INDIANA DEPARTMENT OF HOMELAND SECURITY

EMERGENCY MEDICAL SERVICES

COMMISSION MEETING MINUTES

DATE:	November 14, 2019	
TIME:	10:00am	
LOCATION:	Zionsville Town Hall 1100 W. Oak St. Zionsville, IN 46077	
MEMBERS PRESENT:	G. Lee Turpen II	(Private Ambulance)
	Myron Mackey	(EMTs)
	Mike Garvey	(Indiana State EMS Director)
	Matthew McCullough	(Volunteer Fire and EMS)
	Sara Brown	(Trauma Physician)
	Darin Hoggatt	(Paramedics)
	Thomas A Lardaro	(Air Medical Services)
	John P. Ryan	(General Public)
	Andrew Bowman	(RN)
	John Brown	(Director of Preparedness and Training)
	Terri Hamilton	(Volunteer EMS)
	Melanie Jane Craigin	(Hospital EMS)
	John P. Ryan	(General Public)
MEMBERS NOT PRESENT:	John Zartman	(Training Institution)
	Charles Valentine	(Municipal Fire)
	Stephen Champion	(Medical Doctor)

OTHERS PRESENT: Field Staff, Robin Stump, Tony Pagano, Candice Pope, Kraig Kinney (IDHS EMS counsel), Michelle Allen (counsel for EMS Commission) and members of the EMS Community.

CALL TO ORDER AND ROLL CALL

Meeting called to order at 10:03am by Chairman Lee Turpen. Mrs. Candice Pope called roll and announced quorum. Everyone stood for the Pledge of Allegiance.

ADOPTION OF MINUTES

a. Adoption of minutes from the November 14, 2019 session.

A motion was made by Commissioner Mackey to approve the minutes as written. The motion was seconded by Commissioner Bowman. The motion passed.

HONORARY CERTIFICATES

a. Janice Hosmer – Mr. Jason Smith presented. On October 4th Ripley County lost an icon in EMS Janice Hosmer. She was a volunteer EMT, Paramedic, Primary Instructor for about 15 years, and EMS Coordinator. Even while sick and in the hospital she insisted on having her laptop so she could try to continue to help EMS and keep up with her duties. Staff presented the Emeritus certificate to her family. Staff is asking for the Commission's approval.

A motion was made by Commissioner Myron to approve the honorary certificate. The motion was seconded by Commissioner Hamilton. The motion was approved.

b. Edward "Ed" Hollenbach - Mr. Jason Smith presented. Mr Hollenbach served as an EMA Direct, an EMT at Franklin County EMS, and currently serves on the Franklin County EMS Board of Directors. Mr. Hollenbach turned 80 years old this year and decided to retire.

A motion was made by Commissioner Hoggatt to approve the honorary certification. The motion was seconded by Commissioner Bowman. The motion was approved.

c. Robert Bullock - Mr. Jason Smith read the email request form Jeff Benson into record: I (Jeff Benston) am writing in reference to see if and what it takes to give someone an Honorary EMT certification. Robert Bullock has worked for Culberson ems and Hagerstown fire many years, he has tried and tried to get through EMT but unfortunate he was never able to make it as we tried to help as much as we can and gave him many opportunities this man with a heart of gold was never able to pass a state test, his reading and writing abilities over the early years held him back, but that never stopped him from caring; he recently was honored by Hagerstown fire and I thought maybe if the state ems could honor him with an EMT cert; I'd like to present it the night of the Culberson Christmas party to him in December. If it all possible or have you (Candice Pope) or Tony Pagano or Mike Garvey come present it. Bob with health issues basically has stepped aside from fire and ems.
Any questions let me know thanks
Jeff Benson

A motion was made by Commissioner Bowman to approve the honorary certification. The motion was seconded by Commissioner S. Brown. The motion was approved.

Chairman Turpen recognized our first Indiana State Medical Director and someone who had great contributions to not only Indiana but the Nation as he was part of the EAGLES group Dr. Olinger who recently passed away. His contribution to Indiana, the Nation, and the IndyCar Racing League are just beyond compare. He was a quietly humorous man who had a passion for Emergency Medical Service both in the field and in the ER. A moment of silence was observed in honor of Dr. Olinger.

INDIANA DEPARTMENT OF HEALTH

Ms. Katie Hokanson reported that the Health Department is focusing on the kicking off the overdose data to action grant. The grant is for $7.1 million a year grant for three (3) years which is a total of over $21 million dollars. The goal of this grant is to analyze our data to see what action can be taken to help with the opioid epidemic at the local level and the state level. On September 1st there was a request for proposals for the grant the goal is to grant out over $1.2 million a year for three years to local communities. The request for proposals closed on October 31, 2019. They have received 47 applications from 45 counties. The review process has started for the submitted applications. More details will be reported as the process continues. The Labor of Love Summit will be on December 11th at the JW Marriott. More details can be found at in.gov/laboroflove all of the registration information and speakers are on the site. The naloxone grant is still on going and can be applied for through the Health Department. Commissioner Bowman asked about the overdose data to action grant. Ms. Hokanson gave an overview of where the rest of the grant will be spent.

EMS FOR CHILDREN

Ms. Margo Knefelkamp reported that the EMSC program is moving to the annual performance measures 2 and 3 in January. All EMS services will be asked to complete the survey. In October Dr. Elisabeth Weinstein and Ms. Knefelkamp met with Dr. Kaufmann, Director Garvey, and Robin Stump to discuss the distribution of the survey. Ms. Knefelkamp gave the timeline for the survey the deadline for completion is March 31, 2020. Ms. Knefelkamp is looking for a space to hold the IEMS annual breakfast. If you have a space available please notify Ms. Knefelkamp.

INDIANA EMERGENCY MEDICAL SERVICES ASSOCIATION (IEMSA)

Mr. Nathaniel Metz reported that a list of 20 concerns has been sent to the Medicaid office. The Medicaid office has responded to the concerns. Southeast Trans and the Medicaid office has met with members of the Association. The Association has discussed unpaid claims to the providers, denied, and rejected claims. Southeast Trans has promised to work with the Association to get the claims paid. The last meeting that was held the Association walked away with 18 points to work on to complete. Mr. Metz further discussed other issues and other unpaid claims. The Association has worked with Representative Bacon to help push Replica. The Association is working with the Fire Chiefs Association and Perdue University to help work on the Paramedic shortage but putting together a data mining group. Mr. Metz discussed the goals of the data mine group. Mr. Metz turned the floor over to Mr. Tom Fentress to talk about the conference. Mr. Fentress announced that the Associations conference will be on December 5th and 6th in West Lafayette. There will be 16 hours of CE available. Currently 43 people has registered for the conference. They are hoping for more attendees. Early Bird registration is now opened until tomorrow (November 15, 2019). Paramedic and EMT students can attend for free. Mr. Fentress discussed briefly some of the topics that will be covered during the conference.

INTRODUCTION OF THE NEW STATE FIRE MARSHAL

Chairman Turpen gave the floor to Dr. Kaufmann. Dr. Kaufmann introduced the new State Fire Marshall Stephen Cox. Marshal Cox brings vision and leadership to the position. Marshall Cox was with the South Bend Fire Department for 26 years were he was a paramedic, firefighter, instructor, EMS Chief, and Chief of the Department. Marshal Cox is a true friend to EMS. Dr. Kaufmann turned the floor over to Marshall Cox. Marshall Cox thanked Dr. Kaufmann for the introduction. Marshal Cox stated that he is looking forward to collaborating with the EMS Commission and EMS providers around the state.

INDIANA FIRE CHIEFS ASSOCIATION

Mr. Douglas Randall the co – chair of the EMS Section stated that they had a very successful conference in September. If anyone has any ideas or complaints about this year's conference please contact Mr. Randall. Mr. Randall discussed and gave an overview of the meeting on the 19th of October. At the next meeting Dr. Kaufmann will be giving a state of the state update.

EMS EDUCATION WORKING GROUP

Mr. Jeffrey Quinn presented (see attachment #1 for presentation) the proposal for the portfolio. After Mr. Quinn's presentation there was extensive discussion and some public comment regarding the portfolio.

Mr. Quinn congratulated Chief Douglas Randall on the award he received at EMS World Expo.

Chairman Turpen directed for this topic to be tabled until after the Scope of Practice discussion and decision are made.

SCOPE OF PRACTICE

Dr. Kaufmann gave an overview of why the scope of practice is important (see attachment #2 Easy Read of Scope of Practice excel spreadsheet and #3 for documents and PowerPoint). Dr. Kaufmann went through line by line the Easy to Read Scope of Practice excel spreadsheet (included in attachment #2). Commission members and staff held discussion as needed throughout the presentation.

A motion was made by Commissioner Lardaro to approve the suparglottic airway at the EMT level and End tidal CO2 monitoring and interpretation of waveform capnography for the EMT and AEMT levels. The motion was seconded by Commissioner S. Brown. The motion was approved.

