AWARD NUMBER: **W81XWH-14-1-0060**

TITLE: **"Preventing Risky Drinking in Veterans Treated with Prescription Opioids"**

PRINCIPAL INVESTIGATOR: **Dr. James Mckay**

CONTRACTING ORGANIZATION: **Trustees of the University of Pennsylvania**
Philadelphia, PA 19104

REPORT DATE: **April 2015**

TYPE OF REPORT: **Annual**

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
April 2015	Annual	1 April 2014 - 31 Mar 2015

4. TITLE AND SUBTITLE

Preventing Risky Drinking in Veterans Treated with Prescription Opioids

5a. CONTRACT NUMBER

5b. GRANT NUMBER
W81XWH-14-1-0060

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
Dr. James McKay

E-Mail: jimrache@mail.med.upenn.edu

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Trustees of the University of Pennsylvania
3451 Walnut Street
Philadelphia, PA 19104-6205

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Veterans who are taking prescription opioids for chronic pain and are engaging in risky drinking are at heightened risk for drug interactions, including overdose and other negative effects, particularly if they are also using benzodiazepines. In this application, we propose to test an integrated prevention intervention, designed to reduce rates of risky drinking in veterans receiving prescription opioids to treat their chronic pain. This adaptive, patient-centered intervention provides integrated clinical assessment, brief intervention, monitoring, and extended prevention services delivered through a combination of clinical visits, telephone calls, and text messages. We propose to conduct a study in which returning OEF/OIF individuals and other veterans receiving medical care at the Philadelphia VAMC (N=300) who are on daily doses of prescription opioids and screen positive for risky alcohol use will be randomized to receive 12 months of an adaptive integrated prevention intervention (IPI) or to standard care (SC), which consists of a Brief Intervention (BI) with 2 follow-up contacts. Potential participants will be veterans at the Philadelphia VAMC who, based on pharmacy records, are using opioids daily to treat chronic pain. An initial evaluation will identify individuals who also engage in risky alcohol use based on NIAAA-recommended guidelines and meet other inclusion criteria to be enrolled in the study. The evaluation will also identify the use of other medications (e.g., benzodiazepines) that could interact negatively with opioid use. For veterans randomized to the IPI condition, a BI is first provided to reduce alcohol to non-hazardous levels and the effects are monitored for one month. Veterans who reduce alcohol use to non-hazardous levels during this one-month period continue in a monitoring track, consisting of tailored text messages and brief monthly telephone contacts. Veterans who continue to drink at risky levels are instead placed in a track that provides tailored text messages and more frequent telephone calls. In addition to monitoring, these calls provide further prevention/BI services to help the veteran reduce alcohol use to non-hazardous levels. Key components of these services are motivational enhancement and development of more effective ways to cope with stress and other triggers for risky alcohol use. All participants will be followed up at 3, 6, 9, 12 and 18 months after baseline. The primary outcome at each follow-up point will be a dichotomous measure of any risky drinking since the prior follow-up (yes/no). Secondary outcomes will include self-reported frequency of heavy drinking, biological measures of alcohol use, other drug use as determined by urine toxicology tests, opioid overdoses, and ratings of depression and pain. Repeated measures analyses will compare the IPI and SC conditions on primary and secondary outcomes assessed across an 18-month follow-up. Analyses will also test hypothesized moderation and mediation effects.

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
Unclassified	Unclassified	Unclassified	Unclassified		19b. TELEPHONE NUMBER *(include area code)*

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

Table of Contents Page No.

1. Introduction

Veterans who are taking prescription opioids for chronic pain and are engaging in risky drinking are at heightened risk for drug interactions, including overdose and other negative effects, particularly if they are also using benzodiazepines. In this application, we propose to test an integrated prevention intervention, designed to reduce rates of risky drinking in veterans receiving prescription opioids to treat their chronic pain. This adaptive, patient-centered intervention provides integrated clinical assessment, brief intervention, monitoring, and extended prevention services delivered through a combination of clinical visits, telephone calls, and text messages. We will conduct a study in which returning OEF/OIF individuals and other veterans receiving medical care at the Philadelphia VAMC (N=300) who are on daily doses of prescription opioids and screen positive for risky alcohol use will be randomized to receive 12 months of an adaptive integrated prevention intervention (IPI) or to standard care (SC), which consists of a Brief Intervention (BI) only. For veterans randomized to the IPI condition, a BI is first provided and the effects are monitored for one month. Veterans who reduce alcohol use to non-hazardous levels during this one-month period continue in a monitoring track, consisting of tailored text messages and brief monthly telephone contacts. Veterans who continue to drink at risky levels are instead placed in a track that provides tailored text messages and more frequent telephone calls. These calls provide monitoring and further prevention/BI services to help the veteran reduce alcohol use to non-hazardous levels. Key components of these services are motivational enhancement and development of more effective ways to cope with stress and other triggers for risky alcohol use. Veterans in the IPI condition who are initially placed in the monitoring track but whose drinking increases again during the 12 month intervention are transferred to the more intensive prevention track, until their alcohol use has again decreased. IPI is hypothesized to produce better alcohol and other drug use outcomes than SC over an 18 month follow-up.

