

# **EVALUATION REPORT: EXECUTIVE SUMMARY**

## **South Carolina Public Health Preparedness Student Corps (SCPHPSC)**

This evaluation summary presents an overview of the SCPHPSC including the problem addressed; evaluation objective and questions; data collection methods and analyses; key findings, main conclusions, recommendations; and limitations. The full Evaluation Report can be accessed at the “Reports” tab of the project’s website ([scphpsc.org](https://scphpsc.org)) or by emailing a request to Project Director, Dr. Shirley Timmons at [stimmon@clemson.edu](mailto:stimmon@clemson.edu).

### **OVERVIEW**

The SCPHPSC was implemented April 1, 2022, to June 30, 2024, and administered by faculty, information technologists, and administrative personnel at the state’s Clemson University (CU) as lead organization and subrecipients Benedict College (BC), Claflin University (ClfU), Coastal Carolina University (CCU), Francis Marion University (FMU), and the Medical University of South Carolina (MUSC) with the goal to prepare a pipeline of 800 culturally competent students (primarily undergraduates) for regional and global disaster preparedness and emergency response. Impetus for the project was lessons learned about public health workforce needs during the Covid-19 pandemic. Six program objectives directed students’ engagement in the approximately 27-clock hour project that consisted of online and live learning experiences: 1) SC Medical Reserve Corps (MRC) training and enrollment, 2) Federal Emergency Management Agency Incident Command training, 3) contact tracing certification including the natural history of SARS-Cov-2, 4) evidence-based health equity instruction that ranged from population health program management to social determinants of health and global/transcultural health, 5) relevant skills based/immersion experiences that spanned activities from point of dispensing exercises and STOP THE BLEED® training to guided reflection on the leadership aims and roles of professional organizations (e.g., SC Public Health Association, SC Nurses Association, CU Center for Research on Health Disparities), and 6) an end-of-project conference to highlight implications of the public health workforce and insights gained from project participation. Students received a stipend allowance after completion of all program requirements.

### **EVALUATION OBJECTIVE/QUESTIONS**

The evaluation was conducted by the CU project director and evaluation consultant (Dr. Kathleen Valentine) with the aim to judge its value based on four questions: 1) did the project operate as planned, 2) what was its impact on student participants, 3) did it function efficiently without wasted expense, and 4) what was its impact on the public health workforce? These questions complement the project’s Evaluation Plan (available at <https://scphpsc.com/reports/>) that focuses on implementation and outcomes.

### **DATA COLLECTION METHODS AND ANALYSIS**

Evaluation data collection methods and measures were based on assessing four project factors: a) adherence to its Work Plan, b) enriched student learning, c) financial accountability, and d) benefit to the public health workforce. The Work Plan’s 13 program objectives included complementing project activities, identified persons responsible for their management, and outcomes produced. Objectives focused on student learning and skills acquisition, stipend management, project marketing and sustainability, formal communications with subrecipients and Advisory Board members, and overall grants management expectations. Qualitative data analysis of the Work Plan (available at <https://scphpsc.com/reports/>) was employed to gauge the level of adherence to project objectives.

Student responses to a 2-item end-of-project Likert scale were generated to uncover their learning outcomes: 1) *My awareness of public health response and preparedness has increased due to participation in*

*the project and 2) My knowledge of marginalize populations, as related to the Medical Reserve Corps, has improved due to participation in the project.* In addition, replies to a 1-item impact survey, administered at end-of-project annual conferences (2022, 2023), also elicited qualitative data in response to the question *What effect (1-2 words) do you think this experience (as SCPHPSC participant) will have on you?*

Student learning was also accessed through analysis of secondary data of a Reporting Spreadsheet designed to document completion of each project requirement and students' personal demographic data (i.e., gender, class level, and ethnicity). Review of these latter data facilitated assessment of the project's effort toward a diverse student cohort. The spreadsheet was subrecipient specific and populated regularly by respective designated personnel. The spreadsheet was also used to measure progress toward student enrollment targets: BC (150), CCU (100), ClFU (150), CU (150), FMU (150), and the MUSC (100).

