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AWARD NUMBER: W81XWH-16-1-0507

TITLE: Risk and Resiliency for Dementia: Comparison of Male and Female Veterans

PRINCIPAL INVESTIGATOR: Kristine Yaffe, MD

RECIPIENT: Northern California Institute for Research and Education

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Fort Detrick, Maryland 21702-5012

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14. ABSTRACT Few studies have critically investigated the unique set of military and health related risk factors facing older veterans today. Even fewer studies have explored the risk factors that may affect older female veterans, who may be at higher risk of dementia compared to the general population and male veterans. We were one the first research groups to focus on this gap by creating a dataset that included all older female veterans in the Veterans Health Administration and study contributors of risk and resiliency in this population. The goal of this project is to identify key factors associated with risk and resiliency for cognitive impairment and dementia in older veterans. In Year 4, we specifically leveraged our unique dataset toward progress in <u>AIMS 2-3</u> : For <u>AIM 2</u> , we had a paper published in the <i>Journal of General Internal Medicine</i> on military sexual trauma (MST) and associated conditions. Of 70,864 women veterans age ≥55, 13% screened positive for MST. MST was associated with PTSD, depression, suicidal ideation, sleep apnea, and pain. For <u>AIM 3</u> , we submitted a paper for publication on alcohol use disorder (AUD) and dementia risk in all female veterans age ≥55 with AUD and an age-matched sample (n=2207 for both). Over follow up, 4% of women with AUD developed dementia compared to 1% without AUD. Women with AUD had a 300% increase in risk of developing dementia compared to women without AUD. Results did not change after removing women with co-occurring substance use disorders or after removing current smokers. For <u>AIM 3</u> , we also presented a project in progress on race and sex differences in risk of developing dementia in older veterans at the 2020 Alzheimer's Association International Alzheimer's Association International Conference. Preliminary results showed that, as compared to white veterans, Hispanic veterans were >2x the risk of developing dementia, and risk also increased for Black veterans. Risk for Asian veterans was increased but modest. Female veterans had a small but greater risk of dementia compared to male veterans. Analyses are in progress that use multistate models to estimate probabilities of older veterans transitioning from being dementia free to either developing dementia or death based on race or sex over the follow up. Our findings highlight the importance of identifying risk and resiliency factors for dementia, particularly in non-white and female veterans.					
15. SUBJECT TERMS Dementia, Women, aging, cognitive impairment (CI), Alzheimer's Disease (AD), Traumatic brain injury (TBI), Post-Traumatic Stress Disorder (PTSD)					
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1. **INTRODUCTION:** Narrative that briefly (one paragraph) describes the subject, purpose and scope of the research.

Cognitive impairment and dementia are major contributors to declines in functional independence. To date, however, prior work has primarily focused on male veterans, despite that the overall number of female veterans is increasing with a related rise in the population of older female veterans at risk for dementia. To further our knowledge of effects between dementia, gender, and risk factors of cognitive impairment, our goal is to identify and examine key health and military-related factors linked with risk and resiliency for cognitive impairment in older Veterans. We hypothesize that older female Veterans have unique risks for cognitive impairment and dementia, with additive increases in risk for factors that are related to military service, such as post-traumatic stress disorder and traumatic brain injury. We will capitalize on our prior work with the Veterans Health Administration National Patient Care Database, by using data from this well-defined, existing cohort of Veterans age ≥ 55 to gain key insights into risk factors that are associated with cognitive impairment and dementia in older female Veterans.

2. **KEYWORDS:** Provide a brief list of keywords (limit to 20 words).

Dementia, Women, aging, cognitive impairment (CI), Alzheimer’s Disease (AD), Traumatic brain injury (TBI), Post-Traumatic Stress Disorder (PTSD)

3. **ACCOMPLISHMENTS:** The PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency Grants Officer whenever there are significant changes in the project or its direction.

What were the major goals of the project?

List the major goals of the project as stated in the approved SOW. If the application listed milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion.

