

CU College of Nursing **Proposal Justification**
Proposal for Program Evaluation DNP Scholarly Project

Project Title: Enhancing Sense of Belonging as a Suicide Prevention Strategy for
Health Profession Student Veterans

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I. Evaluation Question Program Evaluation

The organization initiating this project is Student Affairs, Anschutz Medical Campus (AMC). Their goals are to determine if AMC Student Veteran (SVs) Sense of Belonging and well-being are adequately supported. This project will connect SVs to resources that enable them to engage and thrive as health professionals thus enhancing their Sense of Belonging.

The Formative Program Evaluation Question for this project is:

What is the impact of an engagement Roadmap (WE-SERVE) on Health Professional Student Veteran's Sense of Belonging at University of Colorado Anschutz Medical Campus between May 2024-October 2024?

Additional evaluation questions include:

How does the WE-SERVE Roadmap influence Health Professional Student Veteran engagement with CU-AMC 'opportunities to serve' between May 2024-October 2024?

How does the WE-SERVE Roadmap influence understanding of mental health help-seeking as part of safe/quality Health Professional behavior between May 2024-October 2024?

II. Background and Significance

Higher Education is part of the National Veteran Suicide Prevention Strategy. In 2024 the national suicide rate is 22 veterans per day and in Colorado this is linked to reduced help-seeking due to mental health stigma and familiarity with guns as increased access to lethal means. Within a public health framework, a Sense of Belonging is considered a protective factor to suicidal ideation and may mitigate the risk of death by suicide during the reintegration and transition period from military to civilian life such as being a Student Veteran in Higher Education. However, reintegration and transition periods from the military to civilian life actually increase the risk of suicide. Student Veterans are twice as likely as their non-veteran student counterparts to experience suicidal ideation due to a loss of military identity, feeling undervalued and an unfamiliarity with academic procedures or expectations (DVA, 2022; SVA, 2022).

The National Veteran Suicide Prevention Strategy (DVA, 2022) identifies that suicide is preventable when a whole community approach is taken. Suicide risk is complex and influenced by social determinants of health, gender identification, mental health help-seeking stigma, employment, social support, and limiting access to lethal means e.g., weapons (DVA, 2022; SVA, 2022). Health-related variables and academic

performance for Student Veteran's Sense of Belonging often relate to campus engagement (Eakman et al., 2019; SOL, 2021). PTSD, Traumatic Brain Injury (TBI), insomnia, anxiety, and depression along with other military acquired health conditions negatively impact GPA for Student Veterans leading to dropout or increased disengagement / social isolation (Hinkson et al., 2022; Morissette et al., 2021).

Student Veteran Sense of Belonging increases when they feel engaged in campus activities that improve social connection, acknowledge their leadership skills as part of a group and enhance their career development with a sense of purpose. Based on this literature the WE-SERVE Roadmap was designed to facilitate an onboarding briefing with AMC Student Veteran Services (Student Affairs Office) to introduce campus resources that support all facets of a suicide prevention framework, promote opportunities to continue to serve, engage in leadership and career development, and develop an awareness of mental health help-seeking as part of the Institute for Health Care Improvement's quadruple aim of reducing clinician burnout (Nundy et al., 2022).

III. Needs Assessment and Program Design

In Spring 2023, data from the American College Health Association (ACHA) National College Health Assessment III survey, for the whole AMC student population, identified that 18.8% strongly agreed that they have a Sense of Belonging on campus. Outreach by AMC Student Affairs identified that Students Veterans do not feel the same, and many feel dislocated from AMC. A qualitative interview study (unpublished data, n=26) conducted in Spring 2023 by the DNP student, across both AMC and Denver highlighted that an undergraduate model of Student Belonging and engagement was not effective at AMC as an integrated medical campus. Health professions students were unaware of current Student Veteran Services and said they would not currently access its services as they were not relevant to their needs as non-traditional / graduate students. Mental health, insomnia, TBI and PTSD were reported as impediments to academic performance by AMC ACHA survey and interview students.

