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TITLE: Augmenting Suicide Prevention Interventions for Service Members (ASPIS)

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CONTRACTING ORGANIZATION: The Ohio State University, Columbus, OH

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<b>14. ABSTRACT</b> Research to prevent suicidality among Servicemembers supports the effectiveness of several strategies. Though better on average than traditional approaches to suicide prevention, some Servicemembers do not benefit from or respond to these strategies. Very little is known about when or for whom these strategies are most likely to work, however. As a result, mental health professionals and military leaders are unable to strategically deliver interventions in ways that maximize impact and efficiency. The overall objective of this project is to improve the effectiveness, efficiency, and scale of evidence-based strategies to prevent suicidality among Servicemembers. We propose to achieve this objective through five synergistic research studies guided by a common, overarching question: What strategies, delivered how, by whom, and under which circumstances, are most effective for whom?					
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## TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	4
2. Keywords	5
3. Accomplishments	5
4. Impact	12
5. Changes/Problems	13
6. Products	14
7. Participants & Other Collaborating Organizations	14
8. Special Reporting Requirements	n/a
9. Appendices	n/a

## 1. Introduction

The suicide rate among US Servicemembers remains elevated relative to the age- and gender-adjusted general population. The latest available data indicate that the military suicide rate is 25.9 per 100,000. Suicide is the second leading cause of death among Servicemembers and has been a top 10 cause of death in the US general population for several decades. Military suicide has far-reaching impacts, even beyond the loss of individual lives, with evidence showing that Servicemember suicide has devastating effects on the morale, readiness, and psychological health of fellow unit members<sup>4</sup> and military families. Military researchers have identified several strategies that prevent suicidality, but little is known about when or for whom empirically-supported strategies are most likely to reduce suicidality. Augmenting Suicide Prevention Interventions for Servicemembers (ASPIS) proposes to address this overarching challenge by conducting five synergistic research studies guided by a common, overarching question: What strategies, delivered how, by whom, and under which circumstances, are most effective for whom? ASPIS directly addresses multiple areas of encouragement within the Peer-Reviewed Medical Research Program (PRMRP) Suicide Prevention topic area: (1) treatment strategies and interventions to prevent suicidality; (2) which interventions or combinations of interventions are most helpful and under what specific conditions; and (3) determining strategies for an efficacy of lethal means safety and restriction methods. Our overall objective is to improve the effectiveness, efficiency, and scale of evidence-based strategies to prevent suicidality among Servicemembers.

Research to prevent suicidality among Servicemembers has primarily considered a simplified version of our Overarching Question: What strategies are most effective for reducing suicidality? For example, our research team has shown that brief cognitive behavioral therapy for suicide prevention (BCBT; W81XWH0910569, PI: Rudd) and crisis response planning (CRP; W81XWH1020181, PI: Bryan) significantly reduce suicidal ideation and suicide attempts among treatment-seeking Servicemembers as compared to treatment as usual (TAU). Our team has also shown that lethal means counseling (LMC) and distribution of cable locks to firearm-owning Servicemembers increase safe storage behaviors (W81XWH1620003, PI: Anestis), a strategy that is inversely correlated with suicide mortality. This proposal focuses on BCBT, CRP, and LMC because each strategy is supported by at least one randomized clinical trial (RCT) in a military sample and all are recommended in the VA/DOD Clinical Practice Guidelines. Although studies indicate these strategies are more effective on average than TAU when used with Servicemembers, little is known about when or for whom they are most likely to be helpful.

Preliminary research provides some clues about factors that can influence variability in treatment effects. Secondary analyses conducted by our team using our previous RCT data has found, for example, that BCBT's effect on preventing suicide attempts varies across patient subgroups and whereas CRP's effect on suicidal ideation and attempts may be moderated by clinician factors, these same factors may not influence other, less effective interventions. Some evidence also suggests that intervention quality and completeness vary markedly across clinicians, and are negatively correlated with reductions in suicidality. The effectiveness of empirically-supported suicide prevention strategies may therefore depend on a multitude of factors. ASPIS aims to understand various circumstances that influence the effectiveness of suicide prevention strategies for reducing suicidality.

We propose five synergistic studies that could, in combination, more efficiently and comprehensively consider the Overarching Question compared to any single study alone. The ASPIS projects will consider multiple facets of our Overarching Question. Each facet will be considered by at least two projects, and each project will enroll a distinct population recruited from unique settings (e.g., outpatient mental health, emergency department, primary care, community). This complementary design will maximize the transferability of knowledge to the military healthcare system and accelerate the identification of practical solutions to reduce suicide risk among Servicemembers. Through this approach, ASPIS is designed to provide practical, empirically-supported answers to critical questions commonly asked by clinicians and policy-makers (e.g., Which treatment should I use with this Servicemember? Which strategies could be implemented at scale?).

