

Paramedic Education Program Assessment Report 2019-2020

Introduction

The Paramedic Education Program was established in 1977 at Oregon Health & Science University (OHSU) and became a collaborative program with Oregon Institute of Technology in 2001. The program offers an Associate of Applied Science degree in Paramedicine and is nationally accredited by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP), a specialized accrediting body recognized by the Council for Higher Education Accreditation and/or the Secretary of the U.S. Department of Education. The program is administratively located at the Oregon Tech Portland-Metro campus in Wilsonville and divides classroom time between facilities at OHSU and Oregon Tech.

Program Educational Purpose, Objectives, and Student Learning Outcomes

OHSU-OIT Paramedic Education Program Purpose:

The purpose of the Oregon Health & Science University/ Oregon Institute of Technology Paramedic Education Program is to educate pre-hospital care providers, to prepare EMS leaders of the future, and to enhance the safety and quality of the delivery of health care in the out-of-hospital setting.

Educational Objectives

The educational objectives of the program are to prepare students to:

1. Comprehend, apply, and evaluate information relative to the role of an entry-level Paramedic.
2. Demonstrate technical proficiency in all the skills necessary to fulfill the role of an entry-level Paramedic.
3. Demonstrate personal behaviors consistent with professional and employer expectations of an entry level Paramedic.

Learning Outcomes

The following learning outcomes will be evaluated and analyzed every year to allow for longitudinal data analysis of the program's effectiveness. Graduates of the program will demonstrate:

1. **An ability to understand, interpret and apply EMS and general medical knowledge necessary to function in a healthcare setting.**
2. **An ability to perform a broad range of paramedic level EMS skills both difficult and routine.**
3. **An ability to conduct oneself in an ethical and professional manner and show proficiency in interpersonal relations and communication.**

2019-20 Assessment Activities

The program faculty conducted formal assessment of three student learning outcomes during the 2019-2020 academic year (Student Cohort: Class 46-20).

Student Learning Outcome #1: An ability to understand, interpret and apply EMS and general medical knowledge necessary to function in a healthcare setting.

We will use two measures of this outcome:

1. **NREMT Written Paramedic Exam** is the comprehensive written exam administered by the National Registry of EMT's that prospective paramedic candidates must take after graduating from their paramedic program before they are granted a license to practice within an individual state. Our target is to have 80% of the students pass with one attempt and for 90% to pass within 3 attempts.

Table 1: NREMT Written Paramedic Exam

	Percent of students passing with one attempt	Percent of students passing with two attempts	Percent of students passing with more than two attempts
Class 46	91% (20 students)	9% (2 students)	0%

2. **The CoAEMSP Graduate Summary Report** is the annual survey of the past year's graduates that we do as part of our accreditation. The survey queries the students as to how well our program prepares them to function in a healthcare/EMS environment. The survey is divided into three broad categories: Cognitive, Psychomotor and Affective, which match the three Learning Outcomes listed in this Assessment Report. Our target for Learning Outcome #1 is that 90% of the survey respondents check Successful/Competent.

Results: Graduates of the 2018 cohort were surveyed in the fall of 2019 giving them 6-12 months of field employment experience. They rated a series of questions for each of the three learning domains on a scale of Unsuccessful, Marginal or Successful/Competent. The summary of their responses for learning outcome #1 include:

Cognitive Results = 86% of responses indicating Successful/Competent

Summary of Assessment Results for Learning Outcome #1

After discussion, the faculty concluded

1. Assessment quality:

- We have three independent and temporally distinct measures to address this single learning outcome.
- Students are exceeding or meeting all three measures for the learning outcome,
- Our problem with the value of all of these assessments is the small sample size. This is particularly problematic with the CoAEMSP reports as we are dependent on the response of employers and graduates. Despite our diligent attempts, the number of respondents for these two reports remains low. Additionally because our class size is usually < 35 students, Measures #1 represent a small sample size as well.
- In 2022 (, we plan to evaluate the results of 2017-2022 together in order to get a more complete assessment across that five-year period of our program.

Student Learning Outcome #2: An ability to perform a broad range of paramedic level EMS skills both difficult and routine.

We will use three measures of this outcome:

1. The **Final Skills Exam** is the comprehensive skills exam that every student must pass in order to graduate from our program. Our target is to have 80% of the students pass with one attempt and for 100% to pass all sections with 1-2 attempts.