It was decided by consensus to hold the rest of the approvals or denials until after the completion of the presentation and discussion of the Scope of Practice.

Discussion was held regarding a timeline or start date for the Scope of Practice.

A motion was made by Commissioner Lardaro to implement the waveform capnography on March 1, 2020. Discussion was held. Commissioner Lardaro withdrew his motion.

A motion was made by Commissioner Lardaro to implement all of the changes for the Scope of Practice on March 1, 2020 to give staff time to put together the training for each section that is approved that is a new skill/information. The motion was seconded by Commissioner Bowman. The motion was approved.

Discussion of the rest of the Scope of Practice was held.

A motion was made by Commissioner Ryan to approve the first section of Section One (1) Skill – Airway/Ventilation/Oxygenation (lines 10-25 on attachment #2) as recommended by the agency. The motion was seconded by Commissioner Lardaro. The motion was approved.

A motion was made by Commissioner Lardaro to approve high flow nasal cannula with appropriate medical director approval at the paramedic level. The motion died.

A motion was made by Commissioner Lardaro to approve the second section of Section One (1) Skill – Airway/ventilation/oxygenation (lines 28-43 on attachment #2) as recommended by the agency. The motion was seconded by Commissioner Hoggatt. The motion was approved.

A motion was made by Commissioner Lardaro to approve Section Two (2) Skill – Cardiovascular/Circulation (line 45-61 on attachment #2) as presented by the agency. The motion was seconded by Commissioner S. Brown. The motion was approved.

A motion was made by Commissioner Hoggatt to approve Section Three (3) Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint (lines 64-74 on attachment #2). The motion was seconded by Commissioner Bowman. The motion was approved.

A motion was made by Commissioner S. Brown to approve Section Four (4) Skill – Medication Administration – Routes (lines 76-93 on attachment #2) as presented by the agency. After discussion Commissioner S. Brown withdrew her motion.

A motion was made by Commissioner Lardaro to approve Section Four (4) Skill – Medication Administration – Routes (lines 76-93) with the addition of the language "in conjunction with EMS Commission approved medications." The motion was seconded by Commissioner Ryan. The motion was approved.

A motion was made by Commissioner Lardaro to approve Section Seven (7) Skill – Miscellaneous (lines 123-133 on attachment #2) as presented by the agency. The motion was seconded by Commissioner Ryan. The motion was approved.

A motion was made by Commissioner Ryan to approve Section Six (6) Skill – IV Initiation/Maintenance Fluids (lines 114-121 on attachment #2) as presented by the agency. The motion was seconded by Commissioner Mackey. The motion was approved.

A motion was made by Commissioner Ryan to approve Section Five (5) Medical Director Approved Medications (lines 96-112 on attachment #2) as presented by the agency. The motion was seconded by Commissioner Bowman. Discussion followed. Commissioner Bowman withdrew is second and Commissioner Ryan withdrew his motion.

Discussion followed regarding analgesia medications at the AEMT level and if they should be allowed or not.

A motion was made by Commissioner S. Brown to except Section Five (5) Medical Director Approved Medications (line 96-112 on attachment #2) as presented by the agency accept for line 103 and 109 remove analgesia at the AEMT level. The motion was seconded by Commissioner Mackey. More discussion followed. Commissioner Mackey withdrew his second of the motion. Commissioner S. Brown withdrew her motion.

A motion was made by Commissioner S. Brown to except Section Five (5) Medical Director Approved Medications (line 96-112 on attachment#2) as presented by the agency accept for line 103 and 109 add "Commission approved medications for AEMT level". The motion was seconded by Commissioner Mackey. The motion was approved.

Chairman Turpen called for a break at 1:34pm

Chairman Turpen called the meeting back to order at 1:46pm

Commissioner Hoggatt left the meeting during the break (quorum was still present with his departure).

MOBILE INTERGRATED HEALTH

Dr. Michael Kaufmann presented information and recommendations to the Commission from staff (see attachment #4).

A motion was made by Commissioner Mackey to approve the staff recommendation for the membership representation of the Advisory Board as a sub-committee for the Mobile Integrated Health. The motion was seconded by Commissioner Lardaro. The motion was approved.

A motion was made by Commissioner Lardaro to have staff bring recommendations to the Commission for approval for the members of the Advisory Board for the sub-committee and allow the recommended sub-committee to meet prior to the next Commission meeting to start work. The motion was seconded by Commission Hamilton. The motion was approved.

At this time, Dr. Kaufmann gave an abbreviated State Medical Director's report. Dr. Kaufmann recognized the work done on approving the Scope of Practice updates today at the meeting. He also stated that he hopes to see movement on legislation being passed regarding the EMS Compact. Dr. Kaufmann reported that the Board of Pharmacy has passed a draft version of new rules to allow EMS provider organizations to obtain CSR (controlled substance registration) in Indiana. Mr. Kinney clarified that IDHS had reviewed and suggested the draft language and that he would provide updates as the rule progressed through the

rulemaking process.. Dr. Kaufmann also briefly talked about the key performance indicators that were reported on at the end of last year. Staff is working on updating the report to share with the Commission.

PRACTICAL INFORMATION

Mr. Tony Pagano presented the agency recommendations to use only the new EMT practical sheets as of January 1, 2020. Discussion followed.

A motion was made by Commissioner Bowman to start only using the new state EMT and EMR practical sheets as of December 1, 2019. The motion was seconded by Commissioner Mackey. The motion was approved.

Mr. Tony Pagano asked that the Commission approve the updated to the state rep manual that coincide with the changes made to the state EMR and EMT practical sheets.

A motion was made by Commissioner Bowman to approve and start using the revised State Rep manual as of December 1, 2019. The motion was seconded by Commissioner Mackey. The motion was approved.

Mr. Quinn had to leave the meeting so Mr. Kraig Kinney reopened the discussion on the portfolio that was presented earlier in the meeting. Mr. Kinney noted that staff was viewing the portfolio as presented earlier by Mr. Quinn as a resource manual rather than the form to be used. Staff is wanting the portfolio to be used to show competencies of the skills not tested during the state practical exam. Some discussion followed as well as a few comments from public.

A motion was made by Commissioner Lardaro to approve the portfolio at the EMT level to be used to show competencies of the skills not tested during the state practical exam and have been defined in the resource manual developed by the EMS Education Workgroup. The motion was seconded by Commissioner Ryan. The motion passed.

Commissioner Lardaro left at 2:25pm (quorum was still present with his departure).

NEW BUSINESS

a. Chairman Turpen opened the floor to Keith Current for comment. Mr. Current noted issues with finding and looking up PSID numbers through the Acadis system. Ms. Candice Pope stated that there are two ways to look up information there is a site to look up a psid number and there is a way to look up certifications. To look up a psid number you so not have to have the psid number you have to have a last name and the email address that the person used to sign up for their psid number. To verify a certification you need the psid number of the person. To view training the provider can request a training report be emailed to them through the state office or from the individual through their portal account. Ms. Pope also briefly discussed rosters being updated in the Acadis system.

b. AHA Mission Lifeline Recognitions – Did not come to this meeting

c. Appellant process for Discipline sanction orders - Mr. Kinney asked the Commission to consider appointing a panel to from the Commission to hear any disciplinary sanction appeals that may occur until the return of our regular ALJ who is currently on leave. Ms. Allen pointed out that the law permits the use of an ALJ or a Commission review panel to hear such actions.

A motion was made by Commissioner Mackey to appoint a panel of 3 Commission members to hear any technical appeals that may occur until the return of the regular ALJ. The motion was seconded by Commissioner McCullough. The motion was approved. Commissioner Mackey, Commissioner Bowman, and Commissioner Ryan volunteered for the panel and was approved for the panel.

OLD BUSINESS

a. EMS Rule update – Mr. Kinney reported that there is no new news regarding the Stroke Rule. Mr. Kinney stated that after a meeting with the Governor's office he made some adjustments to the fiscal impact part of the rule package. Mr. Kinney has completed the fiscal impart update and has submitted the rule package to his supervisor. It is believe that the rule package will be sent to the Governor's office possibly still this week.

b. Tabled business and/or waivers – none at this meeting

c. Current ongoing studies

    a. CPAP use at the BLS level –This study will no longer be needed after March 1, 2020. No report for this meeting.