## 2. Keywords

Suicide; suicide prevention; military; clinical trial; precision medicine; brief cognitive behavioral therapy; crisis response plan; lethal means counseling

## 3. Accomplishments

### a. What were the major goals of the project?

#### Project 1

- (1) To develop a novel treatment prognostic calculator to predict response to treatment as usual (TAU) for the prevention of suicide among military personnel.
- (2) To evaluate the performance of the treatment prognosis calculator in a new sample and determine whether brief cognitive behavioral therapy (BCBT) is more effective than TAU for those patients who are predicted not to respond adequately to TAU.

#### Project 2

- (3) To test the efficacy of the Aviva app for the prevention of suicide attempts and reduction of suicidal ideation among Servicemembers.
- (4) To identify moderators and mediators of intervention effects.

#### Project 3

- (5) To assess the effectiveness of CRP, delivered by military clinicians, on suicide attempt risk and severity of suicidal ideation among Servicemembers presenting to a military ED for elevated suicide risk.
- (6) To identify potential moderators of CRP effects on suicide attempt risk and severity of suicidal ideation.
- (7) To identify barriers to CRP implementation in military EDs.

#### Project 4

- (8) Identify which CRP and emotion regulation strategies are most effective for reducing suicide risk among non-treatment seeking military personnel.
- (9) Identify whether profiles of military personnel influence who experiences reductions in suicide risk following the use of specific CRP and emotion regulation strategies.
- (10) Identify when specific emotion regulation and CRP strategies are most effective for reducing suicidality among non-treatment seeking military personnel.

#### Project 5

- (11) Assess the preliminary efficacy of a LMC intervention, augmented with an IU intervention, on firearm storage practices.
- (12) Examine mechanisms through which IUT and LMC increase firearm storage practices.
- (13) Assess the preliminary efficacy of a LMC intervention, augmented with an IU intervention, on firearm storage practices.

### b. What was accomplished under these goals?

During Year 1 of this project, all five studies submitted IRB applications, received IRB approval and Office of Human Subjects Oversight (OHRO) approval, and hired and trained study staff. The Assessment core built and tested the databases for each study and have made project-specific modifications in collaboration with project leads. The overall study PI, project leads, and core leads meet monthly to review study progress and troubleshoot problems. The Administrative Core developed and refined risk management protocols and a publication approval process that was approved by all study leads. Multiple studies initiated participant recruitment, data collection, and delivery of project interventions.

A summary of project milestones and progress towards each milestone is summarized in the tables below.

<b>Study 1 Specific Aims:</b> (1) To develop a novel treatment prognostic calculator to predict response to treatment as usual (TAU) for the prevention of suicide among military personnel. (2) To evaluate the performance of the treatment prognosis calculator in a new sample and determine whether brief cognitive behavioral therapy (BCBT) is more effective than TAU for those patients who are predicted not to respond adequately to TAU.	<b>Projected Timeline (Months)</b>	<b>Progress</b>
<b>Task 1: Obtain IRB and HRPO approvals</b>		
Obtain IRB approval	1-6	Complete
Obtain HRPO approval	1-6	Complete
Submit quarterly reports to CDMRP	Quarterly	Complete (ongoing)
Submit annual reports to the IRB	Annually	Not yet started
Submit annual reports to the CDMRP	Annually	Not yet started
Submit annual reports to HRPO	Annually	Not yet started
Submit final report to IRB	48	Not yet started
Submit final report to CDMRP	48	Not yet started
Submit final report to HRPO	48	Not yet started
Milestones Achieved:		
- IRB approval	6	Complete
- HRPO approval	6	Complete
<b>Task 2: Hire and train staff</b>		
Advertise for and interview project coordinator	1	Complete
Hire and train project coordinator	1-3	Complete
Advertise for and interview research assistants	3-6	Complete
Hire and train research assistants	6	Complete
Milestone Achieved:		
- Project coordinator hired and trained	3	Complete
- Research assistants hired and trained	6	Complete
<b>Task 3: Conduct two-stage clinical trial</b>		
Build study database	1-6	Complete
Stage I: Begin enrollment	6	Not yet started
Stage I: Conduct baseline assessments (target 400 participants)	6-16	Not yet started
Stage I: Administer TAU to participants	6-16	Not yet started
Stage I: Conduct 6-month follow-up assessments (target 340 participants)	12-22	Not yet started
Stage I: Enter data into database	6-22	Not yet started
Stage II: Begin enrollment	16	Not yet started
Stage II: Conduct baseline assessments (target 800 participants)	16-36	Not yet started
Stage II: Administer TAU to participants	16-31	Not yet started
Stage II: Train on-base clinicians to provide BCBT	21-36	Not yet started
Stage II: Administer BCBT to participants	21-36	Not yet started
Stage II: Conduct 6-month follow-up assessments (target 680 participants)	22-42	Not yet started
Stage II: Enter data into database	16-42	Not yet started
Milestones Achieved:		
- Complete database build	6	Complete
- Begin Stage I enrollment	6	Not yet started
- Complete Stage I enrollment	16	Not yet started