1. Planning and regulatory approval: Months 1-5
 - In Year 1 Quarter 1, study IRB protocols were approved by UCSF IRB and by HRPO and we received approval to receive data from VHA NPCD.
2. Obtain data from the VHA NPCD: Months 6-12.
 - In Year 1, we submitted/received approval to receive data from VHA NPCD (Quarter 2) and cleaned and prepared data for analysis (Quarter 3).
3. Specific AIM 1: Months 12-19.
 - In Year 2, we completed one analysis, presented the results at a conference, finished the paper and submitted it for publication. In Year 3, the paper was published The American Journal of Geriatric Psychiatry.
4. Specific AIM 2: Months 20-26
 - In Year 2, we completed 2 analyses. For the first analysis, we presented the results at a conference, finished the paper, and submitted it for publication. In Year 3, the paper was published in Neurology. For the 2nd analysis, we presented the results at a conference, we submitted an additional conference presentation, finished the paper, and submitted it for publication. The manuscript was published in the Journal of General Internal Medicine in Year 4.
5. Specific AIM 3: Months 27-33
 - In Year 3 Quarter 3, we completed one analysis, presented the results at a conference. For this analysis, we finished the paper and submitted it for publication in Year 4 Quarter 3. In Year 4, we finished one analysis and presented the results at a conference (Quarter 3).

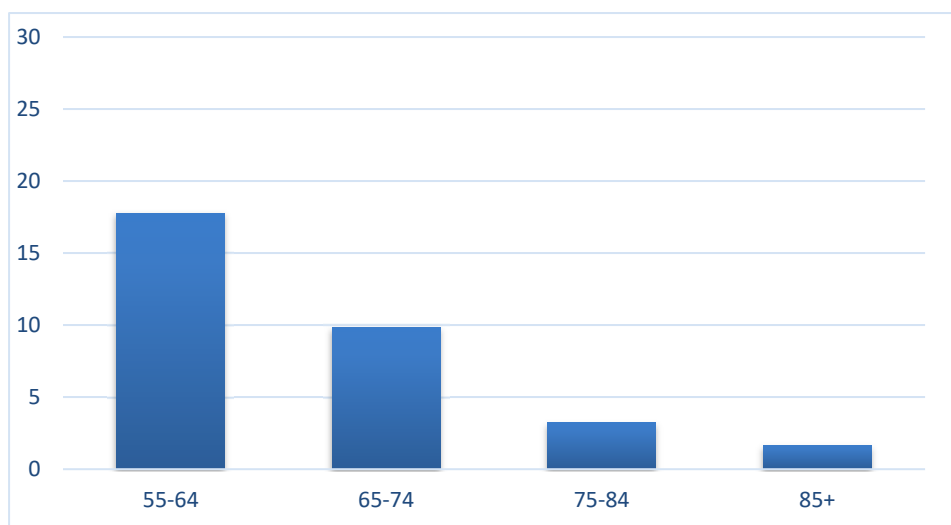
What was accomplished under these goals?

For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results or key outcomes, including major findings, developments, or conclusions (both positive and negative); and/or 4) other achievements. Include a discussion of stated goals not met. Description shall include pertinent data and graphs in sufficient detail to explain any significant results achieved. A succinct description of the methodology used shall be provided. As the project progresses to completion, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.

