

EMERGENCY MEDICAL SERVICES

ANNUAL PROGRAM REVIEW

ACADEMIC YEAR: 2023-2024



FIRE, SAFETY AND EMERGENCY MEDICAL SERVICES

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Yearly Planning Discussion

PROGRAM NAME: EMERGENCY MEDICAL SERVICES

ACADEMIC YEAR: 2023-2024

General Questions

1. Has your program mission or primary function changed in the last year?

No, our program mission and primary function remain the same. However, we have expanded significantly by bringing on a Paramedic Program.

2. Were there any noteworthy changes to the program over the past year? (eg, new courses, degrees, certificates, articulation agreements)

Required hours have increased by national guidelines and we will need to increase the hours of the basic EMT academy (EMS 301). We will continue to fulfill those requirements; however, we will revise the curriculum through curriQunet to increase the course with 2 additional units. We must consider that many of these students work full-time. When deciding the layout, we must set it up in a way that those that work (typically about 80-90 %) can still attend. This change will be submitted in the Fall of 2024.

A major issue that has affected all EMS programs in the county is the issue of who will be managing and transporting the patients in the 911 system. Currently, it is AMR (American Medical Response), however, the bid was lost to them in 2023 and SBCo Fire was to take over in March of 2024. Lawsuits were brought by AMR, and the judge put a stay on changed until July of 2023. Both our basic academy and Paramedic academy's ability to train in the field was affected as legal battles continued and left our programs without the ability to train in our county.

Our basic academy in the Spring only obtained their mandated hours working in the Emergency departments in our local hospitals and did not work in the 911 system. We have addressed this with both AMR and through our Local Santa Barbara County Emergency Medical Services.

3. Is your two-year program map in place and were there any challenges maintaining the planned schedule?

It is in place, however, some of these options that we have run are struggling with both instructors to teach, as well as filling the quota. Other GE courses are no longer being taught or are taught less often. We have been looking at options that can replace them, so students will not have to go through counseling to find optional courses to complete their degree. This will require a major modification to the EMS associate degree. Ideally, we do this in the Fall 24.

4. Were there any staffing changes?

The assistant professor, Susan Roehl, is stepping down and will be teaching as a part-time faculty. A replacement, Sean Newton, has been brought on board. His start date is August 14th, 2024. We are addressing this with possible options as both the academies start prior to this date, students for both programs must be selected, new programs have been added to teach at the Orcutt Academy HS, equipment acquisition must be organized in the paramedic lab, staff hired must be trained, schedule modifications and more.

We also have 3 classes starting in the fall that are taught at a local high school. We were able to bring 2 PTF with excellent background in EMS and CERT, unfortunately, they were offered a position elsewhere in the state with a significantly higher salary with benefits. In CTE programs we often get staff that is retired or near retirement. Ideally, it is better in EMS world to have a higher proportion of staff that are continuing to work in the field. That is our challenge.

We are still short of staff in both EMS and EMSP. Both in PTF and primarily as instructional aides. Our ratio (mandated by CoAEMSP, NREMT and our local EMSA set by the state of California predominately) of staff to skills is 6 students to one staff. At the basic academy we bring on 40 students. We have been creative as we cross over staff with the EMSP programs to cover both programs. We brought on many staff, however, when they look more closely at the pay, many have taught minimally or not at all. The pay scale vs their pay in the field they have stated is not worth teaching vs picking up an over-time shift. This has been a huge problem. Some SBCo first responder programs and hospitals have stepped up to assist, however, we must come up with a creative solution that will enable these programs to be successful and compliant.

5. What were your program successes in your area of focus last year?

The basic academy continues to run with 40 students accepted. Typically, it graduates with 35-40 students. Our pass rate for national registry continues to trend up. Students receiving associate degrees are rising, representing the statistics of ethnicity in our community. The basic academy changes are noted with more males applying as many (data being collected) students' goal is the fire academy. The basic academy is a steppingstone to the Fire academy and paramedic program (the gold standard) a local and national change in the first responder field.

Both EMS, EMSP, and Fire continue to strive to bring in more women in the field. This summer a women's fire day camp is offered to introduce women into the field and see the possibility of a career in this field.

Learning Outcomes Assessment

a. Please summarize key results from this year's assessment.

We continue to support our community with a higher number of Hispanics and first-time family members that have entered college and as a focus in our program that coincides with AHC goal to acquire a degree. We strive for the student to be able to enter the field of EMS, then return for more degrees with a goal to become a fire fighter paramedic or paramedic

with an associate degree. As A.S. are beginning to be acquired in community colleges such a degree would be wise to set our eyes on as the field of EMS is evolving and an A.S. is really a necessary acquisition to grow within the EMS field they are hired into.

A year ago, we started the first college class held at a high school, Orcutt Academy. The goal is that these Freshman will graduate if accepted into this program with their H.S. Diploma and an associate's degree. This year we are offering 3 classes held at OAHS (Orcutt Academy High School, a charter school located in Orcutt, Ca. Female and males are equally selected and equally successful.

b. Please summarize your reflections, analysis, and interpretation of the learning outcome assessment and data.

We continue to follow the philosophy and focus of AHC with our diversified student population that represents our community in ethnicity, financial support, and educational support not only in our EMS courses but within the heart of the school seen in predominately in our students' services. We encourage our community young and old to enter our doors and see the dream come to fruition. In our programs this doesn't end in finding a career, but supporting the community when their family is injured or perhaps in a potential disaster to come.

c. Please summarize recommendations and/or accolades that were made within the program/department.