- Complete Stage I 6-month follow-up assessments	22	Not yet started
- Develop treatment prognosis calculator	28	Not yet started
- Begin Stage II enrollment	16	Not yet started
- Complete Stage II enrollment	36	Not yet started
- Complete Stage II 6-month follow-up assessments	42	Not yet started
<b>Task 4: Analyze data and disseminate results</b>		
Conduct data quality checks	Quarterly	Not yet started
Develop treatment prognosis calculator	22-28	Not yet started
Data analyses, manuscript writing	42-48	Not yet started
Publish manuscripts, submit presentations, and disseminate results	42-48	Not yet started
Milestones Achieved:		
- Complete data analyses	48	Not yet started
- Publish primary outcomes	48	Not yet started

<b>Study 2 Specific Aims:</b> (1) To test the efficacy of the Aviva app for the prevention of suicide attempts and reduction of suicidal ideation among Servicemembers. (2) To identify moderators and mediators of intervention effects.	<b>Projected Timeline (Months)</b>	<b>Progress</b>
<b>Task 5: Obtain IRB and HRPO approvals</b>		
Obtain IRB approval	1-6	Complete
Obtain HRPO approval	1-6	Complete
Submit quarterly reports to CDMRP	Quarterly	Complete (ongoing)
Submit annual reports to the IRB	Annually	Complete (ongoing)
Submit annual reports to the CDMRP	Annually	Complete (ongoing)
Submit annual reports to HRPO	Annually	Complete (ongoing)
Submit final report to IRB	48	Not yet started
Submit final report to CDMRP	48	Not yet started
Submit final report to HRPO	48	Not yet started
Milestones Achieved:		
- IRB approval	6	Complete
- HRPO approval	6	Complete
<b>Task 6: Hire and train staff</b>		
Advertise for and interview research therapists	1	Complete
Hire and train research therapists	1-3	Complete
Milestone Achieved:		
- Research therapists hired and trained	3	Complete
<b>Task 7: Conduct clinical trial</b>		
Build study database	1-3	Complete
Begin enrollment	6	Complete
Conduct baseline assessments (target 350 participants)	6-30	Underway
Administer TAU or Aviva app to participants	6-30	Underway
Conduct 3-month follow-up assessments (target 315 participants)	9-33	Not yet started
Conduct 6-month follow-up assessments (target 280 participants)	12-36	Not yet started
Conduct 9-month follow-up assessments (target 260 participants)	15-39	Not yet started
Conduct 12-month follow-up assessments (target 245 participants)	18-42	Not yet started
Enter data into database	6-42	Not yet started

Milestones Achieved:		
- Complete database build	3	Complete
- Begin enrollment	6	Complete
- Complete enrollment	30	Not yet started
- Complete follow-up assessments	42	Not yet started
<b>Task 8: Analyze data and disseminate results</b>		
Conduct data quality checks	Quarterly	Underway
Data analyses, manuscript writing	42-48	Not yet started
Publish manuscripts, submit presentations, and disseminate results	42-48	Not yet started
Milestones Achieved:		
- Complete data analyses	48	Not yet started
- Publish primary outcomes	48	Not yet started

<b>Study 3 Specific Aims:</b> (1) To assess the effectiveness of CRP, delivered by military clinicians, on suicide attempt risk and severity of suicidal ideation among Servicemembers presenting to a military ED for elevated suicide risk. (2) To identify potential moderators of CRP effects on suicide attempt risk and severity of suicidal ideation. (3) To identify barriers to CRP implementation in military EDs. (Expl) To statistically examine associates between indicators of suicide risk extracted from the medical record as compared to patient-reported outcomes.	<b>Projected Timeline (Months)</b>	<b>Progress</b>
<b>Task 9: Obtain IRB and HRPO approvals</b>		
Obtain IRB approval	1-6	Complete
Obtain HRPO approval	1-6	Complete
Submit quarterly reports to CDMRP	Quarterly	Complete (ongoing)
Submit annual reports to the IRB	Annually	Complete (ongoing)
Submit annual reports to the CDMRP	Annually	Complete (ongoing)
Submit annual reports to HRPO	Annually	Complete (ongoing)
Submit final report to IRB	48	Not yet started
Submit final report to CDMRP	48	Not yet started
Submit final report to HRPO	48	Not yet started
Milestones Achieved:		
- IRB approval	6	Complete
- HRPO approval	6	Complete
<b>Task 10: Hire and train staff</b>		
Advertise for and interview research staff	2-4	Complete
Hire and train research staff	4-5	Complete
Milestone Achieved:		
- Research staff hired and trained	5	Complete
<b>Task 11: Conduct randomized stepped-wedge clinical trial</b>		
Build study database	2-5	Complete
Enroll participants	7-30	Underway
Conduct baseline assessments (target 700 participants)	7-30	Underway
Administer TAU to participants	7-26	Underway

