Comprehensive Program Review Report



Program Review - Emergency Medical Technician

Program Summary

2023-2024

Prepared by: Jonna Schengel and Nick Branch

What are the strengths of your area?: 2022-2023 PR required elements:

1. 65.4% overall success rate - no pre reqs - class is large to allow as many students as possible to be eligible for the Fire Academy

2. FTES/FTEF= 36.71, very high.

3. FTES = 42.33

4. Equity

The Emergency Medical Technician (EMT) program is in high demand, course offerings fill immediately when registration opens with a waitlist. The EMT program increased its course offerings to 2 sections offered in both Fall and Spring semester beginning Spring 2022. There were 34 students enrolled in Fall 2021 with additional students on the waitlist. The spring 2022 semester had 68 students, 34 in each CRN, enrolled with additional students on the waitlist. Of the 102 enrolled from fall 2021-Spring 2022. Sixty-six certificates were awarded to the students who successfully completed and passed the course. Due to the high drop rate the instructors will take up to 32-34 students. Many of the students that register for this class have not taken other college courses as there are no prerequisites. Although the students who participate in this course are strongly encouraged to an American Heart Association? Basic Life Support (BLS Providers) CPR course before taking EMT 251, some students do not complete this prior to entering the course and these students struggle with basic concepts that should have been taught during the BLS Provider CPR course. Adjunct faculty teaching this course have expressed that they would like to see CPR certification be a prerequisite for this course to enable students to be more successful in the EMT 251 course. The program has implemented a scenario-based skills night that helps to bring the practice sessions closer to a real-life EMT experience to help improve success rates. Students are required to successfully comprehend and demonstrate skills of the EMT Core Content and Standards of Practice. The Core Content requires knowledge of human biology, anatomy, physiology, and psychopathology. The rigor of this program is extremely high for students without the basic skills in education at college level or a science background. Another factor affecting student course completion is the grading scale mandated by the National EMS Education Standards of C or better to pass the course (75% and below is an F). The students often realize the course is too difficult or are unsuccessful on the initial quiz and drop the course. ?The students that do succeed in the program are eligible to sit for the NREMT written exam.

Enrollment Patterns: For the 2021-2022 academic year 34 enrolled in Fall and 68 were enrolled in the Spring semester, a total of 102 students in 3sections of the course offering.

Workload Measure: The EMT program is 6 units divided into theory and lab. The course is taught in the evening twice a week. The program was taught by adjunct instructors (2) that share the position 50/50. The program also employs 4 adjunct instructors for the skill lab portion to assist with the four groups of students assigned to different stations.

Academic Quality: Academic Quality: The quality of the program is ensured by The National EMS Core Content. ?This document is published by the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services

Administration that promotes universal knowledge and skills for EMS personnel. ?California Code of Regulations, Title 22 dictates the EMT-B Scope of Practice, and the National Highway Traffic Safety Administration's National EMS Education Standards outline the minimum terminal objectives for entry-level EMS personnel. The faculty members stay involved with the California EMS Educators Association (CEMSEA) for up-to-date information from the state and the NREMT. The requirements to provide testing for each skill, and for every student was waived due to COVID and that allowed the faculty to develop a more realistic skills lab and utilize our time differently than previous semesters.

Resource Efficiency: The EMT program is a CTE program that qualifies for VTEA grant funding as well as funds from the recent Strong Workforce Initiative. VTEA funds were allotted in 2020-2021 for faculty professional development. Faculty development related to active teaching strategies had enabled the EMT instructors to embed more scenario-based learning that provides students with more active learning opportunities, that support student achievement of SLO's.?The 2021-2022 COS Dashboard FTEF was 1.13 a slight decrease from the prior academic year of 1.43. The program is taught by two adjunct faculty at 50% load each. During lab there are 4 additional adjuncts to meet the 10 students per instructor mandated requirements.

Equity and Diversity: For the academic year of 2021-2022 the entire number of students registered identified as Hispanic, with Hispanic males having a higher success rate (66.2%) than their female counterparts (45%).

What improvements are needed?: 1. Increase student completion and success rates.

The instructors of the program have been making changes to the way the course is facilitated to improve students' success over the last 2 years. The course continues to have a high attrition rate and the success rate of students in the course decreased from 77.0% for 2020-2021 which is an increase of 15.1% from 2019-2020 to 59.5% for 2021-2022. The EMT instructors attribute the high attrition rates in the program overall, to students not being prepared for the rigor of the course resulting in withdrawals from the course failure and continuing student challenges related to COVID. The EMT instructors have implemented multiple teaching strategies including placing students in class groups, more active student classroom participation, case studies, outside study groups, and incorporating Brady-lab to provide students added support and assist students with completing the course successfully and meeting the course SLO's.

