

# Advanced Practice Paramedic Program Catalog



The Resuscitation Group  
7815 NE Hwy 99  
Vancouver, WA 98665  
+1-855-739-2257  
<http://resuscitationgroup.com/>

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# **Admission Requirements**

All documentation must be submitted to the office staff at the time of admissions and final payment.

## Pre-requisites:

1. 21 years or older by start date of program.
2. High School diploma or GED
3. Copy of Driver's License or Copy of Current Passport Photo Page.
4. Must be a Paramedic (or equivalent license from outside USA) or Registered Nurse (or equivalent license from outside USA).
5. Must have the following current certifications:
  - a. American Heart Association Basic Life Support (BLS)
  - b. American Heart Association Advanced Cardiac Life Support Experienced Provider (ACLS EP)
  - c. American Heart Association Pediatric Advanced Life Support (PALS)

## Insurance Requirements:

1. Students must have their own professional liability coverage in the amount of \$1,000,000 per incident minimum coverage, or purchase professional liability insurance from Healthcare Providers Service Organization (HPSO) (<http://www.hpso.com/individuals/professional-liability-insurance>) for the length of the program.
2. Students participating in clinical placements at international sites must show proof of comprehensive travel insurance for the country they will be in during the placement. An example of appropriate insurance can be found at Travelex Insurance Services ([https://www.travelexinsurance.com/quote/?utm\\_source=affiliate&utm\\_medium=referral&utm\\_campaign=standard-terms](https://www.travelexinsurance.com/quote/?utm_source=affiliate&utm_medium=referral&utm_campaign=standard-terms))

## Immunizations Required:

1. MMR immunization at least twice during lifetime, or within the last ten years;
2. Hepatitis B immunization
3. Negative Tuberculosis test or chest x-ray within the past six months.
4. Updated influenza vaccine shot
5. Tetanus/Diphtheria
6. Polio
7. COVID-19

## Immunizations Recommended for Overseas Placement:

1. Typhoid
2. Malaria Prophylaxis

# **INTRODUCTION**

## **OVERVIEW OF ADVANCED PRACTICE PARAMEDIC PROGRAM**

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The Advanced Practice Paramedic is physician extender, capable of extensive, advanced patient care interventions in critical and emergent patients. This individual possesses the complex knowledge and advanced interventional skills necessary to provide physician extension to the patient's side, allowing their physician medical program director (MPD) the ability to have physician level care extended to the scene of any emergency, through the hand, eyes, and ears of the APP. Advanced Practice Paramedics are the pinnacle of a comprehensive EMS response, under medical oversight. Advanced Practice Paramedics perform interventions and patient care management with the advanced and diagnostic equipment typically found in an advanced response vehicle, on an advanced practice ALS ambulance, or in an emergency department. The Advanced Practice Paramedic is a tertiary link from the scene into the tertiary health care system, serving as advanced responders, critical care transport providers, aeromedical providers, and in atypical care provision.

Students are provided with a challenging comprehensive education with didactic, laboratory, simulation, and clinical placement components.

## **OUR VISION**

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The Resuscitation Group seeks to showcase the exceptional healthcare system in Washington State, improve healthcare systems in the region, increase the effectiveness of the healthcare system, enhance the education of healthcare practitioners, and provide a model for other regions and countries.

## **OUR PHILOSOPHY**

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The Resuscitation Group (TRG) is committed to a philosophy of educational excellence and attention to detail both in our programs and in our students. We accept responsibility for preparing students who are knowledgeable in the field, responsive to service in the community and dedicated to continued expansion of human understanding through study.

To this end, we hold to the following philosophy:

- To promote high ethical codes of conduct and professional standards and foster participation in professional organizations and activities.
- To prepare students to assume responsibility for management of critical care patients in a wide range of environments, utilizing the principles of critical care medicine.
- Academically educating students for successful completion of international, national, and state certification examinations.
- Assuring student competencies in critical care medicine prior to allowing patient contact and then assuring high standards of compliance with competencies during patient care.

## **GOALS AND PROGRAM OBJECTIVES**

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TRG holds that learning is a lifelong process through which an individual modifies his/her behavior in order to accommodate changing healthcare needs. We also believe that learning is facilitated when student participation is actively encouraged, instructional and educational goals are well defined and communicated, and student goals and objectives are clear and supported by the faculty.

It is understood that, ultimately, the full responsibility for learning rests with the student and his/her commitment to the learning process.

The Advanced Practice Paramedic Program is designed for providers involved in the care, transport, remote site, resuscitation programs, emergency department staffing, or site-specific care of critically ill patients. Upon completion of the program, the participant will also be prepared for the safe and efficacious transport of the critically ill or injured patient by air or ground.

The program objectives are unique to the needs of this program, but incorporate the Global Emergency Medical Registry (GEMR) standard objectives (<https://www.gemr.org/app/>), while blending in the objectives required for the unique environment and challenges of the Pacific Northwest and Pacific Rim environments, with additional objectives incorporated to meet the highest level of clinical expectation under the current United States CMMS Specialty Transport guidelines and CAPCE Accreditation.

Specific Program Objectives can be found in the program curriculum (Appendix 1).

## **CONTACT TELEPHONE NUMBERS**

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Rod Rowen	Director of School Operations	+1-855-739-2257
Michael Christie	APP Program Director	+1-855-739-2257
Dr. Luke Parr	Medical Director	+1-855-739-2257
Program Accreditation Consultant		+1-855-739-2257

## **PROGRAM STAFF & DUTIES**

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Rod Rowen - Director of School Operations:

The DOSO manages the day to day operations of the entire school environment, as well as assures compliance with equipment, support services, and legal documents.

Michael Christie - APP Program Director

The AAPPD will review and approve the educational content of the program curriculum to certify its ongoing appropriateness and medical accuracy against current regional, national, and international guidelines. The AAPPD will review and approve the quality of medical instruction, supervision, and evaluation of the students in all area of the program. The AAPPD will assure and attest to the competence of each graduate in the cognitive, psychomotor, and affective domains.

Dr. Like Parr MD - Medical Director

The Medical Director is responsible for all adherence to medical science in the curriculum, supervision of the APP Program, issuance of medical privileges, and final approval of all patient contact protocols and treatment processes.

Program Accreditation Consultant

The Program Accreditation Consultant is responsible for operating The Resuscitation Group accreditation process with CAPCE and GEMR.

## **FACULTY**

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The TRG faculty is comprised of a numerous healthcare practitioners at a variety of levels from Critical Care Paramedic to Physician.

The Resuscitation Group practices non-discriminatory faculty recruitment with regard to disability, race, color, creed, gender, sexual preference, affectional preference, veteran status, and national origin; but The Resuscitation Group does seek the highest qualified educational staff in the United States and abroad.

## **ACCREDITATION**

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There is no accreditation process for the educational component of Advanced Practice Paramedic at the non-physician level in the United States; the process in the United States as revolved around outcome testing through third party boards or registry.

## **FACILITIES**

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We are located in Southwest Washington in the Portland Metro area at 7815 NE Hwy 99 Vancouver, WA 98665. Business hours are from 9:00am until 5:00pm Monday through Friday and we can be reached at 855-739-2257 or by email at [info@resuscitationgroup.com](mailto:info@resuscitationgroup.com)

## **STUDENT/TEACHER RATIO**

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While no standard exists for this type of educational process, The Resuscitation Group intends to hold to the international standard of not more than 24:1 ratio during didactic sessions, a student/teacher ratio of not greater than 10:1 in the laboratory setting, and a ratio not to exceed 8:1 in the clinical setting under an assigned educator.

## **ACADEMIC CALENDAR AND HOURS OF OPERATION**

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The Resuscitation Group will observe the following holidays and classes will not be held on the following United States Holidays:

- New Year's Day
- Martin Luther King Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Eve
- Christmas Day

Enrollment is ongoing throughout the year.

## **TUITION, FEES AND DEPOSITS**

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Tuitions, fees, and deposits are paid to The Resuscitation Group.

1. Tuition and Fees for domestic or international ***students who will be completing their clinical experience in the United States or Canada (must obtain or have current required License and have an approved site):***

Application Fee:	\$100
Tuition:	\$2000
Lab Fee:	\$2000
Clinical Placement Fee (USA):	\$1000
<b>Total Charges:</b>	<b>\$5,100 usd</b>

2. Tuition and Fees for domestic or international ***students who will be completing their clinical experience at an International site:***

Application Fee:	\$100
Tuition:	\$2000
Lab Fee:	\$2000
Clinical Placement Fee (International):	\$1000
<b>Total Charges:</b>	<b>\$5,100 usd</b>

### *Notation as to International Clinical Sites:*

Students are required to provide their own airfare, accommodations, and meals during travel and stay at international sites. The Resuscitation Group will advise students on cost estimates, specific costs, recommended accommodations, and meals for specific locations.



## **REFUND POLICY**

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All refunds will be made within thirty (30) calendar days from the time of cancellation from the program; provided cancellation was made at least 30 days prior to program start date.

The official date of termination or withdrawal for a student shall be determined in the following manner:

1. The date on which the school recorded the student's last day of attendance; or,
2. The date on which the student is terminated for a violation of a published school policy which provides for termination.

No student shall be continued on an inactive status in violation of school policy without written consent of the student. Inactive students must be terminated within thirty days of the next available start date and refunded appropriate prepaid tuition and fees at that time.

Refunds must be calculated using the official date of termination or withdrawal and the date designated on the current enrollment agreement executed with the student. Refunds must be paid within thirty calendar days of the student's official date of withdrawal or termination.

Application/registration fees may be collected in advance of a student signing an enrollment agreement; however, all monies paid by the student shall be refunded if the student does not sign an enrollment agreement and does not commence participation in the program.

The school must refund all money paid if the applicant is not accepted; this includes instances where a starting class is canceled by the school.

The school must refund all money paid if the applicant cancels within five business days (excluding Sundays and holidays) after the day the contract is signed or an initial payment is made, as long as the applicant has not begun training; the applicant may request cancellation in any manner, in the event of a dispute over timely notice. The burden of proof rests on the applicant.

The school may retain an established registration fee equal to ten percent of the total tuition cost, or one hundred dollars, whichever is less, if the applicant cancels after the fifth business day after signing the contract or making an initial payment. A "registration fee" is any fee charged by a school to process student applications and establish a student records system.

If training is terminated after the student enters classes, the school may retain the registration fee established under (c) of this subsection, plus a percentage of the total tuition as described in the following table:

<b>If the student completes this amount of training:</b>	<b>The school may keep this % of the tuition cost:</b>
One week or up to 10%, whichever is less	10%

<b>If the student completes this amount of training:</b>	<b>The school may keep this % of the tuition cost:</b>
More than one week or 10% whichever is less but less than 25%	25%
25% through 50%	50%
More than 50%	100%

Should The Resuscitation Group (TRG) cancel the program after a student has paid the full tuition, TRG will refund all monies paid by the student, including the application fee.

## **COURSES AND PROGRAMS OFFERED AT TRG**

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- Advanced Cardiac Life Support (ACLS)
- Advanced Cardiac Life Support – Experienced Provider (ACLS EP)
- Pediatric Advanced Life Support (PALS)
- Cardiopulmonary Resuscitation (CPR)
- AHA Blended learning programs (All disciplines)
- Trauma Life Support courses
- 12 Lead ECG and Capnography workshops
- Advanced Airway management workshops
- Advanced scope of practice, transport, wilderness, and SAR medicine courses
- Emergency Medical Responder (EMR) – NRAPP and Washington State
- Emergency Medical Technician (APP) Program – NRAPP and Washington State
- Advanced Practice Paramedic Programs
  - Advanced Practice Paramedic (APP)
  - Critical Care Provider (CCP)
  - Flight Paramedic and Flight Nurse
- Ultrasound Program
  - Basic Ultrasound
  - Emergency Ultrasound
  - Ultrasonography
- Tactical Medicine Program
- Search and Rescue (SAR) Medicine Program
- Disaster Medicine Program
- Crew Resource Management (CRM)
- Immersive simulation for healthcare staff drills
- Safety and disaster response drills
- Managing large scale events
- All terrain discipline rescue programs

# **POLICIES & PROCEDURES**

## **ATTENDANCE**

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The education program is a rigorous program of study where any absences are detrimental to a student's chances of passing all required phases. Attendance is required for all classes. Excused absences will be granted for emergency situations only. Students are required to attest to attendance for each day of class. Absences, tardiness and/or early exits, and operational policies are as follows:

### **Absences:**

A student will be allowed only three (3) absences with notification. Absences above this limit may result in expulsion from the program with any reimbursement provided in accordance with TRG scheduled refund policy.

An absence with prior notification means that the student has contacted the TRG staff more than one hour prior to the scheduled start of class.

After one (1) absence without prior notification or two (2) absences with notification, the student shall meet with the Program Director to create a remediation plan and the student will be placed on probation. In addition, if a student is absent for three (3) or more consecutive days, he or she will be expelled from the program with no reimbursement for tuition already paid.

During the clinical phase of a program, absence without prior notification to the educator or preceptor in charge is not acceptable and is cause for dismissal from the program.

### **Tardiness and Early Exits:**

A student will be allowed only three (3) unexcused tardy or early exits. A tardy is defined as arriving to class more than 5 minutes after the scheduled start time. An early exit is defined as leaving class more than 30 minutes prior to the end of scheduled class time. Tardy arrivals or early exits above this limit will be cause for expulsion from the program with any reimbursement provided in accordance with TRG scheduled refund policy.

During the clinical phase of a program, tardiness without prior notification to the educator or preceptor in charge is not acceptable and is cause for dismissal from the program.

### **Make-up Work:**

Students who miss assignments, exams, or any other work due to absences, tardiness, or early exits must make-up any missed assignments. Missed exams must be taken before the next day class can be attended.

During the clinical phase of a program, make up sessions or shifts are at the discretion of the educator or preceptor in charge.