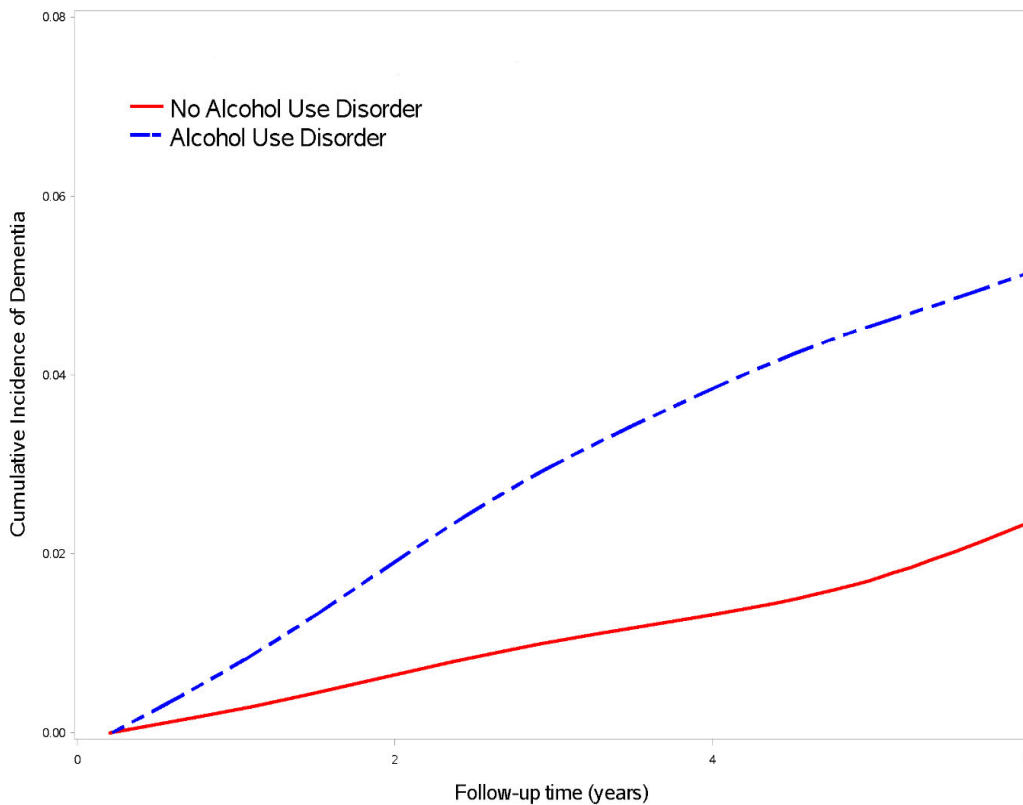
A limited number of investigations have critically studied the unique set of military and health related risk factors facing older Veterans today. Even fewer investigations have explored the risk factors that may affect older female Veterans, who may have an elevated dementia risk compared to the general population and male veterans. We were one of the first research groups to focus on this gap in the research by creating a dataset that included all older female veterans in the Veterans Health Administration, to determine the contributors of risk and resiliency in this population, in order to facilitate improvement in care. In the past year, we leveraged our unique dataset toward progress in the following areas:

We published a paper that centered on AIM 2, which leveraged data from 70,864 female veterans age ≥ 55 who were receiving care from VHA medical centers, to examine military sexual trauma (MST) and associated conditions in this population. About 13% screened positive for MST and the figure shows that the rates of MST decreased with age. In adjusted regression analyses, MST was associated with most mental health diagnoses, particularly post-traumatic stress disorder, depression and suicidal ideation. MST was also associated with a number of medical conditions, particularly sleep disorders, sleep apnea, and pain (P 's < 0.001). The results are published in the *Journal of General Internal Medicine*.

Positive military sexual trauma screen among older female veterans by age



In the past year, we submitted a manuscript for publication that focused on AIM 3, in which we examined the association between alcohol use disorder (AUD) and risk of developing dementia in all female veterans age ≥ 55 and an age-matched comparison sample ($n=2207$ for both groups). During the follow-up period (median = 4, interquartile range, 2 – 6 years), 4% of women ($n=82$) with AUD developed dementia compared to 1% ($n=24$) without AUD. After adjustment for demographics, psychiatric conditions and medical comorbidities, women with AUD had a 300% increase in risk of developing dementia compared to women without AUD (adjusted hazard ratio [aHR]=3.06, 95% CI 1.83-5.13). Sensitivity analyses in which 8% of women ($n=349$) with co-occurring substance use disorder were removed did not change the results (aHR=3.38, 95% CI 2.00-5.70). Similar findings were also found after removing women who were currently smoking. The figure shows that the adjusted cumulative incidence of dementia based on age at diagnosis is higher in women with AUD than without AUD.



