Educational Institution Endorsement Manual



Division of EMS Licensure and Certification

West Virginia Department of Health and Human Resources



West Virginia Department of Health and Human Resources **Bureau for Public Health Office of Emergency Medical Services** 350 Capitol Street, Room 425 Charleston, WV 25301-3714 (304) 558-3956 www.wvoems.org

Table of Contents

Introduction	3
Standards for Endorsement	3
BLS Institute Endorsement	4
ALS Institute Endorsement	12
CCT Institute Endorsement	14
Continuing Education Endorsement	22
Instructor Requirements	26
Application Instructions	30
Appendices	
1. Application for Endorsement	34
2. Institution Self Study	36
3. Instructor Application	
4. BLS Institution Equipment List	40
5. CCT Institution Equipment List	42

Introduction

Six years ago, under the direction of the late Mark E. King, the West Virginia Office of Emergency Medical Services (WVOEMS) released the first Basic Life Support Training Institute Manual and Instructions for Accreditation. The original manual was guided by a vision derived from the EMS Education Agenda for the Future: A systems Approach. This National Consensus document calls for the completion of a systematic educational program for EMS.

Now, six years later, the WVOEMS is proud to release the Educational Institute Endorsement Manual. The goal of this manual is to assist the Educational Institute in achieving endorsement from the state. This updated manual incorporates the National EMS Education Program Standards, along with State Legislative Rule, to set the standards for Educational Institutes within West Virginia.

The WVOEMS is dedicated to the care of patients experiencing illness or injury in this State. It is the vision of the WVOEMS for providers to play a vital role in the healthcare system which is driven by the needs of the patients and their families. The Educational Institutes must meet this challenge, and we, as continual students of pre-hospital care, must have a stable foundation from which to build the knowledge base which makes us successful pre-hospital care providers for ourselves and those in the communities which we serve.

Please review this manual and familiarize yourself with the standards within. Once you have a plan for implementation, submit your application for endorsement along with the completed self study to the WVOEMS, and make a request for education institute site visit review. It is the desire of the WVOEMS that the information in this manual will greatly assist you in becoming endorsed as an educational institution.

Standards for Endorsement

The purpose of the following sections are to establish standards to ensure that EMS education offered in West Virginia is provided by approved, qualified educational institutes. These standards apply to any entity providing initial or formal refresher courses of education for the listed certification level. Any entity who will conduct initial certification courses, or whose primary goal is to conduct continuing EMS education must apply, be evaluated and endorsed by the West Virginia Office of Emergency Medical Services (WVOEMS) as an Educational Institute. Application and evaluation processes shall be completed in a manner prescribed by WVOEMS. Such entities must be eligible, as determined by WVOEMS, to provide such education and must continuously maintain the minimum requirements herein once approved.

Basic Life Support Educational Institution

PROCEDURE/REQUIREMENTS:

- I. General BLS Institute Characteristics:
 - A. Qualifications:
 - 1. Only entities, authorized under applicable State or Federal law to provide post-secondary education, or;
 - 2. Those entities authorized by legislative rule to be qualified to deliver EMS education shall be considered for endorsement, or;
 - 3. A hospital, clinic or medical center accredited by a healthcare accrediting agency or equivalent that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law or other acceptable authority to provide healthcare, which is affiliated with an accredited post-secondary educational institution or equivalent or an accredited graduate medical education program, which awards a minimum of a certificate at the completion of the program. [http://www.coaemsp.org/Documents/Standards.pdf]
 - B. Responsibilities:
 - 1. Management of student admissions
 - 2. Curriculum planning
 - 3. Coordination of classroom teaching
 - 4. Appointment and management of qualified faculty
 - 5. Management of clinical and laboratory practice appropriate to the education of BLS personnel
 - 6. Compilation and documentation of student educational records
 - C. Administration:
 - 1. Every approved BLS Institute shall have an organizational chart and written job descriptions identifying individual responsibilities for leadership and management of BLS education program.
- II. Required Resources:
 - A. Required Personnel Positions
 - 1. Administrative Director:
 - a. Qualifications:
 - i. Possess minimum of Associate's Degree from an accredited institution of higher education with experience in educational program administration or;
 - ii. Experience in administrating a BLS education program.
 - iii. Knowledge of and ability to apply methodologies of instruction, guidance and evaluation of students particularly adult learners.
 - vi. Possess knowledge of current national curricula, and requirements for national registration and state certification
 - b. Responsibilities:
 - i. Organization and supervision of BLS Education Program.
 - ii. Oversight of institutional Continuous quality review and improvement of the BLS education program.
 - iii. Process-applications and oversight of student selection process.
 - iv. Course scheduling and assignment of instructors.

- v. Provision and maintenance of required educational equipment.
- vi. Submission of course and student records in a manner specified by WVOEMS.
- vii. Request written and practical examinations.
- viii. Management of BLS program budget.
- ix. Management of student grievance procedure for the BLS program.
- x. Oversight of selection and supervision of qualified faculty, and,
- xi. May delegate responsibilities to other faculty as appropriate; provided that written policies and procedures are in place to assure responsibility for delegated task completion.
- 2. Medical Director:
 - a. Qualifications:
 - i. Shall be a physician licensed in the State of West Virginia.
 - ii. Shall have current knowledge of emergency care of acutely ill and injured patients.
 - iii. It is recommended that the Medical Director be knowledgeable of EMS personnel education, including all professional, legislative, and regulatory aspects of this education.
 - b. Responsibilities:
 - i. Provide medical and clinical oversight for students enrolled in a BLS education program.
 - ii. Assist with practical skills development and testing.
 - iii. Assist with selection and orientation of faculty and clinical preceptors.
 - iv. Provide medical advice and assistance to the BLS education program faculty and students.
- 3. Instructional Faculty:
 - a. A Lead Instructor, meeting requirements of WVOEMS Policy 5.03.11, must be appointed for each BLS course presented.
 - b. Visiting instructors, or subject matter experts meeting requirements of WVOEMS policy 5.03.11, may be utilized as appropriate within an individual course.
 - c. Institute selected and trained clinical preceptors shall be utilized to assist students during clinical rotations if applicable.
 - d. There should be sufficient instructional faculty to maintain a student-to-teacher ratio that provides students with adequate didactic and psychomotor instruction and supervised practice.
- 4. Support staff:

It is recommended that every approved BLS Education Institute provide sufficient secretarial/clerical staff to assist the Administrative Director and Instructional staff.