**Inclement Weather:**

During inclement weather, TRG will hold class according to the Vancouver School District weather condition policy. Students should use added discretion when traveling from more rural areas. If class is in session, and the student deems it unsafe to travel to class, the Program Director should be contacted immediately.

**Cell Phones and Pagers:**

All cell phones, pagers, or other such electronic communication devices will be turned to vibrate during class and will not be utilized except for emergency or clinical contact during class.

**Dress Code:**

During didactic and laboratory sessions, students may wear any form of clothing they feel is appropriate, keeping in mind that The Resuscitation Group does not, under any circumstances, take responsibility for clothing which becomes soiled, stained, torn, or ruined during didactic or laboratory sessions.

During clinical placements, students will conform to the clothing or uniform requirements for the location their clinical placement is taking place. Please be aware that at some international sites, the dress code for providers is business formal.

**Clinical Phase Behavior**

In this phase of training, the student will be spending a minimum of 150 hours in clinical rotation with a healthcare agency or hospital. All students are expected to follow the instructions of his or her educator/preceptor exactly and present a professional attitude/presence at all times.

**CONFIDENTIALITY OF STUDENT RECORDS (FERPA)**

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Student records are released only for legitimate educational reasons or pursuant to a student's express written consent. Students may provide written consent to the TRG staff by filling out and submitting the **Consent to Release Student Information** form.

A copy of this document is available at the back of this handbook, the form may not be sent electronically.

TRG adheres to the guidelines set forth in the federal Family Educational Rights and Privacy Act (FERPA).

**Family Educational Rights and Privacy Act (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S Department of Education.

For additional information or technical assistance, you may call (202) 260-3887 (voice). Individuals who use TDD may call the Federal Information Relay Service at 1-800-877-8339.

Or you may contact the following address:

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington D.C. 20202-5920

## **STUDENT EVALUATIONS**

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Students will be evaluated relative to the cognitive, psychomotor, and affective educational domains. Evaluation of students shall be conducted on a recurring basis and with sufficient frequency to provide both the student and program faculty with valid and timely indicators of the student's progress toward and achievement of entry level competencies stated in the curriculum.

## **STUDENT CONDUCT**

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### **Representation of the TRG Education Program:**

Through their professional conduct, students represent TRG. The quality of medical care, abilities to explain and/or justify the care provided and even personal appearance all reflects the educational and professional philosophies of TRG.

We have an excellent reputation in the healthcare community because our faculty and students take pride in the TRG Education Program. Students should not make statements on behalf of TRG, or represent TRG in administrative, financial, educational, or policy matters without the express written authorization of TRG staff.

### **Honor Code:**

Students are responsible for conducting themselves in a manner that is above reproach at all times. The TRG staff maintains that above all, ethical conduct, especially honesty, is one of the most important attributes of a competent healthcare professional. Having adopted the high ethical standard of the healthcare profession, the student is charged with the responsibility for the behavior of his or her colleagues as well as his/her own.

Violations of this honor code can be cause for dismissal from the program. Students with knowledge of an infraction of this honor code are obligated to provide this information to the TRG staff immediately. If a student fails to notify TRG staff immediately, the student could face disciplinary action up to and including expulsion.

**Prohibited Conduct:**

The following is a list of prohibited conduct. This list is not meant to be exhaustive, nor should it be inferred that items not expressly listed are acceptable. Students are required to abide by all rules, policies, and procedures dictated by TRG staff, whether indicated herein or communicated at a later date.

- Submitting material in assignments, examinations, or other academic work which is based upon sources prohibited by the instructor or the furnishing of materials to another person for the purposes of aiding another person to cheat
- Submitting material in assignments, examinations, and other academic work which is not the work of the student in question
- Knowingly producing false evidence or false statements, making charges in bad faith against any other person, or making false statements about one's own behavior related to educational or professional matters
- Falsification or misuse of TRG records, permits, or documents.
- Exhibiting behavior which is disruptive to the learning process or to the academic or community environment.
- Conviction of a crime, either:
  - Before becoming a student under circumstances bearing on the suitability of a student to practice a health or related profession, or
  - While a student at the program.
- Disregard for the ethical standards appropriate to the practice of a health or related profession while a student
- Attending any TRG Program while under the influence of alcohol, drugs, or medication that may impair one's ability to perform required functions is prohibited. It is inappropriate to be under the influence or have consumed within the last eight (8) hours any substance that would alter your state of mind, or jeopardize patient care (e.g. alcohol, drugs, or medications). Students should be aware that tolerances may vary and the eight (8) hour minimum may not be sufficient time for some individuals.
- If a student is suspected of being under the influence of alcohol, drugs, or impairing medication, he/she will be dismissed immediately from class, lab, or clinical placement. In such an instance, the student will fall under the procedures outlined in the Academic Discipline/Dismissal Procedure.
- Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other institutional activities including the TRG public service functions or other authorized activities on institutionally owned or controlled property.
- Obstruction, disruption, and/or interfering with freedom of movement, either pedestrian or vehicular, on TRG owned or controlled property.
- Possession or use of firearms, explosives, dangerous chemicals, or other dangerous weapons or instruments on institutionally owned, TRG controlled property, or Clinical placement, unless the student is law enforcement officer or active-duty military personnel on specific assignment requiring armed capability.
- Detention or physical abuse of any person or conduct intended to threaten imminent bodily harm or endanger the health of any person on any TRG owned, TRG controlled property, or Clinical site.

- Malicious damage, misuse, or theft of TRG property, or the property of any other person where such property is located on TRG owned or controlled property or regardless of location, is in the care, custody, or control of TRG or a clinical site.
- Refusal by any person while on TRG owned or controlled property (or clinical site) to comply with TRG staff orders or an appropriate authorized official to leave such premises because of conduct proscribed by this rule when such conduct constitutes a danger to personal safety, property, or educational or other appropriate institutional activities on such premises.
- Unauthorized entry to or use of TRG facilities, including buildings and grounds.
- Use of TRG or clinical site computers for any activities involving (a) buying or selling of items not required for program use, (b) downloading programs off the Internet, including music or video files, (c) accessing Internet sites containing pornography or gambling.
- Inciting others to engage in any of the conduct or to perform any of the acts prohibited herein. Inciting means that advocacy of proscribed conduct which calls upon a person or persons addressed for imminent action, and is coupled with a reasonable apprehension of imminent danger to the functions and purposes of the TRG including the safety of persons and the protection of its property.

**Knowledge of Misconduct:**

Any person who witnesses or has firsthand knowledge of misconduct as described in the section above is obligated to send a written report of the infraction to TRG Staff. Failure to do so may result in disciplinary action up to and including dismissal from the program.

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## **DRUG AND ALCOHOL AWARENESS**

TRG recognizes the obligation of the administration, faculty, staff, and students to support and maintain a community atmosphere that emphasizes the development of healthy lifestyles and the making of responsible, informed decisions concerning drug and alcohol use. Efforts to provide this atmosphere will include: education through curriculum infusion, intervention, treatment referral, and especially the support of healthy lifestyle alternatives.

The goal of these efforts is to provide factual information about use and abuse and to increase awareness of indicators of harmful involvement; to educate students, faculty, and staff concerning options for dealing with excessive consumption by self and/or others; and to educate concerning possible interventions to prevent further abuse.

Whenever a person is concerned about another's abuse of chemicals. The concerned individual is encouraged to speak privately with the abuser. Students needing assistance should consult with TRG staff for counseling and/or referral.

## **DISCIPLINE PROCEDURE**

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### **Academic Discipline/Dismissal Procedure:**

Any student for whom a recommendation for discipline/dismissal is considered will have received ample notification of unsatisfactory work. The student will be notified in writing, either by email, personal delivery or posted letter, of the following:

1. Factors the TRG Program intends to consider in the discipline/dismissal proceedings.
2. The time and place for a meeting with members of the program staff.

From the time of written notification to the time in which the proceeding is held and a final decision rendered, the student loses all attendance privileges. This time period will not exceed three (3) business days.

A meeting will be convened, attended by members of the program staff and the student. During this meeting, the following will be reviewed:

- Policies and Procedures relevant to the disciplinary proceeding.
- Student's signed statement, agreeing to be bound by the TRG Education Program policies.
- TRG Education Program documentation regarding student's deficient performance.
- Student rebuttal.

Within five (5) business days of this meeting TRG Staff shall provide the student with a written decision. The student has the right to appeal the instructor's decision based on the Appeal Process outlined below.

## **APPEAL PROCESS**

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A student who has been dismissed from TRG program or disciplined in any way that the student feels is unfair may appeal the decision of the staff.

- **Step 1:**  
Within five (5) working days of receiving the Instructor's decision, the student shall provide to the Director staff (or his or her designee) a written request for an appeals hearing. The request should outline the alleged behavior that led to discipline and why the student does not believe this is a fair outcome.
- **Step 2:**  
Within five (5) working days of receiving the request for an appeals hearing, the Director staff (or his or her designee) shall meet with the student. During this meeting the student will present his or her case as to why he or she believes the discipline to be unfair.
- **Step 3:**  
Within five (5) working days of this meeting, the Director staff (or his or her designee) shall provide a written response to the student regarding this matter. The decision of the Director staff (or his or her designee) is final and may not be appealed.



## **DISCRIMINATION AND HARASSMENT**

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In addition to the prohibited behaviors listed above, TRG prohibits any type of discrimination or harassment against any person based on the following:

- Race
- National Origin
- Sex
- Age
- Creed
- Presence of physical, sensory, or mental disability
- Religion
- Color
- Disabled veteran status
- Sexual Orientation
- Affectional Preference
- U.S. Military Veteran status
- Marital Status

The responsibility for, and the protection of this commitment extends to students, faculty, administration, staff, contractors, and those who develop or participate in TRG programs. It encompasses every aspect of employment and every student and community.

Trainees are seeking to assume a vital position of trust in the community and taking on the responsibility of serving everyone in need of their services, regardless of gender, race, age, national origin, sexual orientation, economic or educational background, religion, or any other factor. This is the responsibility that goes with having access to people's private homes and lives in times of their great stress. It is your obligation to treat every patient and their families with equal respect. Everyone in the community must be approached and served with equal respect, care, and professionalism.

Persons who believe they have been discriminated against or harassed by TRG or its employee(s) or agent(s) on the basis of any status listed above, may request informal assistance and/or lodge a formal complaint.

## COMPLAINT PROCESS

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The process for filing a complaint for alleged discrimination or harassment is as follows:

- **Step 1:**  
The student shall provide TRG with a written summary of the alleged behavior which led to the complaint. If the complaint involves the Instructor, the student shall provide the complaint to the Director staff.
- **Step 2:**  
Having received the complaint, TRG shall review the facts with the Director staff and determine the appropriate course of action. Many situations can be resolved by the Instructor mediating a meeting between the complainant and the alleged offender. If that is not a viable option, or if it is not successful in resolving the matter, TRG shall initiate an investigation.
- **Step 3:**  
The investigation shall include interviews with the complainant and the alleged offender(s). This investigation may be conducted by TRG staff or outside investigators. This investigation will be completed within 45 days of the original complaint. Once the investigation is complete, the Instructor shall provide the complainant with a written summary of the findings and the action to be taken by TRG
  - No one shall be singled out, penalized, or retaliated against in any way by a member of the TRG agency for initiating or participating in the complaint process. Retaliation may be grounds for disciplinary action.

If desired, inquiries or appeals beyond TRG level may be directed to:

**Equal Employment Opportunity Commission**

909 First Avenue, Suite 400  
Seattle, WA 98104  
(206) 220-6883

**Washington State Human Rights Commission**

711 South Capitol Way, Suite 402  
PO BOX 42490  
Olympia, WA 98504  
(360) 753-6770

**Workforce Training and Education Coordinating Board**

128 10<sup>th</sup> Avenue, SW  
PO BOX 43105  
Olympia, WA 98504-3105  
(360) 753-5673

## **BLOODBORNE/AIRBORNE PRECAUTIONS**

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In the laboratory and clinical settings students are at risk for exposure to blood borne pathogens and infectious diseases. All bodily substances should be considered potentially infectious. Personal protective equipment (PPE) is readily available in the laboratory, clinical, and field internship settings and should be used at any time where there is a possibility of exposure to blood borne pathogens.

The minimum recommended PPE includes:

- **Gloves:** Disposable gloves should be worn BEFORE initiating patient care when there is any risk of exposure to bodily substances.
- **Masks and Protective Eyewear:** Masks and protective eyewear should be worn when there is any risk of blood or other bodily fluids splashing or spattering.
- **Gowns:** Gowns should be worn when there is any risk of blood or other bodily fluids splashing or spattering.
- **Hand Washing:** Hand washing is mandatory before and after any patient contact. All students must wash their hands after eating or using the restroom facilities.
- Any student who is exposed to a patient's bodily fluids should immediately decontaminate themselves and report the incident to their instructor or preceptor. Failure to adhere to precautions will result in disciplinary action.

## **PATIENT CARE & CONFIDENTIALITY**

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Students should expect to participate in the care of patients with infectious diseases during their educational activities. Students will follow Bloodborne/Airborne Precautions to avoid transmission of or infection from infectious diseases. The procedures deemed necessary should be those recommended by the Centers for Disease Control (CDC).

- 1) It shall be the responsibility of TRG or clinical placement site to provide adequate protective materials (e.g., disposable gloves, masks, eye protection) per local guidelines, or to ensure that the student is not put in a position where unprotected exposure is likely. Some facilities may require the student to supply his/her own HEPA-filter masks as protection against airborne pathogens.
- 2) It shall be the responsibility of TRG or clinical site to instruct the student about accepted infection control procedures applicable to the student's activities.
- 3) It shall be the responsibility of the student to use the protective barriers provided, and to follow the instructions given, to minimize the risk of being infected by or transmitting any infectious diseases.

### **Student Illness or Injury:**

Students are expected to exercise prudence in attending mandatory class or clinical sessions when ill. Healthcare professionals at clinical sites are empowered to restrict the activities of, or prohibit a student from completing a clinical shift.