Continue to develop our programs utilizing equipment we have acquired, staff we have brought on board and polish up the program degrees that enable students to enter with clarity and ease in their EMS academic journey.

d. Please review and attach any changes to planning documentation, including PLO rubrics, associations, and cycles planning.

Courses related to certifications such as EMS 301 (EMS Academy, EMT-1 Basic) are guided by the governing body of accreditation (CoAEMSP) using the guidelines of Title 22. Compliance to National, state and county standards is mandated to maintain the programs accreditation. After the first cohort completion of our paramedic academy, the PLO's will be reevaluated in both content knowledge and general abilities, such as critical thinking.

Distance Education (DE)

Modality Course Design Peer Review Update (Please attach documentation extracted from the *Rubric for Assessing Regular and Substantive Interaction in Distance Education Courses*)

a. Which courses were reviewed for regular and substantive interactions (RSI)?

No courses were reviewed by RSI. The PTF evaluation done on a new hire, Santino Lopez gave Suz Roehl the opportunity to look deeply into the 2 DE courses he took over. Sonny restructured and updated a much need outline, videos and current modalities in the world of

Disaster management and Terrorism. Sonny, an IA for EMS and wilderness first responder with a background in Law enforcement for 17 years completed his degree in Disaster management and was excited to take on these two DE courses knowing they needed new material in the body, coupled with new books we acquired that brought our programs up to date, current and well structured.

b. What were some key findings regarding RSI?

None from peers at this time. We are planning to have our A&P for First Responders made into a DE as well as an option for life. At this time, it would be an ideal point to have peer review.

Some strengths:

- N/A at this time

Some areas of possible improvement:

- N/A at this time

c. What is the plan for improvement?

- N/A at this time

CTE two-year review of labor market data and pre-requisite review

a. Does the program meet documented labor market demand?

As stated in the prior annual review, the deficits for EMT-B and EMT-P are local and statewide. We still desperately need both EMT's and Paramedics. According to the U.S. Bureau of Labor Statistics, Employment Projections program. "Overall employment of EMTs and paramedics is projected to grow 7 percent from 2021 to 2031, about as fast as the average for all occupations. About 20,000 openings for EMTs and paramedics are projected each year, on average, over the decade." We are collaborating with Santa Barbara County LEMSA bringing advanced EMT courses to help increase the pool for both AMR and SBCo Fire.

b. How does the program address needs that are not met by similar programs?

We built the paramedic program after multiple agencies requested, we started a paramedic program and there were not enough paramedics coming out of programs in counties that sit on our borders. Similar programs have the same guidelines as the national educational standards. However, we have a 40-million-dollar facility that provides the students with a state-of-the-art training arena. With the ED rooms, lab, ambulances, EVOC, village, radios and equipment we are able to truly prepare the students for the field.

c. Does the employment, completion, and success data of students indicate program effectiveness and vitality? Please, explain.

Students that complete the basic academy and seek employment is sitting close to 80% located in our own county or in San Luis Obispo with San Luis Ambulance. The Chumash casino also attends our academy to discuss employment. We are striving to improve collaboration with AMR in our county as it is unclear what the status will be for who will run the 911 calls; however, AMR is owned by GMR and is a national company. This relationship needs to be supported to enable our students to find work and agencies short staff to find them. This type of collaboration, as we currently have with Santa Barbara County Fire, is essential and is a key goal of providing education, training and jobs.

d. Has the program met the Title 5 requirements to review course prerequisites, and advisories within the prescribed cycle of every 2 year for CTE programs and every 5 years for all others?

We have and as we come upon some walls with prerequisites that were created, we see where we need to make them both prerequisites as well as corequisites. This will prevent the delay and work our staff in student services and A&R have currently. This example is with EMS 301 and the prerequisite of EMS 306 (Healthcare provider basic life support).

The paramedic course needs some revision which after the development found many are not necessary to create (see EMSP annual update). As the student enters the field the second course set up for the requirements to obtain your paramedic certificate of achievement will not need so many prerequisites written as they are mandated.

e. Have recommendations from the previous report been addressed?

Yes. See the 6-yr. Comprehensive Program Review, Validation Team Report with the recommendations. Most have been met.

New Program Planning Initiatives

Use the tables below to fill in **NEW** resources and planning initiatives that do not apply directly to core topics. ***This section is only used if there are new planning initiatives and resources requested.***

New Program Planning Initiative (Objective) – Yearly Planning Only	
Title (including number):	EMS 301 – OBJ 1
Planning years:	2024-2025
Description The basic academy has national guidelines that state and counties must comply with. We will need to add 2 units to the basic academy in order to have wiggle room for students to miss days if they have a family emergency or illness and still stay compliant to these guidelines. Currently, we meet the hours if they don't miss any time.	
What college plans are associated with this Objective? (Please select from the list below):	
<input checked="" type="checkbox"/> Ed Master Plan <input type="checkbox"/> Student Equity Plan <input type="checkbox"/> Guided Pathways <input type="checkbox"/> AB 705 <input type="checkbox"/> Title V	
<input type="checkbox"/> Technology Plan <input type="checkbox"/> Facilities Plan <input type="checkbox"/> Strong Workforce <input type="checkbox"/> Equal Employment Opp.	