5. Professional Development

It is recommended that every approved BLS Institute develop and implement written policies and procedures to ensure continued professional growth of faculty.

- B. Financial:
 - 1. The approved BLS Institute shall demonstrate commitment of adequate financial resources to operate and sustain the provided BLS educational programs.
 - 2. The approved BLS Institute shall provide evidence of professional liability and errors and omissions insurance in the amount of one million dollars (\$1,000,000) for EMS faculty and programs offered by the institution.
- C. Physical Resources:
 - 1. Facilities:
 - a. The approved BLS Institute shall maintain, or by agreement make available for all courses, facilities for provision of BLS education in a suitable setting for the purpose of the course, including, but not limited to:
 - i. Classroom areas,
 - ii. Laboratory/skills practice areas
 - iii. Appropriate clinical sites, if applicable.
 - b. Facilities shall have adequate storage space for all equipment and supplies required.
 - c. Facilities shall be in compliance with all Federal and State Laws and Codes.
 - 2. Equipment and Learning Resources:
 - a. The approved BLS Institute shall provide appropriate and sufficient medical equipment and supplies for student use and for teaching didactic and psychomotor components of the curriculum. (Required equipment list is in Appendix 3)
 - b. Audio/visual and/or computer hardware and software shall be available to enhance student learning experience.
 - c. It is recommended that students have access to adequate reference resources related to the curriculum to enhance learning opportunities.
- D. Clinical Resources:
 - 1. Affiliations:
 - a. Every approved BLS Institutes shall establish written agreements with licensed EMS agencies, hospitals, or other institutions to provide appropriate clinical experiences for their students if applicable.
 - b. Agreements shall clearly define learning goals and objectives students should obtain, including clinical site's role and responsibilities to students.
 - 2. Settings:
 - a. Clinical areas must be appropriate to ensure student experiences are efficient and effective in achieving clinical objectives, such as;
 - b. Pre-hospital EMS:
 - i. Insure appropriate oversight and accountability where students are not operating without preceptor supervision.
 - ii. Insures students operate under appropriate treatment protocols as authorized by WV OEMS.

- c. Hospitals or Health Care Facilities:
 - i. Areas utilized must provide patient care similar to the pre-hospital setting, or is as an extension of pre-hospital care.
 - ii. Insure appropriate oversight and accountability when students are not operating as independent practitioners.
- 3. Patient Encounters:
 - a. Every approved BLS Institute shall document all student encounters with patients.
 - b. Every approved BLS Institute and clinical facility will insure that any assessment and care provided by students is within their scope of education and practice.
- 4. Student Supervision
 - a. Shall be provided by appropriate Institute staff or by preceptors approved by the Institute.
 - b. Every approved BLS Institute shall have written policies and procedures documentation regarding the process of selecting, training and orientating clinical receptors.
- 5. Student Identification:
 - a. Students shall be clearly identified by use of nametags, uniforms, or other means to distinguish them from agency or facility personnel.
- E. Advisory Committee:
 - 1. It is recommended that an advisory committee representing communities of interest or stake holders be selected and charged with assisting the Institute in formulating appropriate goals and standards, monitoring needs and expectations, and ensuring program effectiveness and responsiveness to community needs.
- III. Student Affairs:

Α.

- Admission Policies and Procedures:
 - 1. Admission of students shall be made in accordance with clearly defined and published practices of the Institute.
 - 2. Specific academic and technical standards required for program admission shall be clearly defined and published, and shall be readily accessible to prospective students and the public.
 - 3. If the Institute admits students on the basis of "ability-to-benefit", it shall employ appropriate methods, such as a pre-admission testing or evaluation, to determine that such students are capable of benefiting from the education.
- B. Health:
 - 1. Every approved BLS Institute shall establish written policy and procedure to determine whether or not health status of an applicant or student will allow them to meet required physical activity required for the provider and documented in that Institute's written technical standards.
- C. Evaluation:
 - 1. There shall be written policies and procedures that define the evaluation process for students in BLS education programs. These policies shall include, but are not be limited to:
 - a. Frequency which students will be evaluated.
 - b. Methods used to evaluate students.

- c. Process used to report outcomes.
- D. Guidance:
 - 1. There shall be written policies and procedures to establish guidance and counseling systems to assist students pertaining to their understanding of course content, observing program policies, and provision of counseling or referral for evaluation of problems that may interfere with student progress.
 - a. There shall be documentation of all guidance and counseling sessions.
 - b. Students shall have ample time to correct any identified deficiencies in knowledge and/or performance documented during guidance or counseling sessions, and be given time to correct these deficiencies prior to completion of the course.
- IV. Operational Policies:
 - A. Fair Practices:
 - 1. Institutes shall have written policies and procedures addressing student and faculty recruitment, student admission, and faculty employment practices.
 - a. These shall be non-discriminatory and in accordance with applicable Federal and State mandates.
 - 2. Institute course announcements, catalogs, publications, and advertising shall accurately reflect BLS education offered.
 - a. Institutes shall publish an academic calendar for BLS programs.
 - b. Materials shall specify number of credits or clock hours required for successful completion of each program, including:
 - i. Didactic hours
 - ii. Lab/Psychomotor hours
 - iii. Clinical hours
 - c. Institutes shall publish accurate statements of all tuition and fees, including books, uniforms, and other items.
 - 3. Institutes shall establish written educational goals, objectives, standards, and competencies of each BLS program.
 - 4. Institutes shall have a written policy to provide a mechanism by which students and faculty may appeal decisions made by Institute staff regarding dismissal or other disciplinary actions.
 - 5. Institutes shall have written policies and procedures for student withdrawal and refunds of tuition and fees, and these policies shall be made known to all applicants.
 - 6. Institutes shall have written policies and procedures concerning health and safety of students and faculty.
 - B. Student Records:
 - 1. All records and documentation for each student shall be maintained by the Institute, and may include the following:
 - a. Evidence of completion of all didactic, psychomotor, and clinical requirements.
 - b. Documentation of class and laboratory participation.
 - c. Documentation of competencies attained.
 - d. Copies of examinations and assessments.

