



# Crisis Line Facilitation in High-Risk Veterans



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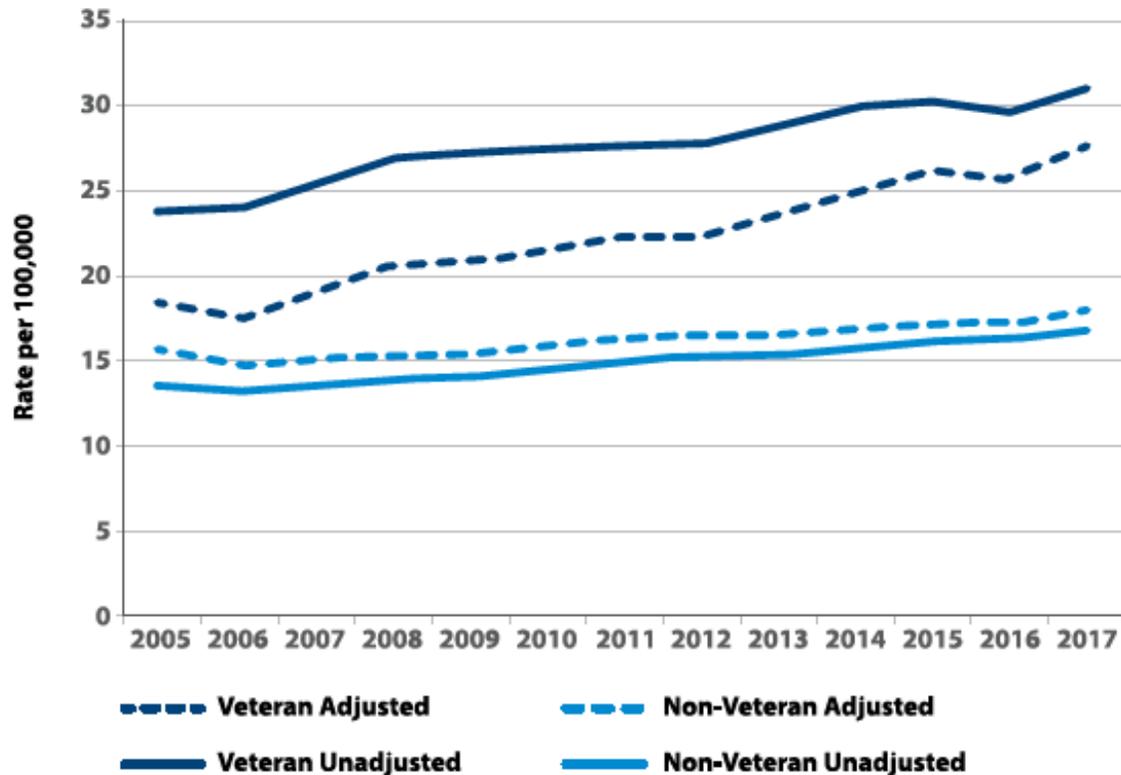
# Overview

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- Rationale for studying methods to increase utilization of the Veterans Crisis Line (VCL)
- Present preliminary results from randomized trial of intervention to increase VCL utilization
- SPRINT CORE - Discuss lessons learned from conducting intervention research on suicide prevention within VHA

# Suicide Risk in Veterans Health Administration Patients

Graph 3. Unadjusted and Age- and Sex-Adjusted Suicide Rates for Veterans and Non-Veteran Adults (2005–2017)