### **Patient Confidentiality:**

The following guidelines should be followed to protect the patient's right to privacy:

1. Students, staff, and faculty of TRG will comply with the patient confidentiality guidelines established in the Health Insurance Portability & Accountability Act (HIPAA) of 1996.
2. TRG Patient Charting Forms and the clinical logs submitted for review should not have patients name, social security number, address, phone number, hospital identification number, or any other uniquely distinguishing information noted on them.
3. Patient condition and/or therapy will not be discussed with anyone not directly involved in that patient's care. Cases may be discussed as part of the educational process of the TRG Program. During these case presentations, every effort will be made to protect the patient's confidentiality. Any discussion regarding patient condition or care will be undertaken in an area and under circumstances which prevent dissemination of information to others not directly involved in the patient care conference.
4. If patient care assessment or management problems are perceived, or questions arise regarding the care, the case may be discussed in private with the Program Director.

Students should understand that when at international clinical placements, the standards of patient confidentiality and behavioral values may differ from the United States. Students must show respect for and compliance with local customs and regulations.

## **RECORD KEEPING**

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The TRG maintains all training records in electronic format. All records will be made available to students and to authorized agencies upon request. All hard copy format student files, during the program instruction, are maintained in a locked office within TRG, only the Instructor, Executive Assistant, and the Director staff are permitted access to these records. Each student shall be permitted to review their file upon request. In addition, TRG conforms with all laws under the Family Education Rights and Privacy Act (FERPA) regarding any records released to outside sources. Student records will be maintained for a minimum of ten (10) years.

### **TRG Program Files:**

TRG Program files will contain for each course: summary of student attendance, summary of all written exams and all practical exams, copies of all written exams with answer keys, copy of practical exam plan to include evaluators utilized. Also included for each course is a detailed syllabus, copy of applicable handbook(s), and records pertaining to clinical and field internship experiences.

### **Student Files:**

Student files will contain the student application and any applicable documentation for prerequisites, waivers, signed code of conduct agreements, attendance record, skill competency record, exams, counseling forms, clinical evaluations, incident reports (as needed), clinical and field internship records, and copies of certifications earned.

### **Access to Student Files:**

Any student shall have access to their personal class records upon request. This request should be made to the Instructor or the Director staff. The Instructor and student issuing the request will then review the student's file.

## GRADING

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The program is a preparatory program for exam process, such as the BCCTPC, BCEN, ARAPP, HSI, and PHECC, as well as preparation to care for patients. It is important for all students to know at least 85% of the course content to successfully complete the program. This is ensured through homework, skills competency examination, authentic assessment, and exams.

### **Self-Paced Student Assignments:**

Assignments are graded as pass/fail; and are due according to the course syllabus. Any assignments not turned in on time will be entered into the grade book as failed and successful completion of the course will not occur.

### **Exams:**

Each student must pass exams to successfully complete the program. A minimum score of 85% on all exams is required. If an exam is failed, the student will be allowed one retest, after meeting with the director of the program. The exam must be retested within five (5) days of failing the exam. If the exam is not tested within five (5) days the student will be dismissed from the program.

If the student fails, the retest they will be dismissed from the program. If a second exam is failed, the student will meet with the director to discuss continuing in the program. It is the responsibility of the student to arrange to meet with the director and schedule a retest.

If a student misses an exam due to an absence, they must take the exam before their next class day.

If a retest is passed the maximum score the student will receive for that exam will be 85%.

### **Exam Grading Scale:**

Grades during the didactic phase will be determined on the basis of the following:

A	95% - 100%	Exceeds Expectations
B	86% - 94%	Exceeds Standard
C	85%	Satisfactory
F	0% - 84%	Failing

### **Method to report Student Grades:**

Student's grades will be posted and accessible via electronic record.

### **Academic Probation / Remediation:**

Failure of a student to meet academic or skill performance standards will result in remedial action to address educational strategies. Such corrective action may include additional course work in the form of oral presentations, written assignments, additional examinations, and/or one-on-one coaching by peers or staff. Remediation may be initiated by the student or the Director staff. All remedial sessions will be documented and recorded in the student's personal file. Inability to resolve academic or skill performance deficiencies with remedial course work is grounds for dismissal. A student may discuss academic or skill performance difficulties at any time by making an appointment directly with the Director staff.

## CLINICAL PHASE

Students will have access to an adequate number of patients, appropriately distributed by disease, injury, gender and age, who present common problems encountered in the delivery care. The program shall ensure that the nature and amount of clinical experience are adjusted to the experience and ability of the student and that appropriate guidance and feedback are provided to the student. ***The Resuscitation Group places students on rotation in Costa Rica, students may opt to perform their rotation in their local area if there is a suitable site available.***

### CLINICAL PLACEMENT FACT SHEET

The final module of the APP program is the APP Clinical Placement, where the participant is supervised by a Physician or experienced APP during supervised clinical experience at the advanced practice level. The clinical placement allows the participant to be the primary provider to patients on a continuous basis with the Physician or experienced APP directly mentoring and supervising their activities.

Description of practicum	The practicum provides participants an opportunity to obtain supervised clinical experience at the advanced practice level by working under the supervision of a Physician or APP as the primary provider in an emergency medicine environment.
Types of duties performed	The participant will perform as the primary emergency medicine provider, under supervision of a Physician (or APP instructor), at the advanced practice level of intervention, diagnostics, and assessment per the scope listed on the Daily Observation Report (DOR). <u><i>The tasks the APP may be assigned by their Physician Supervisor include, but are not limited to:</i></u> Manage full scope of patient care activities, Perform all procedures and administer all medication at the advanced life support level, perform ET Intubation with rapid sequence induction, Perform chest tube thoracostomy; Perform ultrasound examination, with ultrasound guidance Initiate and perform pericardiocentesis, Perform central vascular access or deep vein cannulation under ultrasound guidance, Prepare or interpret any diagnostic test, Manage patients on mechanical ventilators, Carry out other clinical diagnostics , tasks and procedures as authorized by the supervising physician.
Hours of internship	A total of 150 hours of supervised work at the clinical site is required.
Placement Timeframe	Summer and Fall ( <i>Instructors will be placed earlier to provide Physicians with the opportunity to work with a APP prior to APP candidates being placed</i> )
Duties of Physician (or APP) Supervisor	The supervising physician assigns the participant to patients, provides oversight of the participant’s care and interventions, while providing the participant with coaching and mentorship during patient care incidents. The supervising physician completes a Daily Observation Report (DOR) with the participant at the conclusion of each shift and verifies competencies of the participant.
Duties of the APP Participant	The student explicitly follows the directions of the supervising physician (or APP) and performs patient care duties for the supervising physician and adheres to all client confidentiality requirements.
Compensation	The APP Participant receives no compensation for clinical practicum

**General Rules During Placement:**

The following is a list of rules to be adhered to while performing TRG Education Program clinical:

1. Eating and drinking are prohibited except in designated areas.
2. Smoking and smokeless tobacco are prohibited during and one hour prior to clinical/internship rotations.
3. No alcoholic beverages (or other intoxicating substances) will be consumed during rotations or up to 12 hours prior to rotations. This time limit may not be adequate, based on the amount of consumption and body type of the individual, and should only be used as a guide. Students who feel their involvement in a rotation may be impaired by any substance should refrain from participation. Any evidence of alcohol or drug use while on rotations will result in immediate suspension from the rotation site and from the APP Education Program, and may result in dismissal from the program, pending a full investigation.
4. No student will be allowed to leave his/her rotation site without the consent of the clinical preceptor.
5. Students are not to receive personal telephone calls while on rotation. In case of a family emergency, the clinical site operator should be contacted by the student's family and a message will be relayed to the student.
6. The student will be ready to start rotations at the assigned time. The student must be at the rotation site at least fifteen (15) minutes early.
7. Upon arrival at the rotation site, the student will introduce himself/herself to the clinical preceptor and clearly indicate their level of training.
8. The student will not argue with their preceptor or with any paid personnel at the clinical site. The ultimate responsibility for patient care lies with the staff of the rotation site. If a conflict arises between the student and anyone at the rotation site the student will immediately remove himself/herself from the conflict and notify the APP Program Director by telephone immediately.
9. Students will practice universal precautions during all patient care, and handling of patient care equipment regardless of the situation. Any student not complying with this policy will fail that rotation and be required to write a 10-page report on infection control and present it orally before the class.

**Clinical Placement Evaluation:**

During Clinical Placement, the student will be evaluated on a daily basis by their educator or preceptor utilizing the Field Training and Evaluation Process (FTEP) evaluation sheet below.

In the final module of the program, participants must successfully complete their supervised clinical practicum with a minimum of ten daily observation reports completed by their supervising Physician or Educator/Preceptor at a "meets standard" or above rating.

The placement allows the participant to be the primary provider to patients on a continuous basis with the Physician or Educator/Preceptor directly mentoring and supervising their activities

**ADVANCED PRACTICE PROVIDER – Daily Observation Report (Acute/Emergent fixed site)**

<b>AP Paramedic:</b>		<b>License#:</b>	
<b>Date:</b>	<b>Physician (or Educator/Preceptor):</b>		
<b>Interventional Level:</b>		<b>Assignment Location:</b>	

RATING INSTRUCTIONS	RATING CRITERIA			
<b>BELOW STANDARD</b> Frequently demonstrates difficulty in determining and performing basic job components and/or the actions necessary to accomplish required tasks. Requires substantial supervisory/preceptor assistance, review, and step in. Quality and quantity of work is usually below acceptable levels. Requires prompting to start tasks.	<b>BELOW STANDARD</b>	<b>STANDARD</b>	<b>ABOVE STANDARD</b>	<b>NOT OBSERVED</b>
<b>STANDARD</b> Determines and performs the essential job components and the actions necessary to accomplish required tasks at the APP level. Requires an acceptable amount of physician direction or consultation. Quality and quantity of work is within acceptable levels. Demonstrates initiative.				
<b>ABOVE STANDARD</b> Exceptional ability to determine and perform virtually all job components and actions necessary to accomplish required tasks. Requires little supervisory/preceptor direction, assistance, or review. Quality and quantity of work consistently exceeds requirements in accuracy, thoroughness and timelines. Demonstrates outstanding initiative and motivation				

**PERFORMANCE CATEGORY**

1. <b>APPEARANCE:</b> The participant maintains an appearance which is neat, clean, fits and is worn properly.				
2. <b>ACCEPTANCE OF FEEDBACK:</b> The participant accepts criticism in a positive manner and incorporates it to improve performance and further interaction				
3. <b>ATTITUDE TOWARD WORK:</b> The participant demonstrates an active interest in patients and healthcare responsibilities				
4. <b>SELF-INITIATED ACTIVITY:</b> The participant recognizes and identifies time to read medical journals, study protocols, seeks self-learning, seeks coaching, and familiarize self with vehicles, emergency/clinic department, supplies and equipment.				
5. <b>KNOWLEDGE OF HEALTHCARE POLICIES AND PROCEDURES:</b> The participant is familiar with most commonly applied government and organizational policies, regulation, procedures; and has completed their assigned policy overview.				
6. <b>KNOWLEDGE OF PROTOCOLS:</b> Participant understands the protocols and uses them when necessary for direction				
7. <b>KNOWLEDGE OF GENERAL ACUTE CARE ASSESSMENT:</b> The participant demonstrates the ability to distinguish between emergent, acute care, and primary care patients through assessment, diagnostics, and history taking.				
8. <b>KNOWLEDGE OF DISCHARGE PROCESSES:</b> The participant demonstrates the capability to bring a patient through the process of admission, assessment, treatment, and discharge.				
9. <b>KNOWLEDGE OF MEDICATIONS:</b> The participant understands the basic approach to medication regimes and uses a knowledge aid whenever possible.				
10. <b>CONSULTATION:</b> The participant demonstrates the ability to perform a consult with the physician for discharge approval, prescriptions, and point of knowledge exhaustion. Initially for first portion of observation time, consults all cases with Physician to show thought process and obtain approvals. All discharges must be a physician consult if outside the “routine” conditions category in protocol.				