The EMT faculty indicated that having an additional ALS trainer manakin would be beneficial since there is usually between 50-60 students and they currently only have one manakin. The addition of a second manakin provided more students with hands-on skills time. It will also be used for medical assessments and throughout the semester for skills night. This is beneficial now that the class size has doubled. The instructors have also indicated needing 40 new stethoscopes and blood pressure cuffs as the ones they have need repair and because of the increased number of students (double) needing to use them to develop this important skill.

2. Increase the student success rate on the National Registry Exam.

There is a wide discrepancy of student program success rate and the pass rate on the certifying exam. The number of students that sat for the National NREMT: Results for the 3rd quarter 2021-to 3rd quarter 2022; 29 students attempted the exam. First attempt pass rate was 34% (10); cumulative pass within 3 attempts was 48% (14); Cumulative pass within 6 attempts 48% (14); Failed all 6 attempts 0%, 52% are eligible for retest.

The instructors of the course provide test prep instruction on the last day of class for the students on a volunteer basis as well as provide the material presented in the 4-hour test prep for all students via Canvas. They have also started using My Brady Lab materials that both instructors feel has had a positive effect on the NREMT pass rates.

3. Increase the opportunities for students to practice and perform hands-on skills.

The skills lab continues to outgrow its assigned skills lab. Over the last few years the instructors have replaced and introduced new equipment that help provide the necessary instruction, however, the biggest challenge they currently face is lack of space for students to spread out and complete their skills. In the fall they were again spread out among several open classrooms and that makes it extremely difficult for the primary instructors to maintain awareness of their class. An EMT 401 open skills course was developed and approved in Spring 2021 and an adjunct EMT faculty was hired for this position Fall 2021 so the course can begin Spring 2022. As stated in #1 above the addition of a second ALS manakin provides individual students more skill practice time especially now that the class size has doubled. The addition of new stethoscopes and blood pressure cuffs would also increase the ability of the students to practice hands-on skills (as mentioned in #1 above) and can be funded through VTEA.

4. Consistent completion of student evaluations at the end of each semester. Students should be given the opportunity to evaluate the program and identify barriers to learning which will assist faculty and the Division Chair in evaluating the needs of the program and the students. Completion of student course evaluations have been inconsistent and a process needs to be implemented that addresses this need.

5. Faculty have addressed the need to have available equipment and supplies including blood pressure cuffs, stethoscopes, and demo dose drugs for practice administration of medications and skills practice. A process for annual reordering of supplies

essential to the program is being reviewed and will be implemented to assure ready availability of these essential supplies.

6. Student attendance is an issue relayed by faculty which is due to covid and other illnesses and the need to isolate or quarentine. The EMT program has strict covid mandates in place regulated by the state.

Describe any external opportunities or challenges.: The required clinical contacts of ten hours are still challenging. Students are still only able to attend one 12 hour ambulance ride along day as part of their hour requirments. Faculty are securing additional ambulance services to address the need for more availability with American Ambulance-Exeter, Life Star-Tulare and American Ambulance of Fresno and Hanford.

Overall SLO Achievement: Not completed per each course; one adjunct was put on medical leave and therefore 100% of teaching load fell on one adjunct who was also a full time fire fighter.

Changes Based on SLO Achievement: Not completed per each course; one adjunct was put on medical leave and therefore 100% of teaching load fell on one adjunct who was also a full time fire fighter.

Overall PLO Achievement: Not completed per each course; one adjunct was put on medical leave and therefore 100% of teaching load fell on one adjunct who was also a full time fire fighter.

Changes Based on PLO Achievement: Not completed per each course; one adjunct was put on medical leave and therefore 100% of teaching load fell on one adjunct who was also a full time fire fighter.

Outcome cycle evaluation: Not completed per each course; one adjunct was put on medical leave and therefore 100% of teaching load fell on one adjunct who was also a full time fire fighter.

Action: 2023-2024; 2022-2023 Increase student access to essential skills medications and supplies for practicum

Develop and implement a process of ordering essential demo dose medications used in hands on practicum in the program and assure availability by the beginning of each semester/academic year.

Leave Blank: Implementation Timeline: 2022 - 2023, 2023 - 2024 Leave Blank: Leave Blank: Identify related course/program outcomes: Person(s) Responsible (Name and Position): Nick Branch, Adjunct EMT faculty Rationale (With supporting data): The availablity of demo dose drugs for medication administration skills develop is essential to the program. Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2023 - 2024 Status: Continue Action Next Year This action was completed but needs to be continued until considered part of EMT/Paramedic program. Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2021-2025

10/09/2023

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District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

Action: 2022-2023, 2021-2022 Increase Student Success on the National Registry EMT exam.

Increase the pass rate by 20% on the EMT certifying exam through the integration of online instruction and testing (My Lab Brady) to better prepare the students for the NREMT exam.

Leave Blank:

Implementation Timeline: 2019 - 2020, 2020 - 2021, 2022 - 2023 Leave Blank:

Leave Blank:

Identify related course/program outcomes: The EMT instructors have indicated that the online instruction and testing provided with the MY Lab Brady resources has helped to better prepare the students for the NREMT exam as they will be better prepared for a computer-based test.