New Program Planning Initiative (Objective) – Yearly Planning Only	
Title (including number):	Public Safety - EMS OBJ 2 – Augmented Reality Room by MedCognition, Inc.
Planning years:	2024-2026
Description Both the basic academy and the paramedic academy would benefit from an augmented reality system to enhance their training before going into the field. this technology uses augmented reality technology to project highly realistic 3D images of simulated patients into virtually any environment. This allows an instructor to control or modify all aspects of the patient simulations in real-time instead of a tightly scripted, inflexible video game format. It permits us to project highly realistic depictions of patients into virtually any environment. It is controlled, real-time, by an instructor using our software and all fits into a portable case permitting easy transport to any learning or teaching environment. Rather than be told that a patient is breathing hard, sweating or is turning blue, our technology allows the student to see these states, observe any changes and develop critical decision-making skills foundational to clinical practice.	
What college plans are associated with this Objective? (Please select from the list below):	
<input checked="" type="checkbox"/> Ed Master Plan <input type="checkbox"/> Student Equity Plan <input type="checkbox"/> Guided Pathways <input type="checkbox"/> AB 705 <input type="checkbox"/> Title V	
<input checked="" type="checkbox"/> Technology Plan <input type="checkbox"/> Facilities Plan <input type="checkbox"/> Strong Workforce <input type="checkbox"/> Equal Employment Opp.	

New Program Planning Initiative (Objective) – Yearly Planning Only

Title (including number): Public Safety - EMS OBJ 3 – Update Inventory, Equipment, and Organization

Planning years: 2024-2025

Description

In order to keep up with the dynamic field of EMS, we need to continuously update our inventory needs to better serve the students. With more equipment, it will allow students more opportunity to learn and solidify their knowledge base to follow the learning objectives presented in class. Many students are kinesthetic learners, so it is imperative we have enough equipment to meet the student demands to ensure equitable learning for each student, as well as promote quality of instruction.

What college plans are associated with this Objective? (Please select from the list below):

- Ed Master Plan Student Equity Plan Guided Pathways AB 705 Title V
 Technology Plan Facilities Plan Strong Workforce Equal Employment Opp.

Area of Focus: Enrollment Trends and Efficiency

Enrollment Trends and Efficiency looks for areas of growth or decline, relationship to the college and similar programs, and head count (enrollment and full-time equivalents for students and full-time equivalents faculty).

1. What data were analyzed and what were the main conclusions?

I looked across all the data collected from headcount to success and retention. The years 2020-2021 being an outlier due to COVID I excluded. I focused on the trends from the 2018-2019 to the 2022-2023 data.

Totals in AHC, EMS, EMT-basic academy.

- ❖ Headcount female/male:
 - AHC in 22-23 was 53% FM, 45% male, 2 % non-binary.
 - In all of our EMS courses: 47% woman, 52% male, 1% non-binary
 - In our EMT –basic academy in 22-23 we had only 27% FM, 73% male.

This might be an outlier however, we are funneling more through the basic EMT academy prior to fire and back again into the paramedic program. This might account for the decrease in women. This summer J. Cecena FTF in fire is running a fire women's camp. They have been working the female deficit by going to sports teams in HS to recruit however, this has not been successful. We can learn from the women’s fire camp how to pull more women through these steps.