<p>11. General APP SKILLS – Emergency Medicine: The participant is able to perform the following skills:</p> <ul style="list-style-type: none"> <li>A. Successfully intubate patient with endotracheal tube with in two attempts, in under 30 seconds</li> <li>B. Successfully ventilate a patient with BVM and transition to ventilator care when appropriate</li> <li>C. Successfully performs needle chest decompression.</li> <li>D. Successfully performs synchronized cardioversion</li> <li>E. Successfully performs defibrillation</li> <li>F. Successfully administers medication by IV route</li> <li>G. Successfully administers medication by IM route</li> <li>H. Successfully administers IV infusion medication via pump</li> <li>I. Establish large bore (14g/16g) intravenous therapy with in two attempts</li> <li>J. Establish interosseous therapy with one attempt</li> <li>K. Manage symptomatic Bradycardia</li> <li>L. Manage symptomatic Supraventricular Tachyarrhythmias</li> <li>M. Manage Ventricular Tachycardia</li> <li>N. Manage Ventricular Fibrillation</li> <li>O. Manage Pulseless Electrical Activity</li> <li>P. Manage STEMI</li> <li>Q. Manage Abnormal 12 lead findings</li> <li>R. Routinely perform initial assessment of critical patients with in 1 minute of arrival.</li> <li>S. Able to intubate trauma patient utilizing RSI within 2 minutes</li> <li>T. Able to perform blood product administration</li> <li>U. Able to perform chest tube thoracostomy</li> <li>V. Able to perform surgical cricothyrotomy</li> <li>W. Able to perform pericardiocentesis with ultrasound guidance</li> <li>X. Able to perform ultrasound eFAST exam</li> <li>Y. Able to perform ultrasound RUSH exam</li> <li>Z. Able to perform ultrasound examination of the lungs</li> <li>AA. Altered mental status</li> <li>BB. Anaphylaxis</li> <li>CC. Hyperglycemia</li> <li>DD. Hypoglycemia</li> <li>EE. Hyperthermia</li> <li>FF. Respiratory distress</li> <li>GG. Poisoning and Overdose</li> <li>HH. Obstetrical Emergency</li> <li>II. Sepsis/Septic Shock</li> <li>JJ. Able explain advanced medical care to ancillary staff and colleagues</li> </ul>				
<p>12. General APP SKILLS – Acute Care Medicine: The participant demonstrates the ability to assess, manage, and resolve to discharge or transport for following:</p> <ul style="list-style-type: none"> <li>A. Gastroenteritis verses infectious process with minor abdominal pain</li> <li>B. Septicemia/Sepsis</li> <li>C. Urinary Tract Infection</li> <li>D. Yeast Infection</li> <li>E. Conjunctivitis</li> <li>F. Respiratory Infection</li> <li>G. Colds and Flu</li> <li>H. Ear Infection or pain</li> <li>I. Pharyngitis</li> <li>J. Fever</li> <li>K. Sprains, strains, dislocations, and fractures</li> <li>L. Superficial or Minor wounds</li> </ul>				

<ul style="list-style-type: none"> <li>M. Skin and subcutaneous tissue infections</li> <li>N. Hypertension above minor level and standard variance (Systolic above 180 or diastolic above 100)</li> <li>O. Sub-acute congestive heart failure</li> <li>P. Constipation</li> <li>Q. Dizziness</li> <li>R. Headache</li> <li>S. Able explain acute care considerations to ancillary staff and colleagues</li> </ul>				
<p>13. General APP SKILLS – Diagnostics: The participant demonstrates the ability to:</p> <ul style="list-style-type: none"> <li>A. Perform and interpret 12 Lead ECG</li> <li>B. Interpret laboratory values</li> <li>C. Interpret basic radiographic images</li> <li>D. Identify normal CT of the head images in CVA</li> <li>E. Perform ultrasound examination of the lungs</li> <li>F. Perform ultrasound examination of the heart</li> <li>G. Perform ultrasound examination of the abdomen</li> <li>H. Able explain diagnostics to ancillary staff and colleagues</li> </ul>				
<p>14. REPORT WRITING: The participant completes reports, organizes information in a logical manner, and writes reports containing the required information and details per policy and physician direction.</p>				
<p>15. USE OF RESOURCES: The APP utilizes available staff in an appropriate manner and scope to facilitate clearance rates and patient care goals.</p>				
<p>16. APP CLEARANCE RATE: The APP is able to perform healthcare assessment, diagnosis, and care in a timely manner within in acceptable standards of care; while not extending patient wait times beyond acceptable perimeters.</p>				
<p>17. FIELD PERFORMANCE: NON-STRESS CONDITIONS: The participant shows professional interaction with the incident, properly assesses the situation, determines appropriate action and implements the planned action.</p>				
<p>18. FIELD PERFORMANCE: STRESS CONDITIONS: The participant consistently maintains a calm and self-controlled personal demeanor, consistently determines the proper course of action and implements it. This is done without any further deterioration of the incident.</p>				
<p>19. CONTROL OF EVENTS: VOICE COMMAND: The participant speaks with authority in a calm, clear voice; uses proper selection of words and knowledge when speaking, and uses them correctly.</p>				
<p>20. SAFETY - General: The participant is fully aware of safety precautions at all times, including all of the following:</p> <ul style="list-style-type: none"> <li>A. Infection Control</li> <li>B. Is cautious near combative/intoxicated patients/families/bystanders</li> <li>C. Anticipates potentially dangerous situations.</li> <li>D. Utilizes appropriate PPE for hostile situations</li> <li>E. Stands a safe distance from passing vehicular traffic.</li> <li>F. Stands to side of doors when knocking.</li> <li>G. Lifts with proper body mechanics.</li> <li>H. In addition, the participant always works safely, foresees dangerous situations and prepares for them, while keeping his or her partner informed. Additionally, determines the best position for self and partner, is not overconfident, and observes all applicable regulations.</li> </ul>				
<p>21. CONTROL OF CONFLICT: NON-VERBAL SKILL: The participant projects a non-threatening, calmly assertive attitude with stance, gestures, appropriate touching and open, attentive facial expression</p>				

22. PROBLEM SOLVING & DECISION MAKING: The participant is able to reason through a problem and come to an acceptable conclusion. And he/she is able to consistently make reasonable decisions based on information available and perceive situations as they really				
23. TRANSPORT DECISIONS: The participant makes transport decisions in a timely manner, taking into account all protocol and policy considerations.				
24. RADIO: APPROPRIATE USE OF CODES/PROCEDURE: The participant follows policy, accepted radio procedures, and is able to contact appropriate resource				
25. RADIO: LISTENS AND COMPREHENDS: The participant acknowledges radio transmissions and is generally aware of radio traffic directed to other emergency vehicles or resources.				
26. HOSPITAL REPORTS: The participant provides the receiving care provider with organized report on patient condition and treatment in a clear, concise format (SBAR) with rationale for any medication or procedure orders.				
27. RELATIONSHIPS WITH PATIENT/CITIZENS IN GENERAL: The participant communicates in a professional, unbiased manner with all people; while maintaining a courteous, friendly, and empathetic manner. In addition, serves all customers' needs objectively, with deference to local customs and cultural considerations.				
28. RELATIONSHIPS WITH CO-WORKERS AND OVERSIGHT: The participant adheres to the chain of command and accepts role in the organization; practices good peer and FTO (or Physician) relationships, and is accepted as a team member. In addition, is sensitive to the concerns of public safety agencies at the scene.				
30. FACILITY: The APP demonstrates understanding of the facility they work within or deliver to, with specific knowledge of departments, equipment, and personnel at the facility				
31. MPS/MCI PROTOCOLS: The participant should understand the MPS/MCI protocol(s) and is able to utilize the protocol(s) to resolve events.				
32. POLICIES: The participant is able to recall and/or apply government and organizational policy to patient transport, admission, and care.				
33. APP PROTOCOL MULTI-TASKING: The APP is able to combine more than one treatment protocol and recall the proper sequence of actions when treating a complex patient with more than one protocol.				
34. PROLONGED – CARDIAC: The participant is able to manage the care of a cardiac patient during a prolonged period (1 hour).				
35. PROLONGED – TRAUMA: The participant is able to manage the care of a trauma patient during a prolonged period (1 hour).				
36. PROLONGED – MEDICAL: The participant is able to manage the care of a medical patient during a prolonged period (1hour).				
37. PROLONGED – PEDIATRIC: Given a scenario, the participant is able to manage the care of a pediatric patient during a prolonged period (1 hour).				
38. ALTERNATIVES FOR CARE: The participant is able to identify the best alternative treatment options to a specific primary healthcare patient situation.				
39. SAFETY AWARENESS: The participant is able to consider and defend the best choices for protecting themselves and their fellow personnel.				
40. COMPLEX PROBLEM SOLVING: Given a scenario or patient care situation, the participant is able to problem solve complex medical situations, utilizing multiple protocols at once.				

<b>PHYSICIAN OBSERVATIONS</b> (Please specify dates of observed performance)
<b>Observations at emergencies:</b>
<b>Summary of Performance</b>
<b>Instruction / Training / Activities / Review:</b>
<b>Explanation of any <u>"Below Standard"</u> scoring:</b>
<b>Counseling / Remediation needed</b>
<b>Weaknesses / Remediation given:</b>
<b>Counseling provided:</b>
<b>Plan for improvement:</b>
<input type="checkbox"/> See Attached Improvement Plan

<b>SIGNATURES ARE MANDATORY</b>			
<b>ASSIGNED PHYSICIAN (or Educator/Preceptor)</b>			
PHYSICIAN Name	PHYSICIAN Signature	Lis #	Date
Or Educator/Preceptor	Or Educator/Preceptor		
<b>ADVANCED PRACTICE PROVIDER OBSERVED</b>			
AP Paramedic's Name	AP Paramedic's Signature	Lis #	Date


# GRADUATION

## REQUIREMENTS

1. Payment in full of all TRG Program tuition and fees.
2. Meet minimum attendance requirements.
3. Satisfactory completion of all didactic requirements with grade scores of at least 85%.
4. Satisfactory completion of all skills competency examinations with a “meets standard” rating.
5. Satisfactory completion of clinical placement and submission of supporting documentation.
6. Submission of all assigned writing assignments

## CERTIFICATE AND PERMANENT RECORD

Students successfully completing the program will receive a certificate in Advanced Practice Paramedic. An example of the certificate is below:



**Resuscitation**  
Group

The Resuscitation Group  
7815 Highway 99  
Vancouver, Washington USA  
+1-855-739-2257  
<http://resuscitationgroup.com>

After (INSERT HOURS) hours of program study

**(INSERT NAME)**

Has successful completed the required course of study, authorized by the Washington State Dental Commission and the Oregon Dental Board, delivered by The Resuscitation Group (Vocational/Technical School licensed under Chapter 28C.10RCW.), and is therefore awarded this

**(INSERT PROGRAM NAME)**

_____	_____
Medical Director	Course Director
_____	_____
CAPCE Manager	Date

The student’s academic records will be kept on file at TRG for a minimum of fifty (50) +1 years using secured cloud capabilities as required per state law WAC 490-105-200.

## **PLACEMENT SERVICES**

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The Resuscitation Group does not assist with placement services

## **EDUCATIONAL CREDENTIAL UPON GRADUATING**

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Upon graduation from the program student will be prepared to potentially successfully complete any national or international exams required.

# The Resuscitation Group



## Consent to Release Student Information

The TRG philosophy regarding student information is that students are adults and we generally will not share their academic and/or financial records with third parties, including parents, without consent. At the same time, we will share a student's education records where the student has given consent and in other cases permitted by federal law. The Family Educational Rights and Privacy Act of 1974 (FERPA) and the TRG policy on the confidentiality of student records protect the privacy of student education records and generally limit access to the information contained in those records by third parties. FERPA and TRG policy, however, do provide for situations in which TRG may, at its discretion, and sometimes must, disclose information without a student's consent. For example, we may disclose education records to a parent without the consent of the student if the student is listed as a financial dependent on the parent's federal tax submission (financial aid applicants) when we determine such disclosure is merited. **You may choose to grant TRG the right to disclose education records to certain individuals in accordance with FERPA and TRG policy by filling out and signing this consent form.** You have the right to revoke the permissions granted here at any time by submitting your written revocation to the office maintaining this consent form. Such revocation will not affect disclosure made by the TRG relying on your consent prior to receipt of such notice of revocation. **Note: this form does not pertain to Medical inquiries.**

Student's Name: \_\_\_\_\_

Last four digits of your SSN: \_\_\_\_\_

I have listed below the individual(s) to whom TRG may release information from my education records:

Name: \_\_\_\_\_

Relationship to Student: \_\_\_\_\_

Address & Telephone #: \_\_\_\_\_

Name: \_\_\_\_\_

Relationship to Student: \_\_\_\_\_

Address & Telephone #: \_\_\_\_\_

The above named individual(s) may have access to the following information (examples: all academic information, all financial information):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

# ACADEMIC GUIDELINES

1. Reading assignments are to be completed prior to class.
2. Attendance is required for all classes. Excused absences will be granted for emergency situations only.
3. You will be responsible and accountable for all equipment assigned to you during skill stations and patient care scenarios. You are expected to assist in the cleaning and proper storage of equipment after each class.
4. Tests will include the material from the resource texts, online resources, and classroom work.
5. Any student may withdraw from the program at any time; refunds will be made according to the policy.
6. Any student may be dismissed if they do not meet the course standards; this will include skills, clinical rotation, and written grades (after review by the Director staff and the individual).
7. Passing score for this program is 85% or greater on exams and “meets standard” on skills competencies and clinical evaluations.
8. If the student does not successfully pass any practical portion of the class, they will not receive a passing grade or a course completion certificate.





## GENERAL RELEASE

I understand that the education and work of a Advanced Practice Paramedic, including lab work and clinical rotations within hospitals or other healthcare facilities with which I may be associated, are inherently dangerous and could expose me to accident and injury, including but not limited to blood borne and airborne pathogens, needle sticks, and many other dangerous and hazardous situations and environments, and I hereby release and hold harmless The Resuscitation Group and any other their employees, instructors and volunteers from any liability associated with these risks.

All students have the understanding that taking and successfully completing the required written and practical material does not guarantee the student will obtain certification, licensure, and/or practice as an Advanced Practice Paramedic (or equivalent) in the state of Washington or any other state or country.

I, (Print Student Name) \_\_\_\_\_, understand the Student Code of Conduct from this handbook and agree to follow these policies and procedures of TRG.

I, (Print Student Name) \_\_\_\_\_, understand this activity will fundamentally place me in an environment that has risks, dangerous situations, and exposure to potentially deadly diseases and accept this potential risk as my own, holding all organizations and staff associated with this program harmless from liability.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

# **NOTICE OF LICENSURE**

This school is licensed under Chapter 28C.10RCW.

Inquiries or complaints regarding this private vocational school may be made to the:

Workforce Board, 128 – 10th Ave., SW, Box 43105, Olympia, Washington 98504

Web: [wtb.wa.gov](http://wtb.wa.gov)

Phone: (360) 709-4600

E-Mail Address: [pvsa@wtb.wa.gov](mailto:pvsa@wtb.wa.gov)

## **APPENDIX 1**

### **Advanced Practice Paramedic Curriculum**

# Advanced Practice Paramedic

## Education Sequence

Summary 2017

The Advanced Practice Paramedic is physician extender, capable of extensive, advanced patient care interventions in critical and emergent patients. This individual possesses the complex knowledge and advanced interventional skills necessary to provide physician extension to the patient's side, allowing their physician medical program director (MPD) the ability to have physician level care extended to the scene of any emergency, through the hand, eyes, and ears of the APP. Advanced Practice Paramedics are the pinnacle of a comprehensive EMS response, under medical oversight. Advanced Practice Paramedics perform interventions and patient care management with the advanced and diagnostic equipment typically found in an advanced response vehicle, on an advanced practice ALS ambulance, or in an emergency department. The Advanced Practice Paramedic is a tertiary link from the scene into the tertiary health care system, serving as advanced responders, critical care transport providers, aeromedical providers, and in atypical care provision.