Financial accountability was primarily evaluated by qualitative data analysis of email communications among subrecipient team leaders, the project director, and the CU grants management team and of Quarterly Reports submitted to the project funder (SC Department of Public Health [SC DPH]) (formerly SC Department of Health and Environmental Control). A total of nine Quarterly Reports (available at <https://scphpsc.com/reports/>) was analyzed on an ongoing basis and each was submitted to the funder with attention to feedback about any financial management concerns. Quarterly Reports were developed by the project director based on input from each subrecipient team leader who also reviewed them for accuracy and breadth of content prior to submission.

Benefit of the project to potential public health workforces was determined based on the assessment that students completed all health equity related educational modules (per Reporting Spreadsheet) with documented outcome reflection statements (i.e., insights), all required skills development and immersion exercises, and that personal demographics (especially ethnicity) reflected a diverse group. This latter variable was gauged in comparison to SC's current 40% minoritized populace.

### **KEY FINDINGS/CONCLUSIONS/RECOMMENDATIONS**

Key evaluation findings and conclusions are presented in relation to the four evaluation questions referenced. Recommendations for future consideration are offered based on perspectives of the program evaluators.

Eight timeline related edits to 26 total program objectives, within the Work Plan, were warranted due to 1) a small number of students who completed project requirements earlier than planned, 2) delay of some end-of-project conference agenda confirmations and supply orders, and 3) a few dates and times of Advisory Board meetings that required adjustments to accommodate members' ability to participate. A timeline adjustment was also required for student stipend disbursement schedules that were changed to funds being disbursed after completion of all required project activities versus an original plan to disburse half of the stipend midway of activities being completed and the remainder at full completion. Still, frequent monitoring of the Work Plan greatly impacted project implementation and attainment of outcomes. Based on these findings, a key recommendation for replication of the SCPHPSC or implementation of a comparable project is that a written and detailed work plan that includes specific, measurable, achievable, realistic and time-bound objectives be prioritized. The work plan should also be shared and discussed among all program personnel prior to implementation and reviewed often with the expectation that flexible timelines, for activities to be completed, will likely be needed.

Student learning resulting from participation in the project was documented. This finding is based on data collected from participants who had completed all program requirements versus those who enrolled and failed to complete. Over 89% of project completers acknowledge increased knowledge (i.e., strongly agree) as

evidenced by quantitative data collected (5-point Likert scale). This proportion represents 95% of the 800 student enrollment goal originally established. In addition, qualitative data collected about the impact of the project, as perceived by students attending the 2022 and 2023 end-of-project conferences, yielded responses that ranged from enriching, beneficially impactful, strong, enlightened, great, and eye opening, to valuable, useful, vigilant, inclusive, and inspiring. We conclude that student training outcomes were successful based on their guided engagement throughout the project. A main recommendation for future consideration is that the endeavor be designed so that significant portions of requirements can be completed online (versus in person) to accommodate students' ability to also manage their academic curriculum demands successfully.

The project positively impacted the number of trained individuals able to contribute to communities in need of emergency management and disaster preparedness. While the project did not reach its goal of 800 completers, 681 were added to the state's potential public health workforce. Also, this group gained useful insights and regard for health equity as well as the ability to foster community resilience based on the SCPHPSC experience. In addition, over 57% of project completers mirror SC's ethnically diverse individuals. Diversity was also evident based on gender (67.7% identified as female/woman) and class level (33% junior, 28% sophomore, 20% senior, 14% graduate program). The group also varied with regard to academic programs of study that consisted largely of nursing/pre-nursing followed by public health and biology focused disciplines. Other fields ranged from psychology and healthcare administration and medicine to math, computer science, engineering, social work, chemistry and biochemistry, and language and international health.

The SCPHPSC participants are community members beyond their academic settings. In addition, students can be socialized to recognize health equity and community resilience remedies during their post-secondary education experience. They also represent interested and willing candidates able to help ameliorate current and future public health workforce needs. A significant recommendation for future replication of this project is that potential project participants be thoughtfully targeted to complement the needs of communities to be served.

