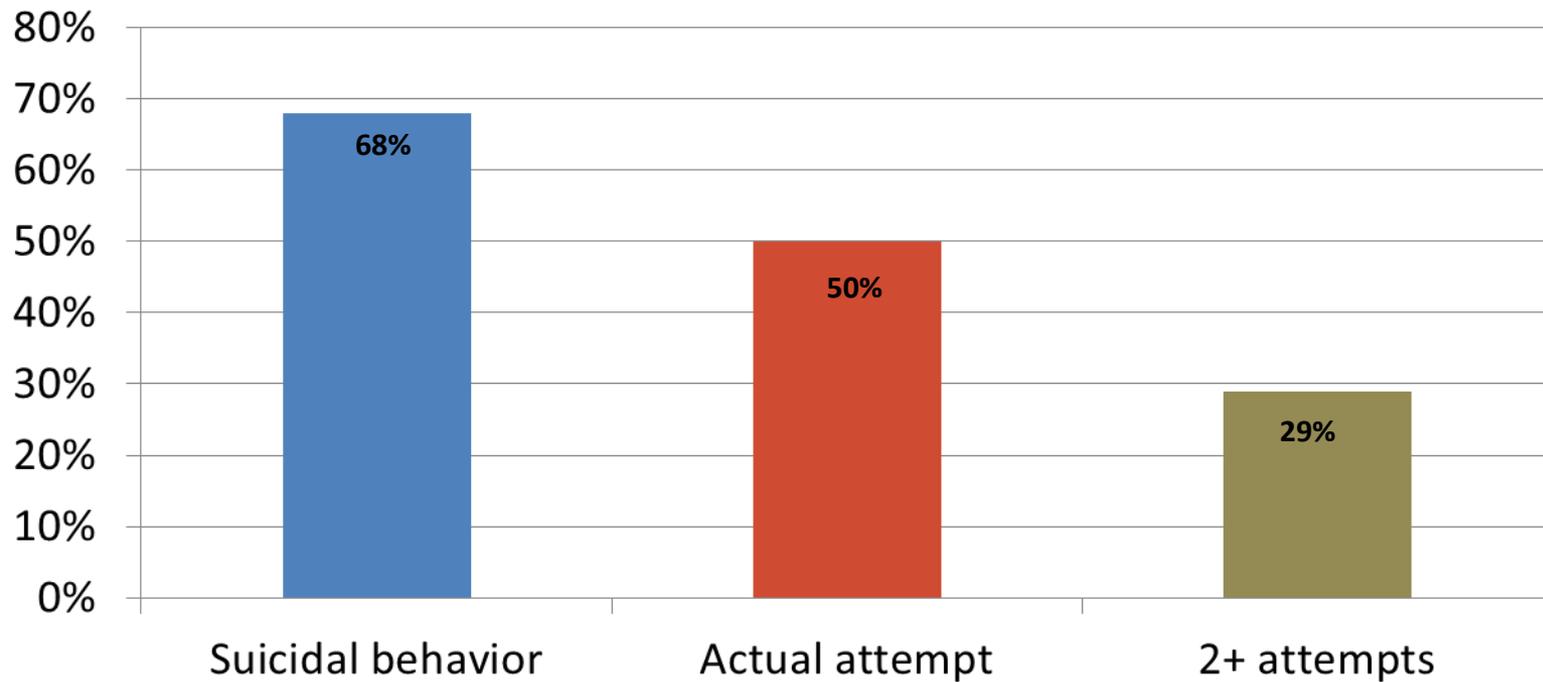
## Participant Characteristics - Demographics

Characteristic	Summary Statistic
Age	50.5 (median) 27-69 (range)
Sex (male)	88%
White race	71%
Married or Partnered	24%
Unemployed or Not Employed Outside the Home	81%
1+ Episode of Homelessness	30%