ASSIGNMENTS

a. Past Assignments
    i. All past assignments have been completed and reported.
b. Today's Assignments
    i. No new assignments made at this meeting

ADMINISTRATIVE PROCEEDINGS

A. Waiver Orders
    a. Personnel
        i. PI waiver requests – granted by staff
            a. Order number W0050-2019 Armstrong, Ashely N. - No action required nor taken
            b. Order number W0049-2019 Baumgarder, Christopher P. Sr.- No action required nor taken
            c. Order number W0051-2019 Caffrey, Michael W. - No action required nor taken
            d. Order number W0054-2019 Caprio, Scott L. - No action required nor taken
            e. Order number W0035-2019 DeBoer, Lisa - No action required nor taken
            f. Order number W0048-2019 Hahus, Leonard A. - No action required nor taken
            g. Order number W0044-2019 Higgins, Zachary D.. - No action required nor taken
            h. Order number W0046-2019 Jones, Alex C. - No action required nor taken
            i. Order number W0059-2019 Kinney, Chad. - No action required nor taken
            j. Order number W0043-2019 Lacy, Matthew C. - No action required nor taken
            k. Order number W0047-2019 Lahue, Samantha - No action required nor taken
            l. Order number W0052-2019 Morris, Ronald L. - No action required nor taken
            m. Order number W0055-2019 Onken, Jeffrey - No action required nor taken
            n. Order number W0053-2019 Sternberg, Breven T. - No action required nor taken

o. Order number W0042-2019 Rosen, Ari - No action required nor taken

p. Order number W0036-2019 Schroeder, Robert A. - No action required nor taken

q. Order number W0045-2019 Taylor, Anthony Joseph - No action required nor taken

r. Order number W0056-2019 Thomas, Zakary - No action required nor taken

s. Order number W0058-2019 Wagner, Evan - No action required nor taken

ii. Extension of temporary certification – granted by staff
   a. Order number W0062-2019 Fuoss, William Michael - No action required nor taken
   b. Order number W0064-2019 Marshall, Brendan – No action required nor taken
   c. Order number W0060-2019 Smits, Karissa – No action required nor taken
   d. Order number W0063-2019 Whiteaker, Charity – No action required nor taken

iii. Appeal of Denied Waiver – Mr. Kinney presented the appeal of the denial order for Mr. John Purdy to the Commission. Mr. Purdy had requested additional time past his certification expiration date to obtain his continuing education requirements due to extensive health issues. Staff had reviewed the initial waiver request nothing that while staff is sympathetic to Mr. Purdy's health challenges, traditionally an open-ended extension has not been granted. Discussion and questions regarding Mr. Purdy's waiver, the denial, and his appeal followed Mr. Kinney's information.

A motion was made by Commissioner Mackey to modify the order and issue an honorary EMR. After discussion on the appropriateness of whether to grant a non-requested honorary certification, the motion died.

A motion was made by Commissioner Ryan to table the appeal until a later meeting to allow staff to obtain more information and work with Mr. Purdy. The motion was seconded by Commissioner S. Brown. The motion to table was approved.

b. Provider
   i. 836 IAC 2-7.2-1 (f) – 24 hour coverage – granted by staff
      a. Order number W0038-2019 Switzerland County EMS Inc. – No action required nor taken

B. Disciplinary Orders
   a. Personnel
      i. Rescinded certification
         a. Order number 0022-2019 Marshall, Brendan Graham – No action required nor taken
      ii. Letter of Censure
         a. Order number 0019-2019 Egley, Keith Allan – No action required nor taken
         b. Order number 0016-2019 Mayes, Rebecca (Toni) A. – No action required nor taken
      iii. Rescinding Order
         a. Order number 0021-2019 Mayes, Rebecca (Toni) A. – No action required nor taken
      iv. 1 Year Probation

a. Order number 0018-2019 Guard, Trevorr Richard – No action required nor taken
b. Order number 0012-2019 Reiss, Taylor R. – No action required nor taken

v. 2 Year Probation

a. Order number 0013-2019 Hoffman, Jennie L. – No action required nor taken
b. Order number 0017-2019 Royalty, Alexander Erin – No action required nor taken
c. Order number 0020-2019 Story, Jimmy Lawrence II – No action required nor taken

STAFF REPORTS

No verbal staff reports were given at this meeting at the Chairman's discretion. No action required nor taken.

STATE EMS DIRECTORS REPORT – Director Michael Garvey did not report at this meeting.

STATE MEDICAL DIRECTORS REPORT - Dr. Kaufmann gave his report right after the Mobile Integrated Health report.

CHAIRMAN'S REPORT AND DIRECTION- Chairman Turpen reminded everyone that IEMSA conference is coming up in December. The EAGLES conference has been moved and is now in Florida in June. Chairman Turpen also reminded everyone of the NAEMSP conference that is coming up in January.

MEETING DATES FOR 2020

Ms. Pope announced that there were some conflicts with the dates that were originally in the packet for the Commission to review. The proposed new dates had been sent out separate and the date for January was still in question. Mr. Steve Gilliam checked the available date in January. After discussion it was decided to set the January meeting for the 17th. The 2020 EMS Commission dates are as follows:

January 17

March 26

May 14

July 9

September 9 – in conjunction with the IERC conference.

November 12

All meeting will be at Zionsville Town Hall unless noted otherwise.

NEXT MEETING

January 17, 2020
10: 00am at
Zionsville Town Hall
1100 W. Oak St.
Zionsville, IN 46077

ADJOURNMENT

A motion was made by Commissioner Hamilton to adjourn the meeting at 2:50pm. The motion was seconded by Commissioner Bowman. The motion passed.

Approved _____

G Lee Turpen, Chairman

Attachment #1

November 14, 2019

Dear Commissioners,

As you are aware, over the past few months, the staff along with the work group have been diligently working to complete the Indiana EMT process. From the new skills exam sheets from NREMT, the new psychomotor format and now the new EMT portfolio.

I have attached version 4 of the portfolio draft as well as the presentation intended for the November meeting for you to review. The portfolio is an extremely comprehensive document designed for the EMT candidate as well as the instructor to present the Best Practices. In many cases programs are already competing a majority of the portfolio and will only need to add the few forms that were no previously approved.

At the November meeting, the Work Group would like for you to consider a few things:

1. The Commission to adopt the version 4 draft of the portfolio (included on you packet) to be the Indiana EMT Psychomotor Portfolio. This portfolio is best practices and would be a dynamic document as there are a few items that may need revised as the Commission adopts or approves other skills. Current example: The Intravenous Maintenance Competency Sheet needs to be modified for the Indiana EMT and is currently only in a creation phase.

2. The Work Group would like to provide support to DR. Kaufmann and request that the Commission approve Waveform Capnography for the EMT Scope of Practice in whole. For assisting in the verification of an advanced airway such as a Supraglottic in the apneic patient to the assistance in monitoring oxygenation of COPD and Asthma in a conscious patient.

3. The Work Group wishes to support the staff decision to totally discontinue the use of the "old" Indiana Psychomotor Skill Sheets and move to only having the new NREMT Psychomotor Sheets already approved by the Commission.

4. The Work Group wishes to express support to the staff's request to modify the EMR Psychomotor Exam to include seven (7) stations and no random stations.

It is always a privileged to present items for you to review and our group is greatly appreciative of the opportunity to remain a part of EMS in Indiana. Thanks,

Quinn

Jeffrey S. Quinn EMS-P, PI

Chair – Indiana EMS Education Work Group

317-435-5416

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Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

Introduction

The Indiana Department of Homeland Security (IDHS) with the cooperation of the Indiana EMS Education Work Group and the EMS Commission have developed this ***Best Practice*** package for the implementation of the EMT Psychomotor Competency Portfolio based off of the NREMT Paramedic Psychomotor Competency Portfolio. The completed portfolio becomes a part of the student's permanent educational file and is a prerequisite to seeking initial NREMT EMT Certification. The Indiana EMT Psychomotor Competency Portfolio (Portfolio) is designed to provide the EMT candidate and instructor with a description of what is needed to develop the competency portfolio and prepare EMT students for state and national EMS certification as well as providing instructors a *best practices model* in fulfilling the requirement of **IAC836 4-2-3:**

"(C) Attesting on forms provided by the agency to the competency of the course graduates to perform the medical skills required by the certification for which the student has been trained."

Psychomotor skills are an important component of safe and effective out-of-hospital care. Delivery of care, at its most fundamental level, is when and where the importance of EMS is demonstrated to the public. Compassionate care using the complete affective skill set can result in a positive image of EMS and lead to medical and public support for the profession. Psychomotor education begins in the Skills Lab, where psychomotor learning takes place. The Skills Lab is the setting for educational imprinting, cognitive integration, frequent drilling and autonomic development of psychomotor skills. The Scenarios provide students a contextual opportunity to demonstrate what they have learned in a simulated environment based upon the psychomotor skills. Once students have demonstrated skill competence in the simulated environment, they progress to assessing and treating real patients in the Clinical and Field Phases with adequate supervision.

For many students, the Clinical and Field Phases provide the first opportunity to actually interact with a sick or injured patient. The Clinical Phase in a student's education includes planned, scheduled, educational student experience with patient contact activities in a hospital's emergency department. The Field Phase will include planned, scheduled, educational student time spent on an EMS unit, which includes observation and skill development with patient contact. The Field Phase is where the student builds his or her skills, learns scene choreography to include taking over more and more of the call, how to approach the patient and patient management.