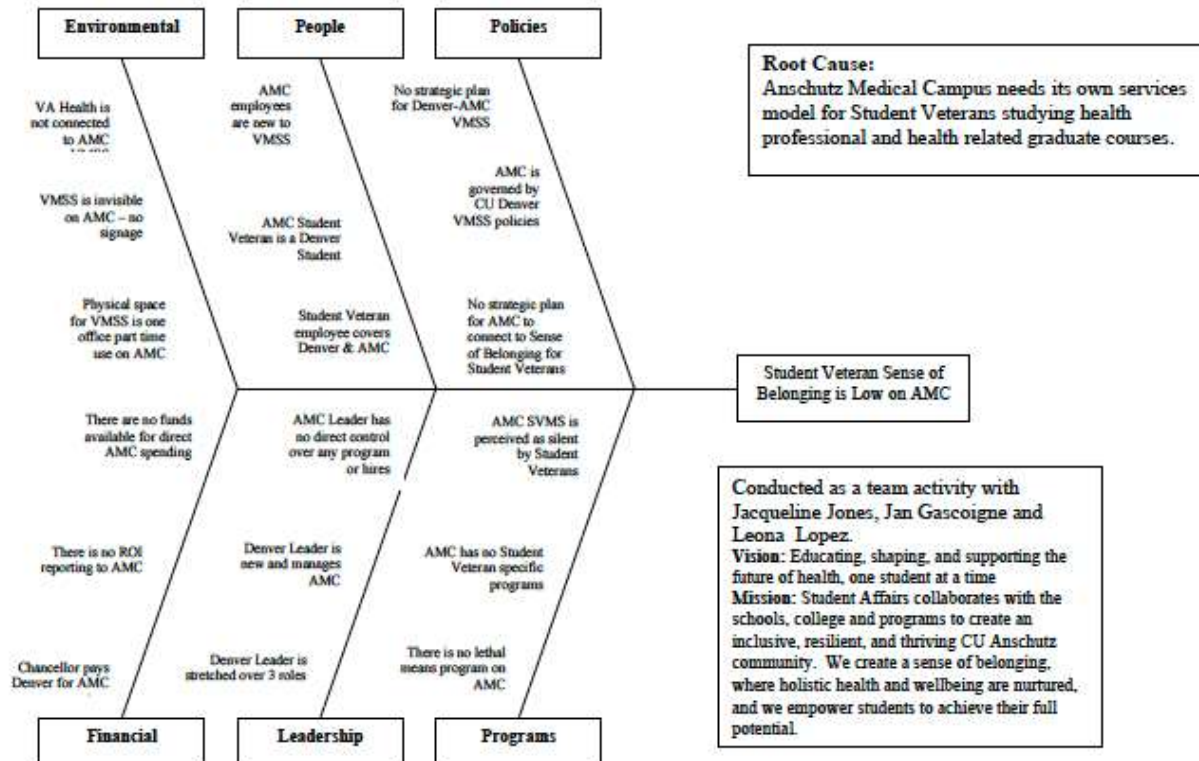
Thus, the problem is that current services provided to Student Veterans on AMC lack a cohesive suicide prevention approach to a Sense of Belonging for health professions.

Interprofessional team members collaborating on this project include VC Student Affairs (Public Health), Jacqueline Jones and Mona Pearl-Treyball (Nursing and Veteran Military Health Care), Student Veteran Services co-ordinator (Social Worker), Student Veteran representative, Leona Lopez (Business/Veteran). Collaborative partners include the Police Chief and Shared Governance structures (Faculty, staff, and students from all programs on AMC). To situate the project in the local context a SOAR (Figure 1.) and root cause analysis (Figure 2.) were conducted together with VC Student Affairs and the Director of the joint SVS Office based on personal system knowledge.

Figure 1 Veteran Military Student Services SOAR Analysis

Strengths What can we build on? (Doing Right)	Aspirations What do we care deeply about? (Where should we go in future)
<ul style="list-style-type: none"> Equity Serving Institution Veteran Service Focused History as Military Hospital Base Boots to Suits Program (Denver) Suicide Awareness Footprint on AMC Food Pantry and other SDOH groups Mental Health App/wellbeing initiatives Dental Heroes Clinic College of Nursing VMHC programs Combat Research Centre 	<ul style="list-style-type: none"> Safe, welcoming, accessible, empowering and inclusive environment for military connected students Educational effectiveness and degree completion Improve rankings of Military Serving Institution Strengthen lives of all military students Alumni Veterans should be engaged in AMC Desire a Career building focus for Student Veterans
Opportunities What are our stakeholders asking for? (Skills / recognition)	Results How do we know we are succeeding? (Meaningful measures)
<ul style="list-style-type: none"> Expand funding for AMC VMSS and transparent funding ROI Health Promotion work can be expanded for Student Veterans on AMC (Mental Health, Sleep, Depression, PTS) Boots to SCRUBS professional program Increase marketing of VMSS WITH Student Veterans Plug Student Veterans into Research Opportunities on AMC Increase awareness AMC Student Veteran issues are different, experiences are different, military strengths Food insecurity is an issue for AMC Student Veterans Lethal Means Access Reduction Program (VA) 	<ul style="list-style-type: none"> Alumni involved in Career Mentoring of Student Veterans Needs Assessment Survey Student Veteran Wellness Data (National Survey) Sense of Belonging Measure in Health Survey Increased number of Student Veterans or Veterans employed on AMC Student Veteran Community Panel Strategic Plan AMC VMSS