- e. Records of student admission, attendance, academic counseling, and evaluation.
- C. Student Default Rates and Title IV of the Higher Education Act of 1965 responsibilities:
 - 1. Institutes that participate in Title IV (or any other Federal or State Program), shall have a written default management plan and comply with prevailing governmental guidelines regarding program responsibilities.
 - 2. Institutes with responsibilities under Title IV (or other Federal or State programs), shall comply with any results of financial or compliance audits, program review, and such other information as may be provided to WVOEMS or the Commissioner.
- D. It is recommended that programs offered by the Institute maximize student attainment of academic credit and minimize duplication of learning experiences and loss of time in continuing education. Institutes that do not offer academic credit are encouraged to establish agreements or memorandums of understanding with post-secondary institutions to provide students with the ability to receive maximum credit for coursework taken.
- V. Evaluation Processes:
 - A. Policies:
 - 1. Institutes shall have written policies and procedures detailing an ongoing system review that evaluates students, courses and the effectiveness of the program with achieving stated objectives, standards and competencies, and shall demonstrate that these measured outcomes are consistent with national guidelines.
 - B. Methods:
 - 1. Student evaluations shall emphasize the collection and analysis of data regarding the effectiveness of the program meeting stated objectives, standards and competencies.
 - a. Cognitive examinations:
 - i. Examination content shall be national in scope, with uniform passing standards and a means to perform statistical reporting.
 - ii. Examinations shall be given at suitable intervals throughout the course.
 - iii. A comprehensive final examination shall be given.
 - iv. Examinations should be developed by a qualified independent organization.
 - v. Examinations should evaluate entry level competency.
 - vi. Examinations should be based on current practice analysis.
 - b. Psychomotor evaluations:
 - i. Evaluations shall be based upon criteria developed by the appropriate certifying authority.
 - ii. Evaluations shall be conducted at suitable intervals throughout the course.
 - iii. A comprehensive final evaluation shall be given.
 - iv. Evaluations shall be conducted by WVOEMS approved skill evaluators.

- 2. The Institute shall analyze the effectiveness of the program through a consistent evaluation of program graduates. Sources of data include, but are not limited to:
 - a. Surveys of graduates and employers regarding:
 - i. Employment settings
 - ii. Type and scope of practice
 - iii. Salary and benefit information
 - iv. Job satisfaction
 - b. Interviews with program graduates and employers
 - c. Data on student performance on the certifying examinations and other recognized standardized tests.
- C. Evaluation Utilization
 - 1. The findings of ongoing evaluations shall be appropriately adapted into all operational dimensions of the Institute.
 - 2. The Institute shall systematically use the information obtained from evaluations to improve student achievement.
 - a. There shall be a demonstrated systematic process with internal and external results validation; areas for review include, but are not limited to:
 - i. Admission criteria and processes.
 - ii. Curriculum delivery.
 - iii. Student evaluation processes.
 - iv. Instructor effectiveness.
 - v. Involvement of the advisory committee.

Advanced Life Support Educational Institution

Advanced Life Support Standards

Any entity that conducts Advanced Life Support (ALS) education must be accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Application and evaluation processes shall be completed in a manner prescribed by CAAHEP's Committee on the Accreditation of EMS Programs (CoAEMSP). ALS Institute approval may be granted by WVOEMS based on findings of CAAHEP, provided that the Institute must maintain the requirements of policy and rule.

Any institution seeking information on CAAHEP's accreditation process or CoAEMSP's review process can mayfind further information at the following websites:

- <u>http://www.caahep.org</u>
- <u>http://coaemsp.org</u>

Critical Care Transport Educational Institution

Critical Care Transport Institute Standards

- I. General Institute Characteristics:
 - A. Qualifications:
 - 1. Only entities, authorized under applicable law to provide postsecondary education, or;
 - 2. Those authorized by legislative rule and determined by WVOEMS to be qualified to deliver CCT education shall be considered for endorsement.
 - 3. Critical Care Transport educational programs may be a secondary or post-secondary institution or a consortium of post-secondary institutions or other entities determined by OEMS to be qualified to deliver CCT education.
 - B. Responsibilities:
 - 1. Management of student admissions
 - 2. Curriculum planning
 - 3. Coordination of classroom teaching
 - 4. Appointment and management of qualified faculty
 - 5. Management clinical & laboratory practice appropriate to the education of CCT personnel
 - 6. Compiling and documenting student educational records
 - 7. Compliance with requirements of WVOEMS related to the provision of CCT education
 - C. Administration:
 - 1. The institute shall have an organizational chart and written job descriptions identifying individual responsibilities for leadership and management of the CCT education program.
- II. Required Resources:
 - A. Required Personnel Positions (not required to be separate individuals):
 - 1. Administrative Director:
 - a. Qualifications:
 - i. Possess a minimum of an Associate's Degree from an accredited institution of higher education with experience in administering an educational program or;
 - ii. The Administrative Director shall have demonstrated experience in managing CCT education
 - iii. Knowledge of methodologies of instruction, guidance and evaluation of students.
 - iv. Field experience in the delivery of pre-hospital emergency care.
 - v. Academic training and preparation that is at least equivalent to that of the CCT education program graduates.
 - vi. Posses knowledge of current national curricula, and requirements for national registration and state certification or licensure.
 - b. Responsibilities:
 - i. Organization and supervision of the CCT education program.
 - ii. Continuous quality review and improvement of the CCT education program.

- iii. Processing of applications and oversight of the student selection process.
- iv. Course scheduling and the assignment of instructors.
- v. Provision and maintenance of required educational equipment.
- vi. Submission of course and student records in a manner specified by WVOEMS.
- vii. Requesting written and practical examinations.
- viii. Management of the CCT program budget,
- ix. Management of the student grievance procedure for the CCT program.
- x. Oversight of the selection and supervision of qualified faculty, and,
- xi. May delegate responsibilities to other faculty as appropriate; provided that written policies and procedures in place to assure responsibility for delegated task completion.
- 2. Medical Director:
 - a. Qualifications:
 - i. Shall be a physician licensed in the State of West Virginia.
 - ii. Shall have current knowledge of emergency care of acutely ill and injured patients.
 - iii. It is recommended that the Medical Director be knowledgeable about the education of the CCT personnel, including professional, legislative, and regulatory issues regarding their education.
 - b. Responsibilities
 - i. Assume responsibility for all medical aspects of the CCT education program.
 - ii. Assist with practical skills development and testing.
 - iii. Assist with selection and orientation of faculty and clinical preceptors.
 - iv. Provide medical advice and assistance to the CCT education program faculty and students.
- 3. Instructional Faculty:
 - a. A Lead Instructor, meeting the requirements of WVOEMS Policy 5.03.11 must be appointed for each CCT course presented.
 - b. Visiting instructors, meeting the requirements of WVOEMS policy 5.03.11 may be utilized as appropriate within an individual course.
 - c. Institute selected and trained clinical preceptors shall be utilized to assist students during clinical rotations if applicable.
 - d. There should be sufficient instructional faculty to maintain a student to teacher ratio that provides students with adequate didactic and psychomotor instruction and supervised practice.
- 4. Support staff:

It is recommended that the CCT Institute provide secretarial/ clerical staff to assist the Administrative Director and instructional staff. 5. Professional Development

It is recommended that the CCT Institute develop and implement written policies and procedures to ensure continued professional growth of the faculty.