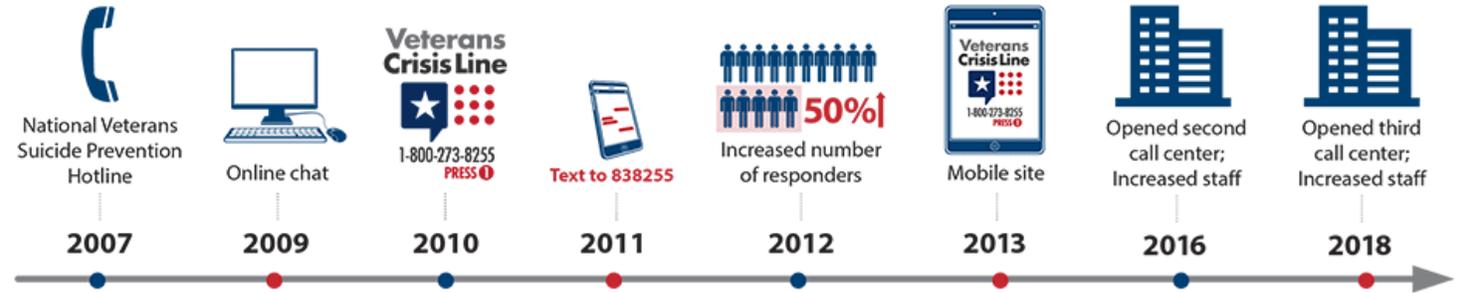
To combat this, the Veterans Health Administration (VHA) has invested extensively in programs designed to prevent suicide, including the Veterans Crisis Line (VCL).

2019 National Veteran Suicide Prevention Annual Report (OMHSP)



# The Veterans Crisis Line (VCL):

- Easily-accessible
- Available 24/7
- Assist Veterans and family/friends
- VCL staff can access VHA medical records to help coordinate care
- High promise of crisis lines but limited outcomes research



# VCL Advertising Campaign

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- Facebook/Twitter
- Documentary
- Radio Ads
- TV Ads
- #BeThere
- “Swag”
  - Bags, kickstand pads, stress balls, pens, koozies, pill cases, brochures, magnets, wallet cards, keychains, and more
- However, the VCL may be being underutilized by Veterans at high risk for suicide.



# High-Risk Veterans and the Veterans Crisis Line

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A small survey of Veterans treated for recent suicidal crisis in a VHA inpatient psychiatric unit (one of the groups at highest risk for subsequent attempts and deaths) found

- Less than  $\frac{1}{2}$  had ever utilized the VCL
- Less than  $\frac{1}{3}$  had used it within the past year

To address this gap in utilization, we developed a brief motivational interviewing-based intervention that was tested in psychiatric inpatient units at two VHA facilities.



# Crisis Line Facilitation (CLF)

- The intervention provides a mixture of encouragement and behavioral rehearsal



# Study Design and Methodology

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Participants were recruited from Ann Arbor Veterans Administration Healthcare System (AAVAHCS) and Battle Creek Veterans Administration Medical Center (BC VAMC)

Staff identified potentially eligible participants by reviewing the electronic medical records of Veterans recently hospitalized in a psychiatric inpatient unit

- Including admission notes and past VCL use



# Participation Timeline

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Screening, baseline assessment, and intervention all occurred prior to discharge

