

## SUPPORTING STATEMENT – PART B

### B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

#### 1. Description of the Activity

This submission corresponds to grant number MO230215, funded by the Military Operational Medicine Research Program (MOMRP/JPC-5); Early Assessment & Interventions Working Group.

Many service members (SM) face adverse social determinants of health (SDOH), such as financial, housing, and food insecurity, isolation or distance from others, and social stressors such as racism and discrimination. Exposure to adverse SDOH may place SM at higher risk for behavioral health symptoms and/or suicidality. Emerging research indicates that preventing adverse psychological health outcomes and suicide among active duty SM may depend on the improved assessment of SDOH and procedures for linking SM to appropriate services before significant behavioral health symptoms develop or a crisis occurs. In fact, in 2021, the White House listed “Addressing Upstream Risk and Protective Factors” as one of its five priorities for preventing military suicide and stated, “Reducing the likelihood . . . of a suicidal crisis requires addressing the factors—such as increased financial strain, lack of housing, food insecurity, unemployment, and legal issues—that may contribute to or increase risk for suicide.” In accordance with these priorities, the Veterans Health Administration recently piloted an SDOH screening process among veterans that assesses nine domains of social needs and provides those with unmet needs with appropriately tailored resources. Early evidence showed high acceptability and support for the screener among veterans, but findings remain preliminary. To date, no similar efforts have been implemented in the active force.

To maintain the safety, health, and operational readiness of the Force, early identification of SM who are at risk for behavioral health issues and connecting them to appropriate resources and services is critical. Current models of assessment and treatment miss important upstream risk factors, including SDOH, and may not identify at-risk SM who do not seek care from military treatment facilities or complete regular behavioral health screeners.

The purpose of this project is to develop and implement a cross-cutting, comprehensive behavioral health instrument that assesses the social needs (i.e., SDOH) of active duty Sailors and Marines as upstream risk factors that predict the future development of behavioral health issues, and to identify procedures for linking personnel with services and treatments that can meet their overarching SDOH and behavioral health needs. Specifically, the study aims to (1) develop a cross-cutting, comprehensive assessment of upstream risk factors (i.e., SDOH) for behavioral health issues among Sailors and Marines, (2) administer the assessment to active duty Sailors and Marines, (3) identify the upstream behavioral health risk factors of Sailors and Marines, (4) determine the relationship between social risk factors and future behavioral health issues among Sailors and Marines (5) finalize the

instrument, and (6) develop procedures for linking Sailors and Marines to appropriate services and programs based on their reported social and behavioral health needs. Project aims will be achieved through longitudinal SDOH and behavioral health symptom data collected from up to 1088 active duty Sailors and Marines. Ultimately, this project uses a public health approach to understand the adverse SDOH experienced by Sailors and Marines to prevent behavioral health issues and suicide within the military.

## 2. Procedures for the Collection of Information

Statistical methodologies for stratification and sample selection:

To complete study analyses, we need 299 participants to complete both baseline and follow-up surveys. Accounting for 45% attrition from baseline to the follow-up, which is standard for active duty survey research, we need 544 participants from each branch of service to consent and take the baseline survey. Thus, we need to recruit 1,088 service members for participation.”

Estimation procedures:

Survey results will not be adjusted or weighted. Study findings will be used to develop a cross-cutting, comprehensive behavioral health instrument that assesses the social needs of active duty Sailors and Marines as upstream risk factors that predict the future development of behavioral health issues, and to identify procedures for linking personnel with services and treatments that can meet their overarching SDOH and behavioral health needs. Data collected will also be used to distribute technical reports, presentations, and manuscripts for dissemination within and outside of the DoD. Finally, data may be used to develop formal recommendations for policy.

Degree of accuracy needed for the Purpose discussed in the justification:

The SDOH assessment will be used to understand the prevalence (i.e., the proportion of the sample) of specific social needs among Sailors and Marines, and to evaluate whether the SDOH predict subsequent behavioral health symptoms. However, we recognize that representativeness cannot be ensured in a voluntary survey and that conclusions based on small samples of participants are less reliable than those based on larger samples.

Unusual problems requiring specialized sampling procedures:

N/A

Use of periodic or cyclical data collections to reduce respondent burden:

N/A

### 3. Maximization of Response Rates, Non-response, and Reliability

Participants will be recruited via email, which will allow them to volunteer without being publicly singled out or directly identified. Participants who complete the baseline questionnaire will be offered a \$15 electronic gift card and a \$25 electronic gift card for completing the 6-month follow-up, if they attest to being off duty during participation. Gift codes will be sent via email. To increase the accuracy and reliability of responses, study participants will be provided with information about the study, including the risks and benefits of participation, confidentiality, and the voluntary and anonymous nature of study participation. Participants will be reminded that they may provide as much or as little information as they choose, skip any question they do not want to answer, and end the survey at any time. Survey instructions will remind participants of data protection procedures prior to beginning the survey. The voluntary and anonymous nature of this study is likely to increase the candidness of responses, though this cannot be assured.

### 4. Tests of Procedures

Experts in the behavioral health and social needs of service members, including the study Principal Investigators and Military Advisory Board (MAB) members, reviewed the surveys to determine appropriateness for project aims and sponsor priorities. Affiliated study staff have taken the survey to ensure the time burden is equivalent to what we have stated in our recruitment materials.

### 5. Statistical Consultation and Information Analysis

a. Provide names and telephone number of individual(s) consulted on statistical aspects of the design.

Quantitative data analysis falls within the statistical expertise of the project PI and Co-I listed below.

b. Provide name and organization of person(s) who will actually collect and analyze the collected information.

Kristen Walter, PhD (PI; interpretation of study findings)

Emily Schmied, PhD (PI; interpretation of study findings)

Hee-Jin Jun, PhD (Co-I; data analysis, interpretation of study findings)

Lisa Glassman, Ph.D. (Co-I; study coordinator; interpretation of study findings)

Alexander Kline, Ph.D. (Co-I; data analysis, interpretation of study findings)

Laura Crocker, Ph.D. (Co-I; interpretation of study findings)

Nick Otis, BS (Research staff; data analysis)