This psychomotor portfolio is designed to provide a framework and evaluation system to document psychomotor competency (IAC836 4-2-3) as well as augment and enhance EMT education programs. Programs that correctly use this competency package and adhere to its standards can attest to the psychomotor competencies of students who are candidates for both State of Indiana and National EMS Certification by the NREMT and provide the candidate with the best chance of success with the psychomotor evaluation.

This Manual is intended to provide best case examples of how to implement these tools into EMT education and provide standards that comprise the current research regarding the acquisition of psychomotor competency. Clinical and Field Phases of EMT education can be conducted in

different ways, and this package is not designed to be prescriptive as to how to deliver that education. It is a compilation of best practices in education, measurement, and documentation of psychomotor competency. This Manual does not prescribe the use of these instruments but merely provides best practice examples. This package should also help improve inter-rater reliability by attaching minimum standards and helping to standardize the evaluation of skill performances. It is the goal of this package to provide EMT education programs with instruments and methods to facilitate consistent recording of student performances and instructions to the evaluator focused at improving inter-rater reliability. The use of this package serves to document psychomotor competency that is a prerequisite to EMS certification issued by the NREMT and the State of Indiana.

The following sections of this document contain descriptions of the Skills and Scenario Labs, Clinical and Field Phase and an essay on Psychomotor Competency. At the end of this Manual are appendices that contain the individual instructions, evaluation instruments and documents that can be used to complete an individual student portfolio and assist in the development of good psychomotor domain for an EMT candidate.

Skill Lab

The "Pass/Fail Criteria and Average Minimum/Maximum" document **(Appendix B)** lists the skills that must be accomplished to meet the Indiana and NREMT performance requirements for a student's individual portfolio in order to qualify for state and national EMS certification. The NREMT analyzed data from programs that participated in the pilot study, which are presented in the last two columns of this document. These numbers represent the average of the minimum number of times each skill was performed and the average of the maximum number of times each skill was performed. Educational programs and their communities of interest can use these numbers as a guide when designing their portfolio requirements.

The Skills Lab begins with the use of formative assessments and progresses to use of summative instruments for all phases of EMT education. The psychomotor domain is comprised of two subsets, the *psycho* domain representing procedural knowledge, and the *motor* domain or using muscles (and other senses) to actually do or accomplish the skill. Failure to combine these two domains leads to failure to develop appropriate psychomotor competency. Educational scientists indicate learning of psychomotor skills follows patterns of skill and knowledge acquisition. The first phase is a requirement to know what to do. This means the student must know (psycho/procedural knowledge) the steps that together compile delivery of the skill (task list) (Anderson & Krathwohl, 2001). After the knowledge of how to do a skill has been acquired, the instructor must adequately demonstrate the skill to his or her students. Complete and proper demonstration of skills by the instructor is essential as students will *imprint* the demonstration into his or her mind and learn to mimic the actions seen in the demonstration. Failure to accurately demonstrate a skill can cause life-long use of bad habits, short cuts or improper technique. Following successful demonstration, the new learner must practice the skill. Practice requires frequent, accurate feedback by the educator and peers. Close supervision and feedback necessitates a proper student-to-instructor ratio during this phase of skill acquisition. Previous studies have suggested that an adequate learning environment for psychomotor skill should not exceed 4 to 8 students per faculty member (Dubrowski & MacRae, 2006; Snider, Seffinger, Ferrill, & Gish, 2012).

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

When students are practicing in the formative phase of education, they are forming habits, knowledge and skills that they will use throughout their EMS careers. The primary concern about formative evaluation is that it puts the power and control of learning into the hands of the student. A student who does not learn psychomotor precision during the formative phase of his or her development will fail during delivery of that skill.

Competency of psychomotor skills is not possessed after one successful demonstration of that particular skill. Competency requires repeated student skill demonstrations (practice) until the demonstration of that skill can be automatically delivered during stressful times, in unfamiliar places and to patients who are severely ill or injured. Autonomic delivery (automation) of a skill is maintained when the EMS professional can perform the skill without thinking about the steps. This frees-up working memory (Mayer, 2011) to continue the assessment, give directions to Team Members, and communicate effectively with the patient and others on the scene. Once competency in a skill has been achieved, an EMS professional can deliver that skill without thinking about the steps and adapt to differing situations.

Throughout EMS education, as students increase in knowledge and skills, they should be placed in increasingly stressful situations where skills must be performed. One of the first is to accomplish a skill in front of an instructor or classmates. Repetition of the vast array of psychomotor skills in a simulated environment is necessary to naturalize the skills and perform them without thinking about the steps. Repetition is time consuming and therefore expensive. Failure to incorporate enough repetition in early learning of new skills results in reduced skill retention and the inability of the student to spontaneously demonstrate that skill in either a testing environment or during actual patient care. Often, instructors do not have time to provide feedback individually to every student every time he or she practices a skill. Groups of students can use formative instruments that include detailed steps outlining entry-level competency during practice. Students evaluating other students and providing feedback can be useful once everyone understands the expected standard. A student whose performance is being compared to the formative instrument can be judged, and immediate feedback can be provided. Students observing another student's performance can frequently learn missed steps, varying or improper techniques and provide valuable feedback to peers (Weidner & Popp, 2007).

The Skills Lab instruments in the competency package represent a range of importance in skill delivery. Not every skill is used as often as others. Not every skill is equally complicated and equally important to the patient's outcome. Not every skill, if performed improperly, can cause the same potential for harm. Therefore, some psychomotor skills are more essential to acquire than others, but all interventions carry some risk. It is not sensible to frequently practice an easy-to-learn skill that has little bearing on the eventual outcome of critical patient care. However, it is sensible to practice the most important and higher risk skills with greater frequency. It is imperative that the educational program has documentation in the student file that show a student can deliver particular skills competently. The package allows some skills, even if they are difficult or necessary to be accomplished, to be measured by peers because these skills are infrequently used as part of out-of-hospital care. Instructions for each individual skill will further explain the measurement and documentation requirements.

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Emergency Medical Technician Psychomotor Portfolio

Appendix B of the Manual includes sample individual Skills evaluation instruments that can be utilized to evaluate student performance. Neither the State of Indiana nor the NREMT require their use, but provide them as best practice instruments that have been developed for use by education programs if they choose. These evaluations can be documented on paper, electronic format, or with commercially available evaluation instruments as the needs and resources of the education program dictate.

Clinical Phase

The next phase of EMS education requires the student to move from the skills lab and simulation environment (skill and scenario) to interaction with real patients in the clinical and field settings. Many variables influence skill delivery in the clinical/ field setting. The added stress of movement out of the laboratory or classroom setting to real patients has an effect on student performance. Regardless of the student's stress level or the patient's illness/injury, the psychomotor delivery of a patient intervention is essential. The patient's age, the urgency of delivery of the skill, the patient's level of consciousness and the affect of the patient can place added stress on the EMT student who is about to perform the intervention.

Clinical Phase evaluations usually take place in an Emergency Department. Patient interaction opportunities of individual EMT programs may vary. The important point of EMT education is that students have ample opportunity to interact with a variety of patients who are experiencing a range of illnesses and injuries throughout the various age groups.

Preceptors or instructors must be present during clinical rotations and should help minimize student's errors by instructing them in the proper techniques, providing feedback and evaluating their performance. Commonly, the preceptor is on duty as an employee of the healthcare institution. Patient volumes may make instruction and evaluation of students difficult for preceptors. Preceptors should be familiar with the required documentation required for each student prior to the clinical rotation.

Setting up Clinical Sites

Prior to sending students to a clinical site, a formal clinical affiliation agreement or contract must be in place. Affiliation agreements should include a description of what the students can do at the site and the responsibilities of the preceptors. The program must ensure that preceptors are adequately oriented or trained to supervise and coach students. Topics should include purposes of the rotation, evaluation criteria and tracking tools, and contact information for the educational program. Clinical sites should have emergency contact information for direct access to the Program Director and Clinical Coordinator at all times.

Students must have direct interaction with patients and perform skills that he/she will need to perform in the out-of-hospital setting as an EMT. These skills should be performed under the direct supervision of a trained preceptor. Performance must be evaluated, and documentation must be obtained in order to have validity.

The length of time necessary to complete the required clinical patient exposures and measurement is not important. The important part of clinical patient care education is that there are sufficient

patient contacts with a broad array of patients and conditions that adds to the validity of cognitive and psychomotor competency of the student. In most cases the EMT student should be able to obtain a minimum of ten (10) patient contacts and interactions between the Clinical and Field Phase of eight (8) hours each as a minimum.

Field Phase

Field Phase evaluation of field performance assesses a student as a Team Member and is isolated to evaluation of individual skill delivery or a portion of patient care that is delivered. The student is not assuming the Team Leader role but integrating with other Team Members. When evaluating the student's performance as a Team Member, only the portion of care completed by the student is evaluated. The Team Member role contains an affective component and evaluates the student's cognitive understanding of complete patient care that EMTs are expected to deliver.