Conduct 3-month follow-up assessments (target 665 participants)	10-33	Underway
Conduct 6-month follow-up assessments (target 630 participants)	13-36	Not yet started
Conduct 9-month follow-up assessments (target 595 participants)	16-39	Not yet started
Conduct 12-month follow-up assessments (target 560 participants)	19-42	Not yet started
Train clinicians to provide CRP	11-27	Not yet started
Administer CRP to participants	11-30	Not yet started
Provide follow-up consultation to clinicians to support fidelity	12-33	Not yet started
Conduct fidelity monitoring via chart review	7-30	Underway
Enter data into database	7-42	Underway
Milestones Achieved:		
- Complete database build	5	Complete
- Begin enrollment and baseline assessments	7	Complete
- Complete enrollment	30	Not yet started
- Complete fidelity monitoring	32	Not yet started
- Complete follow-up assessments	42	Not yet started
<b>Task 12: Conduct implementation sub-study</b>		
Consent provider participants and collect data	13-33	Not yet started
Qualitative analysis	34-42	Not yet started
Write-up results	42-48	Not yet started
Milestones Achieved:		
- Complete data collection for implementation sub-study	33	Not yet started
- Analyze implementation sub-study data	42	Not yet started
- Summarize findings and implementation recommendations	48	Not yet started
<b>Task 13: Extract electronic medical record (EMR) data</b>		
Extract diagnostic and procedure codes	45	Not yet started
Milestones Achieved:		
- Extract relevant data from EMR	45	Not yet started
- Create EMR dataset	45	Not yet started
- Merge EMR dataset with study dataset	45	Not yet started
<b>Task 14: Analyze data and disseminate results</b>		
Conduct data quality checks	Quarterly	Underway
Data analyses, manuscript writing	36-48	Not yet started
Publish manuscripts, submit presentations, and disseminate results	36-48	Not yet started
Milestones Achieved:		
- Complete data analyses	48	Not yet started
- Publish primary outcomes	48	Not yet started

<b>Study 4 Specific Aims:</b> (1) Identify which CRP and emotion regulation strategies are most effective for reducing suicide risk among non-treatment seeking military personnel. (2) Identify whether profiles of military personnel influence who experiences reductions in suicide risk following the use of specific CRP and emotion regulation strategies. (3) Identify when specific emotion regulation and CRP strategies are most effective for reducing suicidality among non-treatment seeking military personnel.	<b>Projected Timeline (Months)</b>	<b>Progress</b>
<b>Major Task 13: Obtain IRB and HRPO approvals</b>		

Obtain IRB approval	1-6	Complete
Obtain HRPO approval	1-6	Complete
Submit quarterly reports to CDMRP	Quarterly	Complete (ongoing)
Submit annual reports to the IRB	Annually	Complete (ongoing)
Submit annual reports to the CDMRP	Annually	Complete (ongoing)
Submit annual reports to HRPO	Annually	Complete (ongoing)
Submit final report to IRB	48	Not yet started
Submit final report to CDMRP	48	Not yet started
Submit final report to HRPO	48	Not yet started
Milestones Achieved:		
- IRB approval	6	Complete
- HRPO approval	6	Complete
<b>Major Task 14: Coordinate study staff</b>		
Develop job descriptions	4	Complete
Advertise and interview for project related staff	4	Complete
Coordinate space allocation for new staff	4	Complete
Hire research staff	6	Complete
Train study staff on assessments, EMA protocol, and follow-up assessments	6-9	Complete
Coordinate with Training Core to train study staff in CRP	6-9	Complete
Coordinate with Training Core to conduct ongoing fidelity ratings for CRP staff	6-36	Complete
Milestone(s) Achieved:		
- Research and CRP staff trained	9	Complete
<b>Major Task 15: Conduct research study</b>		
Prepare and pilot test virtual assessment and EMA surveys	6-9	Complete
Finalize assessment measures in virtual platforms	9	Complete
Finalize EMA survey items and format	9	Complete
Begin participant recruitment	9-36	Complete
Administer CRP to all participants	9-37	Underway
Complete all baseline assessments and CRPs (target 334 participants)	9-36	Underway
Complete all EMA assessments	9-37	Underway
Complete 1-month follow-up assessments (target 310 participants)	10-36	Underway
Complete 3-month follow-up assessments (target 297 participants)	13-39	Underway
Complete 6-month follow-up assessments (target 275 participants)	16-42	Underway
Complete 9-month follow-up assessments (target 262 participants)	19-45	Not yet started
Complete 12-month follow-up assessments (target 230 participants)	22-48	Not yet started
Milestone(s) Achieved:		
- 1st participant enrolled	9	Complete
- All baseline assessments and CRPs complete	36	Underway
- All EMA assessments complete	37	Underway

