

## COMPREHENSIVE PROGRAM REVIEW

### Mobile Intensive Care Technician (MICT)

2013-2016

**Mission Statement:** Kapi'olani Community College provides students from Hawai'i's diverse communities open access to higher education opportunities in pursuit of academic, career, and lifelong learning goals. The College, guided by shared vision and values, and commitment to engagement, learning, and achievement, offers high quality certificate, associate degree, and transfer programs that prepare students for productive futures.

#### **Part I. Executive Summary of CPR and Response to previous ARPD recommendations**

The department chair monitors the budget account balances for the EMS department. The MICT program has been able to purchase the equipment and supplies as needed. The professional fee account balance are collected each semester and there is a need to monitor the use and balances.

The classroom space on O'ahu has been renovated. The MICT and CME programs share the third renovated classroom. The number of classes offered has increased so that class sizes can be reduced to comfortably accommodate students. The Hilo MICT classroom space was recently also renovated, however, the HCC and KCC Chancellors are process of finding another space for the program. The Hilo office assistant position was filled in August 2013.

National accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) for the MICT program has been obtained as of August 2014.

#### **Part II. Program Description**

##### **History**

Emergency Medical Services education in Hawaii began in 1971 with an EMT-A program. In 1973, the first MICT (Paramedic) program began. The training was funded by federal grants through the U.S. Department of Transportation, and provided by the Hawaii Medical Association. In 1979, the State Comprehensive EMS Act (Act 148) was adopted and provided state funding for the continuation of training. In 1981, a gradual transition of transferring training programs from the Hawaii Medical Association to the University occurred. The programs were incrementally transferred to the University of Hawaii through the State of Hawai'i's Employment Training Office.

In December of 1985, the programs were transferred laterally to Kapi'olani Community College and the Department of Emergency Medical Services was established. Until its arrival at Kapi'olani Community College, the program granted a certificate to those completing EMT and MICT Programs. The Department of Emergency Medical Services Program has four different emphases.

1. Public Safety Education (First Responder and First Responder Refresher
2. Kaua'i, Maui and Hawai'i)
3. Emergency Medical Technician (EMT)
4. Mobile Intensive Care Technician (MICT) or Paramedic
5. Continuing Medical Education of Prehospital Personnel

The Emergency Medical Services Program is designed to be competency-based, and offers a career ladder. A Certificate of Completion for Emergency Medical Technician (EMT) and a Mobile Intensive Care Technician (MICT) Certificate of Achievement and an Associate of Science Degree for MICT are offered. Upon completion of the EMT Certificate Program, students can be employed in the field. After gaining field experience they may continue their education at Kapi'olani Community College and enter the MICT Certificate Program and their Associate of Science Degree in Mobile Intensive Care Technician. All graduates of the MICT program become employed upon graduation.

The Emergency Medical Service Department is overseen by the Department Chairperson. As per the accreditation body, the MICT program has a program director. The program staff includes nine faculty, casual hires, and a large contingent of skills instructors from the affiliated clinical agencies. One primary medical director is employed, halftime, to ensure accuracy of the medical content in the programs. The paramedic field instruction program consists of volunteer paramedics who work for the agencies for which the college serves.

### **Program Goals**

1. To deliver an effective and efficient MICT curriculum that meets both local, state, and national standards
2. To provide graduates with the entry-level skills and knowledge necessary for performing the tasks of a Mobile Intensive Care Technician (MICT).
3. To meet community needs by providing high quality MICT educational programs for all islands as appropriate.
4. To be an integral part of a statewide comprehensive Emergency Medical Services system.
5. To improve relationships with professional and educational agencies, nationally, and internationally.
6. To encourage and support self-directed professional development.
7. To incorporate advanced technology in all aspects of prehospital care.