Figure 2. Root Cause Analysis



The AMC Chancellor and Executive Vice Chancellor for Faculty when interviewed by the DNP student suggested mental health of all students is a priority, and the campus is suicide aware so initiatives that can support Student Veterans can also support non-veteran students simultaneously. In the ACHA 2023 survey, a total of 70 students across AMC programs reported having experienced thoughts of taking their own life with 13 of those students reporting they had put thoughts into action already. Recent Care Team (mental health crisis) activations and removal of weapons from students experiencing suicidal ideation in 2024 compounded the analysis that a tailored and comprehensive approach to suicide prevention was urgently needed on AMC to enhance Student Veteran engagement and improve Sense of Belonging.

This formative program evaluation framework is guided by the Center for Disease Control's program evaluation in public health (Framework for Program Evaluation 2023).

Framework steps include:

1. Engage Stakeholders: those involved or affected by the program/primary users
2. Describe the Program: Identify needs, effects, and resources
3. Focus Evaluation Design: Focus on the issues of greatest concern while being efficient with resources
4. Gather Credible Evidence: Evidence should strengthen evaluation judgments and recommendations
5. Justify Conclusions: Conclusions should be linked to gathered evidence
6. Ensure Use and Share Lessons: Design, preparation, feedback, follow-up, and dissemination

Ways of Engaging Student Veterans (WE-SERVE) Roadmap Program Design

A new program was developed to facilitate the transition from Military identity to Health Professional (Civilian) identity as a student by enhancing (a) sense of belonging to campus/program, (b) engagement in leadership, research, and clinical education opportunities and, (c) improving mental health help-seeking intention as part of Health Professional behavior. The program, guided by social determinants of health and informed by key stakeholders, was developed for health professional students who are military connected to support the nexus between health, wellbeing, and academic performance to achieve the health outcome of a greater Sense of Belonging, reducing suicide risk in the long term (to be measured in the national ACHA biannual survey again in 2025). The quintuple aim for health care improvement (Nundy et al., 2022) adds a dimension of health equity and focuses on prevention of clinician burnout. These concepts (See Figure 3) guided an emphasis on health profession leadership and career development as part of the logic model to enhance engagement (See Appendix). COMIRB approval was given for this program evaluation project due to the vulnerable nature of Student Veterans and as a requirement by the University of Colorado Student Veteran and Military Services for Student Veterans to be contacted.

Figure 3 Key Concepts



Each existing Student Veteran on AMC will receive a RedCap survey having been identified as eligible by the Registrar compiled email list. They will be invited to participate in a Chancellor supported 15-minute *Onboarding Briefing* in-person or by zoom with a project trained member of the Student Affairs Office. They will be asked to attend within 3 weeks of receiving the email request. At the briefing Student Veterans will be given a RoadMap of existing resources, including a Thrive Action Plan and Safety Protocols for mental health help-seeking. Key *Opportunities to continue to serve on AMC* between May-October 2024 will be described and each Student Veteran can choose to participate in 1-3 opportunities. These are:

1. *AMC Student Veteran Engagement Panel (SVEP)* where Student Veterans will be invited to participate in a yet to be formed, student-led group to partner for campus initiatives and provide Veteran related guidance to the VC Student Affairs, Executive Vice Chancellor, and Shared Governance structures. Students will develop a Charter and also participate in items 2-3. A VA Veteran engagement tool (VA-ENACT) will be used to evaluate the experience and time commitment related to forming and participating in the panel. May-June 2024

2. *Leadership for Gun Safety as a Health Professional* is a student-led seminar with Guest speaker Prof. Emmy Betz, UCHHealth Emergency Medicine, that covers red flag laws, gun safety and mental health. It will also cover how to decrease ‘Lethal Means Access’ as a partnership with VA/MIRECC to distribute gun locks to all students on AMC. Finally, Campus Police will give a presentation on resources and ways to partner with community policing. Sign up, attendance and content related to gun safety will be evaluated at the end of the session. May-June 2024

3. *Review the new Boots to Scrubs Curriculum* developed to enhance health professional Student Veteran research and clinical education mentorship, networks, and career progression. It is modelled after the successful ‘Boots to Suits’ opportunity on general campuses. Sign up, attendance and input will be evaluated using VA-ENACT at the end of the session July-September 2024.