- All follow-up assessments complete	48	Underway
<b>Major Task 16: Analyze data and disseminate results</b>		
Data cleaning and preparation	9-48	Underway
Conduct data analyses	24-48	Not yet started
Obtain results from data analyses	37-48	Not yet started
Manuscript preparation	40-48	Not yet started
Professional presentations	40-48	Not yet started
Milestone(s) Achieved:		
- Report results from data analyses	40-48	Not yet started
- Submitted manuscript for primary analyses	48	Not yet started

<b>Study 5 Specific Aims:</b> (1) Assess the preliminary efficacy of a LMC intervention, augmented with an IU intervention, on firearm storage practices. (2) Examine mechanisms through which IUT and LMC increase firearm storage practices. (3) Assess the preliminary efficacy of a LMC intervention, augmented with an IU intervention, on firearm storage practices.	<b>Projected Timeline (Months)</b>	<b>Progress</b>
<b>Task 17: Obtain IRB and HRPO approvals</b>		
Obtain IRB approval	1-6	Complete
Obtain HRPO approval	1-6	Complete
Submit quarterly reports to CDMRP	Quarterly	Complete (ongoing)
Submit annual reports to the IRB	Annually	Complete (ongoing)
Submit annual reports to the CDMRP	Annually	Complete (ongoing)
Submit annual reports to HRPO	Annually	Complete (ongoing)
Submit final report to IRB	48	Not yet started
Submit final report to CDMRP	48	Not yet started
Submit final report to HRPO	48	Not yet started
Milestones Achieved:		
- IRB approval	6	Complete
- HRPO approval	6	Complete
<b>Task 18: Prepare for research study</b>		
Build study database	1-3	Complete
Coordinate with human resources for creation of job posting(s)	1-3	Complete
Advertise and interview for project related staff	1-3	Complete
Coordinate with Ohio U. for project staff space	3	Complete
Hire study staff	3	Complete
Train research staff to deliver lethal means counseling (LMC) and intolerance of uncertainty treatment (IUT)	3-6	Complete
Milestone(s) Achieved:		
- Database created	3	Complete
- Research staff hired and trained	6	Complete
<b>Task 19: Conduct research study</b>		
Begin enrollment	6	Underway
Conduct baseline assessments (target 100 participants)	6-28	Underway

Administer IUT and LMC to participants	6-28	Not yet started
Monitor intervention fidelity	6-28	Not yet started
Collect EMA survey data 6 times per day for 28 days	6-30	Not yet started
Conduct 2-week follow-up assessments (target 100 participants)	6-24	Not yet started
Conduct 1-month follow-up assessments (target 90 participants)	7-25	Not yet started
Conduct 3-month follow-up assessments (target 80 participants)	9-27	Not yet started
Conduct 6-month follow-up assessments (target 75 participants)	12-30	Not yet started
Enter data into database	6-30	Not yet started
Milestone(s) Achieved: - Begin enrollment - Begin baseline assessments - Begin follow-up assessments - Complete baseline assessments		Underway Underway Not yet started Not yet started
<b>Task 20: Analyze data and disseminate results</b>		
Conduct data quality checks	8-33	Not yet started
Final data analyses and manuscript writing	33-34	Not yet started
Publish manuscripts, submit presentations, and disseminate results	35-36	Not yet started
Milestone(s) Achieved: - Initiate planned analyses - Submit results for publication	33 36	Not yet started Not yet started

**c. What opportunities for training and professional development has the project provided?**

Nothing to Report

**d. How were the results disseminated to communities of interest?**

Nothing to Report

**e. What do you plan to do during the next reporting period to accomplish the goals?**

During the second year of effort, we anticipate continuing enrollment and data collection. We will also submit annual continuing review applications to the relevant IRBs and OHRO.