Headcount

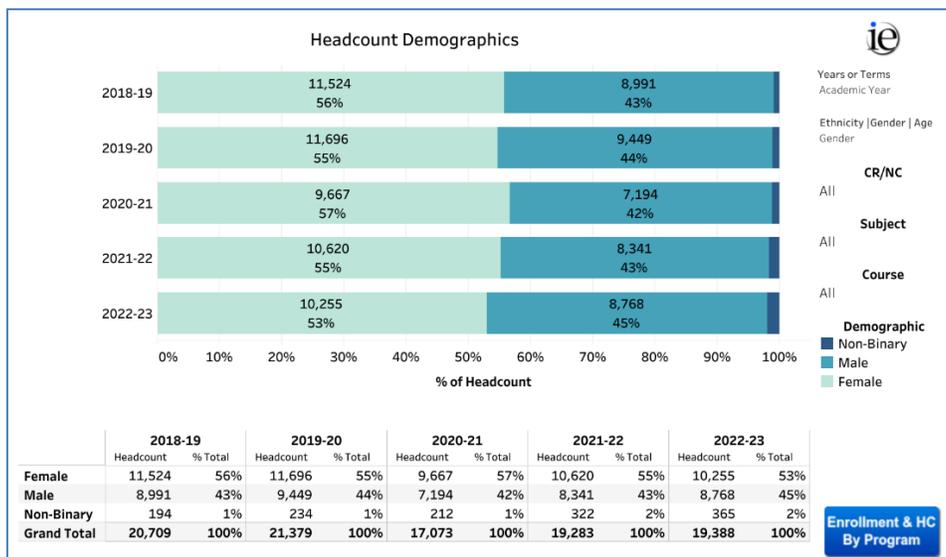


Figure 1. All AHC Gender

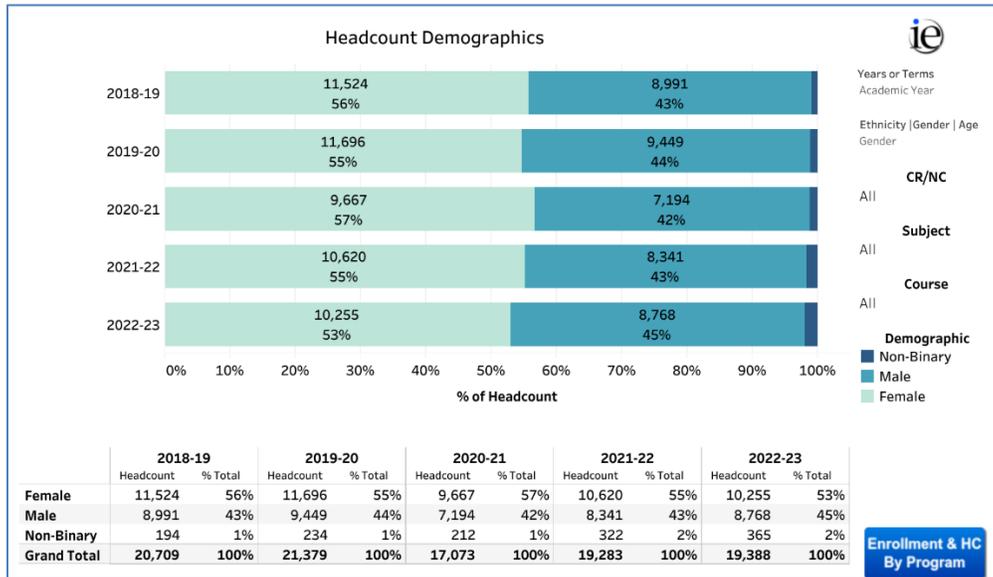


Figure 2. AHC EMS Gender

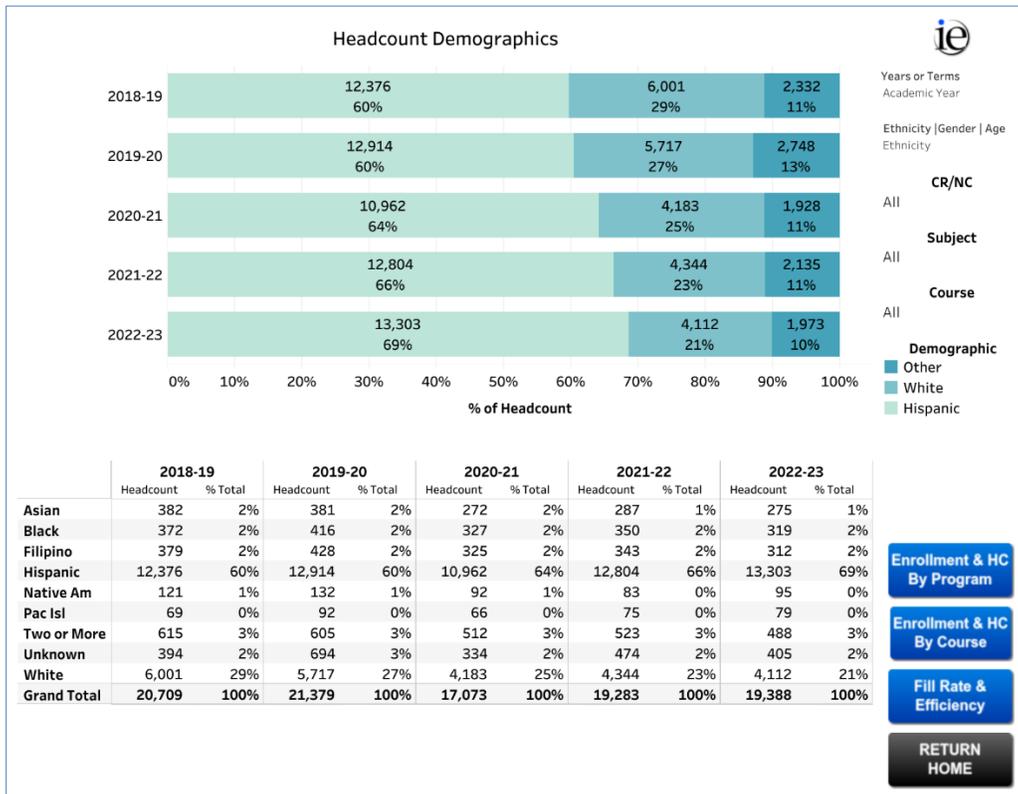


Figure 3. All AHC Ethnicity

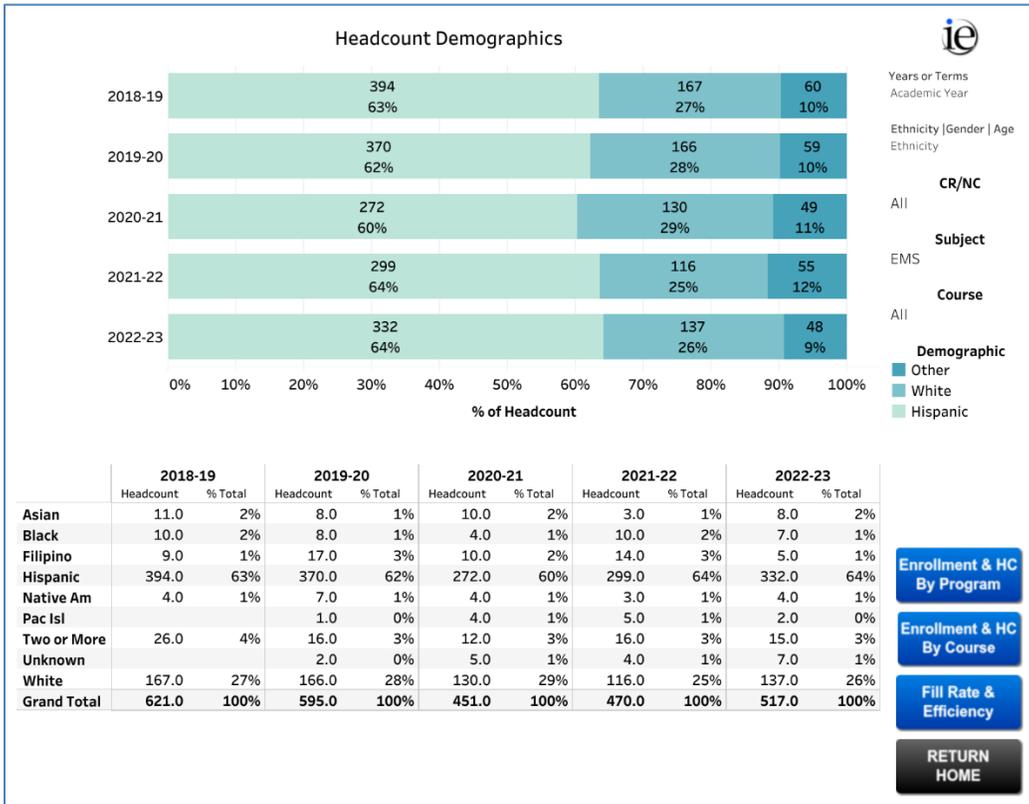


Figure 4. AHC EMS Ethnicity

Success & Retention

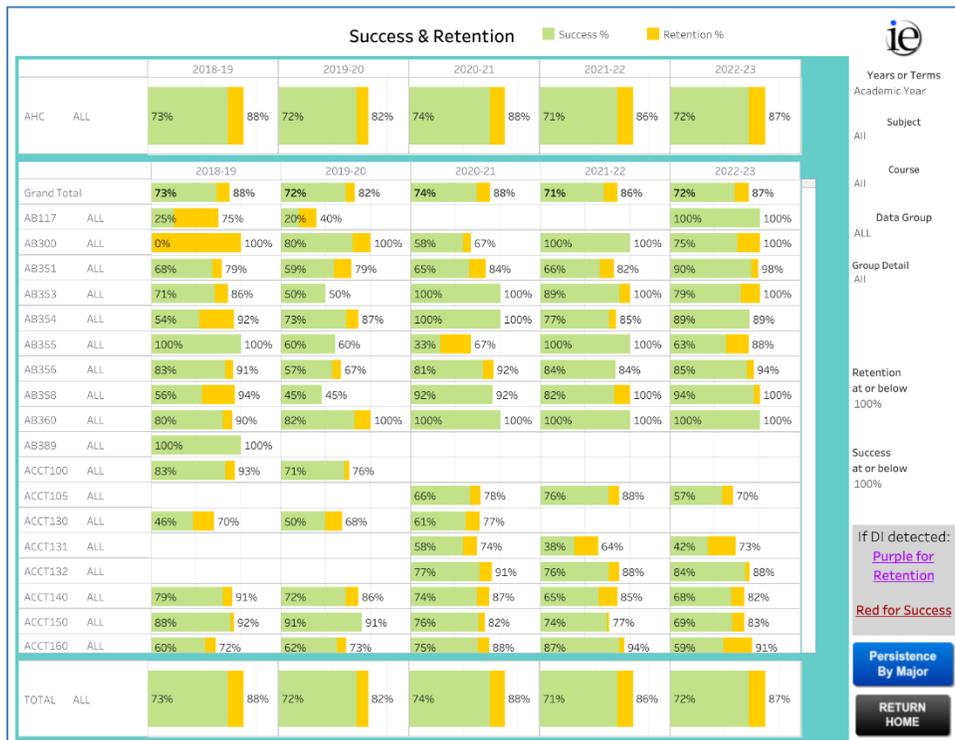


Figure 5. All AHC Success & Retention



Figure 6. AHC EMS Success & Retention

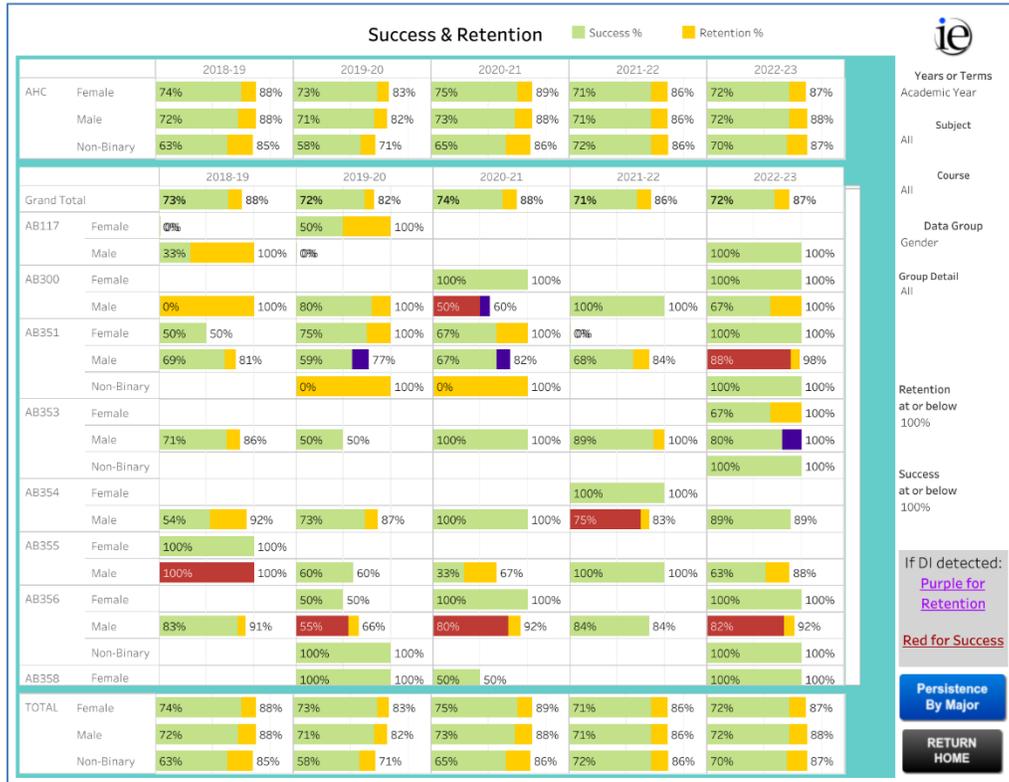