At the end of the briefing the Student Veterans will be advised they will receive a post-survey in October 2024 to evaluate their experience with the WE-SERVE RoadMap and opportunities to serve. Student Services Office members will record time spent and questions arising during the briefing.

IV. Methodology

A. Description of the Population to be Studied

In March 2024, AMC has 250 Student Veterans enrolled across all health profession programs. All existing students will be eligible to participate in this program evaluation project. The response rate to a participation survey-based invitation is expected to be 17-30% based on prior AMC Student Veteran surveys, 2022-2024.

A power analysis is not required for the total sample for this project. It is expected 42-75 Student Veterans will participate in the onboarding briefing and complete the pre-post survey. It is anticipated that 10% of Student Veterans who return pre surveys will attend one activity.

B. Measures and Data Collection Procedure

Outcome Measures:

Outcome Measure #1: Sense of Belonging

Goal: Increase Sense of Belonging by 20% by October 2024 from pre-survey measure May 2024

Baseline: No baseline exists for this sample, using WE-SERVE RoadMap, pre-survey measurement using 10-point Likert scale of the existing item from the 2023 ACHA survey will be used (not the data) and re-measured in May 2024. An overall Sense of Belonging comparison between the March 2023 item data and ACHA projected survey March 2025 could be made however ACHA caution that items change so this will NOT be included in the DNP project.

Outcome Measure #2: Engagement

Goal: Increase Engagement by 20% by October 2024 from pre-survey measure May 2024

Baseline: No baseline exists for this sample, using WE-SERVE RoadMap, pre-survey measurement using 10-point Likert scale from the 3 items from the VA ENACT Tool measured in May 2024

Outcome Measure # 3: Mental health help-seeking intention

Goal: Increase Mental Health help-seeking intention by 20% by October 2024 from pre-survey measure May 2024

Baseline: No baseline exists for this sample, using WE-SERVE RoadMap, pre-survey measurement on a 10-point Likert scale from the 4 help-seeking items used in the 2023 ACHA survey (not the data) and re-measured in May 2024.

Process and Balancing Measures:

Process Measure #1: Number of Student Veterans who attend Briefing meeting and receive RoadMap with safety protocols

Goal: 10 new Student Veterans attend Briefing per week

Baseline: 0

Action: If the Time from survey receipt to Briefing is more than 3 weeks then survey invitation will be re-sent to non-attendees

Process Measure #2: Attendance at Opportunities to Serve

Goal: 10% of Student Veterans attend one 'Opportunities to continue to serve'

Baseline: 0

Action: If Likelihood of attending number (sign up) is more than number attended then increased marketing of next event will occur and students asked if the current experience was valuable

Process Measure #3: Attendance at Lethal Means Seminar

Goal: 10 Student Veterans attend 'Lethal Means Seminar'

Baseline: 0

Action: If Likelihood of attending number (sign up) is more than number attended then increased marketing of next event will occur and students asked if the current experience was valuable

Balancing Measure #1: Time burden on Office member for Briefing

Goal: Time of total Onboarding Briefing should be 15 minutes or less

Baseline: 0

Action: If the total time is more than 15 minutes then Office member re-training will occur, or additional Office members will be trained.

Data Collection

Pre and post data will be collected using RedCap and an email invitation to participate. The survey will consist of demographic items related to age, gender, broad program of study, military service, health concerns (physical and invisible wounds) and will include a Sense of Belonging valid and reliable item using a 10 point Likert scale from the ACHA III national survey, 3 engagement items using 10 point Likert scale from the valid and reliable national VA ENACT tool and 4 help-seeking intention items using a 10 point Likert scale from the ACHA III national survey. Each survey should take 15 minutes to complete online.

Onboarding Briefing will be time recorded in minutes by the Office Member

Opportunities to serve will have sign up email to record intention of attending and a sign in sheet (virtual and in-person) for the seminar sessions. Post session evaluation questions will elicit experience as valuable or not using an [online poll](#). All data will be stored in an excel spreadsheet for evaluation and interpretation.

C. Planned Interventions

The Plan, Do, Study, and Act (PDSA) cycle evaluation approach will be utilized to achieve the program goals.