**4. Impact**

**a. What was the impact on the development of the principal discipline(s) of the project?**

Nothing to Report

**b. What was the impact on other disciplines?**

Nothing to Report

**c. What was the impact on technology transfer?**

Nothing to Report

**d. What was the impact on society beyond science and technology?**

Nothing to Report

## 5. Changes/Problems

### a. Changes in approach and reasons for change

Nothing to Report

### b. Actual or anticipated problems or delays and actions or plans to resolve them

#### Project 1

During the first year of effort, Project 1 experienced several delays stemming from DoD bureaucratic regulatory processes. DHA had not yet created research protocols and forms and the three Air Force sites followed different local procedures. This combination of factors resulted in conflicting information and slow response times from DoD regulatory administrators. Local on-boarding procedures for hired staff members has also been inconsistent across sites, delaying staff access to clinics and systems necessary for the project. During the most recent quarter, we obtained all regulatory approvals and initiated site visits to speed up the on-boarding process. Project 1 will begin enrollment as soon as research staff members have completed local on-boarding processes. This is projected to occur by the end of calendar year 2023.

#### Project 2

During the first year of effort, Project 2 experienced delays stemming from DoD bureaucratic regulatory processes. OHRO requested extra paperwork and documentation from the IRB of record and research site that created confusion and slowed the approval process. Final approval was finally received during the third quarter, enabling us to initiate enrollment on this project.

#### Project 3

During the first year of effort, Project 3 experienced no problems or delays.

#### Project 4

During the first year of effort, Project 4 experienced significant challenges with fraudulent screening responses from civilians posing as military personnel. We therefore shifted out outreach and recruitment efforts to advertise directly to military personnel at Ohio National Guard annual health screenings and via collaborating military installations. This has significantly reduced the number of fraudulent screenings but overall enrollment remains slow. One issue slowing enrollment is the study's eligibility criterion for military personnel to not be engaged in mental healthcare. We are therefore considering a modification to the study design to remove this particular eligibility criterion.

#### Project 5

During the first year of effort, Project 5 also experienced significant challenges with fraudulent screening responses from civilians posing as military personnel. We therefore shifted our outreach and recruitment efforts to advertise directly to military personnel at Ohio National Guard annual health screenings and via collaborating military installations. This has significantly reduced the number of fraudulent screenings but overall enrollment remains slow. We are also developing new approaches to more efficiently identify fraudulent responses, thereby reducing staff members' time reviewing these responses.

### c. Changes that had a significant impact on expenditures

Nothing to Report

### d. Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

Nothing to Report

### e. Significant changes in use or care of human subjects

Nothing to Report

## 6. Products

### a. Publications, conference papers, and presentations

Report only the major publication(s) resulting from the work under this award.

### b. Journal publications.

Nothing to report

### c. Books or other non-periodical, one-time publications.

Nothing to Report

### d. Other publications, conference papers, and presentations.

Nothing to Report

### e. Website(s) or other Internet site(s)

Nothing to Report

### f. Technologies or techniques

Nothing to Report

### g. Inventions, patent applications, and/or licenses

Nothing to Report

### h. Other products

Nothing to Report

## 7. Participants & Other Collaborating Organizations

### a. What individuals have worked on the project?

#### Project Management Team

<i>Name:</i>	Craig Bryan
<i>Project Role:</i>	Principal Investigator
<i>Researcher Identifier (e.g. ORCID ID):</i>	0000-0002-9714-0733
<i>Nearest person month worked:</i>	2.2
<i>Contribution to Project:</i>	Dr. Bryan has provided overall guidance and direction for the study team, has provided support for regulatory approvals, guided the development of standard operative procedures, and run monthly executive committee meetings

<i>Name:</i>	Darrin Aase
<i>Project Role:</i>	Assessment Core Lead
<i>Researcher Identifier (e.g. ORCID ID):</i>	0000-0002-9714-0733
<i>Nearest person month worked:</i>	1.8

*Contribution to Project:* Dr. Aase has overseen database construction for all projects, attended monthly Executive Committee meetings, and met individually with Project Leads to ensure database construction meets each project's requirements

*Name:* AnnaBelle Bryan  
*Project Role:* Assessment Core Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0002-6192-4229  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Mrs. Bryan has helped create standard operating procedures, attended monthly executive committee meetings, overseen purchasing and ordering of supplies, and supervised support staff

*Name:* Justin Baker  
*Project Role:* Training Core Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0001-7010-5009  
*Nearest person month worked:* 2.35  
*Contribution to Project:* Dr. Baker has developed a training plan for each project, scheduled trainings for staff members, and attended monthly executive committee meetings

*Name:* Guy Brock  
*Project Role:* Biostatistician  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.6  
*Contribution to Project:* Dr. Brock has attended project meetings, completed protocol-specific training, overseen database construction, and met with Project Leads regarding data analyses