2. Key words

veterans, opioid medication, pain treatment, risky drinking, prevention, brief intervention, monitoring, adaptive interventions, benzodiazepines, overdose, follow-up

3. Accomplishments

Major Goals of the Project

The goal of the proposed study is to test an integrated adaptive prevention approach designed for returning OEF/OIF individuals and other veterans who are engaging in risky drinking while being treated with prescription opioids for chronic pain. We propose to conduct a study in which returning OEF/OIF individuals and other veterans receiving medical care at the Philadelphia VAMC (N=300) who are on daily doses of prescription opioids and screen positive for risky alcohol use will be randomized to standard care (SC) or to 12 months of the adaptive integrated prevention intervention (IPI) described above. The primary outcome at each follow-up point will be a dichotomous measure of alcohol use status (any risky alcohol use since the prior follow-up: yes/no). Secondary outcomes will include self-reported frequency of heavy drinking, biological measures of heavy drinking, urine toxicology tests to assess other drug use, opioid overdoses, depression, and pain.

Objectives and Hypotheses

a. Primary objective: To compare the effectiveness of a 12-month integrated prevention intervention (IPI) with standard care (SC) over an 18-month follow-up period, for veterans treated with prescription opioids and who are engaging in risky/hazardous drinking, as defined by NIAAA guidelines (5).

- *Hypothesis 1*: IPI will produce better outcomes than SC, as indicated by lower rates of risky/hazardous alcohol use across the follow-up period.

b. Secondary objectives: To examine secondary outcome measures, moderator effects, and mediation effects:

- *Hypothesis 1*: IPI will produce better outcomes than SC on frequency of heavy drinking, biological measures of heavy drinking (i.e., GGT and CDT), urine toxicology tests to assess other drug use, depression, and pain.
- *Hypothesis 2:* Rates of opioid overdoes will be lower in IPI than in SC
- *Hypothesis 3*: Intervention effects will be greater in higher-risk veterans, including those with higher prescription opioid dosages, co-occurring benzodiazepine use, poor social support, and low readiness for change.
- *Hypothesis 4*: Results favoring IPI over SC on risky drinking will be mediated by greater readiness for change, self-efficacy, and coping.

Milestone	Base Line Plan Date
Task 1: Prepare the text messaging system for the study, and finalize all manuals for the integrated prevention intervention (IPI)	15-Oct-2014
Task 2: Pilot test methods to identify veterans with chronic pain who are receiving daily opioid medication through VANC pharmacy records, and the screening procedures to detect risky alcohol use in these individuals	15-Oct-2014
Task 3: Complete training for the two prevention counselors, in IPI, and identify and begin training a third prevention counselor	15-Oct-2014
Task 4: Begin enrollment of study participants	15-Jan-2015
Task 5: Complete enrollment of study participants	01-May-2017
Task 6: Complete all 18-month follow-ups	15-Oct-2018
Task 7: Complete and submit all main outcome papers	30-Jun-2019

Progress Toward Year 1 Milestones:
Task 1: Completed (October 15, 2014)
Task 2: Completed (December 1st, 2014)
Task 3: Partially completed (66%; February 9, 2015). Two prevention counselors were hired and trained. We held off on hiring the third counselor until we have sufficient participant flow.
Task 4: We began enrollment procedures at the end of March 2015, which means we were about 2 months behind schedule. They delay was due to the protracted process of getting the study approved by the Philadelphia VA IRB, including the use of SMS (i.e., text messaging) in the prevention protocol.