Figure 7. All AHC Success & Retention Gender



Figure 8. AHC EMS Success and Retention Gender



Figure 9. EMS 301 Success & Retention Gender

Persistence

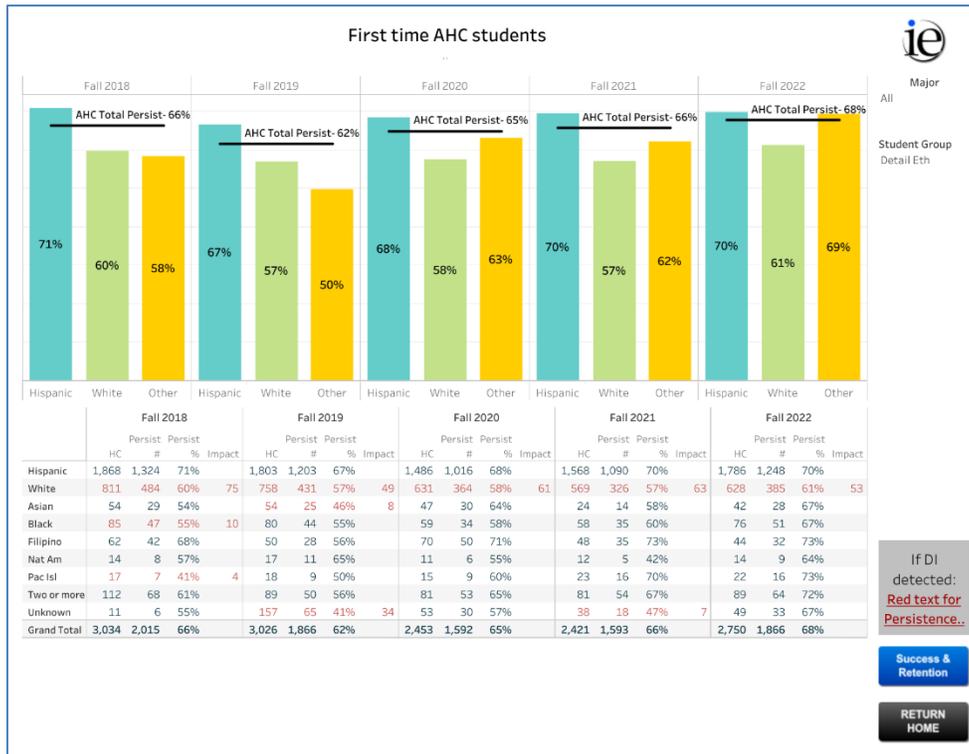


Figure 10. All AHC Persistence Ethnicity

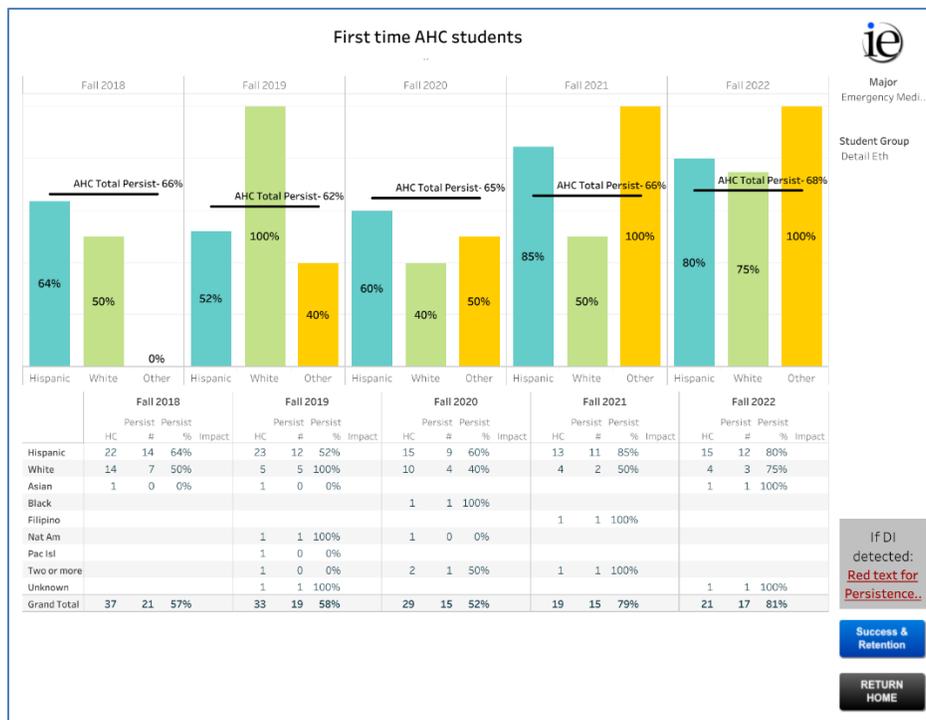


Figure 11. AHC EMS Persistence Ethnicity

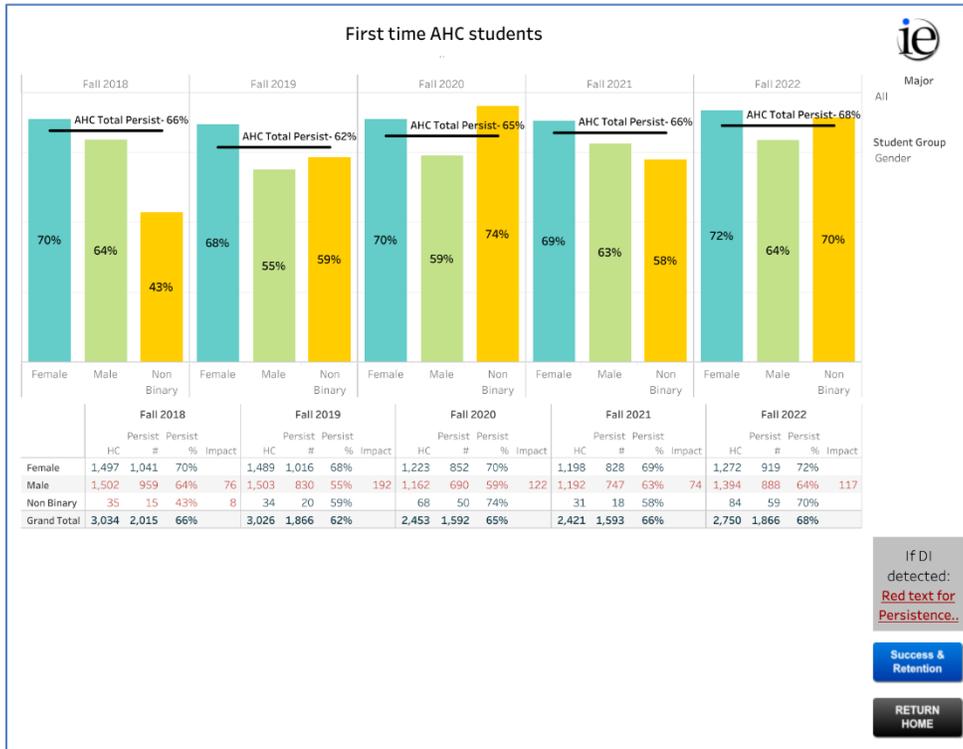


Figure 12. All AHC Persistence – Gender

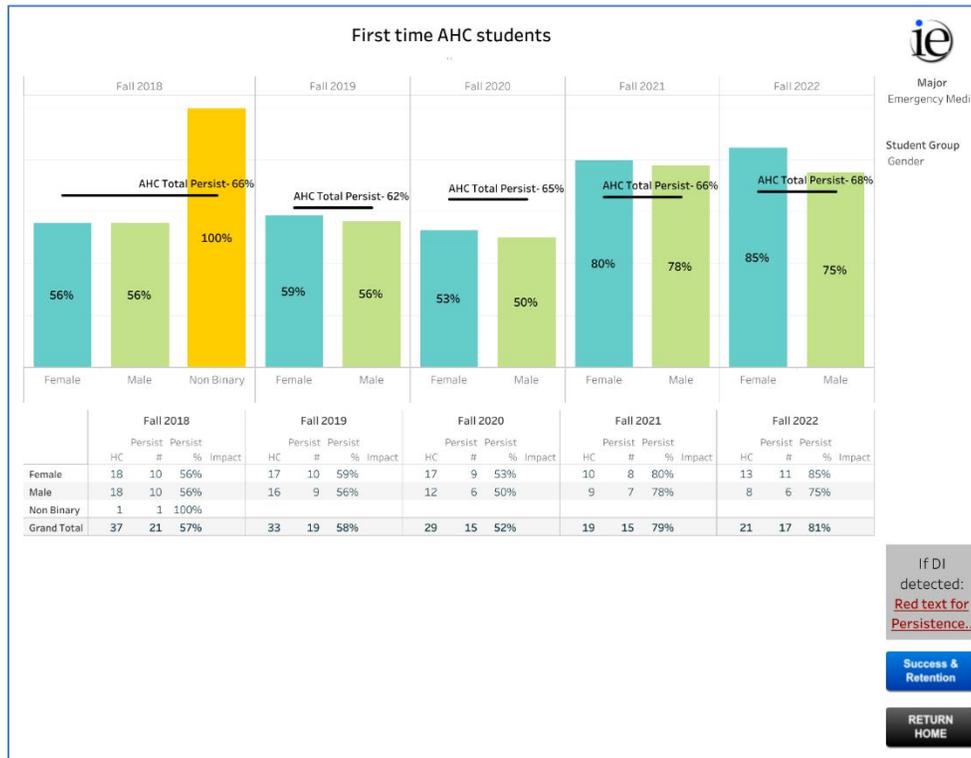


Figure 13. AHC EMS Persistence Gender

2. **Based on the data analysis and looking through a lens of equity, what do you perceive as challenges with student success or access in your area of focus?**

In EMS, we have brought those that statistically are the highest ethnic population and those that have not had a family member attend college, and we have been successful. We engage in many activities, such as "in the streets" and represent our programs to the people. We have bilingual staff encouraging and sharing EMS as a possible career. The challenge is getting the word out that these careers are accessible. Many individuals in this community still do not know this could be their future career.

Through word of mouth on top of engaging into the community we have opened doors to the LGBT community as they state they feel welcome. Bringing past students on board as instructional aides is a great asset.

Bringing guest speakers to share can also get the word out and open doors for our diversification in our programs.