- B. Financial:
 - 1. The Institute shall demonstrate commitment of adequate financial resources to operate and sustain the CCT education programs provided.
 - 2. The Institute shall provide evidence of professional liability and errors and omissions insurance in the amount of one million dollars (1,000,000) for EMS faculty and programs offered by the institution.
- C. Physical:
 - 1. Facilities:
 - a. The CCT Institute shall maintain, or by agreement make available for all courses, facilities for the provision of CCT education in a suitable setting for the purpose of the course, including, but not limited to:
 - i. Classroom areas,
 - ii. Laboratory/skills practice areas
 - iii. Appropriate clinical sites.
 - b. Facilities shall have adequate storage space for all equipment and supplies required.
 - c. Facilities will be in compliance with all Federal and State Laws and Codes.
 - 2. Equipment and Learning Resources:
 - a. The Institute shall provide appropriate and sufficient medical equipment and supplies for student use and for teaching the didactic and psychomotor components of the curriculum. (Required equipment is in Appendix 1.list)
 - b. Audio/visual and/or computer hardware and software shall be available to enhance student learning experience.
 - c. It is recommended that students have access to adequate reference resources related to the curriculum to enhance student learning opportunities.
- D. Clinical Resources:
 - 1. Affiliations:
 - a. Institutes shall establish written agreements with licensed EMS agencies, hospitals, or other institutions to provide clinical experiences for their students if applicable.
 - b. Agreements shall clearly define the learning goals the student should obtain, and the clinical site's role and responsibilities to the student.
 - 2. Settings:
 - a. Clinical areas must be appropriate to ensure student experiences are efficient and effective in achieving clinical objectives, such as;
 - b. Pre-hospital EMS:
 - i. Insure appropriate oversight and accountability where students are not operating as independent practitioners.
 - ii. Insures students operate under the appropriate treatment protocols as authorized by medical command.

- c. Hospitals or Health Facilities:
 - i. Areas utilized must provide patient care similar to the CCT pre-hospital setting.
 - ii. Insure appropriate oversight and accountability where students are not operating as independent practitioners.
- d. Patient Encounters:
 - i. The Institute will document student's patient encounters.
 - ii. The Institute and clinical facility will insure that any assessment and care provided by students is within their scope of education and practice.
- e. Student Supervision
 - i. Shall be provided by appropriate Institute staff or by preceptors approved by the Institute.
 - ii. The Institute shall have written policies and documentation of the process for selecting, training and orientating clinical preceptors.
- f. Student Identification:
 - i. Students shall be clearly identified as students by use of nametags, uniforms, or other means to distinguish them from agency or facility personnel.
- E. Advisory Committee:
 - 1. It is recommended that an advisory committee representing communities of interest be selected and charged with assisting the Institute in formulating appropriate goals and standards, monitoring needs and expectations, and ensuring program effectiveness and responsiveness to community needs.
- II. Student Affairs:
 - A. Admission Policies and Procedures:
 - 1. Admission of students shall be made in accordance with clearly defined and published practices of the institute.
 - 2. Specific academic and technical standards required for admission to the program shall be clearly defined and published, and shall be readily accessible to prospective students and the public.
 - 3. If the Institute admits students on the basis of "ability-to-benefit", it shall employ appropriate methods, such as a pre-admission testing or evaluation, for the purpose of determining that such students are in fact capable of benefiting from the education offered.
 - B. Health:
 - 1. The Institute shall establish a written policy and procedure for determining that applicant or the student's health will permit them to meet the written technical standards.
 - C. Evaluation:
 - 1. There shall be written policies and procedures that define the evaluation process for students in CCT education programs. These policies shall include, but not be limited to:
 - a. The frequency at which students will be evaluated.
 - b. The methods used to evaluate them.
 - c. The process used to report the outcomes.

- D. Guidance:
 - 1. There shall be written policies and procedures to establish a system of guidance and counseling to assist students in understanding course content, observing program policies and to provide counseling or referral for problems that may interfere with students' progress.
 - a. There shall be documentation of all guidance and counseling sessions.
 - b. Students shall have ample time to correct any identified deficiencies in knowledge and/or performance documented during guidance or counseling sessions, and be given time to correct these deficiencies prior to the completion of the course.
- III. Operational Policies:
 - A. Fair Practices:
 - 1. Institutes shall have written policies and procedures addressing student and faculty recruitment, student admission, and faculty employment practices.
 - a. These shall be non-discriminatory and in accordance with applicable Federal and State mandates.
 - 2. Institute course announcements, catalogs, publications, and advertising shall accurately reflect the BLS education offered.
 - a. Institutes shall publish an academic calendar for BLS programs.
 - b. Materials shall specify the number of credit or clock hours required for successful completion of each program, including:
 - i. Didactic hours
 - ii. Lab/Psychomotor hours
 - iii. Clinical hours
 - c. Institutes shall publish accurate statements of all tuition and fees, including books, uniforms, and others.
 - 3. Institutes shall establish written educational objectives, standards, and competencies of each CCT program.
 - 4. Institutes shall have a written policy to provide a mechanism by which students and faculty may appeal decisions made by Institute staff regarding dismissal or other disciplinary actions.
 - 5. Institutes shall have written policies and procedures for student withdrawal and refunds of tuition and fees, and these policies shall be made known to all applicants.
 - 6. Institutes shall have written policies and procedures concerning the health and safety of students and faculty.
 - B. Student Records:
 - 1. All records and documentation for each student shall be permanently maintained by the Institute, including:
 - a. Evidence of satisfactory completion of all didactic, psychomotor, and clinical requirements.
 - b. Documentation of class and laboratory participation
 - c. Documentation of competencies attained.
 - d. Copies of examinations and assessments.
 - e. Records of student admission, attendance, academic counseling, and evaluation.