### Objectives:

The program objectives are unique to the needs of this program, but incorporate the Global Emergency Medical Registry (GEMR) standard objectives (<https://www.gemr.org/app/>), while blending in the objectives required for the unique environment and challenges of the Pacific Northwest and Pacific Rim environments, with additional objectives incorporated to meet the highest level of clinical expectation under the current United States CMMS Specialty Transport guidelines and CAPCE Accreditation.

Specific Program Objectives can be found below.

### Media and Print Resources for Course Participants:

This program utilizes resources from multiple formats including but not limited to:

1. Basics of Anesthesia 7th Edition by Manuel Pardo MD
2. Emergency Department Resuscitation of the Critically Ill, 2nd Edition: A Crash Course in Critical Care, Michael E. Winters MD
3. Alaska Air Medical Escort Course Book, Department of Health and Social Services, State of Alaska, 2006;
4. Introduction to Flight Physiology, Federal Aviation Administration,
5. Patient Care Protocols and Policies
6. ACLS Experienced Provider, American Heart Association, 2018 (2021 as soon as available)
7. PALS Provider Manual, American Heart Association, 2020

## Prerequisites for Course Participants:

Participants must have the following at the initiation of the course:

1. Current NREMT Nationally Registered Paramedic (or equivalent country licence) or Nurse;
2. Current AHA Pediatric Advanced Life Support (PALS) Provider certification;
3. Current AHA Advanced Cardiac Life Support – Experienced Provider (ACLS EP); and,
4. Current State or Country Licence in good standing.
5. Minimum 1 year emergency or intensive care experience.

## COURSE FORMAT:

The Resuscitation Group proposes a multifaceted approach to the education and competency assurance of a reduced number of advanced providers in the pilot project area. The Resuscitation Group (TRG) holds that learning is a lifelong process through which an individual modifies his/her behavior in order to accommodate changing healthcare needs. We also believe that learning is facilitated when student participation is actively encouraged, instructional and educational goals are well defined and communicated, and student goals and objectives are clear and supported by the faculty.

It is understood that, ultimately, the full responsibility for learning rests with the student and his/her commitment to the learning process.

The Advanced Practice Paramedic Program is designed for providers involved in the treatment, transport, remote site, and/or site-specific care of physiologically exhausted or critically ill patients. Upon completion of the program, the participant will be prepared for the safe and efficacious transport of the critically ill or injured patient by air or ground.

The program objectives are specific to the requirements of the National Registry of Emergency Medical Technicians (NREMT) and Global Emergency Medical Registry (GEMR), but also incorporate the Board for Critical Care Paramedic Certification (BCCTPC) standard objectives, the ILCOR guidelines, and Canadian CCT objectives, while blending in the objectives required for the unique environment and challenges of the Pacific Rim environments, with additional objectives incorporated to meet the highest level of clinical expectation.

The Advanced Practice Paramedic program is designed for healthcare personnel who are already paramedics, nurses, or midlevel personnel and ready to move to the highest level of assessment, diagnostics, and intervention for the patient in resuscitative events.

## APP PROGRAM OBJECTIVES:

### Didactic Objectives

The participant will be able to:

1. Identify the components of a multi-team system that must work together effectively to ensure patient safety.
2. Identify a structured process by which information is clearly and accurately exchanged among team members.
3. Demonstrate the ability to maximize the activities of team members by ensuring that team actions are understood, changes in information are shared, and team members have the necessary resources.

4. Demonstrate the process of actively scanning and assessing situational elements to gain information or understanding, or to maintain awareness to support team functioning.
5. Demonstrate the ability to anticipate and support team member's needs through accurate knowledge about their responsibilities and workload
6. Complete emergency warning score (EWS) utilizing a standard EMS tool.
7. Interpret correctly cardiac, great vessels, abdominal content, and lung ultrasound findings related to the FAST, RUSH, CAUSE, and Lung ultrasound exams.
8. Interpret, respond, and apply principles of flight physiology to presented case studies in aeromedical evacuation.
9. Explain the considerations in caring for a patient in the aeromedical flight environment in unpressurized and pressurized aircraft.
10. Explain the considerations for caring for a patient in the maritime environment.
11. Interpret, respond, and apply principles of resuscitation to presented case studies in the online case study program.
12. Show the ability to interpret and respond to knowledge assessments presented in the online knowledge assessment process.
13. Demonstrate knowledge of standard laboratory values, including blood gases, chemistry, and enzyme screens.
14. Demonstrate knowledge of Intra-Aortic Balloon Pump (IABP).
15. Demonstrate knowledge of the principles of Extracorporeal Membrane Oxygenation (ECMO).
16. Demonstrate a knowledge of the principles of Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA).
17. Demonstrate a knowledge of the principles of emergency transfusion procedures.
18. Demonstrate a knowledge of the critical pathways to the assessment and management of Undifferentiated Shock.
19. Demonstrate a knowledge of the critical pathways to the assessment and management of the Difficult Airway.
20. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating Ventilated Patient.
21. Demonstrate a knowledge of the critical pathways to the assessment and management of Fluid Management in resuscitation.
22. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiac arrest patient, utilizing the current research and the ILCOR guidelines for management.
23. Demonstrate a knowledge of the critical pathways to the assessment and management of the post cardiac arrest patient, utilizing the current ILCOR guidelines for management.
24. Demonstrate a knowledge of the critical pathways to the assessment and management of lethal arrhythmias
25. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiogenic shock patient, utilizing the current ILCOR guidelines for management.
26. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiac tamponade patient, utilizing the current ILCOR guidelines for management.
27. Demonstrate a knowledge of the critical pathways to the assessment and management of aortic catastrophes.
28. Demonstrate a knowledge of the critical pathways to the assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.

29. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating morbidly obese patient, utilizing the current research and ILCOR guidelines for management.
30. Demonstrate a knowledge of the critical pathways to the assessment and management of the pulmonary hypertension patient, utilizing the current research and ILCOR guidelines for management.
31. Demonstrate a knowledge of the critical pathways to the assessment and management of left ventricular assist devices (LVAD), utilizing the current research and ILCOR guidelines for management.
32. Demonstrate a knowledge of the critical pathways to the assessment and management of the toxidrome patient, utilizing the current research and ILCOR guidelines for management.
33. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating trauma patient, utilizing the current research and ILCOR guidelines for management.
34. Demonstrate a knowledge of the critical pathways to the assessment and management of intracerebral hemorrhage, utilizing the current research and ILCOR guidelines for management.
35. Demonstrate a knowledge of the critical pathways to the assessment and management of subarachnoid hemorrhage utilizing the current research and ILCOR guidelines for management.
36. Demonstrate a knowledge of the critical pathways to the assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.
37. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating anaphylaxis patient, utilizing the current research and ILCOR guidelines for management.
38. Demonstrate a knowledge of the critical pathways to the assessment and management of life threatening gynecological and obstetric pathologies, utilizing the current research and ILCOR guidelines for management.
39. Demonstrate a knowledge of neonatal resuscitation, utilizing the current research and ILCOR guidelines for management.
40. Demonstrate a knowledge of pediatric resuscitation, utilizing the current research and ILCOR guidelines for management.

#### Practicum/Simulation Module Objectives

The participant will be able to:

1. Demonstrate the ability to observe clinical signs, recognize deterioration, manage deterioration in the critically ill patient
2. During simulation, interpret patient condition(s), respond to changes in physiology, and apply interventions; specifically, with the post cardiac arrest patient, the multi-system trauma patient, and the septic shock patient.
3. Communicate effectively during drills and transport with all stakeholders in the transport process.
4. Demonstrate an awareness of the importance of situational awareness, advanced decision-making skills and human factors in emergency medicine.
5. Assess the probable cause of a critical event using critical thinking
6. Develop an advanced practice approach to the patient's condition when presented with real or simulated patients.

7. Demonstrate competence at integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks.
8. Provide optimal airway management for the crashing patient in the emergency medicine environment.
9. Demonstrate the ability to identify and mitigate time, anatomy, and physiologic influences on the patient nearing physiologic exhaustion in the trauma and medical etiologies.
10. Demonstrate the ability to care for a complex trauma or medical patient during a 60-minute period in the real world or simulation environment.
11. Demonstrate the ability to correctly perform cardiac, great vessels, abdominal content, and lung ultrasound in the FAST, RUSH, CAUSE, and Lung ultrasound exams.
12. Demonstrate the ability to perform moderate sedation (“conscious sedation”) per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.
13. Demonstrate the ability to perform deep sedation per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.
14. Demonstrate the ability to perform general anesthesia per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.
15. Demonstrate the ability to manage the complex and difficult airway.
16. Demonstrate the ability to perform endotracheal intubation with direct laryngoscopy and first pass success.
17. Demonstrate the ability to perform endotracheal intubation with direct laryngoscopy in the emesis patient.
18. Demonstrate the ability to perform endotracheal intubation with video laryngoscopy and first pass success.
19. Demonstrate the ability to perform endotracheal intubation with bronchoscopy and first pass success.
20. Demonstrate the ability to perform endotracheal intubation with guide wire technique.
21. Demonstrate the ability to successfully place a supraglottic airway (SGA)
22. Demonstrate the ability to perform surgical cricothyrotomy.
23. Demonstrate the ability to perform endotracheal intubation with rapid sequence induction algorithm.
24. Demonstrate the ability to perform tracheal foreign body airway obstruction.
25. Demonstrate the ability to perform needle chest decompression.
26. Demonstrate the ability to perform simple thoracotomy (fingertip thoracotomy).
27. Demonstrate the ability to perform chest tube insertion.
28. Demonstrate the ability to perform pericardiocentesis with ultrasound guidance.
29. Demonstrate the ability to perform ultrasound guided deep vein cannulation.
30. Demonstrate the ability to perform intraosseous (IO) needle placement.
31. Demonstrate the ability to perform skull trephination under online guidance.
32. Demonstrate the ability to utilize raney scalp clips.
33. Demonstrate the ability to perform pelvic fracture immobilization.
34. Demonstrate the ability to perform suprapubic cystostomy.
35. Demonstrate the ability to utilize the NEXUS (National Emergency X-Ray Utilization Study) and the Canadian C-Spine Rule criteria.
36. Demonstrate the ability to perform basic lateral cervical spine x-ray interpretation.



37. Demonstrate the ability to perform basic Head CT interpretation.
38. Demonstrate the ability to perform ultrasound guided regional nerve blocks.
39. Demonstrate the ability to perform surgical decompression of oral and subcutaneous lesions when the lesion is interfering with an intervention or presents a life threat.
40. Demonstrate the ability to place REBOA under ultrasound guidance.

Clinical and Field Placement Module Objectives

The participant will be able to:

1. Participants will be able to demonstrate competence at the APP level with integration of the course foundations through supervised clinical practice under the oversight of a Specialist Emergency Medicine Physician in a Hospital Emergency Department resuscitation and critical care areas, during a 100-hour clinical placement.
2. Participants will be able to demonstrate competence at the APP level with critical care patients during a clinical placement under the oversight of a Specialist Critical Care Physician in a Hospital Intensive Care Unit, during a 100-hour clinical placement.
3. Participants will be able to demonstrate competence at the APP level with airway management and anesthesia patients during a clinical placement under the oversight of a Specialist Anesthesia Physician in a Hospital Anesthesia Department, during a 100-hour clinical placement.
4. Participants will be able to demonstrate competence at the APP level with pediatric patients during a clinical placement under the oversight of a Specialist Pediatric Physician in a Hospital Pediatric Care Unit, during a 40-hour clinical placement.
5. Participants will be able to demonstrate competence at the APP level with neurological patients during a clinical placement under the oversight of a Specialist Neurologist Physician in a Hospital setting, during a 40-hour clinical placement.
6. Participants will be scheduled with APP instructor staff for response duty in the EMS system when not on clinical placements to begin experiential learning in the APP role.

Clinical Internship Objective:

The participant will be able to:

1. Participants will be able to demonstrate competence at the APP level with integration of the course foundations through practice in the EMS critical patient response environment under the supervision of specialist physicians and/or APP Field Training Officer during a clinical internship in the Costa Rica EMS system or arranged USA system.

Advanced Practice Paramedic - Sample Course Outline

The APP course outline is subject to change, based on the instructional environment, module time frames, and location. Following as a sample course outline:

Didactic Module:

The 400-hour didactic module requires both online and classroom activities with significant emphasis on a team instructional approach with the latest science and integration of the current ILCOR science guidelines. Instructional hours are a combination of assignments, discussion, case study, lecture, and self-guided learning. The module is broken into the following topical areas.

- 24 hours      Resuscitation Systems and TeamSTEPPS
- Components of a multi-team system that must work together effectively to ensure patient safety.
  - Structured process by which information is clearly and accurately exchanged among team

	members.
	<ul style="list-style-type: none"> <li>▪ Maximize the activities of team members by ensuring that team actions are understood, changes in information are shared, and team members have the necessary resources.</li> <li>▪ Active scanning and assessing of situational elements to gain information or understanding, or to maintain awareness to support team functioning.</li> <li>▪ Anticipate and support team member's needs through accurate knowledge about their responsibilities and workload.</li> </ul>
2-hour	Emergency warning score (EWS) systems and use.
24 hours	Basic Ultrasound <ul style="list-style-type: none"> <li>• Interpret correctly cardiac, great vessels, abdominal content, eye exam, and lung ultrasound findings</li> <li>• FAST, RUSH, CAUSE, and Lung ultrasound exams.</li> </ul>
8 hours	Basics of Intra-Aortic Balloon Pump (IABP).
8 hours	Basic principles of Extracorporeal Membrane Oxygenation (ECMO).
16 hours	Basic of the principles of Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA).
8 hours	Basic principles of emergency transfusion procedures.
8 hours	Assessment and management of Undifferentiated Shock.
8 hours	Assessment and management of the Difficult Airway.
8 hours	Assessment and management of the decompensating Ventilated Patient.
8 hours	Fluid Management in resuscitation.
8 hours	Assessment and management of the cardiac arrest patient, utilizing the current research and the ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of the post cardiac arrest patient, utilizing the current ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of lethal arrhythmias
8 hours	Critical pathways to the assessment and management of the cardiogenic shock patient, utilizing the current ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of the cardiac tamponade patient, utilizing the current ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of aortic catastrophes.
8 hours	Critical pathways to the assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of the decompensating morbidly obese patient, utilizing the current research and ILCOR guidelines for management.
8 hours	Critical pathways to the assessment and management of the pulmonary hypertension patient, utilizing the current research and ILCOR guidelines for management.
8 hours	Assessment and management of left ventricular assist devices (LVAD), utilizing the current research and ILCOR guidelines for management (includes Thoratec Training)
16 hours	Basic laboratory values, interpretation, and use of point of care testing (includes ISTAT training)
8 hours	Assessment and management of the toxidrome patient, utilizing the current research and ILCOR guidelines for management.
8 hours	Assessment and management of the decompensating trauma patient, utilizing the current research and ILCOR guidelines for management.
8 hours	Assessment and management of intracerebral hemorrhage, utilizing the current research and ILCOR guidelines for management.