3. **What are your plans for change or innovation?**

Innovating an EMT Basic and Paramedic program at a community college involves enhancing educational outcomes, preparing students for real-world challenges, and integrating modern technology and practices. At our PSTC we have the perfect training playground. Ambulances, simulated manikins, simulated cardiac monitors, out buildings with addresses and cameras to "run" calls and evaluate. We have a lab where there are 2 ER beds to receive patients and ER doors to back, the ambulances (we have 2). We have one of only 2 ambulance skid vehicles to train ambulance drivers safe driving practices.

4. **How will you *measure* the results of your plans to determine if they are successful?**

- Feedback questions provided to staff at the ED and ambulance services that reflect improved cultural competency and awareness of diversity.
- Offer questions throughout the semester that when reviewed in class demonstrates the students understanding of cultural competency and sensitivity training.
- Future projects incorporating the students are to find and encourage students to be involved in data collection and present the conclusions to the other students and staff as extra credit.
- Maintain the framework for lifelong learning and continuing education. Provide resources for students and staff and maintain updates to each class and advancements in EMS.

Validation for Program Planning Process

If you have chosen to do the Validation this year, please explain your process and the findings.

1. Who have you identified to validate your findings? (Could include Guided Pathway Success Teams, Advisory Committee Members, related faculty, industry partners or higher education partners)

- Advisory committee members: We recently had our advisory committee meeting. We are on track and the community key players are extremely supportive, providing both students to attend, staff to help teach and equipment to support the training. We continue to have difficulty bringing staff on board because the pay is not comparable to what they make in the field and 50% less than an overtime shift. SBCo Fire is abundantly aware and has provided staff to assist with skills that are provided free of charge. They are committed to supporting a program that will support their needs.
- Related faculty: Staff meeting and collaborative discussions on these topics of cultural competency and diversity training. Law enforcement and firefighting personnel are careers that tend to bring in more men than woman and more white than other ethnicities. At AHC CTE programs held at LVC PSTC this is a steady focus to support our community. With this, we must pull in what our community represents. Within this context, to support all that enter, introduce the programs and encourage students to think of these careers as being in their grasp.
- Another key topic is the EMS 102 needed at the Santa Maria Campus. See below. Planning initiative. Requested by Bill Pucciarelli, EMS 102 instructor and Suz Roehl, EMS Coordinator.
- Guided pathway success team member: Dave DeGroot has been a huge support for years in the development. Having our new tenured faculty sit down with them for feedback would be another benefit to insight in areas to improve on.

2. Are there specific recommendations regarding the core topic responses from the validation team?

See Planning initiative.

New Program Planning Initiative

Based on the narratives for the prompts above, what are some program planning initiatives and resources needed for the upcoming years? ***This section is only used if there are new planning initiatives and resources requested.***

New Program Planning Initiative	
Title:	<i>EMS 102 CERT (Community Emergency Response Team) skill training site for Santa Maria Campus OBJ 1</i>
Planning years:	2024-2025
Description:	
<p>The EMS 102 for more 5 weeks would meet at South Campus to do all the CERT skills that is laid out by FEMA. The lecture precedes the skills for 9 hours then followed with over 12 hrs. of skill training. This includes: Paperwork required (triage, data collection, finance, communication logs, search and rescue, etc.), Search and Rescue training (grid search, cribbing, bucket brigade, radio communication, night operations, etc), medical operations (setting up and running medical triage, injuries identification, management and evaluation) utilizing equipment provided in a CERT trailer and what the student was required to obtain (CERT backpack and first aid supplies), Logistics (documenting, obtaining and distributing equipment to different branches during a disaster). This is an essential part of this 3-unit course for optimal training.</p> <p>Unfortunately, South Campus CERT training area (C-train of equipment, 2 old trailers, fire suppression, field for grid search, old gas line and electrical panels for shut off training. Since this closure the instructor, Bill Pucciarelli, who teaches 3 EMS 102 courses (3 unit UC transfer course) a semester has had to do some training in his classroom, out on a lawn, drive to SM Fire station 1 for fire suppression and cribbing) has put a great strain on the staff as well as the students.</p> <p>I have moved the 4th class to Lompoc where we teach 2 more EMS 102 courses there. The facility is designed for this training, and it would be ideal to run more classes there, however enrollment is significantly less for Lompoc courses as distance and transportation becomes an issue. Both of the 102's held at Lompoc do not fill typically verses classes at Santa Maria Campus. Ideally, I would like to bring one of those classes back to SM. With this loss of training coupled with the room assigned each semester (see planning initiative) the question is do we continue these courses with grossly inadequate and challenging locations to teach and store equipment.</p> <p>We MUST HAVE a CERT training area on campus if the south campus is now not available to us. This would include moving the C-train with our equipment, having 2 outbuildings to do indoor and external search and rescues, a secure area to do grid searches etc. A meeting with those I feel will be able to listen and perhaps come up with a plan to enable these courses to continue. This includes PTF who teach CERT, EMS Coordinator, PSTC dean and director, AHC Law enforcement, administrative personnel and facilities.</p> <p>What college plans are associated with this Objective? (Please select from the list below):</p>	
❖ Facilities Plan	

Program Review Signature Page:


Suz Roehl (Aug 5, 2024 12:42 PDT)

Program Review Lead

Date



Program Dean

Date



Vice President, Academic Affairs

Date

2023-2024 EMS Program Review Yearly Planning Update and Enrollment & Efficiency Topic - Suz Roehl S2024

Final Audit Report

2024-08-05

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