- Participants were also given a pre- and post-intervention survey

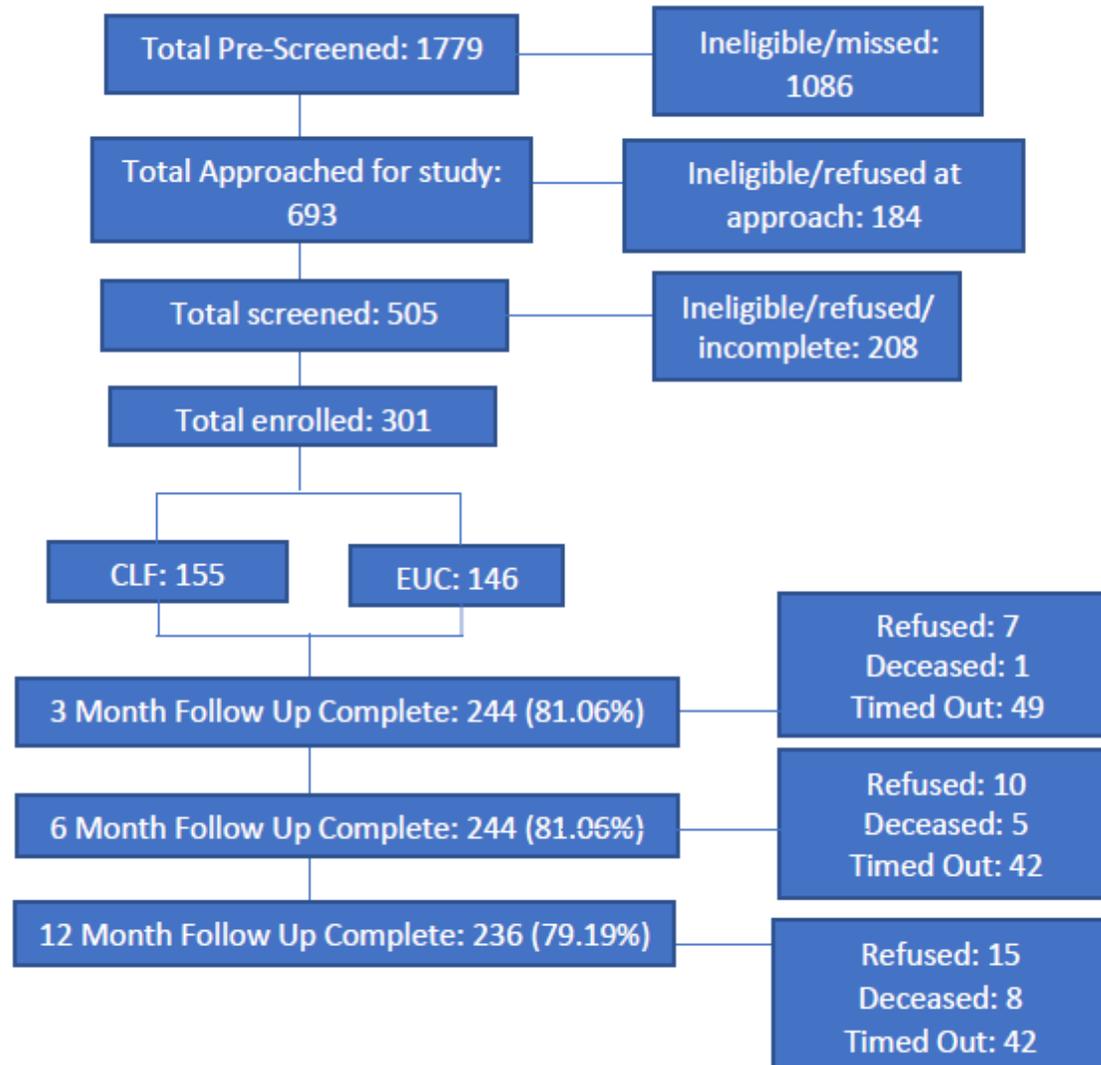
All participants are re-assessed at 3-, 6-, and 12-months post-baseline.

- Assessments at all timepoints include:
  - Self Report Survey
  - Interview
    - Columbia Suicide Severity Rating Scale
    - Timeline Follow Back (suicide behaviors, VCL use, hospitalizations/residential treatment)

Follow-up assessments are almost complete, and analyses of the primary outcomes will be conducted once data is finalized



# CONSORT – recruitment and follow-up



# Demographics

	Total (n=301)	CLF (n=155, 51%)	EUC (n=146, 49%)
<b><u>Demographics</u></b>			
<b>Age (yr.) (mean, SD)</b>	46.8 (13.1)	47.0 (12.7)	46.5 (13.6)
<b>Male Gender</b>	262 (87%)	136 (88%)	126 (86%)
<b>Non-white race and/or Hispanic ethnicity</b>	81 (27%)	45 (29%)	36 (25%)
<b><u>Military History</u></b>			
<b>1+ tours of combat</b>	147 (49%)	73 (47%)	74 (51%)
<b><u>Clinical Characteristics</u></b>			
<b>Lifetime history of Suicide Attempt(s)</b>			
<b>No attempts, ever</b>	90 (30%)	50 (32%)	40 (27%)
<b>One attempt</b>	92 (31%)	44 (28%)	48 (33%)
<b>2+ attempts</b>	119 (39%)	61 (39%)	58 (40%)