Lastly, we have a project underway that is focused on AIM 3, in which we are finalizing an analysis among 774,520 veterans age ≥ 65 (mean age 72.5 years) that compares incidence of dementia by sex and race. Our preliminary findings show that about 12% of the sample developed dementia during follow-up. Compared to white veterans, Hispanic veterans had an almost twofold increased risk of dementia (HR: 1.97, 95% CI 1.89-2.06), and risk was increased for Black veterans as well (HR: 1.60, 95% CI 1.57-1.63). Increased risk for Asian veterans was statistically significant but small (HR: 1.17, 95% CI=1.08-1.26). Likewise, in models fully adjusted for age and race, female Veterans had a statistically significant but small increased risk compared to male veterans (HR: 1.22, 95% CI 1.17-1.27). We presented the results at the 2020 Alzheimer's Association International Conference. To supplement these results, we currently are finalizing multi-state model analyses that estimate the probabilities for this sample of older veterans transitioning from being dementia free to either a state of developing dementia or death based on race or sex over follow-up. Results from these novel analyses may help inform the extent to which incidence of dementia differs across race and sex in older veterans, which is currently under examined despite the U.S. military becoming increasingly diverse.

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

If the project was not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. “Training” activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. “Professional development” activities result in increased knowledge or skill in one’s area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

- 1. Training Opportunities
 - Nothing to report.
- 2. Professional Development
 - Nothing to report.

How were the results disseminated to communities of interest?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how the results were disseminated to communities of interest. Include any outreach activities that were undertaken to reach members of communities who are not usually aware of these project activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.

In the past year, we selected national/ international meetings to disseminate our work through submitting poster and oral presentations in which a broad range of multidisciplinary researchers and clinicians who are invested in reducing the effects of cognitive aging and improving Veteran’s health would also attend. We note that due to the COVID-19 pandemic, several conferences were moved to online formats, and we conducted presentations and disseminated our work virtually. Regarding our completed projects, we have published our papers in journals that target multidisciplinary researchers and clinicians invested in improving Veteran’s health.

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

If this is the final report, state “Nothing to Report.”

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

In the past quarter, we requested and were granted a one-year NCE, due to delays that we encountered related to shelter-in-place orders stemming from the COVID-19 pandemic. This one-year NCE will allow us to continue the project as originally planned and designed. During the additional performance period, we will complete our in-progress analyses that compare dementia incidence by race and sex in this cohort of older veterans, and submit the paper for publication. We will also finish the paper currently in submission that focuses on the association between AUD and risk of developing dementia in this cohort. All work is consistent with our original scientific aims. We will continue to hold regular meetings with all study investigators and study personnel to discuss goals and objectives.

- 4. IMPACT:** Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to:

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

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how findings, results, techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research in the principal disciplinary field(s) of the project. Summarize using language that an intelligent lay audience can understand (Scientific American style).

Very few studies have critically explored the unique set of military and health related risk factors facing older Veterans today. Unfortunately, even less is known about older female Veterans, who may be at an increased risk of dementia relative to the general population and male Veterans. We were one of the first research groups to leverage administrative VHA data to extract all female Veterans aged ≥ 55 and explore these factors to increase our understanding of risk and resiliency in this population. We found a history of military sexual trauma is common among older female veterans, and is associated with a range of medical and mental health diagnoses affecting health and functioning. We also found female veterans with AUD had a 300% increase in risk of developing dementia compared to women without AUD, and this risk remained virtually unchanged even after removing women who were currently smoking or women with co-occurring substance use disorders, which emphasize the need for increased screening for both AUD and dementia in this population. We also found evidence to suggest important difference in risk for dementia by ethnicity/ race with Black and Hispanic veterans having greater risk compared to white veterans, which highlight health disparities in dementia incidence, and require further investigation to understand underlying mechanisms. Because little is known about the long-term health and cognitive consequences of female veterans and the implications from these studies suggest a need for more comprehensive studies into prevention, treatment, and care of dementia and highlight the potential role of health disparities, military-related risk factors and AUD screening and treatment to reduce dementia risk.

Nothing to report

What was the impact on other disciplines?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.