*Name:* Jeff Pan  
*Project Role:* Biostatistician  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.6  
*Contribution to Project:* Dr. Pan has attended project meetings, completed protocol-specific training, and overseen database construction

*Name:* Kelli Williams  
*Project Role:* Project Coordinator  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.2  
*Contribution to Project:* Ms. Williams has assisted with equipment purchases, arranging travel for investigators, scheduling meetings, and submitting travel vouchers

*Name:* Jeffrey Tabares  
*Project Role:* Research Scientist  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.3  
*Contribution to Project:* Dr. Tabares has assisted with EMA database construction

*Name:* Johnnie Young  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 5.0  
*Contribution to Project:* Mr. Young has attended project meetings, completed protocol-specific training, and assisted with recruitment

*Name:* Sean Williams  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.0  
*Contribution to Project:* Mr. Williams assisted with database construction and follow-up assessment protocols

### Project 1

*Name:* Jay Fournier  
*Project Role:* Project Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0001-8967-1668  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Fournier has submitted the IRB application for Project 1, created HR postings for Project 1 staff, met weekly with our military collaborators, and attended monthly Executive Committee meetings

*Name:* Nichole Cook  
*Project Role:* Project Coordinator  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.8  
*Contribution to Project:* Ms. Storey has assisted with the IRB application for Project 1, scheduled weekly meetings with military collaborators, and interfaced with HR to post study positions

*Name:* Clanesha Munford  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 6.0  
*Contribution to Project:* Ms. Munford has attended project meetings and completed protocol-specific training

*Name:* Allison Wilkerson  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 8.0  
*Contribution to Project:* Ms. Wilkerson has attended project meetings and completed protocol-specific training

*Name:* Cara Johnston  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.0  
*Contribution to Project:* Ms. Johnston has attended project meetings and completed protocol-specific training

*Name:* Robert DeRubeis  
*Project Role:* Co-Investigator  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.2  
*Contribution to Project:* Dr. DeRubeis meets regularly with the study team and has provided support for regulatory approvals.

### Project 2

*Name:* M. David Rudd  
*Project Role:* Project Lead  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Rudd has submitted the IRB application for Project 2, created HR postings for Project 2 staff, met monthly with our military collaborators, and attended monthly Executive Committee meetings

*Name:* Rhea Pedler  
*Project Role:* Study Therapist  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 12.0  
*Contribution to Project:* Ms. Pedler has attended project meetings, completed protocol-specific training, and initiated recruitment activities for Project 2

### Project 3

*Name:* Kristen Walter  
*Project Role:* Project Co-Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0002-2464-2716  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Walter has submitted the IRB application for Project 3, met weekly with her study team, attended monthly Executive Committee meetings, and trained study staff.

*Name:* Cynthia Thomsen  
*Project Role:* Project Co-Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0003-2538-9596  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Thomsen assisted with the contract and attended monthly Executive Committee meetings.

*Name:* Alexander Kline  
*Project Role:* Research Psychologist  
*Researcher Identifier (e.g. ORCID ID):* 0000-0001-7420-7547  
*Nearest person month worked:* 6.0  
*Contribution to Project:* Dr. Kline has attended project meetings, completed protocol-specific training, and assisted with participant recruitment and study facilitation.

*Name:* Erin Miggantz  
*Project Role:* Research Psychologist  
*Researcher Identifier (e.g. ORCID ID):* 0000-0003-1122-036X  
*Nearest person month worked:* 6.0  
*Contribution to Project:* Dr. Miggantz has attended project meetings, completed protocol-specific training, and assisted with participant recruitment and study facilitation.

*Name:* Nicholas Otis  
*Project Role:* Research Scientist/Program Manager  
*Researcher Identifier (e.g. ORCID ID):* 0000-0003-1078-2862  
*Nearest person month worked:* 3.0  
*Contribution to Project:* Mr. Otis has attended project meetings, completed protocol-specific training, supported regulatory processes, and assisted with participant recruitment and study facilitation.

*Name:* Julia Hollingsworth  
*Project Role:* Research Assistant  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.2  
*Contribution to Project:* Ms. Hollingsworth assisted with the IRB and regulatory processes, and drafted study documents.

*Name:* Lisa Glassman  
*Project Role:* Co-Investigator  
*Researcher Identifier (e.g. ORCID ID):* 0000-0002-4909-519X  
*Nearest person month worked:* 1.0  
*Contribution to Project:* Dr. Glassman has completed protocol-specific training and supported regulatory processes.