The student will need to be successful on all SLOs to pass the National Registry Exam

1. Given skills practice and lecture content, students will be able to provide emergent and non-emergent care, by return demonstration of all EMT-B skills.

2. Given lecture content, students will be able to asses and identify signs and symptoms of illness and/or traumatic injury by multiple choice tests.

3. Given skills lab practice with actual equipment and real-life scenarios, students will be able to implement appropriate emergency care procedures to include stabilization and transfer of the patient to the receiving emergency service facility – return demonstration.

4. Given lecture on legal and ethical practices, students will be able to identify the legal and ethical ramifications of the care provided by multiple choice test.

Person(s) Responsible (Name and Position): Jonna Schengel Associate Dean Nursing/Allied Health and Anne Morris Chair of Nursing and Allied Health

Rationale (With supporting data): The pass rate on the National Registry Exam is _____%. The state average is 72% and the national average is 67%.

Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

08/26/2022

Status: Continue Action Next Year

MyLab Brady is now being implemented and success rates are being evaluated over a couple of semesters to determine whether this is a valuable tool.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5

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percentage points

District Objectives: 2021-2025

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and

attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

Action: 2022-2023 Increase student access to skills equipment providing opportunity for hands-on skills practice and improved demonstrated success

Obtain 40 new stethoscopes and blood pressure cuffs to supplement supply and replace broken/damaged or lost equipment

Leave Blank:

Implementation Timeline: 2022 - 2023

Leave Blank: Leave Blank:

Identify related course/program outcomes: Increase the number of students successfully passing the program, receiving certification and passing the national registry exam

Person(s) Responsible (Name and Position): Jonna Schengel Associate Dean of Nursing and Allied Health; Dean, Academic Services CTE & Word Force, Tina Toth Chair of Nursing and Allied Health

Rationale (With supporting data): The EMT program has added additional course sections and increased the number of enrolled students by 100%. While this increases the the number of students in the program it also increases the need for available supplies and equipment needed to perform and practice essential skills. The current supply of stethoscopes and blood pressure cuffs is inadequate to meet these needs. Several currently available pieces of equipment are damaged, broken or lost and the purchase of new equipment will enable student practice of skills improving overall student success.

Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2023 - 2024 Status: Action Completed Stethoscopes and BP cuffs were obtained Impact on District Objectives/Unit Outcomes (Not Required):

10/09/2023

Resources Description

Equipment - Instructional - VTEA funds (Active) Why is this resource required for this action?: VTEA provides funding for equipment used to improve student success in the program Notes (optional): Cost of Request (Nothing will be funded over the amount listed.): 1600 Related Documents: Quote for stethoscopes and bp cuffs.html Pocket Nurse Quote 1285663 J. Prator (Supplies).pdf

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2021-2025

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

Action: 2022-2023, Increase Number of Students Successfully Completing EMT Program by 3% over 2021-2022

Increase the number of students who complete the course successfully and go on to take the NREMT exam by 3% over 2021-2022.

Leave Blank: Implementation Timeline: 2022 - 2023 Leave Blank: Leave Blank: Identify related course/program outcomes: Person(s) Responsible (Name and Position): Jeremy Church, Adjunct EMT Faculty; Nick Branch, Adjunct EMT faculty Rationale (With supporting data): The success rate for 2021-2022 was 59%. It is hypothesized that the low success rate related to the rigor of the program, lack of student preparation and covid related attendance, lack of skills practice. Students are slowly returning to clinical sites, attending face to face classes and have more access to skills lab practicing and equipment. This action item will be monitored and trended during program review again in 2022-2023.

Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

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District Objectives: 2021-2025

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and

attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

Action: 2022-2023; 2019-2020 Implement Consistent Student Evaluation Process

Develop and implement a student course evaluation survey for distribution at the end of every course to measure satisfaction. This is addressed under improvements needed in the review.

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(Completed)

Leave Blank: Implementation Timeline: 2019 - 2020, 2022 - 2023 Leave Blank: Leave Blank: Identify related course/program outcomes: District Objective: Increase CTE course success rates and program completion annually Person(s) Responsible (Name and Position): Jonna Schengel Associate Dean Nursing/Allied Health and Tina Toth Chair of Nursing and Allied Health Rationale (With supporting data): Currently there is not an evaluation process in place to measure or rate student satisfaction with the EMT course. This data is necessary to implement changes to meet the student's needs for success Priority: High Safety Issue: No External Mandate: No Safety/Mandate Explanation:

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objectives: 2013-2015

2013-2015: District Objective #1 - District Objective #1 for 2013-2015: Provide effective academic support services as measured by an increase in the rate at which students successfully complete courses.

District Objectives: 2015-2018

District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.

District Objectives - 4.2 -Improve the efficiency, effectiveness and communication of human, physical, technological, and financial resources to advance the District Mission.

District Objectives: 2021-2025

District Objective 4.1 - Increase the effective use of data and transparency in decision making at all institutional levels from 2021-2025.