Nothing to report

What was the impact on technology transfer?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe ways in which the project made an impact, or is likely to make an impact, on commercial technology or public use, including:

- *transfer of results to entities in government or industry;*
- *instances where the research has led to the initiation of a start-up company; or*
- *adoption of new practices.*

Nothing to report

What was the impact on society beyond science and technology?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:

- *improving public knowledge, attitudes, skills, and abilities;*
- *changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or*
- *improving social, economic, civic, or environmental conditions.*

Nothing to report

- 5. CHANGES/PROBLEMS:** The Project Director/Principal Investigator (PD/PI) is reminded that the recipient organization is required to obtain prior written approval from the awarding agency Grants Officer whenever there are significant changes in the project or its direction. If not previously reported in writing, provide the following additional information or state, “Nothing to Report,” if applicable:

Changes in approach and reasons for change

Describe any changes in approach during the reporting period and reasons for these changes.

Remember that significant changes in objectives and scope require prior approval of the agency.

Actual or anticipated problems or delays and actions or plans to resolve them

Describe problems or delays encountered during the reporting period and actions or plans to resolve them.

Due to shelter-in-place orders related to the COVID-19 pandemic, we experienced some minor delays in terms of data processing and analyses for manuscripts in progress. The VA servers we use for our projects are running slowly due to the increased access from home computers. Because of this delay in work, we anticipated that we may incur a 3-4 month delay and have requested and received a 1-year NCE to complete the project as proposed and awarded (Year 4, Quarter 3) pending updated amendment from grants officer.

Changes that had a significant impact on expenditures

Describe changes during the reporting period that may have had a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

Although we were awarded the grant 15-AUG-2016, we were delayed in initial spending due to delays in securing 1st level UCSF IRB approval and 2nd level HRPO approval. Per institutional regulations, we are required to have approvals in place before we can begin to spend. In Year 1 Quarter 2, two investigators were added to the project; however, they were unable to take their level of effort detailed in the budget until the Year 1 Quarter 4 due to unforeseen prior commitments. We added all staff and investigators Year 1 Quarter 4 as detailed in the budget. Because of this delay in work and in initial spending, we received and completed a 1-year NCE (Year 4) to account for these early delays. Due to shelter-in-place orders related to the COVID-19 pandemic, we experienced some minor delays in terms of data processing and analyses for manuscripts in progress. The VA servers we use for our projects are running slowly due to the increased access from home computers. Because of this delay in work, we anticipated that we may incur a 3-4 month delay and have requested and received a 1-year NCE to complete the project as proposed and awarded (Year 4, Quarter 3), pending updated amendment from grants officer..

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

Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, biohazards, and/or select agents during the reporting period. If required, were these changes approved by the applicable institution committee (or equivalent) and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

Significant changes in use or care of human subjects

Nothing to report

Significant changes in use or care of vertebrate animals.

Nothing to report

Significant changes in use of biohazards and/or select agent

Nothing to report

6. **PRODUCTS:** List any products resulting from the project during the reporting period. If there is nothing to report under a particular item, state “Nothing to Report.”

- **Publications, conference papers, and presentations**

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

Journal publications. *List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Identify for each publication: Author(s); title; journal; volume; year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Publications

- Gibson CJ, Maguen S, Xia F, Barnes DE, Peltz CB, Yaffe K. Military Sexual Trauma in Older Women Veterans: Prevalence and Comorbidities, Journal of General Internal Medicine, 35(1):207-213 doi:101007/s11606-019-05342-7. Epub 2019 Nov 11. Acknowledgement of federal support/ yes.

Books or other non-periodical, one-time publications. *Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like. Identify for each one-time publication: Author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (e.g., book, thesis or dissertation); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Nothing to report

Other publications, conference papers, and presentations. *Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication as noted above. List presentations made during the last year (international, national, local societies, military meetings, etc.). Use an asterisk (*) if presentation produced a manuscript.*

- Kornblith E, Peltz C, Xia F, Barnes D, Byers A, Yaffe K, Race but not Sex Differences in Incidence of Dementia Diagnosis Among Older Veterans. Poster presented at the 2020 Alzheimer’s Association International Conference (July 2020).

- **Website(s) or other Internet site(s)**

List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

Nothing to report

- **Technologies or techniques**

Identify technologies or techniques that resulted from the research activities. In addition to a description of the technologies or techniques, describe how they will be shared.