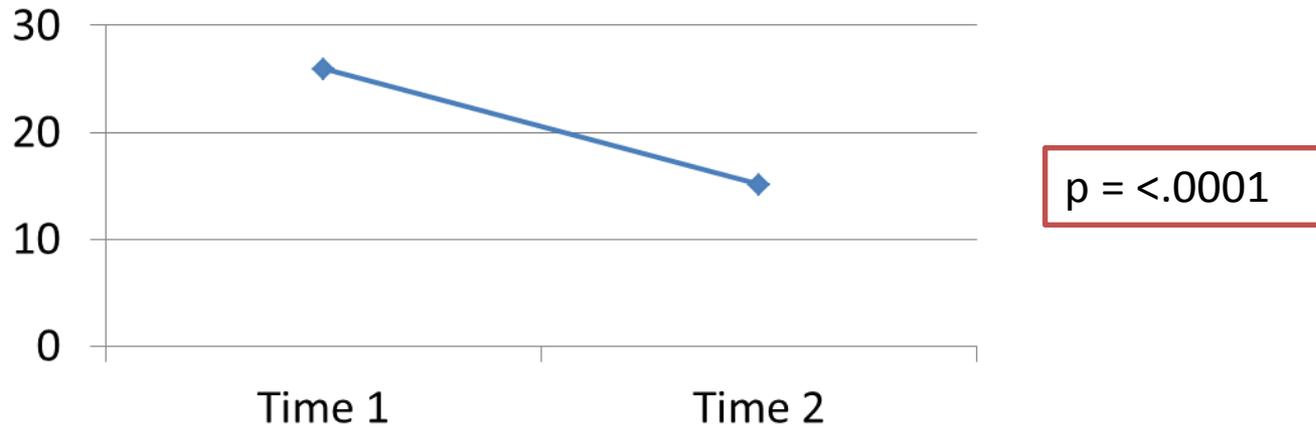
## Participant Characteristics – Lifetime Suicidal Behavior History

### C-SSRS Results



## Participant Characteristics- Baseline to one week post-discharge

### Brief Symptom Inventory



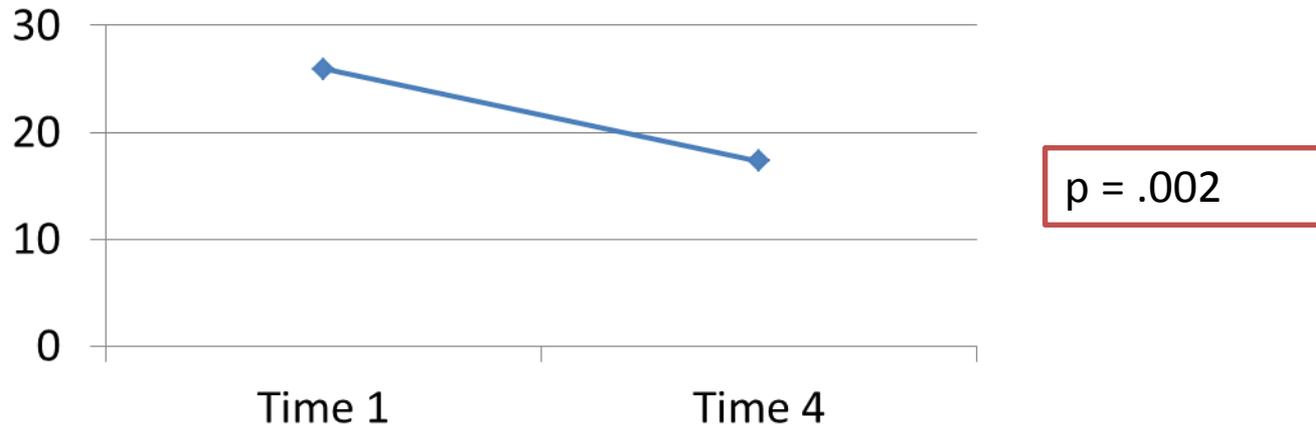
### Beck Scale for Suicidal Ideation

Comparison	OR	95% CI	p-value
Time 1 / Time 2	2.99	(1.34, 6.67)	<b>0.007</b>



## Participant Characteristics- Baseline to three months post-discharge

### Brief Symptom Inventory



### Beck Scale for Suicidal Ideation

Comparison	OR	95% CI	p-value
Time 1 / Time 4	1.09	(0.38, 3.15)	0.88



## Participant Characteristics- Additional Analyses

### Attitudes Towards Seeking Professional Psychological Help: Modified Shortened Version

Comparison	Estimated Mean Difference	95% CI	p-value
Time 2 - Time 1	0.59	(-0.55, 1.73)	.31
Time 4 - Time 1	1.13	(0.02, 2.25)	<b>.046</b>

# Discussion





## Discussion

In the first 90 days post-hospitalization, Veterans who participated in the HOME program, as compared to archival matched controls, were **more likely to engage in care, engage in care in a shorter amount of time and attend more individual outpatient appointments.**

Veterans in the HOME program:

1. Are characterized by many factors that place them at increased risk for suicide
2. Experience decreased suicidal ideation and other MH symptoms once home from the hospital (which is discrepant from what literature suggests)
3. Report improved attitudes towards seeking MH care 3 months post-discharge as compared to when they were in the hospital

Limitations: Small sample, no comparison group for prospective data

# HOME Expansion Timeline





## Questions/Comments

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