### **Program Student Learning Outcomes**

1. Apply and possess the knowledge, skills, and critical thinking necessary for an entry-level Paramedic required to ensure scene safety, effectively assess patient(s), make critical decisions, competently treat patient(s), safely extricate and appropriately transport patients in a variety of settings.
2. Effectively communicate, interact and work appropriately with patients, family members, bystanders, fellow emergency workers, EMS partners/colleagues, hospital health care providers, and supervisors.
3. Display proficiency-managing emergencies on scene and identifying coping strategies to manage long-term stress.

4. Demonstrate professional and ethical behavior as an EMS health care provider.
5. Incorporate knowledge of multicultural perspectives to meet the needs of diverse populations.
6. Develop effective treatment plans that ensure consistent high quality patient care, cognizant of EMS' role within a larger continuum of care.

### **MICT Certificate and Degree:**

- Mobile Intensive Care Technician: **Certificate of Achievement in MICT – (44 credits)**
- Mobile Intensive Care Technician **Associate in Science in MICT - (86-89 credits)**

**For Certificate and Degree information see: 2016-2017 College catalogue**

[https://www.kapiolani.hawaii.edu/wp-content/uploads/2013/11/2016-2017-CATALOG\\_PROGRAMS\\_A-Z.pdf](https://www.kapiolani.hawaii.edu/wp-content/uploads/2013/11/2016-2017-CATALOG_PROGRAMS_A-Z.pdf)

**Program Description:** The Certificate of Achievement and Associate in Science degree in Mobile Intensive Care Technician is a 44 and 86-89 credit program respectively offered through Kapi'olani Community College, Department of Emergency Medical Services. It prepares students to function as healthcare providers in the prehospital setting. The first step in the program is to complete the EMT program. Graduates then work as a field EMT and return to enroll in the MICT program. In addition to the EMT and MICT courses, students must complete the following: BIOL 130/130L (or ZOOL 141/141L and ZOOL 142/142L); HLTH 125 - Medical Terminology; ENG 100; MATH 100 or higher level mathematics course; A.S. Humanities course (100 level or higher); FAMR 230.

**Special Admission Requirements for Mobile Intensive Care Technician:** The deadline for applications to the Mobile Intensive Care Technician (MICT) program on O'ahu is October 1 (The Maui and Hilo sites have their own application deadlines). The acceptance review period is November 1 - November 30. Applicants to the MICT program are required to have a current State of Hawaii Emergency Medical Technician (EMT) License and Healthcare Provider card. Additional information is listed in the "special requirements for programs in health career education" section. After acceptance to the college, applicants to the Mobile Intensive Care Technician Program, will be evaluated based on a point system that includes EMT written and skills exam scores, EMT coursework grade, an essay, documentation of 300 ambulance transports as an EMT and an interview. Selection is based on the highest qualifying scores. The total qualifying score for the MICT program is based on the following criteria:

1. EMT knowledge and skill exam scores
2. Prerequisite course grade point average
3. EMT course grade
4. Essay
5. A minimum of 300 documented ambulance transports
6. Interview scores

### **Credentials and Licenses Offered**

Upon completion of the Emergency Medical Technician Program the student meets the criteria

to sit for the Emergency Medical Technician National Registry Examination. Both examinations include cognitive and skills testing. Completion of the KCC EMT program and successful passing the National Registry Examination qualifies the graduate for licensure at the EMT level through the Hawai'i State Department of Commerce and Consumer Affairs.

Graduates from the Mobile Intensive Care Technician Program are qualified to sit for the National Registry of Emergency Medical Technician – Paramedic National Examination. The examination includes both cognitive and skills testing. After passing the examination the graduate can apply for a Paramedic license through the State of Hawaii Department of Commerce and Consumer Affairs.

### **Faculty:**

Jeff Zuckernick, MICT, MBA, Professor, Chair (Oahu)  
Mark Kunimune, MICT, MBA, Associate Professor (Oahu)  
James Gray, MICT, BA, Assistant Professor (Hawaii)  
Stacey Oho, MICT, AS, Instructor (Oahu)  
David Kingdon, MICT, MPH, Instructor (Maui) Craig  
Derienger (Hawaii)  
Edward Cabarello (O'ahu)  
Christopher Kelly (O'ahu)

### **Casual Hires:**

The program hires and utilizes a pool of part-time instructors to assist with lectures and skills instruction.