8 hours	Assessment and management of subarachnoid hemorrhage utilizing the current research and ILCOR guidelines for management.
8 hours	Assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.
8 hours	Assessment and management of the decompensating anaphylaxis patient, utilizing the current research and ILCOR guidelines for management.
16 hours	Assessment and management of life threatening gynecological and obstetric pathologies, utilizing the current research and ILCOR guidelines for management.
8 hours	Neonatal resuscitation, utilizing the current research and ILCOR guidelines for management.
16 hours	Pediatric resuscitation, utilizing the current research and ILCOR guidelines for management.
8 hours	Basic cervical radiograph interpretation.
16 hours	Basic head CT interpretation.
24 hours	Interpret, respond, and apply principles of resuscitation to presented case studies in the online case study program (pass/fail grade).
2 hour	Online examination #1 (80% required to pass).
2 hour	Online examination #2 (80% required to pass).
2 hour	Online examination #3 (80% required to pass).
30 hours	Final Paper on assigned resuscitation topic (80% required to pass, original work, referenced, and not more than 3000 words).

#### Practicum and Simulation Module:

The 200-hour practical and simulation module is a practical laboratory and simulation format with significant emphasis on a team instructional approach with the latest science and integration of the current ILCOR science guidelines. Instructional hours are a combination of assignments, discussion, case study, lecture, and self-guided learning. The module is broken into the following topical areas.

24 hours	Basic Imaging Lab #1 (Ultrasound skills, RUSH, CAUSE, BLUE, FOCUS, procedural assistance)
24 hours	Advanced Airway Management Lab (intubation, video, bronchoscope, RSI, surgical cricothyrotomy, guide wire, and ventilator management)
24 hours	Sedation Skills Lab and Simulation
12 hours	Basic Surgical Skills Lab #1 (needle chest decompression, fingertip thoracotomy, chest tube insertion, pericardiocentesis with ultrasound guidance, ultrasound guided deep vein cannulation, intraosseous needle placement).
12 hours	Basic Surgical Skills Lab #2 (skull trephination, raney scalp clips, pelvic fracture immobilization, suprapubic cystostomy).
24 hours	Putting it together (skills integration) and Imaging Lab #2 (NEXUS, Canadian C-Spine Rule criteria, lateral cervical spine x-ray interpretation, basic Head CT interpretation)
24 hours	Stress Inoculation Simulation (SIS) lab #1 (integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks)
24 hours	Stress Inoculation Simulation (SIS) lab #2 (integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks)

- risks)
- 12 hours Stress Inoculation Simulation (SIS) lab #3 (integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks)
- 12 hours Stress Inoculation Simulation (SIS) lab #4 (integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks)

Clinical and Field Placement Module:

In the clinical placement module, the participants are function in the hospital environment, under a specialist physician, caring for patients, assessing patients, and performing procedures.

- 100 hours Participants will be placed in a hospital Emergency Department, under the supervision of a Specialist Emergency Medicine Physician where the participant will be expected to function as a second-year resident in Emergency Medicine in the resuscitation and critical care areas with mentoring from the physician.
- 100 hours Participants will be placed in a hospital Intensive Care Unit, under the supervision of a Specialist Critical Care Medicine Physician where the participant will be expected to function as a critical care provider with mentoring from the physician.
- 100 hours Participants will be placed in a hospital anesthesia department, under the supervision of a Specialist Anesthesia Physician where the participant will be expected to function as an advanced airway and anesthesia provider with mentoring from the physician. In addition, the participant must successfully place a minimum of five (5) endotracheal tubes on the first pass with the anesthesia provider observing.
- 40 hours Participants will be placed in a hospital pediatrics department, under the supervision of a Specialist Pediatric Physician where the participant will be expected to function as a pediatric provider with mentoring from the physician.
- 40 hours Participants will be placed in a hospital neurology department, under the supervision of a Specialist Neurologist Physician where the participant will be expected to function with neurology patients with mentoring from the physician.
- 80 hours When not assigned to clinical placements, participants will be scheduled with APP instructor staff for response duty in the EMS system.

Clinical Internship Module:

- 600 hours Participants will be placed as an APP intern, under the supervision of an APP FTO or Emergency Medical Physician Specialist in the EMS critical patient response environment in the Costa Rica EMS system. Units will be stationed at selected Hospitals and the National Dispatch Center will deploy the units per dispatch guidelines in this document.

Final Testing and Evaluation:

Participants will be required to complete all portions and assignments, as well as skills and proficiencies in the APP course. Once this documentation is completed and audited by the EMS MPD, the participants will sit for the GEMR Advanced Practice Paramedic certification exam.

**APPENDIX 2**

**Supporting Evidence**

## Introduction

Advanced Practice Paramedics outside the intensive care unit setting, began development in the late 1980's in response to the growing need for qualified specialists in the area of critical care interfacility transfer, as well as, the need for personnel able to perform high risk, low frequency skills in critical patient populations in the field environment, both normal EMS environments and special operations environments.

A critical patient is one that will die without continuous monitoring and interventions. These are the fragile patients who require a level of understanding beyond a frivolous shrug of the shoulders and a treatment plan that features diesel as a substitute for stabilization and a transport process.

A critical patient continually tests the limits of bedside clinical knowledge, intuition, and skill. Critical care is all about understanding the patient and the treatment. It's about knowing why a heart failure patient should be treated with afterload reduction. It's appreciating that hypoxic respiratory failure is many times best treated by increasing alveolar pressure rather than giving high flow oxygen. It's about understanding the use of diagnostic tools and their role in focusing treatment for the critically ill patient. It is understanding that interventions the provider performs may have consequences that must also be mitigated to provide benefit to the patient.

Critical care is about understanding that profound patient care is centered on great diagnostic capability and the ability to perform interventions flawlessly under extreme pressure. There is a gap between the curriculum for EMS professionals and the care of the critical patient. In light of advancing capabilities, research modalities, and proliferation of tertiary level centers, more and more patients are surviving profound ailments previously thought to be immitigable. These patients are far more complex than those for which EMS typically trains. How do we get these patients to specialized centers? Or more importantly, how do we get the ICU level of care to the patient?

It helps to prepare providers to serve with competence and confidence in meeting the needs of critical care patients undergoing inter-facility transports, as well as those patients requiring advanced skills and diagnostic capability in the prehospital environment. While traditional paramedic education programs teach essential skills, and provide a knowledge base for the management of patients in the average pre-hospital setting, these training programs seldom teach the skills and knowledge necessary to manage critical patients between hospitals, specialty referral centers, and extended care facilities; as well as, complex patients in the prehospital environment.

It can be difficult to change what is, address what is not, and embrace what is new. Critical care patient management is not a definable curriculum or scope of practice. It's the unique combination of experience, stress inoculation, didactic, and practical training in a package meeting the national standards established by various private guideline organizations and the approval of the medical director.

Critical care training is not about simply sitting while listening to lectures, viewing online materials, or trying to remember enough to pass a test. It's about making a commitment to the patient whose life is

influenced in real time by the provider with superior knowledge, a high level of skill, increased scope, increased speed, and experience.

Training in the form of critical care courses will not miraculously turn out advanced practice providers, but it can be effective in providing the foundational concepts. Further and continued growth then involves personal commitment, field training, acquired intuition, a fine touch, and passionate learning.

Ultimately, the concepts of critical care are science and process based. A respectable critical care education process will concentrate on this science and process in explaining how all critical patients are managed by balancing the working differential diagnoses with the needs of airway, ventilation, perfusion, and pharmacology for the purposes of sedation, antimicrobial therapy, and course of disease process; while working to mitigate adverse effects of interventions and pharmacology utilized to influence positive outcomes.

Over the past decade, an ever-increasing volume of critical care level patients have been encountered in the prehospital and interfacility environments. This, coupled with the ever-increasing expectations of the ILCOR and AHA science guidelines for providers to apply advanced interventions and treatment bundles in complex patient care situations, as created a need for Advanced Practice Paramedic level capability within the service.

In addition, with increasing focus in the US Department of Health and Human Services (HHS) for definable and reportable competencies for providers billing as specialty rates, such as the Medicare critical care transport rate, necessitate the service pursuing additional capabilities.

At its core, critical care medicine for the advanced practice provider in the transport and holding environment is the application of science and artistry to the care of the profoundly ill patient in order to be improving that patient's physiologic status from the moment the Advanced Practice Paramedic arrives at their side.

In this document, we will explore a pathway for providers to develop critical care skills and knowledge to improve patient outcomes and create a recognized system of care.

## Evidence Based Placement of ESP Providers within System Design

**Purpose:** Provide clarity for placement of Extended Scope of Practice (ESP) Paramedics to provide advanced back up on complex trauma and medical patients, as well as manage specific high risk patient events and critical care transports. ESP Paramedics are trained as advanced practice providers, able to function as the “hands, eyes, and ears” of the physician, providing advanced decision making, advanced diagnostics, and advanced care under the direct authority of a specific physician through online and offline medical direction. The focus of these resources are to improve neurologically and functionally intact survival in the patient population through application of advanced medications and procedures. This system of advanced providers has shown dramatic results in Washington, Oregon, Victoria, South Africa, and Raleigh.

### Application:

In King County Washington, the Portland Metropolitan Area in Oregon, and Clark County Nevada during the past ten years, there has been an ever increasing rate of neurologically intact survival from cardiac arrest, functionally intact recovery from trauma, and functionally intact recovery from myocardial infarction and cerebral vascular accidents. With all three system being top performing EMS systems in the world, and the King County Medic One system taking firm hold as the top performing EMS system in the world today with cardiac arrest neurologically intact survival exceeding 50% in 2013!

For an EMS system to become a world leader in EMS and match the results of the highest performing EMS systems in the world, there must be a unique, close, and intimate integration of clinical governance, education, and operations management similar to the methodologies utilized in the three systems discussed above, because only through acknowledgement of the equal footing of medical direction and operations can an EMS system be successful in advanced practice. EMS systems can move to a high fidelity, high performance, and high impact model with the implementation of a tiered response system with a small group of paramedics functioning at an extended scope of practice which mirrors the scope of paramedics in several high-performance systems. This small cadre of Medical Director approved and mentored ESP providers to provide a supplemental paramedic with a high frequency of critical patient care encounters to augment the care being provided by our outstanding ambulance-based EMS providers and provide those advanced interventions that must be done right now or the patient will perish.

A sample of those impacts follow:

1. As discussed at the International science symposium <sup>(1a, 1b, 1c, 1d)</sup>, full application of the immediate post cardiac arrest algorithm, advanced preparation steps for PCI, and direct PCI admission can improve cardiac arrest survival from 27% to 43%! With an average of 40 cardiac arrest incidents treated a month by National Ambulance, this level of intervention combined with rapid defibrillation and CPR from first in units and the general public (through increased public response with the use of PulsePoint) would result in a potential 206 neurologically intact cardiac arrest survivors due to National Ambulance!
2. While the use of standard paramedic interventions make a large impact on patient’s suffering ventricular fibrillation arrest, only through application of advanced techniques can the patient in PEA arrest have an equal chance at survival, by the application of a modified approach to the PEA patient, rapid intervention is possible to improve lives saved <sup>(2a)</sup>.
3. In the current lexicon of trauma, Damage Control Resuscitation (DCR) has been the standard of care since 2008 in the military medical systems worldwide for the 3-8% of trauma patients on the edge of physiologic exhaustion and cardiac arrest; but only through application of advanced techniques <sup>(3a, 3c, 3d, 3e, 3f)</sup>, can these



*patients experience the dramatic recovery rates* (approaching 7%<sup>3b</sup> in traumatic arrest and 80% in multisystem trauma) shown in high performance EMS systems within South Africa and the United States. The addition of blood products for specific trauma patients allows the ESP paramedic to again increase survival<sup>(3g, 3h)</sup>, when coupled with ultrasound identification of specific traumatic injuries, the ESP paramedic will be able to reduce some injury fatality rates by as much as 50%<sup>(5a, 5b, 5c)</sup>.

4. Through the use of advanced techniques and treatment protocols, the ESP provider will be able to improve outcomes secondary to myocardial infarction in a dramatic fashion, through ESP protocols and direct admission to PCI processes established between the cardiology PCI staff and the small cohort of ESP paramedics, the time of event to PCI intervention can be under 90 minutes<sup>(1e)</sup>
5. The application of ESP paramedics with advanced airway capability will improve airway management success and improve patient outcomes<sup>(4a-g)</sup>

#### Fiscal Impacts:

Fiscal impacts are negligible for implementation of this program, if the model for advanced practice utilized by American Medical Response is utilized in this circumstance:

1. Personnel must apply for the available positions and attend a training/selection academy on their own time.
2. The Medical Director appoints a single supervising educator for the program, this individual works directly with the advanced personnel as the medical director's designee and intimately with operations to develop an effective team of personnel while guiding and assessing their education and clinical competencies in the classroom and field.
3. The supervising training officer selects field training officers at a ratio of 10:1 for the advanced practice personnel, these FTO personnel work as shift personnel, but report to the Medical Director and Supervising Educator.
4. **No additional monetary compensation is offered to these personnel**, the only return for their time and investment in their clinical practice is dramatically increased training opportunities, field mentoring, the addition of three "education days" to their leave time per year, and a small increase in work schedule privileges.