Nothing to report

- **Inventions, patent applications, and/or licenses**

Identify inventions, patent applications with date, and/or licenses that have resulted from the research. State whether an application is provisional or non-provisional and indicate the application number. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award.

Nothing to report

- **Other Products**

Identify any other reportable outcomes that were developed under this project. Reportable outcomes are defined as a research result that is or relates to a product, scientific advance, or research tool that makes a meaningful contribution toward the understanding, prevention, diagnosis, prognosis, treatment, and/or rehabilitation of a disease, injury or condition, or to improve the quality of life. Examples include:

- *data or databases;*
- *biospecimen collections;*
- *audio or video products;*
- *software;*
- *models;*
- *educational aids or curricula;*
- *instruments or equipment;*
- *research material (e.g., Germplasm; cell lines, DNA probes, animal models);*
- *clinical interventions;*
- *new business creation; and*
- *other.*

We created a database containing demographic, psychiatric, medical information, etc., for all women age 55 and over who received healthcare in the VA from 2005-2015. We have used this database for all of our analyses, have selected subsamples, and created variables as appropriate for each project.

7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

What individuals have worked on the project?

Provide the following information for: (1) PDs/PIs; and (2) each person who has worked at least one person month per year on the project during the reporting period, regardless of the source of compensation (a person month equals approximately 160 hours of effort). If information is unchanged from a previous submission, provide the name only and indicate “no change.”

Name:	Kristine Yaffe – no change
Name:	Deborah Barnes –no change
Name:	Shira Maguen –no change
Name:	Carrie Peltz –no change
Name:	Feng Xia –no change

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

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

If the active support has changed for the PD/PI(s) or senior/key personnel, then describe what the change has been. Changes may occur, for example, if a previously active grant has closed and/or if a previously pending grant is now active. Annotate this information so it is clear what has changed from the previous submission. Submission of other support information is not necessary for pending changes or for changes in the level of effort for active support reported previously. The awarding agency may require prior written approval if a change in active other support significantly impacts the effort on the project that is the subject of the project report.

Dr. Yaffe: Summary: Dr. Yaffe had three grants end and five grants begin in the past year.

Title: Connection Between Depressive Symptoms and Dementia: When Best to Intervene?
(Yaffe/ Zeki Al-Hazzouri)

Time Commitment: 1% (0.12 calendar months)

Supporting Agency: ADDF

Performance Period: 6/18 – 05/20

Level of Funding: \$25,000 Yr02 DC

Title: Determinants of Midlife & Longitudinal Change in Cognitive Function: CARDIA Study
(Yaffe/Sidney)

Time Commitment: 10% (1.20 calendar months)

Supporting Agency: NHLBI

Performance Period: 12/14 – 11/19 NCE

Level of Funding: \$644,535 Yr04 DC

Title: Chronic Effects of Neurotrauma Consortium: Epidemiology Project
(Yaffe: W81XWH-12-PHTBI-CENC)

Time Commitment: 12% (1.44 calendar months)

Supporting Agency: Department of Defense/VA

Performance Period: 02/15 – 09/19

Level of Funding: \$419,277 DOD/ \$262,654 VA Yr04 DC (nce)

Dr. Yaffe (continued)

Title: Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC): Epidemiological Study
(Yaffe: Y81XWH-18-PH/TBIRP-LIMBIC)
Time Commitment: 10% (1.20 calendar months)
Supporting Agency: Department of Defense/ VA
Performance Period: 10/19 – 9/24
Level of Funding: \$ 260,814 DOD/ \$199,137 VA Yr01 DC

Title: Sleep Quality and Mechanistic Links to Alzheimer Disease and Related Disorders among older Mexican Americans and Non-Hispanic Whites (HABLE-D)
(Yaffe/O'Bryant)
Time Commitment: 10% (1.20 calendar months)
Supporting Agency: NIA
Performance Period: 09/19 – 06/24
Level of Funding: \$612,782 Yr01 DC

Title: Lifecourse CVD Risk and Midlife Cognitive Trajectories and Brain Aging: Implications for Alzheimer's and Dementia Prevention
(Yaffe/Sidney)
Time Commitment: 9% (1.08 calendar months)
Supporting Agency: NIA
Performance Period: 09/19 – 05/23
Level of Funding: \$670,044 Yr01 DC