- C. It is recommended that Institute programs should be designed to provide a maximum opportunity for students to obtain formal academic credit and continue with education with a minimum loss of time or duplication of learning experiences. Institutes that do not offer academic credit are encouraged to establish agreements or memorandums of understanding with post-secondary institutions to provide students with the ability to receive maximum credit for coursework taken.
- IV. Evaluation Processes:
 - A. Policies:
 - 1. Institutes shall have written policies and procedures for a continuing system of reviewing and assuring the effectiveness of all students, courses and the overall program in achieving its stated objectives, standards, and competencies and shall demonstrate that measured outcomes are consistent with national guidelines.
 - B. Methods:
 - 1. Student evaluations shall emphasize gathering and analyzing data on the effectiveness of the programs teaching of the objectives, standards, and competencies.
 - a. Cognitive examinations:
 - i. Examination content shall be national in scope, with uniform passing standards and a means to perform statistical reporting.
 - ii. Examinations shall be given at suitable intervals throughout the course.
 - iii. A comprehensive final examination shall be given.
 - iv. Examinations should be developed by a qualified independent organization.
 - v. Examinations should evaluate entry level competency.
 - vi. Examinations should be based on current practice analysis.
 - b. Psychomotor evaluations:
 - i. Evaluations shall be based upon criteria developed by the appropriate certifying authority.
 - ii. Evaluations shall be conducted at suitable intervals throughout the course.
 - iii. A comprehensive final evaluation shall be given.
 - iv. Evaluations shall be conducted by WVOEMS approved skill evaluators.
 - 2. The Institute shall evaluate outcomes through consistent evaluation of information regarding program graduates to analyze the program's effectiveness. Sources of data include, but are not limited to:
 - a. Surveys of graduates and employers regarding:
 - i. Employment settings
 - ii. Type and scope of practice
 - iii. Salary & benefit information
 - iv. Job satisfaction
 - b. Interviews with program graduates and employers
 - c. Data on student performance on the certifying examinations and other recognized standardized tests.

- C. Evaluation Utilization
 - 1. Results of ongoing evaluation shall be appropriately reflected in adaptation of findings into all dimensions of the Institutes operations.
 - 2. The Institute shall systematically use the information obtained in its evaluations to improve student achievement
 - a. There shall be a demonstrated systematic process with internal and external results validation, areas for review include, but are not limited to:
 - i. Admission criteria and processes
 - ii. Curriculum delivery
 - iii. Student evaluation processes
 - iv. Instructor effectiveness
 - v. Involvement of the advisory committee.

Continuing Education Institute

Continuing Education Institute Standards

- I. General Institute Characteristics:
 - A. Qualifications:
 - 1. Only entities, authorized under applicable law to provide secondary or post-secondary education, or;
 - 2. Those authorized by legislative rule and determined by WVOEMS to be qualified to deliver EMS CE shall be considered for endorsement.
 - B. Responsibilities:
 - 1. Curriculum planning,
 - 2. Coordination of classroom teaching,
 - 3. Appointment and management of qualified instructors.
 - 4. Compiling and documenting student educational records.
 - 5. Compliance with requirements of WVOEMS related to the provision of CE programs.
 - C. Administration:
 - 1. The Institute shall have an organizational chart and written job descriptions identifying individual responsibilities for leadership and management of the CE program.
- II. Required Resources:
 - A. Required Personnel Positions (not required to be separate individuals):
 - 1. Administrative Director, Agency Training Coordinator (ATC) or Agency Training Officer (ATO):
 - a. Qualifications:
 - i. Designated by the sponsoring entity or licensed EMS agency principal official.
 - ii. Knowledge of methodologies of instruction, guidance and evaluation of students.
 - iii. Academic training and preparation that is at least equivalent to that of the continuing education program students, except ATCs.
 - iv. Complete a WVOEMS approved continuing education management program.
 - v. Attend updates as required by the WVOEMS.
 - iii. If ATO, possess current WV certification at the appropriate level.
 - b. Responsibilities:
 - i. Coordinate and schedule all facets of CE programs, including, but not limited to:
 - 1. Facilities
 - 2. Logistics
 - 3. Qualified instructors
 - ii. Continuous quality review and improvement of CE programs.
 - iii. Course scheduling.
 - iv. Provision of necessary educational equipment.
 - v. Submission of course and student records in a manner specified by WVOEMS.

- 2. Instructional Faculty:
 - a. A Lead Instructor, meeting the requirements of WVOEMS policy 5.03.11 must be identified for each CE course.
 - b. Visiting instructors, meeting the requirements of WVOEMS policy 5.03.11, may be utilized as appropriate within an individual course.
 - c. Sufficient instructional faculty must be available meet student to teacher ratios for psychomotor instruction and supervised practice as required by the specific course being taught.
- 3. Professional Development:

It is recommended that the CE Institute develop and implement written policies and procedures to ensure continued professional growth of the faculty.

- B. Financial:
 - 1. The institute shall demonstrate commitment of adequate financial resources to operate and sustain the CE Institute.
- C. Physical:
 - 1. Facilities:
 - a. The CE Institute shall maintain, or by agreement make available for all courses, facilities suitable for course being taught, including, but not limited to:
 - i. Classroom areas,
 - ii. Laboratory/skills practice areas
 - iii. Appropriate clinical sites, if applicable.
 - b. Facilities will be in compliance with all Federal and State Laws and Codes.
 - 2. Equipment and Learning Resources:
 - a. The institute shall provide appropriate and sufficient medical equipment and supplies for student use and for teaching the didactic and psychomotor components of the curriculum.
 - b. Audio/visual and/or computer hardware and software shall be available to enhance student learning experience.
- III. Operational Policies:
 - A. Institute course announcements and advertising shall accurately reflect the education offered.
 - 1. Materials shall specify the number of hours required for successful completion of each course,
 - 2. Institutes shall publish accurate statements of all fees associated with a given course, to include books or other expenses that may be incurred.
 - 3. Institutes shall establish written educational objectives, standards, and competencies of each course offered.
 - B. Student Records:
 - 1. All records and documentation for students shall be permanently maintained by the Institute, including:
 - a. Evidence of satisfactory completion of all didactic, psychomotor, and clinical requirements.
 - b. Documentation of class and laboratory participation
 - c. Documentation of competencies attained.