Fiscal impacts to the healthcare system can exceed \$2,000,000 per patient who is converted from a disabled state to a fully functional state by the application of these techniques. In the United States, the CDC estimates that in 2000 the medical costs and indirect costs (lost productivity) of TBI in United States totaled \$60 billion, with extended care for comatose patients exceeded \$1,000 usd/day. The Markov model estimated rehabilitation costs of \$1.4 million and nursing home cost of \$4.8 million per long term maintenance patient care; and the American Heart Association estimated significant savings in their "Cost and Outcome of Mechanical Ventilation for Life-Threatening Stroke" consensus statement for patients whose functionality could be improved rather than long term care being required. This process also applies to the post cardiac arrest and trauma patient populations.

## Evidence References:

### 1. Improving Post Cardiac Arrest Survival and ACS:

- a. *Implementation of complete field post cardiac arrest care and direct admission to PCI resulted in an adjusted unpaired analysis of 27.4% neurologically survival without immediate PCI versus 43.7% neurologically intact survival with PCI* (Immediate PCI after Cardiac Arrest is associated with short and long term outcome; Guillaume Geri, Florence Dumas, et Al; Original Research Presented November 16, 2014 at AHA/ILCOR Science Meeting, Chicago, Illinois, USA)
- b. *Few systems worldwide have achieved the benchmark time of less than 90 minutes from emergency medical services (EMS) contact to balloon inflation (E2B) for patients sustaining ST-segment elevation myocardial infarction (STEMI)* (Paramedic contact to balloon in less than 90 minutes: a successful strategy for st-segment elevation myocardial infarction bypass to primary percutaneous coronary intervention in a Canadian emergency medical system. Cheskes S, Turner L, Foggett R, Huiskamp M, Popov D, Thomson S, Sage G, Watson R, Verbeek R.; Prehosp Emerg Care. 2011 Oct-Dec;15(4):490-8)
- c. *Overall, optimizing advanced and systemic implementation is the action most likely to result in widespread improvement in survival after OHCA* (Implementation Strategies for Improving Survival After Out-of-Hospital Cardiac Arrest in the United States; Robert W. Neumar, et Al; Circulation; 2011; 123: 2898-2910)
- d. *If Out Of Hospital Cardiac Arrest (OOHCA) associated with STEMI, field providers should bypass nearest hospitals and go directly to a cardiac receiving hospital so patients can receive angiography within 90 minutes* (Regional Systems of Care for OOHCA: A Policy Statement from the AHA, Circulation Feb 9, 2010)
- e. *Hospital door-to-balloon time for those patients averaged 47 minutes and only 87 minutes from when the 9-1-1 call was answered until the patient received a PCI.* (Paramedics Activate Cath Lab for STEMI Patients in Some Areas; JEMS, June 25, 2007)
- f. *A STEMI system allowing EMS to transport patients directly to a primary PCI center was associated with a significant reduction in mortality* (Reduction in Mortality as a Result of Direct Transport From the Field to a Receiving Center for Primary Percutaneous Coronary Intervention; Michel R. Le May, MD, et Al; Journal of the American College of Cardiology Vol. 60, No. 14, 2012)

### 2. Improving Cardiac Arrest Survival

- a. *A modified approach to PEA focuses on “cause-specific” interventions utilizing two simple tools: ECG and Bedside Ultrasound (US)* (Simplified and Structured Teaching Tool for the Evaluation and Management of Pulseless Electrical Activity. Littmann L, Bustin D, Haley M. A; Med Princ Pract 2014; 23:1-6)
- b. *In CARES, survival was higher among OHCA receiving ETI than those receiving SGA* (McMullan J, Gerecht R, Bonomo J, et al. Airway management and out-of-hospital cardiac arrest outcome in the CARES registry. Resuscitation. 2014;85(5):617–622. doi:10.1016/j.resuscitation.2014.02.007)
- c. *“In out-of-hospital urban and rural settings, patients intubated during resuscitation had a better survival rate than patients who were not intubated, whereas in an in-hospital setting, patients who required intubation during CPR had a worse survival rate. A recent study found that delayed endotracheal intubation combined with passive oxygen delivery and minimally interrupted chest compressions was associated with improved neurologically intact survival after out-of-hospital cardiac arrest in patients with adult witnessed VF/pulseless VT “* (2010 CPR/ECC Science Guidelines, Part 8.1, Advanced Airways)
- d. *The presence of an intensive care paramedic had a significant effect on survival (OR = 1.43, 95% CI = 1.02 to 1.99).* (Impact of advanced cardiac life support-skilled paramedics on survival from out-of-hospital cardiac arrest in a statewide emergency medical service; John Woodall, Molly McCarthy and Vivienne Tippett, Emerg Med J. Feb 2007; 24(2): 134–138)

### 3. Improving Trauma Survival

- a. *The natural extension and development of DCS has been damage control resuscitation. DCR is a structured, mobile intervention that can be delivered to a critically ill patient in any location. Basic principles include arresting hemorrhage; restoring blood volume; and correcting coagulopathy, acidosis and hypothermia* (Damage control resuscitation: history, theory and technique; Chad G. Ball, MD, MSc; Can J Surg. Feb 2014; 57(1): 55–60)
- b. *6.6% of the patients survived with a CNR. Our data allow us to state beyond any doubt that advanced life support should be initiated in TCA patients regardless of the initial rhythm, especially in children and those*

*with VF or PEA as the initial rhythm.* (Traumatic cardiac arrest: should advanced life support be initiated?; Leis CC1, Hernández CC, Blanco MJ, Paterna PC, Hernández Rde E, Torres EC; J Trauma Acute Care Surg. 2013 Feb;74(2):634-8)

- c. *Contrasted patients kept at a MAP of 65 verses those kept at a MAP of 50; Patients in the low MAP group: Had lower transfusion requirements, Developed coagulopathy less frequently, Had a lower 24-hour mortality* (Hypotensive Resuscitation Strategy Reduces Transfusion Requirements And Coagulopathy In Trauma Patients With Hemorrhagic Shock; Morrison CA. J Trauma 2011; 70:652-663)
- d. *Targeted pre-hospital ventilation is associated with lower mortality after severe TBI* (The impact of prehospital ventilation on outcome after severe traumatic brain injury; Warner KJ, Cuschieri J, Copass MK, Jurkovich GJ, Bulger EM; J Trauma. 2007 Jun;62(6):1330-6)
- e. *Aeromedical crews appear to appropriately select major trauma victims to undergo field needle thoracostomy and tube thoracostomy. A low incidence of complications and a small but significant group of unexpected survivors support continued use of this procedure by aeromedical personnel.* (The safety and efficacy of prehospital needle and tube thoracostomy by aeromedical personnel; Davis DP, Pettit K, Rom CD, Poste JC, Sise MJ, Hoyt DB, Vilke GM; Prehosp Emerg Care. 2005 Apr-Jun;9(2):191-7)
- f. *Found that advanced scope paramedics could safely provide ALS care in a backcountry environment. This care improved patient comfort during long extrication and allowed for life-saving interventions such as advanced airway management, at the patient's side preventing loss of life.* (Advanced life support in the wilderness: 5-year experience of the Reach and Treat team; Terri A. Schmidt; Carol S. Federiuk; Andrew Zechnich; Markus Forsythe; Michael Christie; Christopher Andrews; Wilderness and Environmental Medicine. 1996;7(3):208-215.)
- g. *Similar to the data published from the ongoing war, improved early outcomes are associated with placing blood products prehospital, allowing earlier infusion of life-saving products to critically injured patients.* (Prehospital Transfusion of Plasma and Red Blood Cells in Trauma Patients; John B. Holcomb, Daryn P. Donathan, et Al; Prehospital Emergency Care, June 16, 2014)
- h. *It is feasible and practical to provide prehospital trauma teams with pRBCs for use in the field. Use of pRBCs in the prehospital setting is associated with similar rates of pRBC wastage to that reported in emergency departments.* (The feasibility of civilian prehospital trauma teams carrying and administering packed red blood cells; Daniel Bodnar, et Al; Emerg Med J 2014;31:93-95)

#### 4. Airway Management at the ESP Level:

- a. *In this population-based cohort of out-of-hospital cardiac arrest, RSI was used in 15% of patients and associated with a better prognosis than intubation attempted without paralytics. Because this subset with a favorable prognosis may not be readily intubated in systems without paralytics, these findings could help to explain the adverse relationship between intubation and survival observed in prior studies.* (Use of rapid sequence intubation predicts improved survival among patients intubated after out-of-hospital cardiac arrest; Kwok, et Al; Resuscitation. 2013 Oct;84(10):1353-8)
- b. *In adults with severe TBI, pre-hospital rapid sequence intubation by paramedics increases the rate of favorable neurologic outcome at 6 months compared with intubation in the hospital.* (Prehospital Rapid Sequence Intubation Improves Functional Outcome for Patients With Severe Traumatic Brain Injury; Stephen A. Bernard MD, Vina Nguyen BSc, Peter Cameron MD, et Al; Annals of Surgery Volume 252, Number 6, December 2010)
- c. *Seattle Medic One's first-pass success rate for oral endotracheal intubation is 75%; its overall success rate is 98.4%.* (Prehospital Management of the Difficult Airway: A Prospective Cohort Study; Keir J. Warner, BS, Sam R. Sharar, MD, Michael K. Copass, MD, Eileen M. Bulger, MD; Journal of Emergency Medicine, Volume 36, Issue 3, Pages 257–265, April 2009)
- d. *Although rarely performed, cricothyroidomy can be a life-saving procedure. Evidence from model lung studies shows that the surgical method provides effective ventilation independent of the degree of upper airway restriction, whereas the efficacy of initial ventilation via a cannula reduces as an inverse function of increasing upper airway restriction, and becomes totally inadequate within 60 s if a low pressure (15 L.min<sup>-1</sup>) self-assembled ventilation system is used* (Needle vs surgical cricothyroidomy: a short cut to effective ventilation; I. Scrase and M. Woollard; Anaesthesia; Volume 61, Issue 10, pages 962–974, October 2006)

- e. *Surgical cricothyrotomy appeared to be a preferable method for establishing a definitive airway over the percutaneous method (A laboratory comparison of emergency percutaneous and surgical cricothyrotomy by prehospital personnel; Keane MF, Brinsfield KH, Dyer KS, Roy S, White D; Prehosp Emerg Care. 2004 Oct-Dec;8(4):424-6.)*
- f. *In this study, only 1.1% of patients required a surgical airway. We attribute this low rate to the use of paralytic agents. The availability of paralytic agents also allows expansion of the indications for prehospital airway control. (An analysis of advanced prehospital airway management; Bulger EM1, Copass MK, et Al; J Emerg Med. 2002 Aug;23(2):183-9.)*
- g. *Paramedics successfully intubated 95.5% (1,582) of all patients receiving Succinylcholine; 94% (1,045) of trauma patients and 98% (538) of medical patients. They were unable to intubate 4.5% (74) of the patients. All of these were successfully managed by alternative advanced methods, such as SGA or surgical cricothyroidomy. (Prehospital use of Succinylcholine: a 20-year review; Wayne MA, Friedland E.; Emergency Medical Services, Bellingham/Whatcom County, Prehosp Emerg Care. 1999 Apr-Jun;3(2):107-9.)*

## 5. Ultrasound Application for Patient Improvement:

- a. *Pre-hospital ultrasound when applied by an proficient examiner using a goal-directed, time sensitive protocol is feasible, does not delay patient management and provides diagnostic and therapeutic benefit. Further studies are warranted to identify the exact indications and role of pre-hospital sonography. (Portable ultrasound in pre-hospital emergencies: a feasibility study; M. Busch, et Al; Acta Anaesthesiologica Scandinavica, Volume 50, Issue 6, pages 754–758, July 2006)*
- b. *Prehospital emergency ultrasound has many clinical applications that would reduce morbidity and improve outcomes of patients with life-threatening emergency conditions. This imaging modality improves diagnostic accuracy and provides crucial information to prehospital providers to guide management and help triage patients to appropriate destinations (Prehospital Emergency Ultrasound: A Review of Current Clinical Applications, Challenges, and Future Implications; Mazen J. El Sayed and Elie Zaghrini; Department of Emergency Medicine, Beirut Medical Center, Beirut, Lebanon; Emergency Medicine International, 2013)*
- c. *Logistic regression revealed that ABD CT was independently associated with more than a 70% higher risk of mortality. (OR, 1.71; 95% CI 1.2-2.2, p <0.001) (Over reliance of CT imaging in patients with severe abdominal injury: Is the delay worth the risk?; Neal MD. J Trauma 2011; 70:278-284)*

## Education, Competency Assurance, Privileges to Practice Considerations

What is the best way to determine if a provider is competent? This question is increasingly being asked by employers, regulators, certifying agencies, insurance companies, and professional associations. Currently in the majority of jurisdictions and courts, a practitioner is determined to be competent when initially licensed, able to show proof of skills competencies, and has the approval of medical oversight; thereafter unless proven otherwise, the issue of competency has been through this pathway, yet in the past decade, legal actions and media investigations have thrown a poor light on this pathway.

As a result, the simple fiscal impacts to the major carriers has resulted in a standard determination that the standard must change. Many organizations and regulatory authorities are exploring alternative approaches to assure continuing competence in today's environment where technology and practice are continually changing, new health care systems are evolving and consumers are pressing for providers who are competent, both privately, through legal action, and through social media processes.