### **Medical Directors:**

Dale Oda M.D., Medical Director  
Robert Bonham M.D., Associate Medical Director  
Ron Kuroda M.D., Associate Medical Director

### **Part III. Curriculum Revision and Review**

Curriculum review and revisions ongoing through Curriculum Central and the required approval of Department of Health (DOH) by spring 2017.

- MICT 150
- MICT 160
- MICT 200
- MICT 301
- MICT 302
- MICT 350

The following Course Learning Reports have been completed:

- MICT 150 in Spring 2015
- MICT 160 in Fall 2015

- MICT 200 in Spring 2016
- MICT 301 in Spring 2013, with next review in Spring 2017
- MICT 302 in Spring 2013, with next review in Spring 2017
- MICT 350 in Spring 2013, with next review in Spring 2017

#### **Part IV. Survey results**

1. Student satisfaction, including student support services are found in the CoAEMSP accreditation appendix
2. Occupational placement in jobs is at 100%. Graduates are employed with the City and County of Honolulu, American Medical Response, or Hawai'i County Fire Department
3. Employer satisfaction may be found in CoAEMSP accreditation appendix
4. Graduate/Leaver may be found in the ARPD

#### **Part V. Quantitative Indicators for Program Review**

Listing of most recent three years of ARPD data for demand, efficiency and effectiveness

<https://www.hawaii.edu/offices/cc/arpd/instructional.php?action=analysis&year=2014&college=KAP&program=73>

#### **Part VI. Analysis of the Program based on prior three years**

##### **Program Demand**

The program demand indicators show the program to be "healthy" at this time. All data indicates that the program is meeting the community EMS needs at this time. Demand for trained MICT graduates has increased from the last APRD to the current year for the State and County. The State shows an increase from 23 to 24 positions and a drop from 9 to 6 positions in the County Prorated. All candidates that have graduated from the program in 2014 have been hired by state agencies.

##### **Program Efficiency**

The program efficiency indicators show the program to be "cautionary" at this time. The O'ahu faculty that was hired in August 2013 to become the EMS clinical coordinator to handle clinical scheduling and management for the EMT and MICT programs left the position and took the vacant faculty position in Hilo. A new faculty member was hired into one of the two vacant O'ahu positions. This faculty member was placed in charge of overseeing continuing medical education.

O'ahu has two full time faculty dedicated to teach the program, with one of the positions acting as the overall program director for all three program sites. O'ahu has a new MICT cohort every year. Maui has one full time faculty teaching the program. Who teaches continuing education classes and has a MICT cohort every three years. Hilo has two full time faculty members who teach the EMT and MICT program as well as continuing medical education courses. Hilo offers a MICT cohort every 2 years.

Initial national accreditation has been awarded to the program. Accreditation is contingent on addressing program alignment issues across the three program site.

## **Program Effectiveness**

Program effectiveness shows "cautionary" at this time. The MICT program is a 12-13 month program. Hilo had a cohort of six that started in August 2013 and completed in July 2014. O'ahu had a cohort of 15 that started in January 2014 and ran into January 2015 to complete. Maui started a cohort of seven in May 2014. This cohort is currently on internship and is scheduled to complete the program in May 2015.

The start date at each site has been staggered with a new cohort starting in January, May, and August to ensure that all students are able to have an equal opportunity to experience internship on O'ahu.

The number of certificates and degrees awarded has dropped because the O'ahu cohort that graduated in May 2014 was five and the Hilo cohort that graduated in late summer 2014 was three.