Preceptor Preparation, Training, and Expectations

Preceptors have varying degrees of interest in student education. Therefore, requirements placed upon preceptors by EMT education programs must be efficient and effective. The goal of the clinical educational experience should be to ensure that each student interacts with patients and provides care while under the direct observation of a preceptor or instructor in a controlled clinical environment. In order for the student to benefit from this interaction, the preceptor must allow the student to conduct a patient history and physical examination followed by a discussion regarding the patient's diagnosis and field care plan. If the patient needs a therapeutic intervention, the preceptor also needs to evaluate and document the student's performance as compared to the accepted standard. The interaction between the student, patient and preceptor is dynamic, and the affective skills of the student also need to be evaluated by the preceptor. The final step is for the student and preceptor to complete a standardized evaluation of the student performance and for the student to document the patient contact for evaluation by the EMT education program.

Evaluation Instruments

Evaluation instruments and documentation of student performance must be brief, easy to understand and effective in measurement of performance. **Appendix C** is the "Clinical Shift Evaluation Worksheet." To improve inter-rater reliability, "How to Use Clinical Evaluation Instrument" (Appendix C) describes the correct use of the evaluation instrument and must be provided to preceptors prior to evaluating the student as a Team Member. These evaluation instruments must be tied to previously learned skills so that standards learned in the Skills Labs are carried forward to live patients in a clinical or field setting. Performance standards that were learned in the formative phases must be adhered to during clinical evaluations and throughout clinical and field rotations.

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Educational Programs need to develop a system for returning completed instruments to the program. This system should employ methods to prevent alteration of the evaluation by the student and/or discarding of the evaluation instrument by the student. Systems that allow students to alter preceptor-completed evaluations and/or make it possible for students to throw away unsuccessful patient evaluations are not valid.

Psychomotor Competency

Competency is the extent to which an individual can handle the various situations that arise in the area of practice. The clinician who is competent, regardless of the complexity of the call, performs within the standard of care. The clinician who is incompetent needs partners to assist, direct or even perform an action when the performance approaches an unacceptable level. Perfection in a clinical occupation such as Emergency Medical Technician will not be demonstrated on every call or every day throughout an individual's career. There are too many variables in patient presentations, ages, illnesses, injuries and idiosyncratic responses to expect the ideal outcome on every call. Because of these variables, continuous education must be a part of continued competency.

The primary problem for educators and even those who certify and license is, "When has the student reached a level of competency that is comprehensive enough to be able to safely and effectively practice?" This is a research question, and its answer is contained within psychometrics and judgment. This competency package requires that some of the variables that ensure competency be acquired by the student. First is the requirement that an adequate sample of skills and patient presentations be obtained as part of EMT education. In order to meet the requirements of this package, a student must be evaluated while in contact with simulated patients who have many types of injuries and illnesses.

The sample size of patient interactions is further required in a hospital or clinic where students must interface with patients having all types of illnesses and injuries in varying age groups. Because patients congregate at hospitals and clinics, it may be the best environment for students to efficiently interact with them. Medical education is important to the American public and therefore most patients understand the value of allowing students to interact with them and perform certain skills. EMS education programs must ensure that their students have an appropriate opportunity to see adequate numbers of patients with varying illnesses and injuries throughout the educational experience. These adequate numbers of patients provide the first needed step towards competency: sample size.

The second step of ensuring competency is evaluation. Allowing students to matriculate through the educational processes without evaluation provides no assurance that competency has been obtained. Allowing students adequate time to practice skills in the laboratory without any final measurement of skill acquisition does not validate competency. Scheduling students in the Clinical or Field Phases without tracking the types of patients they encounter does not ensure an adequate sample of patient contacts or validate competency. Failure to evaluate students during their interaction with the patient does not ensure competency. Evaluations can be specific to a

psychomotor skill, such as, "Can the student obtain baseline vitals or not?" This type of tracking is important because it provides documentation of the sample. However, it is not only enough to know the numerical values for vital signs, but also that it was performed within the context of proper patient care.

Practicing skills and interacting with patients without evaluation and documentation does not lead to competency validation. Sending students to the hospital or field to see how patient care is delivered does not lead to student competency. The student must perform assessments, interviews, skill interventions and be evaluated on his or her performance for feedback purposes and to document competency. Remember, competency cannot be obtained without documented evaluation.

When one considers all of the skills of an EMT and all of the types of patient interactions that should occur, it becomes complicated to determine how much education and exposure is adequate. This requires the application of a third step in psychomotor competency: extrapolation. A student cannot interact with patients who are suffering every known disease to mankind. A student cannot be required to remain in the Clinical or Field Phases until every skill is performed on a live patient. Opportunities are not controlled by the student. Patient volume and who happens to get sick while students are completing their clinical and field phases affect these opportunities. What can be ensured is that the student's Clinical and Field Phases were comprised of a large enough sample of varying patients and that the interactions were measured and documented.

Only when the student's Clinical and Field Phase evaluations have been documented can the results be extrapolated to make a reasonable judgment of competency. Students in EMS education must have a large enough sample that includes measurement in order to extrapolate that the student has reached entry-level competency to safely and effectively practice. Lastly, education and competency are essential. It centers on validity and trust. Validity is difficult to control in psychomotor competency. For example, two judges can see the same performance and mark (score) the performance in different ways. The scoring can be dramatically different or vary slightly depending on the judge's bias, observational attention and current knowledge of the standard.

Licensure and certification are designed to protect the public. Currently in EMS we require applicants for certification to demonstrate psychomotor competency as part of the process. This demonstration contains components of psychomotor competency validation. Candidates who are competent when testing should successfully demonstrate that competency in front of judges in a simulated environment. Pass rates on performance examinations should be high because candidates should not attempt the examination without having demonstrated psychomotor competency as part of successfully completing the educational process.

Performance examinations for certification are only able to evaluate a small sample of the entire psychomotor domain necessary for the occupation. The NREMT and State of Indiana require a summative psychomotor performance examination as part of EMS certification. This psychomotor examination provides an outside validation of competency over a representative sample of core skills (Trauma Assessment, Medical Assessment, Cardiac Arrest, Supraglotic Airway, Ventilation

of the Apneic Patient and Bleeding and Shock Management). This outside validation, coupled with the portfolio during the educational process, form the entire basis for judging psychomotor competence. Strengthening psychomotor education is good for the student, the educational program, the accreditation body, the certification and licensure body, the EMS system and most importantly, the public. Competent psychomotor and affective skills are the cornerstone of quality EMS care and are essential for helping to ensure a high level of professional knowledge, skills and behaviors of EMS Professionals.

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Emergency Medical Technician Psychomotor Portfolio

Appendix A

Psychomotor Exam Sheets

Formally evaluated by the State of Indiana:

Station 1: Patient Assessment Trauma Patient

Station 2: Patient Assessment Medical Patient

Station 3: Cardiac Arrest/ AED

Station 4: Ventilation of the Apneic Adult Patient

Station 5: Spinal Immobilization Supine

Station 6: Supraglotic Airway

Station 7: Bleeding Control and Shock Management

Skills that must be evaluated prior to the EMT candidate's eligibility for certification psychomotor examination and included in the candidate's portfolio

* Long Bone
* Joint Injury
* Oxygen Preparation
* Traction Splint
* CPAP
* Intramuscular Medication Administration
* Intranasal Medication Administration
* Inhaled Medication Administration
* Glucometer
* 12 lead Acquisition

* Skills that must be included in the candidate's portfolio to show competency, however will not be evaluated at the formal psychomotor examination administered by the State of Indiana.

EMERGENCY MEDICAL TECHNICIAN (EMT) PSYCHOMOTOR SKILLS EXAMINATION REPORT

State Form 54502 (R6 / 1-17)

INDIANA DEPARTMENT OF HOMELAND SECURITY
EMERGENCY MEDICAL SERVICES CERTIFICATION
302 West Washington Street, Room E239
Indianapolis, IN 46204
Telephone: 1-800-666-7764

INSTRUCTIONS: 1. Please type or print clearly.
2. Candidates must read and sign where indicated before examination begins.