- d. Copies of examinations and assessments.
- 2. Student continuing education documentation will be submitted to WVOEMS in the manner specified.
- IV. Evaluation Processes:
 - A. Policies:
 - 1. Institutes shall have written policies and procedures for a continuing system of reviewing and assuring the effectiveness of all courses and the overall program in achieving its stated objectives, standards, and competencies.
 - B. Methods:
 - 1. Student evaluations shall emphasize gathering and analyzing data on the effectiveness of the programs teaching of the objectives, standards, and competencies.
 - C. Evaluation Utilization
 - 1. Results of ongoing evaluation shall be appropriately reflected in adaptation of findings into all dimensions of the Institute's operations.
 - 2. There shall be a demonstrated systematic process for review which includes, but is not limited to:
 - a. Curriculum selection and delivery
 - b. Instructor effectiveness

Instructor Requirements

EMS Instructor Requirements

- I. Agency Training Coordinator (ATC) must:
 - A. Be designated by a WVOEMS licensed EMS agency.
 - B. Be in an administrative (non-teaching) position only.
 - C. Coordinate-and schedule continuing education courses for the agency including:
 - 1. Facilities
 - 2. Logistics
 - 3. Qualified instructors
 - D. Maintain and submit all required records and documentation.
 - E. Complete WVOEMS approved ATC program.
 - F. Attend WVOEMS ATC update programs as required.
- II. Agency Training Officer (ATO) must:
 - A. Be designated by a WVOEMS licensed EMS agency.
 - B. Be qualified to instruct continuing education for the WVOEMS licensed EMS agency per the following minimum criteria:
 - 1. Current WVOEMS EMT certification for BLS topics.
 - 2. Current WVOEMS Paramedic certification for ALS topics.
 - 3. Current WVOEMS MCCN/MCCP certification for CCT topics.
 - 4. Meet applicable Lead Instructor requirements as applicable.
 - C. Complete WVOEMS approved ATO program.
 - D. Attend WVOEMS ATO update programs as required.
- III. Basic Life Support Lead Instructor minimum criteria:
 - A. High school diploma or GED.
 - B. Current WVOEMS EMT or higher.
 - C. Four (4) years field experience as EMT or higher.
 - D. Successful completion of WVOEMS approved educational methodology course, or equivalent professional higher education.
 - E. Successful completion of sixteen (16) hours student teaching experience supervised by a Master Instructor or equivalent professional higher education supervision and evaluation.
 - F. Meet requirements of sponsoring educational institution.
 - G. Successful completion of initial and ongoing instructor evaluation by WVOEMS or equivalent professional higher education supervision and evaluation.
 - H. Completion of required continuing education for EMS instructors.
 - I. Other criteria as established by the Commissioner.
- IV. Advanced Life Support Lead Instructor minimum criteria:
 - A. High school diploma or GED.
 - B. Current WV Paramedic or higher (MD, DO, or other subject matter expert).
 - C. Four (4) years field experience as Paramedic or higher.
 - D. Successful completion of WVOEMS approved educational methodology course, or equivalent professional higher education.
 - E. Successful completion of sixteen (16) hours student teaching experience supervised by a Master Instructor or equivalent professional higher education supervision and evaluation.
 - F. Meet requirements of sponsoring educational institution.

- G. Successful initial and ongoing instructor evaluation by WVOEMS or equivalent professional higher education supervision and evaluation.
- H. Completion of required continuing education for EMS instructors or equivalent professional higher education.
- I. Other criteria as established by the Commissioner.
- V. Critical Care Transport Lead Instructor minimum criteria:
 - A. High school diploma or GED.
 - B. Current WV Mobile Critical Care Nurse (MCCN), Mobile Critical Care Paramedic (MCCP) or higher certification (MD, DO, or other subject matter expert).
 - C. Currently practicing at the CCT level, equivalent or higher professional clinical practice.
 - D. Four (4) years field experience at the CCT level or equivalent professional clinical practice.
 - E. Successful completion of WVOEMS approved educational methodology course, or equivalent professional higher education.
 - F. Successful completion of 16 hours teaching experience supervised by a Master Instructor or equivalent professional higher education supervision and evaluation.
 - G. Successful initial and ongoing instructor evaluation by WVOEMS or equivalent professional higher education evaluation.
 - H. Completion of required continuing education for EMS instructors or equivalent professional higher education.
 - I. Other criteria as established by the Commissioner.
- VI. Master Instructor minimum criteria:
 - A. Meet all requirements for an instructor at the appropriate level.
 - B. Current WV certification at appropriate level or equivalency.
 - C. Four (4) years active instructor experience at the appropriate level.
 - D. Demonstrated superiority as an instructor through documented student and sponsoring institution evaluations.
 - E. Successful completion of WVOEMS Skills Evaluator Course.
 - F. Certified at appropriate instructor level for four (4) years or equivalency.
 - G. Successful completion of WVOEMS approved educational methodology course, or equivalent professional higher education.
- VII. Visiting Instructor or Subject Matter Expert minimum criteria:
 - A. Possess subject matter expertise in a particular clinical discipline or skill set.
 - B. EMS certification or emergency experience not necessary.
 - C. May only serve as lead instructor if above listed lead instructor criteria are met.
- VIII. Skills Evaluator:
 - A. Basic Life Support minimum criteria:
 - 1. Current WVOEMS EMT-Basic or higher certification.
 - 2. Four (4) years field experience as an EMT or higher.
 - 3. Successful completion of WVOEMS approved Skills Evaluator Course or equivalent professional higher education skills evaluation process.
 - 4. Monitor one BLS skills examination.
 - 5. Evaluate one skill station supervised by a Master Instructor.
 - 6. Successful ongoing evaluation.
 - 7. Completion of required continuing education for evaluators.

- B. Advanced Life Support minimum criteria:
 - 1. Current WVOEMS Paramedic or higher certification.
 - 2. Four (4) years field experience as a Paramedic or higher.
 - 3. Successful completion of WVOEMS approved Skills Evaluator Course or equivalent professional higher education skills evaluation process.
 - 4. Monitor one practical skills examination.
 - 5. Evaluate one practical skill station supervised by a Master Instructor.
 - 6. Successful ongoing evaluation.
 - 7. Completion of required continuing education for evaluators.
 - Critical Care Transport minimum criteria:

C.