Additional project outcomes that complement recommendations presented in this evaluation are sustainability products realized by the SCPHPSC lead organization and subrecipients. These are summarized at Appendix A.

### **LIMITATIONS OF THE EVALUATION**

Several project evaluation limitations exist: a) Time constraints prohibited inclusion of information about similar workforce development projects that focus on public health, disaster preparedness, and emergency management; b) there was less than 100% of data collection respondents; c) there were limited resources to conduct future impact of the project; d) evaluation data collection instruments were based on face validity versus pre-established benchmarks; e) there was limited capacity for post project follow-up with student participants, subrecipient team members, Advisory Board members, and funder; and f) evaluation data were obtained through a one-step process without the opportunity to return to respondents for additional information or clarification of data.

## APPENDIX A: SCPHPSC SUSTAINABILITY OUTCOMES

### Benedict College

- ✓ A formal partnership was established with Prisma Health (private nonprofit SC health company) to continue STOP THE BLEED® training within student population.
- ✓ Assessing converting project to a campus student organization
- ✓ Aim to collaborate with other partners

### Claflin University

- ✓ A new officer (2<sup>nd</sup> Vice President) was added to the ongoing campus Public Health Student Alliance (PHSA) to continue the SCPHPSC's focus on emergency preparedness
- ✓ A Student Ambassador Program was initiated whereas select SCPHPSC project completers (i.e., ambassadors), who are also members of the campus PHSA, serve as SCPHPSC mentors with the goal to support ongoing community and public health outreach--a non-traditional component of non-health professions majors
- ✓ Integrated emergency preparedness into a BIOL 101 *Improving Community Health* course beginning summer 2024 and to continue to be taught each semester in the future
- ✓ The SCPHPSC website link (scphpsc.org) was included at the NIH Undergraduate Research Initiative for Student Enhancement (URISE) web page. The URISE webpage is currently being added to the Claflin University webpage.

### Clemson University

- ✓ An *Introduction to the MRC* instructional PowerPoint (PPT) slide was created and distributed to SCPHPSC participating schools to advocate for its use, by other faculty, as a teaching aid within courses.
- ✓ An *AACN Population Health Domain Nurse Competency* instructional PPT slide was created and distributed to SCPHPSC participating schools with nursing degree programs (i.e., CU, FMU, MUSC) to advocate for its use, as a teaching aid, within relevant courses.
- ✓ The SCPHPSC Social Determinants of Health (SDOH) health equity education module was shared (upon request) with non-project related faculty at the MUSC
- ✓ The SCPHPSC SDOH health equity education module was shared with the Upstate Area Health Education Center for used by students enrolled in its Summer Enrichment Program.
- ✓ The SCPHPSC SDOH health equity education module will be incorporated as a teaching aid within the School of Nursing's (SON) undergraduate honors course beginning fall 2024
- ✓ STOP THE BLEED® training was adopted, by the SON's community health faculty, for use as a credited clinical skill beginning fall 2024
- ✓ Four SON 4 faculty members have now become STB instructors due to association with the SCPHPSC
- ✓ An official Clemson University SCPHPSC Student Organization has been established.
- ✓ All project faculty team members have completed STB training and become instructors
- ✓ The SCPHPSC website has retained a permanent home (linked) at the CU Center for Research on Health Disparities website

### Coastal Carolina University

- ✓ To continue the project within the CCU Public Health Club--every new club member will enroll in Better Impact and those interested will complete the SC DHEC Cultural Competency training

### Francis Marion University

- ✓ Incorporated emergency management/disease preparedness online modules (e.g., FEMA, CDC) into the Healthcare Administration and Nursing programs.
- ✓ Included an assignment in the *Introduction to Public Health* course that requires students to enroll in the MRC.

### Medical University of South Carolina

- ✓ To engage two MUSC and College of Charleston students in resilience-focused research that will investigate curricular needs of health professions students related to a disaster resilience and extreme heat project