REGISTRANT INFORMATION

Course number	Driver's license number
Name *(last, first, middle initial)*	Public Safety Identification (PSID) number
Address *(number and street, city, state, and ZIP code)*	
Date of birth *(month, day, year)*	E-mail address / Telephone number ( )
Name of training institution	Examination site

EXAMINATION RESULTS

	Date of examination *(month, day, year)*:	Initial:	Retest number:
Section 1	Patient Assessment / Management - Trauma	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 2	Patient Assessment / Management - Medical	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 3	Cardiac Arrest Management / AED	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 4	BVM Ventilation of an Apneic Adult Patient	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 5	Supraglottic Airway Device	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 6	Spinal Immobilization (Supine)	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Section 7	Bleeding Control / Shock Management	☐ Pass ☐ Fail	☐ Pass ☐ Fail

PRACTICAL SKILLS EXAMINATION PASS / FAIL CRITERIA

1.	Candidates failing three (3) or fewer stations may re-test the skill(s) failed on the same day of the examination.
2.	Candidates failing a same day re-test must re-test those failed skills on a different day with a different examiner.
3.	Candidates failing a single skill three (3) times, or fails four (4) or more stations constitutes failure of the practical skills examination.
4.	Candidates who fail the Practical Skills Examination may re-test the entire examination only after documented remedial training.
5.	Candidates who must take the entire Practical Skills Examination a second time, items 1-3 above apply.
6.	Failure to pass the Practical Skills Examination a second time constitutes failure of the Practical Skills Examination and requires the candidate to take the entire EMT Training Program over.
7.	Test results announced on the day of the examination are PRELIMINARY AND UNOFFICIAL. Results are not final until reviewed by Indiana Department of Homeland Security Certifications staff. The Candidate will be notified by mail in the event the preliminary results of the examination ARE NOT upheld upon review.

EMERGENCY MEDICAL SERVICES REGISTRANT SIGNATURE

By my signature below, I acknowledge that I have read and understand the Pass / Fail testing criteria listed in items 1-7 above.

Signature of EMT candidate	Date *(month, day, year)*
State representative comments:	
Signature of representative	Date *(month, day, year)*

FOR OFFICE USE ONLY

☐ Pass	☐ Fail	Staff initials	Date *(month, day, year)*

Indiana Emergency Medical Technician Psychomotor Examination

PATIENT ASSESSMENT/MANAGEMENT – TRAUMA

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

Scenario # _____

Actual Time Started: _____ Note: Areas denoted by "**" may be integrated within sequence of Primary Survey/Resuscitation

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
SCENE SIZE-UP		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional EMS assistance if necessary	1	
Considers stabilization of the spine	1	
PRIMARY SURVEY/RESUSCITATION		
Verbalizes general impression of the patient	1	
Determines responsiveness/level of consciousness	1	
Determines chief complaint/apparent life-threats	1	
Airway -Opens and assesses airway (1 point) -Inserts adjunct as indicated (1 point)	2	
Breathing -Assess breathing (1 point) -Assures adequate ventilation (1 point) -Initiates appropriate oxygen therapy (1 point) -Manages any injury which may compromise breathing/ventilation (1 point)	4	
Circulation -Checks pulse (1point) -Assess skin [either skin color, temperature or condition] (1 point) -Assesses for and controls major bleeding if present (1 point) -Initiates shock management [positions patient properly, conserves body heat] (1 point)	4	
Identifies patient priority and makes treatment/transport decision (based upon calculated GCS)	1	
HISTORY TAKING		
Obtains baseline vital signs [must include BP, P and R] (1 point)	1	
Attempts to obtain SAMPLE history	1	
SECONDARY ASSESSMENT		
Head -Inspects and palpates scalp and ears (1 point) ** -Assesses eyes (1 point) -Inspects mouth**, nose** and assesses facial area (1 point)	3	
Neck** -Checks position of trachea (1 point) -Checks jugular veins (1 point) -Palpates cervical spine (1 point)	3	
Chest** -Inspects chest (1 point) -Palpates chest (1 point) -Auscultates chest (1 point)	3	
Abdomen/pelvis** -Inspects and palpates abdomen (1 point) -Assesses pelvis (1 point) -Verbalizes assessment of genitalia/perineum as needed (1 point)	3	
Lower extremities** -Inspects, palpates and assesses motor, sensory and distal circulatory functions (1 point/leg)	2	
Upper extremities -Inspects, palpates and assesses motor, sensory and distal circulatory functions (1 point/arm)	2	
Posterior thorax, lumbar and buttocks** -Inspects and palpates posterior thorax (1 point) -Inspects and palpates lumbar and buttocks areas (1 point)	2	
Manages secondary injuries and wounds appropriately	1	
REASSESSMENT		
Demonstrates how and when to reassess the patient	1	
	TOTAL 42	

Actual Time Ended: _____

CRITICAL CRITERIA

____ Failure to initiate or call for transport of the patient within 10 minute time limit
____ Failure to take or verbalize appropriate PPE precautions
____ Failure to determine scene safety
____ Failure to assess for and provide spinal protection when indicated
____ Failure to voice and ultimately provide high concentration oxygen
____ Failure to assess/provide adequate ventilation
____ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock
____ Failure to differentiate patient's need for immediate transportation versus continued assessment/treatment at the scene
____ Performs other assessment before assessing/treating threats to airway, breathing and circulation
____ Failure to manage the patient as a competent EMT
____ Exhibits unacceptable affect with patient or other personnel
____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician

Psychomotor Examination

PATIENT ASSESSMENT/MANAGEMENT – MEDICAL

Candidate:_____ Examiner: _____

Date: _____ Signature: _____

Scenario # _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
SCENE SIZE-UP		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional EMS assistance if necessary	1	
Considers stabilization of the spine	1	
PRIMARY SURVEY/RESUSCITATION		
Verbalizes the general impression of the patient	1	
Determines responsiveness/level of consciousness (AVPU)	1	
Determines chief complaint/apparent life-threats	1	
Assesses airway and breathing -Assessment (1 point) -Assures adequate ventilation (1 point) -Initiates appropriate oxygen therapy (1 point)	3	
Assesses circulation -Assesses/controls major bleeding (1 point) -Checks pulse (1 point) -Assesses skin [either skin color, temperature or condition] (1 point)	3	
Identifies patient priority and makes treatment/transport decision	1	
HISTORY TAKING		
History of the present illness -Onset (1 point) -Quality (1 point) -Severity (1 point) -Provocation (1 point) -Radiation (1 point) -Time (1 point) -Clarifying questions of associated signs and symptoms related to OPQRST (2 points)	8	
Past medical history -Allergies (1 point) -Past pertinent history (1 point) -Events leading to present illness (1 point) -Medications (1 point) -Last oral intake (1 point)	5	
SECONDARY ASSESSMENT		
Assesses affected body part/system -Cardiovascular -Neurological -Integumentary -Reproductive -Pulmonary -Musculoskeletal -GI/GU -Psychological/Social	6	
VITAL SIGNS		
-Blood pressure (1 point) -Pulse (1 point) -Respiratory rate and quality (1 point each)	4	
States field impression of patient	1	
Interventions [verbalizes proper interventions/treatment]	1	
REASSESSMENT		
Demonstrates how and when to reassess the patient to determine changes in condition	1	
Provides accurate verbal report to arriving EMS unit	1	
Actual Time Ended: _____ TOTAL	42	

CRITICAL CRITERIA

____ Failure to initiate or call for transport of the patient within 15 minute time limit
____ Failure to take or verbalize appropriate PPE precautions
____ Failure to determine scene safety before approaching patient
____ Failure to voice and ultimately provide appropriate oxygen therapy
____ Failure to assess/provide adequate ventilation
____ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock
____ Failure to differentiate patient's need for immediate transportation versus continued assessment or treatment at the scene
____ Performs secondary examination before assessing and treating threats to airway, breathing and circulation
____ Orders a dangerous or inappropriate intervention
____ Failure to provide accurate report to arriving EMS unit
____ Failure to manage the patient as a competent EMT
____ Exhibits unacceptable affect with patient or other personnel
____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician

Psychomotor Examination

CARDIAC ARREST MANAGEMENT / AED

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
Determines the scene/situation is safe	1	
Checks patient responsiveness	1	
Direct assistant to retrieve AED	1	
Requests additional EMS assistance	1	
Checks breathing and pulse simultaneously	1	
NOTE: After checking responsiveness, then checking breathing and pulse for no more than 10 seconds, examiner informs candidate, "The patient is unresponsive, apneic and pulseless."		
Immediately begins chest compressions [adequate depth and rate; allows the chest to recoil completely]	1	
Performs 2 minutes of high-quality, 1-rescuer adult CPR -Adequate depth and rate (1 point) -Correct compression-to-ventilation ratio (1 point) -Allows the chest to recoil completely (1 point) -Adequate volumes for each breath (1 point) -Minimal interruptions of no more than 10 seconds throughout (1 point)	5	
NOTE: After 2 minutes (5 cycles), candidate assesses patient and second rescuer resumes compressions while candidate operates AED.		
Turns on power to AED	1	
Follows prompts and correctly attaches AED to patient	1	
Stops CPR and ensures all individuals are clear of the patient during rhythm analysis	1	
Ensures that all individuals are clear of the patient and delivers shock from AED	1	
Immediately directs rescuer to resume chest compressions	1	
TOTAL	17	