# Crisis Line Facilitation (CLF)

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Single session

Therapist-delivered

Motivational interviewing-based (Peter Britton was co-I)

Addresses Veterans' perceptions of barriers and facilitators of using the VCL during periods of suicidal crisis

Overview of intervention and pre-post changes in self-efficacy to seek help during a suicidal crisis described in:

- Ilgen et al. (in press). Developing and Testing Crisis Line Facilitation to Encourage Help Seeking in Adults Receiving Inpatient Treatment for a Suicidal Crisis. *Cognitive and Behavioral Practice*



# Crisis Line Facilitation: Engage/Evoke

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## Engage

- Building rapport
- Gathering information about the patient's last suicidal crisis
- Identifying positive steps and/or reasons for optimism
- Using selective reflection/affirmations of positive steps, values, reasons to live, and interpersonal connections

## Evoke

- Understand why the participant has not used the VCL previously
- Elicit and reinforce reasons for using the VCL
- Elicit beliefs and cognitions about the VCL



# Crisis Line Facilitation: Educate/Encourage

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## Educate

- Distribute materials about the VCL
- Discuss features of the VCL
- Review webpage and discuss chat and text options

## Encourage

- Discuss the participant's perceptions of benefits of calling the VCL and what would make it easier to call in the future
- Reinforce strengths by reflecting and amplifying any positive comments about
  - Willingness to reach out
  - How calling the VCL may help participants stay on course with their goals, values, and priorities



# Crisis Line Facilitation: Practice

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Conduct one short practice call with the VCL

- Before the call:
  - Provide sample questions to ask the line
- After the call:
  - Debrief
  - Summarize goals, values, and priorities and connect this to willingness to call the line
  - Affirm and reinforce positive experiences with the line



# Enhanced Usual Care (EUC)

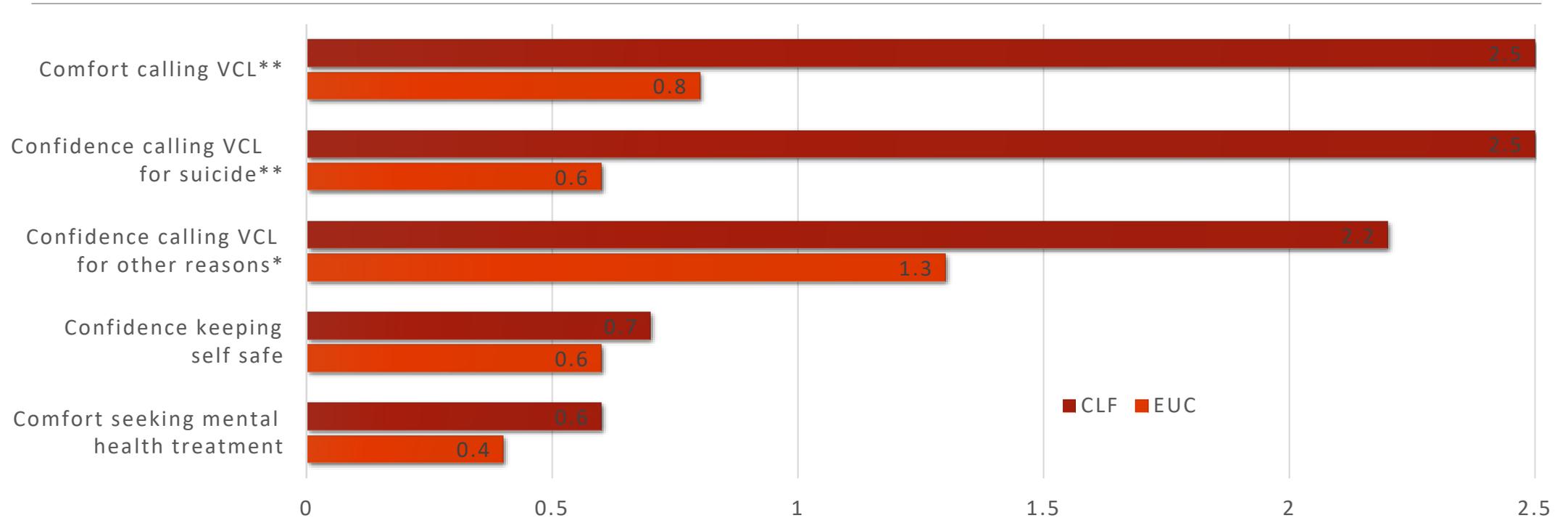
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Those in the EUC condition received the same promotional items and information about the VCL as the CLF condition.