#### Project 4

*Name:* Lauren Khazem  
*Project Role:* Project Co-Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0002-0787-2368  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Khazem has submitted the IRB application for Project 4, met weekly with her study team, built the EMA database, attended monthly Executive Committee meetings, and trained study staff

*Name:* Heather Wastler  
*Project Role:* Project Co-Lead  
*Researcher Identifier (e.g. ORCID ID):* 0000-0003-1519-6926  
*Nearest person month worked:* 2.4  
*Contribution to Project:* Dr. Wastler has submitted the IRB application for Project 4, met weekly with her study team, built the EMA database, attended monthly Executive Committee meetings, and trained study staff

*Name:* Christopher Browning  
*Project Role:* Co-Investigator  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.6  
*Contribution to Project:* Dr. Browning helped to build the EMA database, design the EMA survey, and implement the EMA protocol

*Name:* Cameron Long  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 12.0  
*Contribution to Project:* Mr. Long has assisted with database construction, attended project meetings, completed protocol-specific training, and initiated recruitment activities for Project 4

*Name:* Bethany Boettner  
*Project Role:* Research Scientist  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 0.6  
*Contribution to Project:* Ms. Boettner has assisted with database preparation for Project 4

#### Project 5

*Name:* Nik Allan

*Project Role:* Project Lead  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.8  
*Contribution to Project:* Dr. Allan has submitted the IRB application for Project 5, met weekly with his study team, built the EMA database, attended monthly Executive Committee meetings, and trained study staff

*Name:* Sarah Irvin  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 7.4  
*Contribution to Project:* Ms. Irvin has assisted with database construction, attended project meetings, and completed protocol-specific training

*Name:* Jeanette Clark  
*Project Role:* Research Associate  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.3  
*Contribution to Project:* Ms. Clark has attended project meetings, completed protocol-specific training, and assisted with recruitment and data collection for Project 5

*Name:* Michael Anestis  
*Project Role:* Co-Investigator  
*Researcher Identifier (e.g. ORCID ID):* N/A  
*Nearest person month worked:* 1.8  
*Contribution to Project:* Dr. Anestis meets regularly with the study team and has assisted with training study staff.

**b. Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?**

**New Active Support**

Key Personnel	Sponsor	Title	Start Date	Notes
Allan	NIH	Examining emotion regulation processes in social anxiety from an interpersonal and observational perspective	7/15/22	
Allan	NIH	Randomized clinical trial of a brief, anxiety intervention for mild cognitive impairment/mild Alzheimer's disease and their care providers	1/1/23	
Baker	DOD	Piloting a brief cognitive-behavioral therapy (BCBT) Group intervention for active duty military personnel	8/1/22	
Bryan	DOD	IPA- Veteran's Affairs effort agreement	7/5/22	Grant ended 6/23
Baker, Bryan, Khazem	USAA Foundation	Brief cognitive behavioral therapy for suicide prevention (BCBT) training workshops	10/23/22	
Baker, Bryan, Khazem	USAA Foundation	Lethal Means Counseling (LMC) Training Workshops	10/25/22	Grant ended 9/23

**Active Support Ended**

Key Personnel	Sponsor	Title	End Date	Notes
Allan	NIH	The impact of addressing loneliness on opioid use	5/31/23	
Allan	NIH	Examining outcomes of a multi-component, individually-tailored, consultation process focused on classroom management for teachers (K-5)	8/31/23	
Baker, Bryan	DOD	Peer-to-peer programs for military suicide prevention	9/29/22	
Baker, Bryan	DOD	Protective environments: Military community engagement to prevent firearm suicide-RESTORAL PROJECT	9/26/22	Bryan's effort ended 9/22, overall project ended 9/23
Fournier	NIH	Bottom-up mechanisms of dysfunctional self-evaluation in depression	3/31/23	
Fournier	NIH	A multimethod examination of individual and environmental contributors to racial inequities in cannabis use	9/29/22	

**c. What other organizations were involved as partners?**

Wright-Patterson Air Force Base (Dayton, OH) provided facilities to collect the data and assisted with the on-boarding of study staff.

Joint Base Andrews (Prince George' County, MD) provided facilities to collect the data and assisted with the on-boarding of study staff.

Lackland Air Force Base (San Antonio, TX) provided facilities to collect the data and assisted with the on-boarding of study staff.

Naval Medical Center San Diego (San Diego, CA) provided facilities to collect the data and assisted with the on-boarding of study staff.

Naval Health Research Center (San Diego, CA) provided investigators and research staff who collaborated on the project.

University of Memphis (Memphis, TN) provided investigators and research staff who collaborated on the project.

University of Pennsylvania (Philadelphia, PA) provided investigators who collaborated on the project.

Rutgers University (New Brunswick, NJ) provided investigators who collaborated on the project.

Leidos (San Diego, CA) provided research staff who collaborated on the project.