Actual Time Ended: _____

Critical Criteria

____Failure to take or verbalize appropriate PPE precautions
____Failure to check responsiveness, then check breathing and pulse simultaneously for no more than 10 seconds
____Failure to immediately begin chest compressions as soon as pulselessness is confirmed
____Failure to demonstrate acceptable high-quality, 1-rescuer adult CPR
____Interrupts CPR for more than 10 seconds at any point
____Failure to correctly attach the AED to the patient
____Failure to operate the AED properly
____Failure to deliver shock in a timely manner
____Failure to ensure that all individuals are clear of patient during rhythm analysis and before delivering shock [verbalizes "All clear" and observes]
____Failure to immediately resume compressions after shock delivered
____Failure to manage the patient as a competent EMT
____Exhibits unacceptable affect with patient or other personnel
____Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician

Psychomotor Examination

BVM VENTILATION OF AN APNEIC ADULT PATIENT

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
Checks responsiveness	1	
Requests additional EMS assistance	1	
Checks breathing and pulse simultaneously	1	
NOTE: After checking responsiveness, then checking breathing and pulse for no more than 10 seconds, examiner informs candidate, "The patient is unresponsive, apneic and has a weak pulse of 60."		
Opens airway properly	1	
NOTE: The examiner must now inform the candidate, "The mouth is full of secretions and vomitus."		
Prepares rigid suction catheter	1	
Turns on power to suction device or retrieves manual suction device	1	
Inserts rigid suction catheter without applying suction	1	
Suctions the mouth and oropharynx	1	
NOTE: The examiner must now inform the candidate, "The mouth and oropharynx are clear."		
Opens the airway manually	1	
Inserts oropharyngeal airway	1	
NOTE: The examiner must now inform the candidate, "No gag reflex is present and the patient accepts the airway adjunct."		
Ventilates the patient immediately using a BVM device unattached to oxygen [Award this point if candidate elects to ventilate initially with BVM attached to reservoir and oxygen so long as first ventilation is delivered within 30 seconds.]	1	
NOTE: The examiner must now inform the candidate that ventilation is being properly performed without difficulty.		
Re-checks pulse for no more than 10 seconds	1	
Attaches the BVM assembly [mask, bag, reservoir] to oxygen [15 L/minute]	1	
Ventilates the patient adequately -Proper volume to cause visible chest rise (1 point) -Proper rate [10 – 12/minute (1 ventilation every 5 – 6 seconds)] (1 point)	2	
Note: The examiner must now ask the candidate, "How would you know if you are delivering appropriate volumes with each ventilation?"		
TOTAL	16	

Actual Time Ended: _____

CRITICAL CRITERIA

____ After suctioning the patient, failure to initiate ventilations within 30 seconds or interrupts ventilations for greater than 30 seconds at any time

____ Failure to take or verbalize appropriate PPE precautions

____ Failure to suction airway before ventilating the patient

____ Suctions the patient for an excessive and prolonged time

____ Failure to check responsiveness, then check breathing and pulse simultaneously for no more than 10 seconds

____ Failure to voice and ultimately provide high oxygen concentration [at least 85%]

____ Failure to ventilate the patient at a rate of 10 – 12/minute (1 ventilation every 5 – 6 seconds)

____ Failure to provide adequate volumes per breath [maximum 2 errors/minute permissible]

____ Insertion or use of any adjunct in a manner dangerous to the patient

____ Failure to manage the patient as a competent EMT

____ Exhibits unacceptable affect with patient or other personnel

____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician
Psychomotor Examination

SUPRAGLOTTIC AIRWAY DEVICE

Candidate: _____ Examiner: _____
Date: _____ Signature: _____
Device: _____

NOTE: If candidate elects to initially ventilate with BVM attached to reservoir and oxygen, full credit must be awarded for steps denoted by "**" so long as first ventilation is delivered within 30 seconds.

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
Opens the airway manually	1	
Elevates tongue, inserts simple adjunct [oropharyngeal or nasopharyngeal airway]	1	
NOTE: Examiner now informs candidate no gag reflex is present and patient accepts adjunct		
**Ventilates patient immediately with bag-valve-mask device unattached to oxygen	1	
**Ventilates patient with room air	1	
NOTE: Examiner now informs candidate that ventilation is being performed without difficulty and that pulse oximetry indicates the patient's blood oxygen saturation is 85%		
Attaches oxygen reservoir to bag-valve-mask device and connects to high-flow oxygen regulator [12 – 15 L/minute]	1	
Ventilates patient at a rate of 10 – 12/minute (1 ventilation every 5 – 6 seconds) with appropriate volumes	1	
NOTE: After 30 seconds, examiner auscultates and reports breath sounds are present and equal bilaterally and medical direction has ordered insertion of a supraglottic airway. The examiner must now take over ventilation.		
Checks/prepares supraglottic airway device	1	
Lubricates distal tip of the device [may be verbalized]	1	
NOTE: Examiner to remove OPA and move out of the way when candidate is prepared to insert device.		
Positions head properly	1	
Performs a tongue-jaw lift	1	
Inserts device to proper depth	1	
Secures device in patient [inflates cuffs with proper volumes and immediately removes syringe or secures strap]	1	
Ventilates patient and confirms proper ventilation [correct lumen and proper insertion depth] by auscultation bilaterally over lungs and over the epigastrium	1	
Adjusts ventilation as necessary [ventilates through additional lumen or slightly withdraws tube until ventilation is optimized]	1	
Verifies proper tube placement by secondary confirmation such as EDD or colorimetric device	1	
NOTE: The examiner must now ask the candidate, "How would you know if you are delivering appropriate volumes with each ventilation?"		
Secures device or confirms that the device remains properly secured	1	
Ventilates patient at proper rate and volume while observing pulse oximeter	1	
Actual Time Ended: _____ **TOTAL**	18	

Critical Criteria

___ Failure to initiate ventilations within 30 seconds after taking body substance isolation precautions or interrupts ventilations for greater than 30 seconds at any time
___ Failure to take or verbalize appropriate PPE precautions
___ Failure to voice and ultimately provide high oxygen concentration [at least 85%]
___ Failure to ventilate the patient at a rate of 10 – 12/minute (1 ventilation every 5 – 6 seconds)
___ Failure to provide adequate volumes per breath [maximum 2 errors/minute permissible]
___ Failure to pre-oxygenate patient prior to insertion of the supraglottic airway device
___ Failure to insert the supraglottic airway device at a proper depth or location within 3 attempts
___ Failure to inflate cuffs properly and immediately remove the syringe
___ Failure to secure the strap (if present) prior to cuff inflation
___ Failure to confirm that patient is being ventilated properly (correct lumen and proper insertion depth) by auscultation bilaterally over lungs and over the epigastrium
___ Insertion or use of any adjunct in a manner dangerous to the patient
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician

Psychomotor Examination

SPINAL IMMOBILIZATION (SUPINE PATIENT)

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
Directs assistant to place/maintain head in the neutral, in-line position	1	
Directs assistant to maintain manual stabilization of the head	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
Applies appropriately sized extrication collar	1	
Positions the immobilization device appropriately	1	
Directs movement of the patient onto the device without compromising the integrity of the spine	1	
Applies padding to void between the torso and the device as necessary	1	
Immobilizes the patient's torso to the device	1	
Evaluates and pads behind the patient's head as necessary	1	
Immobilizes the patient's head to the device	1	
Secures the patient's legs to the device	1	
Secures the patient's arms to the device	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
Actual Time Ended: _____ TOTAL	14	

CRITICAL CRITERIA

____ Failure to immediately direct or take manual stabilization of the head
____ Failure to properly apply appropriately sized cervical collar before ordering release of manual stabilization
____ Released or ordered release of manual stabilization before it was maintained mechanically
____ Manipulated or moved the patient excessively causing potential spinal compromise
____ Head immobilized to the device **before** device sufficiently secured to the torso
____ Patient moves excessively up, down, left or right on the device
____ Head immobilization allows for excessive movement
____ Upon completion of immobilization, head is not in a neutral, in-line position
____ Failure to reassess motor, sensory and circulatory functions in each extremity after immobilizing patient to the device
____ Failure to manage the patient as a competent EMT
____ Exhibits unacceptable affect with patient or other personnel
____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Emergency Medical Technician

Psychomotor Examination

BLEEDING CONTROL/SHOCK MANAGEMENT

Candidate: _____ Examiner: _____

Date: _____ Signature: _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
Applies direct pressure to the wound	1	
NOTE: The examiner must now inform candidate that the wound continues to bleed.		
Applies tourniquet	1	
NOTE: The examiner must now inform candidate that the patient is exhibiting signs and symptoms of hypoperfusion.		
Properly positions the patient	1	
Administers high concentration oxygen	1	
Initiates steps to prevent heat loss from the patient	1	
Indicates the need for immediate transportation	1	
TOTAL	7	