The purpose of this discussion is to explore various approaches and views related to continuing competency and examine the difficult policy, development and implementation issues related to continuing competency.

Both the American Medical Association (AMA) and the American Nurses Association (ANA) have been asked this question by their membership, regulators, consumers and the public. Since competence of the provider has become a primary concern of the profession, Both the AMA and ANA have embarked on the development of policy addressing the continuing competence of practicing providers.

The American College of Emergency Physicians (ACEP) believes that:

1. The exercise of clinical privileges in the emergency department is governed by the rules and regulations of the department;
2. The medical director (or their designee) is responsible for periodic assessment of clinical privileges of emergency physicians against the national competency guidelines;
3. When a physician applies for reappointment to the medical staff and for clinical privileges, including renewal, addition, or rescission of privileges, the reappraisal process must include assessment of current competence by the medical director (or their designee);
4. The medical director (or their designee) will determine the means by which each emergency physician will maintain competence and skills and the mechanism by which the proficiency of each physician will be monitored.

*(Revised and approved by the ACEP Board of Directors October 2014, June 2006 and June 2004)*

Mechanisms for continuing competence include regulatory and private sector approaches, as well as approaches by national organizations, certifying entities, and state boards.

### Regulatory Approaches to Continuing Competence:

Health care practitioners are regulated by state regulatory boards with the purpose of protecting the health, safety and welfare of the public. When a practitioner is initially licensed, they are deemed by the state to have met minimal competency standards. The challenge of licensure boards is to assure practitioners are competent throughout their practice career not just with initial licensure. As well as address the issues of post licensure inexperience during the first licensure period.

The ongoing demonstration of continuing competence is not a new regulatory issue.

According to a national commission on health manpower sponsored by the U.S. Department of Health, Education and Welfare recommended physicians undergo periodic reexaminations (*Schmitt Shimberg 1996*). In 1971, a similar report recommended that requirements to ensure continued competence should be developed by professional associations and states. The alternative to periodic reexamination was deemed to be continuing education (CE) and states began requiring mandatory CE as a condition of licensure renewal for a variety of professions. The National Registry of Emergency Medical Technicians (NRAPP) required both continuing medical education and skills competency evaluation in its very first year of establishment.

### Continuing Education and Clinical Competence:

This approach to continuing competence proved to be controversial. Given the broad parameters of what continuing education consists of and the lack of formal research to support the correlation between participation in continuing education and continuing competence related to improved practice outcomes, this method has been called into question. However, several investigators are working to make this link by designing a longitudinal descriptive research study to determine the relationship between education sessions and practice.

The 2006 study, National Reregistration and the Continuing Competence of Paramedics, by Keith Holtermann and colleagues, found that NRAPP Paramedics who reregistered 4 and 6 years after initial registration were twice as likely to pass the exam as their State-certified cohort counterparts who did not reregister with the NRAPP. The registered group, compared to the nonregistered group, had significantly more Continuing Medical Education. The findings suggest that Paramedics who reregister with the NRAPP are more knowledgeable than those who do not reregister.

In a 2011 study (*The Association Between Emergency Medical Services Field Performance Assessed by High-fidelity Simulation and the Cognitive Knowledge of Practicing Paramedics; Jonathan R. Studnek PhD, NRAPP-P, Antonio R. Fernandez PhD, NRAPP-P, Brian Shimberg NRAPP-P, et Al*), investigators simultaneously assessed cognitive knowledge and simulated field performance. Utilization of these measurement techniques allowed for the assessment and comparison of field performance and cognitive knowledge. Results demonstrated an association between a practicing paramedic's performance on a cognitive examination and field performance, assessed by a simulated EMS response.

Substantial research demonstrates that the stressors accompanying the profession of paramedicine can lead to mental health concerns. In contrast, little is known about the effects of stress on paramedics' ability to care for patients during stressful events. In this study, investigators examined paramedics' acute stress responses and performance during simulated high-stress scenarios. Advanced care paramedics participated in simulated low-stress and high-stress clinical scenarios. The paramedics

provided salivary cortisol samples and completed an anxiety questionnaire at baseline and following each scenario. Clinical performance was videotaped and scored on a checklist of specific actions and a global rating of performance. The paramedics also completed patient care documentation following each scenario. Results showed that clinical performance and documentation both appeared vulnerable to the impact of acute stress. Developing systems and training interventions aimed at supporting and preparing emergency workers who face acute stressors as part of their everyday work responsibilities is a vital avenue to successful patient outcomes. (*LeBlanc VR, Regehr C, Tavares W, Scott AK, MacDonald R, King K. The impact of stress on paramedic performance during simulated critical events. Prehosp Disaster Med. 2012*)

In a randomized controlled trial, simulation based learning was superior to problem based learning for the acquisition of critical assessment and management skills (*Simulation-based training is superior to problem-based learning for the acquisition of critical assessment and management skills; Steadman, Randolph H. MD; Coates, Wendy C. MD; et Al; Critical Care Medicine; January 2006 - Volume 34*)

The link between exposure to patients and improvement in performance has been established many times in literature, but perhaps most compelling of recent studies is from Australia, where patient survival after OHCA significantly increases with the number of OHCA's that paramedics have previously treated (*Paramedic Exposure to Out-of-Hospital Cardiac Arrest Resuscitation Is Associated With Patient Survival; Kylie Dyson, Janet E. Bray, et Al; Circulation: Cardiovascular Quality and Outcomes; January 26, 2016*)

In the past twenty years, state legislative action related to continuing competency has increased. In 1999, legislation was passed in Tennessee requiring the development of continuing competence requirements of providers. In the same year, legislation was passed in Vermont mandating continuing competency evaluations of physicians, chiropractors, and podiatrists. Currently, twenty-four states have introduced legislation relative to continuing competence of health professions. Most legislation would require licensees to demonstrate continuing competence to a licensure board upon re-licensure while some bills would require a provider to demonstrate competency in the workplace setting.

A bill in Massachusetts that would authorize the Board of Registration (Board of Nursing) to require periodic competency testing of all licensed and registered nursing including testing of current nursing practice and procedures. Failure to pass this test would result in automatic suspension of a nurses' license until competency was established. A bill introduced in Hawaii would require nurses in hospitals to demonstrate competence in providing care in order to be assigned to a nursing unit. Other continuing competence bills apply to chiropractors, podiatrists, dentists, dietitians, physicians, paramedics, pharmacists and speech-language pathologists.

As states regulate advanced practice, they are turning to certification as an indicator of entry-level competence. Certification in these instances is therefore not a voluntary process, but instead constitutes a regulatory requirement to ensure public safety and enhance public health. As a result, certifying bodies are expected to demonstrate that their initial certification exams truly reflect entry level and that their recertification process reflects continuing competence.

The underlying assumptions regarding the use of certification to ensure competence and its inherent value have been increasingly questioned since the late 1970's. There is a dearth of empirical data which substantiate the predictive power of certification and recertification exams, which has led to the assertion that certification does not have an impact on patient outcomes.

#### Private Sector Approaches to Continuing Competence:

The Joint Commission of Accreditation of Healthcare Organizations (JCAHO) requires hospitals to assess the competency of employees when hired and then regularly throughout employment. The competence assessment is defined as "the systematic collection of practitioner-specific data to determine an individual's capability to perform up to defined expectations." (*Joint Commission on Accreditation of Healthcare Organizations, 1998*).

Pew Commission Reports on health professions licensure issues have been a catalyst in bringing the issue of continued competence to the public's attention. In its 1995 report, *Reforming Health Care Workforce Regulation: Policy Considerations for the 21st Century*, one of the proposed recommendations is: "States should require each board to develop, implement and evaluate continuing competency requirements to assure the continuing competence of regulated health care professionals." Accompanying the recommendation was a series of policy options. In formal responses to the report from the public, this recommendation received the highest score for level of concern and one of the highest scores for level of support. There were 76 formal responses to the report; 45% were from the nursing community which included state and national organizations as well as nursing boards; 26% of the responses were from individuals; and 29% from other health care professions including occupational therapy, physical therapy, medicine, pharmacy and dentistry (*Gagnola, Stone, 1997*). Identified barriers to reform included the complexity of the health care environment and the vast differences in practice. These differences make testing for competence difficult as areas of expertise may not fit into standardized testing.

A second Pew Report, *Strengthening Consumer Protection: Priorities for Health Care Workforce Regulation* was released in October of 1998. One of the three priority issues included in the report was continuing competence. The report recommended that state regulatory boards should be held responsible to require health care practitioners to demonstrate competence throughout their careers. However, the report added that the "actual assessment of competence may best be left to the professional associations, private testing companies and specialty boards" (*Pew Health Professions Commission, 1998*).

The Interprofessional Workgroup on Health Professions Regulation, which represents 17 health professions, received a Pew Foundation grant to sponsor a continuing competence Summit entitled, "Assessing the Issues, Methods and Realities for Health Care Professions," July 25 - 26, 1997 in Chicago, Illinois. The objective of the Summit was for participants to recognize the significance of ensuring continued competence for health care professionals. The Summit focused on analyzing the issues related to continuing competence and promoted discussion of various methods of assessing continuing competence.

Other measures to promote competence have been indirectly aimed at the prevention of potential problems through accreditation of educational institutions, background checks on licensees and the threat of disciplinary action if the licensee is reported to the board.

Whose role is it to assure continuing competence? Is it the role of the individual provider, professional association, employer, regulatory board, or certifying agency to assure continued competence? Should all of the stakeholders be involved, or just one or two?



Dennis Wentz, American Medical Association, points out that 90% of physicians take specialty board examinations and pass. There are continuing medical education requirements for recertification. Fourteen programs are now operational and moving toward maintenance of competence rather than testing at intervals.

The ANA sponsored Expert Panel appointed in 1999 has formulated the following assumptions regarding continuing competence:

1. The purpose of ensuring continuing competence is the protection of the public and advancement of the profession through the professional development of providers.
2. The public has a right to expect competence throughout provider's careers.
3. Any process of competency assurance must be shaped and guided by the profession of the provider.
4. Assurance of continuing competence is the shared responsibility of the profession, regulatory bodies, organizations/workplaces and individual providers.
5. Providers are individually responsible for maintaining continuing competence.
6. The employer's responsibility is to provide an environment conducive to competent practice.
7. Continuing competence is definable, measurable and can be evaluated.
8. Competence is considered in the context of level of expertise, responsibility, and domains of practice.

Building on existing regulatory models and the mission of its organizations, the National Council of State Boards of Nursing (NCSBN) has explored various approaches to determine continued competence. NCSBN has investigated the use of computer simulated testing (CST) for assessing nursing competence, reviewed and utilized mandated continuing education, and is now focusing on the licensee's responsibility for individual competence. NCSBN has also explored through the Continuing Competence Accountability Profile (CCAP), a self-assessment tool, which "provides a framework for nurses to track and document a synthesis of professional growth activities across a nurse's career." NCSBN recognizes that continued competence is a multifaceted issue that compels the profession, consumers and other to assist in comprehensive development of options to best assure ongoing nursing education and skill levels. (National Council of State Boards of Nursing, 1998).

In addition to competency assessment, the issue of clinical privileges is significant.

In its Guidelines for Credentialing and Delineation of Clinical Privileges in Emergency Medicine, the American College of Emergency Physicians (ACEP) states the medical director (or designee) is responsible for setting competence criteria. The medical director is also ultimately responsible for determining the competence of individual department members.

The medical director must also be in compliance with established department proficiency and competence criteria. In the event of question or dispute over the medical director's competency, the matter may be referred to the medical staff's credentials committee or to the medical executive committee.

Establishing criteria for proficiency and the evaluation of proficiency may be problematic. For those medical specialties that perform major procedures (i.e.: surgery, emergency medicine, etc..), establishing numerical thresholds may be a valid methodology (ie, requiring that a minimal number of procedures be

performed during the privileging period under review). Lack of numerical compliance requires stress inoculation simulation performance appraisal.

However, for those specialties that are primarily "cognitive" in nature, which employ a wide armamentarium of "minor" procedural skills, establishing numerical thresholds for numerous procedures may be very difficult to track. Further, it is not clear whether such tracking of "minor" procedural skills is a valid component of proficiency assessment.

Many departments will choose to establish clinical privileges assessment methodologies that utilize a combination of procedure tracking (frequency), plus assessment based on sentinel events, training, assessment, and information forthcoming from the department's overall quality improvement plan.

Establishing frequency thresholds in emergency medicine may be problematic. Certain procedures may be performed very rarely (eg, cricothyrotomy). Yet, all emergency physicians must be capable of performing this and several other rarely-performed emergency procedures. In the event that a member does not meet or exceed numerical thresholds for procedures when such thresholds have been set, an option is to extend a providers procedure privileges through a "skills lab" (eg, educational review, demonstration, simulation and testing) is a recommended process.

In their work, *Defining and Assessing Professional Competence*, Epstein and Hundert (*JAMA* 2002;287(2):226-235) stated that in addition to assessments of basic skills, new formats that assess clinical reasoning, expert judgment, management of ambiguity, professionalism, time management, learning strategies, and teamwork promise a multidimensional assessment while maintaining adequate reliability and validity. Institutional support, reflection, and mentoring must accompany the development of assessment programs.

#### Summary:

Clinical competency, defined as, "The capability to perform acceptably those duties directly related to patient care. competence in professional activities directly related to patient care", has been an issue for decades in healthcare. As early as 1967, a national commission on health manpower sponsored by the U.S. Department of Health, Education and Welfare recommended licensed physicians be re-examined periodically; this commission later recommended CE as an alternative to re-licensure. State legislatures continue to address continuing competence, as do the courts and private accreditation and certification agencies.

The reality of critical care medicine, especially as applied in the prehospital environment, requires that each and every provider have base licensure, recognized educational processes, regular competency assessment, and a formal process for clinical privilege granting.

Failure to have a defensible program that does not include skills demonstration, simulation, and supervised clinical practice as components of the process will not lead to improved patient outcomes, and most certainly will lead to professional or legal complications.