PDSA: Enhance Student Veteran engagement using WE-SERVE RoadMap

Plan: Needs assessment identified a lack of awareness of resources available to support Student Veteran Sense of Belonging, engagement with campus/program and mental health help-seeking.

Do: A literature review did not identify existing Student Veteran engagement tools for Health Professions and an interview study with Student Veterans confirmed the need for a tailored onboarding process with a roadmap for support, opportunities to continue to serve and health profession related career development.

Study: Health Profession Student Veteran pre- and post- RoadMap program implementation

Act: Findings from each cycle of onboarding briefings and opportunity to continue serve will be communicated with VC Student Affairs and will identify additional cycles of survey/invitation, further Office member training and marketing of opportunities to continue to serve.

D. Potential Scientific Problems

The recruitment of Student Veterans is supported by the Chancellor, but participation cannot be mandated. Three cycles of survey emails will be sent to the Student Veteran to invite participation if no response is received. The Office of Student Affairs has five case managers and a key lead Social Worker tasked with liaison for the project. The DNP student will train all of the case managers, the VC Student Affairs and coordinator to conduct the Briefings. Office members will plan and actively focus on recruitment and conduct Briefings until the minimum number of students has been reached. Student Veteran engagement across AMC is understood to be low and stress across the broad student body is high according to the 2023 ACHA survey. Key Champion collaborative partners and initial active Student Veterans will be engaged early in the planning of activities to raise awareness of the WE-SERVE RoadMap project. Simultaneous student surveys have been requested to be kept to a minimum during the project to prevent over-saturation and no other AMC related Student Veteran surveys are planned. The sponsor and clinical mentor for this project is a major gatekeeper of student engagement requests and they will monitor for any potential conflict and simultaneously advocate for the project activities with campus leadership. The timing of the 'opportunities to serve activities' has been planned with the whole of campus academic and activities calendar in mind.

E. Data Analysis Plan

Figaro Loresto PhD (Statistics), RN, was consulted March 15, 2024, for this formative program evaluation proposal, measures to be used and data analysis plan.

Using a convenience sample and a pre-post evaluation analytic design self-report (ID allocated) survey data will be collected using RedCap and exported for analysis. Pre survey will be collected May 2024 and post survey will be collected in October 2024. Items will be measured using a 10-point (1-10) scale to increase sensitivity to change variability. Descriptive statistics and measures of central tendencies will be analyzed. Data distribution, median, mean, standard deviations will be calculated and visually evaluated. Score frequency and percentage change across 2-3 categories of scale will be calculated to evaluate mean concentration (change) differences (pers.com, Loresto, 2024). Bivariate statistics will be used. If there is a normal distribution a paired t-test will be used to calculate change scores across the two groups. If there is non-normal distribution, then non-parametric statistic Wilcoxon (paired) signed-rank test will be used to compare between group data. Table of pre-post measures and bar charts will be used for graphical analysis of summarized data. Single percentage (attendance) or mean (time), and confidence interval will be calculated for process and balancing measures. All deidentified data and analysis will be stored electronically and will be password protected. Study ID will be stored separately from Student Veteran email addresses.

F. Summary of Knowledge to be Gained

This is a formative program evaluation designed as a DNP project to determine the impact of an engagement Roadmap (WE-SERVE) on Health Professional Student Veteran's Sense of Belonging at University of Colorado Anschutz Medical Campus between May 2024-October 2024. The

knowledge gained from the RoadMap implementation data will help shape strategic planning activities for AMC in November 2024 that can benefit from Student Veteran engagement.

Implementation knowledge will also inform ongoing discussions for the VC Student Affairs and the tailoring of Student Veteran and Military Services for CU AMC as it separates from its current co-location with the Denver Campus. Health Professional help-seeking intention data will be shared with Faculty Governance groups for consideration around academic policies, clinical education, and curricular design. Using similar methodologies, the Office of Student Affairs may decide to adopt the Sense of Belonging measure in future campus-based surveys of students in general and Student Veterans in particular.

Approved

V. References

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[Appendix_508.xlsx](https://www.mentalhealth.va.gov/docs/data-sheets/2020/2001-2020-State-Data-Appendix_508.xlsx) Accessed November 2023

**Appendix: LOGIC MODEL: Student Veteran Sense of Belonging Enhancement with a Novel CU-Anschutz Medical Campus
WE-SERVE (Ways of Engaging Student Veterans) RoadMap**