## **Perkins Indicators**

The MICT Certificate of Achievement courses are required for licensure and employment in the state of Hawaii. All students who complete the MICT program are eligible for the MICT Certificate of Achievement and are encouraged to obtain upon completion

Completing the MICT AS Degree is not a requirement for licensure and employment in the state of Hawai'i. As such, the Perkin's indicators show that student retention and completion have not been met. Graduates of the MICT program choose not to complete their AS degree until later in their careers as part of job promotion or as a pathway to obtaining a bachelor's degree.

The non-traditional completion rate goal was not met as the enrollment of overall students was down. In 2013, two MICT cohorts were taught statewide (O'ahu five students and Hilo six students). The O'ahu class graduated four out of the five students enrolled. One of the O'ahu students could be deemed as non-traditional. The Hilo class completed in 2014.

## **Part VII. Tactical Action Plan (2013-2016)**

Long term plans for the MICT program are guided by the college's strategic plan. In the intermediate term, plans are guided by the program's three-year comprehensive program review (CPR). The actions indicated in this report provide short-term measures, which will contribute to the goals of the three year comprehensive program review, aligned with the college's strategic plan.

### **The Action Plan for the MICT Program based on the draft 2015-2021 Strategic Plan and accreditation report:**

1. Demonstrate that the MICT program three sites (O'ahu, Maui, and Hilo) are all aligned in key areas -- curriculum, cognitive and psychomotor testing, clinical and internship objectives and evaluation process, operating policies and procedures, program entry and completion requirements, etc. This work is part of the program accreditation report by the Commission on Accreditation for Allied Health Education Programs (CAAHEP) through the Committee on Accreditation of Educational Programs for the Emergency Medical Services Programs (CoEMSP).
2. Continue the review, analyze, and revise the MICT program curriculum by obtaining the required Department of Health approval.

3. Work with the Dean and the Department Chair, to distribute the teaching loads for the MICT program effectively and efficiently at a three sites
4. Assess the mentoring program to oversee MICT student internship rotations and to assist with instruction in skills lab sessions
5. Update equipment through repair or by purchasing new pieces.
6. Assess the entry process to assist in ensuring that students enter the program are prepared to succeed. This includes assessing the need to develop a preparatory class for candidates prior to entering the MICT program

### **Part VIII. Resource and Budget Implications**

The most important factor in attaining the goals set forth will be in effectively utilizing the 8.5-teaching faculty in the department. The Department Chair and MICT program director work will work collaboratively to address the need to have all faculty members teaching across the program courses in EMT, MICT and CME.

The City and County of Honolulu EMS provides the majority of the ride space for students on clinical and internship rotations for all three MICT program sites. Maui and Hawai'i Island students come to O'ahu for two 5 week rotations. O'ahu's students do all 4 of their required rotations with the City. Up until this point, all sites and the agencies they serve, have agreed on staggering start times so there is not an overload of students on internship using City and County units and field instructors at the same time. Because of scheduling issues, the neighbor islands desire to start at the same time as the O'ahu cohorts. All three agencies and the lead faculty members from each site, along with the chair and program director, need to meet to rethink the strategies to best utilize the City as a resource for internship.

The program course redesign may need change clinical rotations. A design proposal is to have groups of students to visit hospital units (i.e. Cardiac, Surgical, and Medical Intensive Care Units) with an instructor and/or doctor to review actual patient cases, relevant to the content currently being taught in the classroom. In order to accomplish this teaching venue, relationships with both the hospital units and physicians need to be established. Utilizing our medical directors and the relationships they have with their hospital colleagues will be essential in setting this type of clinical rotation up.

Training for our field instructors is essential; however resources to provide training sessions are limited, especially for part-time instructors. Solicitations to organizations have been initiated to begin to build a fund to cover training costs.

Professional development for full time faculty is also essential. The EMS field is dynamic and changes often. Hawai'i is isolated and attending trainings on the continent is a key in networking at a national level and keeping abreast of the latest trends. Accreditation also requires faculty to regularly attend professional development.

To address equipment needs and skill instructors, the faculty will pursue Perkins Grant proposals and other external and internal funding sources.