- Information is in line with services provided during standard care
  - Included to ensure participants in both conditions received information about potential sources of support
- Participants were encouraged to seek help if they felt suicidal in the future.



# Change in Self-Efficacy Ratings: CLF vs. EUC



The graph above shows the paired differences for both CLF and EUC between pre and post test ratings for each of the 5 questions asked.

\*significant,  $p < 0.05$  \*\*significant,  $p < 0.01$



# CLF Participant Ratings of Session

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CLF participants rated the session as helpful (mean = 8.9) and satisfactory (mean =9.2)

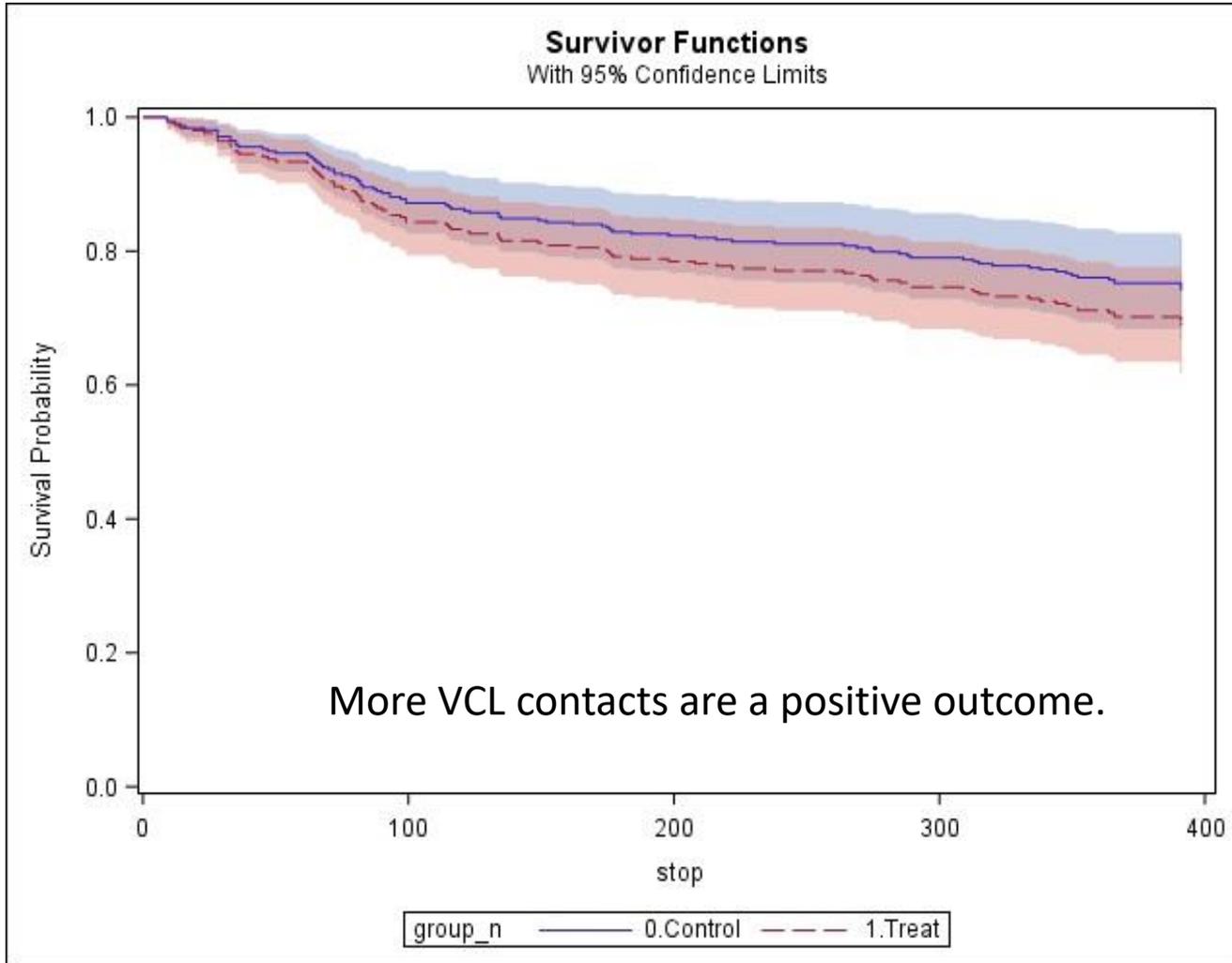
<u>CLF (intervention)</u>	Mean (SD), Median
Ratings of helpfulness of CLF	8.9 (1.5) Median=9
Ratings of satisfaction with CLF	9.2 (0.96) Median=10