Major Activities in Year 1:

- A grant kickoff meeting was held July 14th, 2014 at the Philadelphia VAMC
- The content of the text messaging system was finalized, in collaboration with Sense Health and consultants Drs. Muench and Ames.
- We began meeting with clinical leadership in behavioral health, primary care, pharmacy, and pain treatment around procedures to identify and contact potentially eligible veterans.
- The protocol was approved by the U Penn IRB, the Philadelphia VA IRB, and the USAMRMC HRPO. Most important, the VA IRB approved the use of text messaging in the protocol.
- The manuals for the adaptive prevention intervention that will be used in the study were completed, with input from consultant Dr. Ames.
- Telephone recruitment screen and consent quiz were created.
- Procedures were finalized to use VA pharmacy records and yearly alcohol screening results to identify potential participants.
- Two new research technicians were hired and trained, and completed the WOC process at the Philadelphia VA
- Assessments for the study were finalized, and programmed at our data management unit
- The new VA Opioid Safety Initiative does not specify that veterans receiving opioid medication for pain must not consume any alcohol. Therefore, we kept our drinking goal as it was described in the grant application (i.e., reduction to below risky/hazardous drinking levels).
- Contracts with Sense Health (the SMS vendor) and MUSC (for CDT analyses of blood samples) were completed.
- Applications for second counselor position were reviewed, interviews conducted, and a job offer was made and accepted. The second counselor started, and completed all trainings on the study prevention protocol and obtained WOC status at the VA.
- Pharmacy records were used to identified Veterans who had received prescriptions for opioid medication for pain on three consecutive months (December 2014 through February 2015)
- At the end of March, letters describing the study were mailed to veterans who were positive for opioid medication in all three months and had positive hazardous alcohol use screens. These letters were followed up by telephone calls, in which we asked veterans for permission to screen them for the study. As of the end of March, 2015, none of the contacted veterans met inclusion criteria for the study.

Opportunities for Training and Professional Development
Nothing to report

Dissemination of Results
Nothing to report

Plans During the Next Reporting Period to Accomplish Goals and Objectives
The main goal for the second year of funding is recruitment of study participants. Our goal is to enroll 10-12 veterans per month (i.e., 2-3 per week). To accomplish this goal, we will obtain an updated list of all veterans on opioid pain medications from the VA pharmacy every two months, send letters out to all new names on that list, and call the veterans to discuss their participation in the study and screen them for study eligibility. We will also meet with leadership at the Philadelphia VA to discuss ways to promote the study within the facility, and engage primary care doctors in making referrals. As discussed below, we are modifying our recruitment materials to focus more on helping veterans to use their opioid medications more safely, rather than our current focus on eliminating "risky drinking." We believe this change will reduce defensiveness on the part of the veterans and lead to increased recruitment. We will monitor our participant enrollment rate very closely, and take additional action if we do not achieve our goals. Recruitment at sites other than the Philadelphia VA will be considered, for example, if enrollment is slower than anticipated. Possible changes to study procedures will be discussed with our DoD project officer before any modifications are initiated. Once sufficient participant flow is achieved, we will hire and train a third prevention counselor.

4. Impact
Development of the principal discipline of the project:
Nothing to report

Other disciplines:
Nothing to report

Technology transfer:
Nothing to report

Society beyond science and technology:
Nothing to report

5. Changes/Problems
Changes in approach and reasons for change:
Nothing to report

Actual or anticipated problems or delays and actions or plans to resolve them:
We were delayed about two months in initiating recruiting. This was due to the lengthy process of getting the protocol approved by the Philadelphia VAMC IRB, including the use of SMS (i.e., text messaging) in the prevention protocol. In the first group of 20 veterans we contacted about study participation, we used the screening script that the Philadelphia VA IRB had required, which included the term "risky drinking" in it. The IRB required this, as it is in the title of the project. However, we noted that veterans appeared to be eager to deny that they engaged in any risky drinking, and expressed concern that admitting to this might mean that their prescriptions for opioid medication would not be renewed. Therefore, we have requested that the IRB allow us to remove the term "risky drinking" from our script, and instead refer to "safe use of opioid medication." Once we have permission from the IRB to change the recruitment script, we will increase the pace of screening potential study participants to make up for the delay in initiating recruitment.

Changes that had a significant impact on expenditures:
Nothing to report

Significant changes in use or care of human subjects:
Nothing to report

6. Products
Nothing to report

7. Participants & Other Collaborating Organizations
None

8. Special Reporting Requirements
Nothing to report

9. Appendices
n//a