- 1. Current WVOEMS Mobile Critical Care Nurse (MCCN), Mobile Critical Care Paramedic (MCCP) or higher certification.
- 2. Four (4) years field experience at CCT level.
- 3. Successful completion of WVOEMS approved Skills Evaluator Course or equivalent professional higher education skills evaluation process.
- 4. Monitor one (1) skills examination.
- 5. Evaluate one (1) skill station supervised by a Master Instructor.
- 6. Successful ongoing evaluation.
- 7. Completion of required continuing education for evaluators.
- IX. WVOEMS Approved Instructor Methodology Courses
 - A. WVOEMS approved educational methodology courses for Lead Instructor, as of effective date of this policy, include:
 - 1. National Association of EMS Educators (NAMSE) Instructor I, or
 - 2. Regional Educational Service Agency (RESA) Instructor Methodology course, or
 - 3. Other WV OEMS approved, other nationally accepted education instructors courses or equivalent.
 - B. WVOEMS approved educational methodology courses for Master Instructor, as of the effective date of this policy, include:
 - 1. National Association of EMS Educators (NAMSE) Instructor II course, or
 - 2. Regional Educational Service Agency (RESA) Supervising Instructor course, or
 - 3. Equivalency will be made on a case by case basis.

Application Instructions

Educational Institution Endorsement Application Instructions

Having read the Standards for Educational Institution Endorsement, an agency or institution should have the information needed to apply for endorsement as an EMS Educational Institution from the West Virginia Office of Emergency Medical Services. The following instructions will act as a guide through the application process

The first step in the application process is the performance of a self study. Included you will find an Educational Institution Self Study Survey. Knowledge of the Standards combined with the Survey should allow those seeking endorsement from the WVOEMS to identify areas of weakness that require improvement. With this complete, the institution will need to compose a written Improvement Plan to address the changes being made.

Once the Self Study Survey and Improvement Plan have been done, the institution or agency will electronically submit the following to the WVOMES Education Coordinator:

- 1. Application for Endorsement
- 2. Self Study Survey
- 3. Improvement Plan
- 4. Credential Information Forms for:
 - a. Administrative Director
 - b. Medical Director
- 5. A list of all Lead Instructional Staff that will be used by the institution
- 6. A copy of the Student Policy Handbook
- 7. A copy of the Educational Institution policy and procedure manual

Upon receipt and review of the above materials, the WVOEMS will arrange for a site visit with the applicant. The site visit will consist of, but is not limited to, the following:

- 1. Interviews with the program administration, Administrative Director, and Medical Director (if available)
- 2. Review of the implementation of the Improvement Plan
- 3. Review of the Educational Institution policies and procedures
- 4. Review of Educational Institution Finances
- 5. Review of the Student Policy Handbook
- 6. Review of Instructor credentials
- 7. Inspection of classrooms, labs, storage facilities, and equipment.
- 8. Review of clinical agreements and preceptor training and orientation

After the site visit the Educational Institute will receive a report from the WVOEMS. This report will:

- 1. Identify areas of strengths and weakness as found by the review team
- 2. Make suggestions for improvements that can be made by the institution seeking endorsement
- 3. Provide a score to the institution, and based on the score the following will apply:
- 90-100% 5 year endorsement granted.
- 80-89% 5 year endorsement with a required review in 2 years.

70-79%
 1 year provisional endorsement, contingent upon proof that corrective actions have been taken. Year to year review will be performed and endorsement will be suspended after two consecutive site visits where there is no evidence of corrective action.

Below 70% Endorsement not granted at this time.

If the WVOEMS can answer any questions regarding any part of these instructions, or provide assistance with the application process, please contact the Education Section of the WVOEMS at 304-558-3956.

Appendix

Application for Endorsement

Institution Information

Name	
Address	
Phone	Fax

Institution Administrator

Name	
Title	
Address	
Phone	email

Education Director

Name	
Title	
Address	
Phone	email

35

Medical Director

Medical Director Signature

Name						
Name						
Title						
Address						
Phone		er	mail			
	Level of En	dorsement	t Sought (Ch	eck all that apply)	
BLS	ALS	ССТ	Con	tinuing Educat	tion	
Edu	ucation Prog	rams to be	• Conducted	(Check all that	apply)	
	Int CE	In	t CE		Int	CE
EMR		BLS		Paramedic		
EMTM BL		BLS		ССТ		
Institution Administrator Signature Date						
Educat	tion Director Signature	9			Date	

Date

Institute Self Study

Educational Institution Personnel	Yes	No	N/A
1. Educational Institution has an organizational chart and written job descriptions that define the individual responsibilities of the administration and program management.	0	0	0
2. The Administrative Director meets the qualification requirements set forth in the Endorsement Standards.	0	0	0
The Medical Director meets the qualification requirements set forth in the Endorsement Standards.	0	0	0
The program instructional and skills evaluator staff meet the qualification requirements set forth in the Endorsement Standards.	0	0	0
Educational Institution Finances	Yes	No	N/A
1. Educational Institution has a written budget that documents the institute's ability to financially support itself.	0	0	0
 Educational Institution has proof of professional liability and errors and omissions insurance in the amount of one million dollars (\$1,000,000) for all educational programs offered. 	Ο	0	0
Educational Institution Physical Resources	Yes	No	N/A
1. Educational Institution maintains, or has written agreements in place to have adequate facilities available for each program offered.	0	0	0
All facilities utilized by the Educational Institution meet all Federal and State Laws and Codes, including all ADA requirements.	0	0	0
 Educational Institution has at its disposal all equipment and supplies needed for instructor and student use during any program offered. 	0	0	0
Educational Institution Clinical Resources	Yes	No	N/A
1. Educational Institution has written agreements or memoranda of understandings with all institutions or agencies that will be providing clinical experience for program students.	0	0	0
Educational Institution has clearly documented and defined roles and responsibilities for each clinical site.	0	0	0
Educational Institution has a means of documenting and tracking student's patient encounters.	0	0	0
 Educational Institution has written policies outlining the process for selecting clinical preceptors, preceptor training and orientation process, and has documentation of preceptor training and orientation. 	0	0	Ο