Title: Neuroimaging Endophenotypes and Predictors of Post-Traumatic Brain Injury Dementia in a Nationwide Cohort of Veterans
(Yaffe/Tosun/Gardner)
Time Commitment: 1% (0.12 calendar months)
Supporting Agency: Department of Defense
Performance Period: 09/19 – 08/22
Level of Funding: \$278,919 Yr01 DC

Title: Transforming Research and Clinical Knowledge in Geriatric Traumatic Brain Injury (TRACK-GERI)
(Co-Investigator)
Time Commitment: (*WOC)
Supporting Agency: National Institute of Neurological Disorders and Stroke
Performance Period: 09/19 – 08/24
Level of Funding: \$442,750 Yr01 DC

Dr. Barnes: Summary: Dr Barnes had one grant end and four begin in the past year.

Title: Chronic Effects of Neurotrauma Consortium: Epidemiology Project
(Yaffe: W81XWH-12-PHTBI-CENC)
Time Commitment: 10% (1.20 calendar months)
Supporting Agency: Department of Defense/VA
Performance Period: 02/15 – 09/19
Level of Funding: \$419,277 DOD/ \$262,654 VA Yr04 DC (nce)

Title: Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC): Epidemiological Study
(Yaffe: Y81XWH-18-PH/TBIRP-LIMBIC)
Time Commitment: 17%
Supporting Agency: Department of Defense/ VA
Performance Period: 10/19 – 9/24
Level of Funding: \$260,814 DOD/ \$199,137 VA Yr01 DC

Title: Preventing loss of independence through exercise in community living (PLIE-CLC)
(Barnes)
Time Commitment: 52.5%
Supporting Agency: Department of Veterans Affairs
Performance Period: 1/20– 12/22
Level of Funding: \$333,066 Yr01 DC

Title: A Novel Posttraumatic Stress Disorder Treatment for Veterans with Moral Injury
(Yaffe: Y81XWH-18-PH/TBIRP-LIMBIC)
Time Commitment: 5%
Supporting Agency: Department of Defense/ VA
Performance Period: 10/19 – 3/23
Level of Funding: \$275,000 Yr01 DC

Title: A pharmaco-imaging approach to predicting social functioning and clinical responses to oxytocin administration in schizophrenia
(PI: Woolley, Barnes: Co-Investigator)
Time Commitment: 5%
Supporting Agency: Veterans Affairs Office of Research & Development
Performance Period: 10/19 – 6/24
Level of Funding: \$203,604 Yr01 DC

Dr. Maguen: Summary: Dr Barnes had four grants end and one begin in the past year.

Title: Does Evidence-Based PTS Treatment Reduce PTS Symptoms and Suicide in Iraq and Afghanistan Veterans Seeking VA Care?
(PI: Maguen)
Time Commitment: 1.2 calendar months
Supporting Agency: DoD Joint Warfighter Medical Research Program
Performance Period: 05/15 – 04/19
Level of Funding: \$246,364

Title: Improving Access to Care for Warfighters: Virtual Worlds Technology to Enhance Primary Care Training in Posttraumatic Stress and Motivational Interviewing
(PI: Seal, Co-Investigator, Maguen)
Time Commitment: 0.6 calendar months
Supporting Agency: DoD Joint Warfighter Medical Research Program
Performance Period: 10/15 – 09/19
Level of Funding: \$369,215

Title: Implementation of a Pragmatic Trial of Whole Health Team vs. Primary Care Group Education to Promote Non-Pharmacological Strategies to Improve Pain, Functioning, and Quality of Life in Veterans
(Seal & Becker, Co-Investigator: Maguen)
Time Commitment: 0.6 calendar months
Supporting Agency: NIH/DoD/VA
Performance Period: 9/17 – 12/19
Level of Funding: \$4,999,775

Title: Improving Care for Veterans with PTSD: Comparing Effectiveness of Medications to Augment First-line Pharmacotherapy
(PI: Cohen, Co-Investigator: Maguen)
Time Commitment: 1.2 calendar months
Supporting Agency: PCORI
Performance Period: 7/16 – 7/19
Level of Funding: \$315,351

Title: Risk Factors and Comorbidities of Eating Disorders in a Large Military Cohort
(PI: Maguen)
Time Commitment: 1.8 calendar months
Supporting Agency: DoD
Performance Period: 9/20 – 8/23
Level of Funding: \$345,864

What other organizations were involved as partners?