# Crude rates and Cox proportional hazards models: Events by study arm

Outcome	Crude Rate per 100 days		RR (95% CL)	RR p value	Based on Cox Model	
	CLF	Control			HR (95% CL)	HR p-value
<b>All VCL calls</b>						
(A) All follow-up days	0.096	0.078	1.22 (0.79, 0.91)	0.37	1.24 (0.80, 1.92)	0.33
(B) Excluding CE days	0.107	0.087	1.23 (0.79, 1.92)	0.35	1.22 (0.79, 1.92)	0.32
<b>All Suicide Events</b>						
(A) All follow-up days	0.194	0.325	0.60 (0.46, 0.77)	<0.0001	0.60 (0.46, 0.78)	<0.0001
(B) Excluding CE days	0.196	0.344	0.58 (0.43, 0.74)	<0.0001	0.57 (0.43, 0.74)	<0.0001

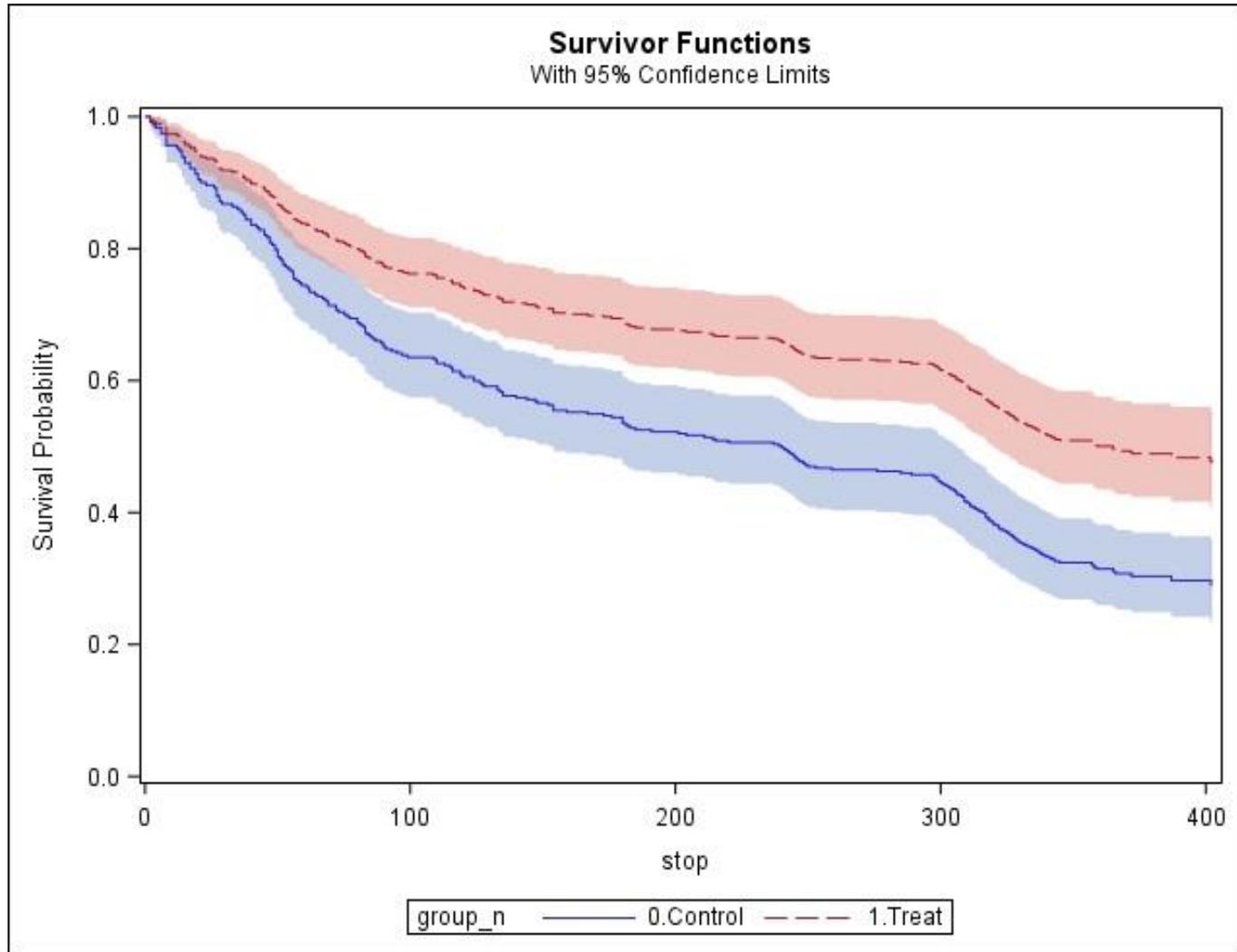
# Survival curves by study arm (Cox model)