Student and Operational Policies	Yes	No	N/A
1. The Educational Institution's admission practices and academic and technical standards are clearly defined and published and are readily accessible to students and the public.	0	0	0
2. The Educational Institution has a documented policy and procedure for pre-admission testing or evaluations with documentation that students admitted on the basis of "ability-to-benefit" are evaluated for the purpose of determining that the student is capable of benefiting from the education.	0	0	0
3. The Educational Institution has written policies and procedures for determining that the applicants' or students' health will permit them to meet the written technical standards of the education program.	Ο	0	0
4. The Educational Institution has written policies and procedures that define the student evaluation process and the institution has a means of documenting and reporting student evaluations.	0	0	0
 The Educational Institution has written policies and procedures to establish a system of guidance and counseling to assist students, and there is a means of documenting any student counseling sessions. 	0	0	0
6. Educational Institution has a student handbook.	0	0	0
 Educational Institution has written policies and procedures regarding student and faculty recruitment, student admission, and faculty employment. 	0	0	0
8. The Educational Institution has a published academic calendar for all education programs offered.	0	0	0
9. All publications specify the number of didactic, lab/psychomotor, and clinical hours required for completion of the course.	0	0	0
10. The Educational Institution publishes a statement of all tuition and fees. To include books, uniforms, and fees for testing and certification.	0	0	0
11. The Educational Institution has written policies to provide students and faculty with a means of appealing decisions made by the institute regarding dismissal or other disciplinary actions.	Ο	0	0
12. The Educational Institution has written policies and procedures that are made known to all applicants for student withdrawal and for refund of tuition and fees	0	0	0

Student and Operational Policies (Cont.)	Yes	No	N/A
13. The Educational Institution has written policies and procedures concerning the health and safety of students, faculty, and any patients the student may come in contact with.	Ο	0	0
14. The Educational Institution maintains permanent records and documentation for each student that has attended.	0	0	0
15. The Educational Institution has a written default management plan that complies with any governmental, federal or state, guidelines with respect to the programs responsibilities.		0	0
Educational Institution Quality Assurance	Yes	No	N/A
1. The Educational Institution has written policies and procedures for continuing system review, and a means of documenting and reporting the outcomes of the review.	0	0	0
The Education Institution has written policies and procedures to gather and document information on graduate's performance once they have finished the program and are working in the field.	Ο	0	0

Instructor Application

Personal Information

	Name: (Last),	(First)	(MI)	(Certifica	tion Number)	
		(Mailing A	Address)			
		(City)		(State)	(Zip)	
	(Phone Number)	(Optional Cell Number)	(Email	Address)		
	(Age	ency Sponsoring Applicant if App	olicable)			
С	redential Informati	ion				
		Initial Application	Renewal Applicat	lion		
	How long have you been certified at your current level?					
	What certification level are you applying for? BLS ALS CCT (Mark all that apply) Image: Constraint of the second se					
	What instructor credential level are you applying for? Lead Master Evaluator (Mark all that apply)					
	Please attach copies of	materials supporting proof of	instructor education.			
P	ease answer the f	ollowing:				
	Have you ever been arre offense? (Excluding min	ested for or convicted of any crin or traffic violations)	minal Yes	No		
		action taken against any profes ou currently hold or have ever h		No		
	If you answered yes to either question please attach a written explanation.					

(Signature of Applicant)

(Date)

BLS EQUIPMENT LIST

The following equipment is required for conduct of an Emergency Medical Technician course. The Institute will provide an adequate amount of equipment to allow all enrolled students the ability to practice the psychomotor skills required to meet competency. Each section contains a general list of equipment needed to perform specific skills. Other equipment may be used as the program deems fit.

A. General Patient Assessment:
Stethoscopes (Adult and Pediatric)
Teaching Stethoscopes
Blood Pressure Cuffs (Adult and Pediatric)
Pen Lights
Trauma Shears
Examination Gloves, Small
Examination Gloves, Medium
Examination Gloves, Large
Examination Gloves, Extra Large
Latex free gloves must be made available as well

B. Airway (Adult & Pediatric):

Supplies and mannequins capable of simulating multiple airway management techniques including; manual maneuvers, oropharyngeal & nasopharyngeal airway placement, Combi-Tube and King Airway placement, ventilation with chest rise, supplemental oxygen administration. Adult airway manneguin Child airway manneguin Infant airway manneguin Full set of oropharyngeal airways (40, 60, 80, 90, 100 & 110 mm) Full set of nasopharyngeal airways (20, 22, 24, 26, 28 & 30 fr Fr.) Oropharyngeal & nasopharyngeal airway devises including King Airway Adult non-rebreather mask Pediatric non-rebreather masks Adult nasal cannula Pediatric nasal cannula Adult Venturi mask Adult simple mask Adult pocket mask Pediatric pocket mask Adult BVM with oxygen reservoir & tubing Pediatric BVM with oxygen reservoir & tubing Infant BVM with oxygen reservoir & tubing Oxygen cylinder, valve seal, regulator & flow meter

C. Blood Glucose Monitoring: Antiseptic site prep pad Adhesive bandage Lancets Test strip samples Calibration strips Test solution or strips Puncture resistant sharp containers

D. Suction:

Must include a fully functional suction unit of each of the following types: Battery or electric powered Manual powered Suction canisters Suction tubing Hard suction catheters Soft suction catheters

E. Medication Administration:
 Simulated medications or medication trainers:
 Metered dose inhalers
 Nebulizers
 Oral medications
 Auto-injector Trainers

F. Splinting:

Equipment to splint the following injuries: dislocated joints, fractured long bones, traction splinting of femur and pelvic splinting. KED or equivalent Rigid splint set or FracPak Formable splint: SAM splint or equivalent Pneumatic splint set Vacuum splint set Traction splint Various items to use as improvised splinting material

G. Dressing & Bandaging:

Supplies must include all equipment necessary to dress and bandage all wounds at all locations on the human body. Towels Dressings (large quantities) Sterile gauze - various sizes Non-sterile gauze - various sizes Occlusive dressing Non-adherent dressing Dry burn dressing Abdominal dressings Adhesive bandages Tape Roller gauze, 2 - 3" (12) Roller gauze, 4 - 6" (12) Triangular bandages (18) Commercially available tourniquet Commercially available clotting dressing

CCT EQUIPMENT LIST

The following equipment is required to conduct a CCT education program. The institute will provide an adequate amount of equipment to allow all enrolled students the ability to practice the psychomotor skills required to meet required competencies.

12 Lead capable cardiac monitor Adjustable IV Medication Pump Surgical Cricothrotomy Set Surgical Chest tube set Full Transport Ventilator Simulated RSI Medications ETCO2 Monitoring Capability Invasive Monitoring Capability