If there is nothing significant to report during this reporting period, state “Nothing to Report.”

Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that were involved with the project. Partner organizations may have provided financial or in-kind support, supplied facilities or equipment, collaborated in the research, exchanged personnel, or otherwise contributed.

Provide the following information for each partnership:

Organization Name:

Location of Organization: (if foreign location list country)

Partner’s contribution to the project (identify one or more)

- *Financial support;*
- *In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);*
- *Facilities (e.g., project staff use the partner’s facilities for project activities);*
- *Collaboration (e.g., partner’s staff work with project staff on the project);*
- *Personnel exchanges (e.g., project staff and/or partner’s staff use each other’s facilities, work at each other’s site); and*
- *Other.*

Nothing to report

8. SPECIAL REPORTING REQUIREMENTS

COLLABORATIVE AWARDS: For collaborative awards, independent reports are required from BOTH the Initiating PI and the Collaborating/Partnering PI. A duplicative report is acceptable; however, tasks shall be clearly marked with the responsible PI and research site. A report shall be submitted to <https://ers.amedd.army.mil> for each unique award.

QUAD CHARTS: If applicable, the Quad Chart (available on <https://www.usamraa.army.mil>) should be updated and submitted with attachments.

- 9. **APPENDICES:** Attach all appendices that contain information that supplements, clarifies or supports the text. Examples include original copies of journal articles, reprints of manuscripts and abstracts, a curriculum vitae, patent applications, study questionnaires, and surveys, etc.

Risk and Resiliency for Dementia: Comparison of Male and Female Veterans

(#AZ150046)

W81XWH-16-1-0507



PI: Dr. Kristine Yaffe **Org:** Northern California Institute for Research and Education **Award Amount:** \$418,886 (directs)

Study/Product Aim(s)

- **Aim 1.** Compare prevalence of mild cognitive impairment and dementia among male and female veterans receiving VHA healthcare and identify key health-related risk factors for developing cognitive impairment
- **Aim 2.** Examine the associations between key military related factors and diagnoses of mild cognitive impairment and dementia among older female and male veterans
- **Aim 3.** Determine whether the risk of nursing home placement and mortality differs between older female and male veterans with a documented diagnosis of dementia, and examine whether there are gender specific associations between military and health-related factors and nursing home placement and mortality

Approach

We propose a series of specific aims that capitalize on existing national databases to further our understanding of the association between dementia, gender, and risk factors for cognitive impairment.



Accomplishments: Published a manuscript, have two in progress, and presented an abstract at conference.

Timeline and Cost

Activities	Year 1	Year 2	Year 3	Year 4 (NCE)	Year 5 (NCE)
Planning and regulatory approval	█				
Conduct Analyses		█			
Manuscript Prep & Submission			█		
Dissemination			█		
Estimated Budget (\$K)	\$127	\$164	\$127	-	-

Updated/: 9/09/20

Goals/Milestones

Year 1 Goal

- Obtain all necessary regulatory approvals
- Clean and prepare data

Year 2 Goals

- Conduct Analyses for Aims 1-3

Year 3 Goal –

- Write Manuscripts
- Dissemination and Publication

Comments/Challenges/Issues/Concerns

- We have received IRB and HRPO approval, as well as approval and access to VHA databases
- We encountered budgetary delays due to a slower start-up than anticipated and plan to use the unspent funds for the same purpose as proposed and awarded during the NCE period
- We experienced delays due to shelter-in-place stemming from the COVID-19 pandemic. We will use the NCE to continue the project as planned.

Budget Expenditure to Date as of 09/11/2020

Projected Expenditure: \$418,886 (directs only)

Actual Expenditure: \$212,307 (directs only)