Table 3: Final Skills Exam 46-20

Exam Section	Number of students passing with one attempt	Number of students passing with two attempts	Number of students passing with more than two attempts
Ventilation - Adult	24	0	0
Ventilation – Pediatric	23	1	0
IV Therapy	20	3	1
IO Infusion	24	0	0
Static Cardiology	19	4	1
Dynamic Cardiology	22	1	1
Trauma Assessment	24	0	0
Medical Assessment	23	1	0
BLS C-spine skill	24	0	0

2. The **NREMT Psychomotor exam** is the comprehensive exam administered by the National Registry of EMT's that prospective paramedic candidates can take after completing the didactic portion of the paramedic program and is required to obtain a license to practice within the state of Oregon. Our target is to have 80% of the students pass with one attempt and for 90% to pass within 3 attempts.

Table 1: NREMT Psychomotor Exam

	Percent of students passing with one attempt	Percent of students passing with two attempts	Percent of students passing with more than two attempts
Class 45	100%	0%	0%

3. **The CoAEMSP Graduate Summary Report** is the annual survey of the past year's graduates that we do as part of our accreditation. The survey queries the students as to how well our program prepares them to function in a healthcare/EMS environment. The survey is divided into three broad categories: Cognitive, Psychomotor and Affective, which match the three Learning Outcomes listed in this Assessment Report. Our target for Learning Outcome #2 is that 90% of the survey respondents check either 4 or 5 in response to each Psychomotor question.

Results: Graduates of the 2018 cohort were surveyed in the fall of 2019 giving them 6-12 months of field employment experience. They rated a series of questions for each of the three learning domains on a scale of Unsuccessful, Marginal or Successful/Competent. The summary of their responses for learning outcome #2 include:

Psychomotor Results = 83% of responses indicating Successful/Competent.

Summary of Assessment Results for Learning Outcome #2

After discussion the faculty of concluded the following:

- Students are exceeding or meeting all three of the three measures for the learning outcome,
- Our problem with the value of all of these assessments is the small sample size. This is particularly problematic with the CoAEMSP reports as we are dependent on the response of employers and graduates. Despite our diligent attempts, the number of respondents for these two reports remains low. Additionally because our class size is usually < 35 students, Measures #1 represent a small sample size as well.
- In Fall of 2022, we plan to evaluate the results of 2017-2022 together in order to get a more complete assessment across that five-year period of our program.

Student Learning Outcome #3: An ability to conduct oneself in a professional manner and show proficiency in interpersonal relations and communication.

We will use three measures of this outcome:

1. **Externship Final Benchmark Assessment: Professionalism** is the final evaluation filled out by a faculty member on each student as they complete their externship. The evaluation is based both on the preceptor evaluations and on the student’s required paperwork that has been submitted to the faculty member over the course of the externship. One of the categories within the Assessment is Professionalism. The maximum number of points assigned in this category is 5. Our target is for 90% of the students to receive 5 points and for 95% of the students to receive 4 or 5.

Table 5: Externship Final Benchmark Assessment

	Percentage of students with 5 points	Percentage of students with 4 or 5 points	Percentage of students with < 4 points
Professionalism: The student is consistently on time, prepared and demonstrates professional behavior.	100% (21)		

The CoAEMSP Graduate Summary Report is the annual survey of the past year’s graduates that we do as part of our accreditation. The survey queries the students as to how well our program prepares them to function in a healthcare/EMS environment. The survey is divided into three broad categories: Cognitive, Psychomotor and Affective, which match the three Learning Outcomes listed in this Assessment Report. Our target for Learning Outcome #3 is that 90% of the survey respondents check either 4 or 5 in response to each Affective question. The CoAEMSP Graduate Summary Report is included here as Appendix 1.

Results: Graduates of the 2018 cohort were surveyed in the fall of 2019 giving them 6-12 months of field employment experience. They rated a series of questions for each of the three learning domains on a scale of Unsuccessful, Marginal or Successful/Competent. The summary of their responses for learning outcome #1 include:

Affective Results = 83% of responses indicating Successful/Competent

Summary of Assessment Results for Learning Outcome #3

After discussion the faculty of concluded the following: Generally our students do well in this outcome, yet we are not completely satisfied that we have discovered the optimum means of testing professionalism. This outcome has always been the most difficult for us to evaluate, so it is not surprising that we have had many, long discussions, but few conclusions. We will continue to work on this.