**All VCL Contact Events across  
all follow-up days**

**Red: CLF**  
**Blue: EUC**

# Survival curves by study arm (Cox model)



**All Suicide Behavior Events  
Over all follow-up days**

**Red: CLF**

**Blue: EUC**

# Conclusions and Limitations

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## Conclusions

- Delivering a single-session suicide-focused intervention (CLF) is feasible during a psychiatric inpatient stay.
- Participants were positive about the experience of receiving CLF and report greater improvements in self-efficacy to use the VCL following CLF
- Participants who received CLF were less likely to report a suicide attempt during the follow-up interval; however, they were no more likely to utilize the VCL
- More work is needed to understand mechanisms of action of CLF

## Limitations

- Difficulty in studying rare events.
- Potential imprecision in measurement of outcomes
- Delivery during inpatient stay is cumbersome; may limit effectiveness (e.g., not able to access their own phone or use computer for chat).



# SPRINT CORE: Lessons Learned

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For inpatient psychiatry:

- First and last day of admission are often too hectic for approach
  - Veterans were less interested in participating in another discussion about admission/crisis
- Adjust recruitment materials to meet safety requirements
  - No metal, rubber pens, no staples, etc.
- Be flexible and expect interruptions/delays
  - Be willing to break up assessment/intervention over hours or days and be prepared to refresh Veterans memory
- Many participants transitioned to controlled environments when leaving inpatient treatment. This made measuring outcomes difficult



# SPRINT CORE: Lessons Learned

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- It is important to measure all suicide-related behaviors (including interrupted and aborted attempts). If you want to do a survival analysis, dates are needed.
- Assessments can require the research team to act to ensure participant safety which can influence outcomes
- There is a tension between short and long intervals between assessments
  - Shorter intervals improve accuracy of recall
  - Longer intervals between assessments may do a better job of capturing the natural course of symptoms
- Usual Care already involves Safety Plans so it can be harder to see effects of interventions



# Summary

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- Crisis Line Facilitation shows promise as an approach to decrease suicidal behaviors in high-risk Veterans.
- More work is needed to understand mechanisms of effects and identify ways to enhance the impact of this intervention.

# Thank you!

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Thank you to everyone who worked and continue to work very hard to make this project possible.

And thank you to all the Veteran participants who volunteered for this study.

## Co-Investigators

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