Actual Time Ended: _____

CRITICAL CRITERIA

____ Failure to take or verbalize appropriate PPE precautions
____ Failure to administer high concentration oxygen
____ Failure to control hemorrhage using correct procedures in a timely manner
____ Failure to indicate the need for immediate transportation
____ Failure to manage the patient as a competent EMT
____ Exhibits unacceptable affect with patient or other personnel
____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

Appendix B

Skills Competency Sheets

Obtain A Patient History From an Alert and Oriented Patient – 3 pages

Comprehensive Normal Adult Physical Assessment – 4 pages

Comprehensive Normal Pediatric Physical Assessment – 4 pages

Supraglotic Airway – 2 pages

CPAP – 2 pages

Trauma Adult Physical Assessment – 3 pages

Spinal Immobilization Supine – 2 pages

Joint Splinting – 1 page

Long Bone – 2 pages

Traction Splinting – 2 Pages

Hemorrhage Control – 1 page

Medical and Cardiac Physical Assessment – 4 pages

Intramuscular Medical Administration – 2 pages

Intranasal Medication Administration – 2 pages

Inhaled Medication Administration – 2 pages

Glucometer – 2 pages

12 lead Acquisition – 2 Pages

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

Appendix B

Pass/ Fail Criteria and Minimum Passing Scores

Skills Lab	Minimum Points Required	Minimum Attempts	Maximum Attempts
History Taking and Physical Exam			
Obtain patient history from an alert and oriented patient	86	2	8
Comprehensive physical exam for an adult	160	2	7
Airway, Oxygenation and Ventilation			
Supraglotic Airway Device	38	2	17
Trauma			
Complete trauma assessment on adult patient	116	2	
Spinal immobilization (supine)	34	1	
Spinal Immobilization (seated)	36	1	
Joint splinting	24	2	
Long bone splinting	26	2	
Traction splinting	30	1	
Hemorrhage control	24	1	
Medical			
Medical and cardiac assessment of an adult patient	130	2	
Intramuscular injection administration	44	2	
Intranasal medication administration	44	2	
Inhaled medication administration	38	2	
Glucometer	32	2	
12 lead Acquisition			

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

OBTAIN A PATIENT HISTORY FROM AN ALERT AND ORIENTED PATIENT SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	SCORE
Demographic data	
Age	
Weight – estimated/translated to kg	
Sex	
Ethnic origin	
Source of referral	
"Who called EMS?"	
Source of historical information	
Who is telling you the information?	
Reliability	
Do you believe the patient?	
Does the patient have appropriate decision-making capacity to consent for care?	
Is the patient oriented appropriately?	
Chief complaint	
"Why did you call us?"	
Duration of this episode/complaint	
History of the present illness	
Onset	
"When did this begin?"	
"Was it sudden or gradual?"	
Provocation	
"What brought this on?"	
"Is there anything that makes it better or worse?"	
Quality	
"How would you describe your pain or symptoms?"	
"Has there been any change in your pain or symptoms since it began?"	
Region/Radiation	
"Can you point and show me where your pain or symptoms are located?"	
"Does the pain move or radiate anywhere else?"	
Severity	
"How would you rate your level of discomfort right now on a 0 – 10 scale?"	
"Using the same scale, how bad was your discomfort when this first began?"	
Timing	
"When did your pain or symptoms begin?"	
"Is it constant or how does it change over time?"	

Setting	
Is there anything unique to place or events with this episode?	
Treatments	
"Have you taken anything to treat this problem?"	
Pertinent negatives	
Notes any signs or symptoms not present	
Converges	
Moves history from broad to focused to field impression	
Past medical history	
General health status	
What does the patient say about his/her health?	
Current medications	
"What prescribed medications do you currently take?"	
"What over-the-counter medications or home remedies do you currently take?"	
"When did you take you last dose of medications?"	
"Do you take all your medications as directed?"	
Adult illnesses	
"What other similar episodes were present?"	
"Is this an acute or chronic illness?"	
"What medical care do you currently receive for this illness?"	
"What medical care do you currently receive for other illnesses?"	
Allergies	
"Do you have any allergies to any medications, foods or other things?"	
Operations	
"What previous surgeries have you had?"	
Environmental	
Patient nutritional status	
"Do you have any habitual activities, such as drugs, alcohol or tobacco use?"	
Family history	
Questions patient about pertinent family medical history	
Psychological history	
Asks appropriate related history questions based upon patient presentation	
Verbal report	
Completes succinct report	
Identifies pertinent findings	
Identifies pertinent negatives	
Organization	
Organizes report in logical sequence	
Affective	
Makes the patient feel comfortable	
Uses good eye contact	
Establishes and maintains proper distance	
Uses techniques that show interest in the patient	
Professional appearance	
Takes notes of findings during history	
Preferably uses open-ended questions	
Follows patient lead to converge questions	

Uses reflection to gain patient confidence	
Shows empathy in a professional manner	

Actual Time Ended: _____

TOTAL	/112

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to complete an appropriate history
___ Failure to obtain vital information necessary for the proper assessment, management and diagnosis of the patient's condition
___ Failure to receive a total score of 86 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

COMPREHENSIVE NORMAL ADULT PHYSICAL ASSESSMENT TECHNIQUES SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

NOTE: The student is to perform a comprehensive physical examination (well physical examination) on a patient who has no complaint or distress.

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Initial general impression	
Appearance	
Speaks when approached	
Facial expression	
Skin color	
Eye contact	
Weight - estimated/translated to kg	
Work of breathing	
Posture, ease of movement	
Odors of body or breath	
Dress, hygiene, grooming	
Level of consciousness/mental status	
Speech	
Quantity	
Rate	
Volume	
Articulation of words	
Fluency	
Mood	
Orientation	
Time	
Place	
Person	
Memory	
Recent	
Long term	

Assesses baseline vital signs	
Vital signs	
Blood pressure	
Pulses – radial, carotid	
Pulse rate	
Pulse amplification	
Respirations	
Respiratory rate	
Tidal volume	
Temperature – oral, tympanic, rectal	
SpO_2	
Secondary physical examination	
Skin	
Colors – flushed, jaundiced, pallor, cyanotic	
Moisture – dryness, sweating, oiliness	
Temperature – hot or cool to touch	
Turgor	
Lesions – types, location, arrangement	
Nails – condition, cleanliness, growth	
Head and neck	
Hair	
Scalp	
Skull	
Face	
Eyes	
Acuity – vision is clear and free of disturbance	
Appearance – color, iris clear	
Pupils – size, reaction to light	
Extraocular movements – up, down, both sides	
Ears	
External ear	
Ear canal – drainage, clear	
Hearing – present/absent	
Nose	
Deformity	
Air movement	
Mouth	
Opens willingly	
Jaw tension	
Mucosal color	
Moisture	
Upper airway patent	
Neck	
Trachea – midline	
Jugular veins – appearance with patient position	

Chest	
Chest wall movement – expansion	
Skin color – closed wounds	
Integrity	
Open wounds	
Rib stability	
Presence/absence of pain	
Lower Airway	
Auscultation – anterior and posterior	
Normal sounds and location	
Tracheal	
Bronchial	
Bronchovesicular	
Vesicular	
Heart and blood vessels	
Heart	
Apical pulse	
Sounds	
S_1	
S_2	
Arterial pulses	
Locate with each body area examined	
Abdomen	
Color – closed wounds	
Open wounds	
Size, symmetry, shape	
Scars	
Distention	
Auscultation	
Palpation – quadrants, masses, tenderness, rigidity	
Back	
Color – closed wounds	
Open wounds	
Size, symmetry, shape	
Scars	
Palpation – tenderness, rigidity, masses	
Pelvis	
Stability	
Male genitalia – inquires about:	
Wounds, rashes, external lesions	
Drainage	
Female genitalia (non-pregnant) – inquires about:	
Wounds, rashes, external lesions	
Drainage	
Asks about bleeding or discharge	

Musculoskeletal	
Legs and feet	
Symmetry	
Range of motion	
Deformity	
Skin	
Color	
Closed wounds	
Open wounds	
Pulses	
Femoral	
Popliteal	
Dorsalis pedis	
Arms and hands	
Symmetry	
Range of motion	
Deformity	
Skin	
Color	
Closed wounds	
Open wounds	
Pulses	
Brachial	
Radial	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner, i.e. uses appropriate name, explains procedures, maintains modesty	

Actual Time Ended: _____

TOTAL /208

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to adequately assess airway, breathing or circulation
___ Performs assessment in a disorganized manner
___ Failure to assess the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Performs assessment inappropriately resulting in potential injury to the patient
___ Failure to receive a total score of 160 or greater

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

COMPREHENSIVE NORMAL PEDIATRIC PHYSICAL ASSESSMENT TECHNIQUES
SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

NOTE: The student is to perform a comprehensive physical examination (well physical examination) on a toddler or school-aged child who has no complaint or distress.
***Choose appropriate age level**

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Initial general impression	
Appearance	
Facial expression	
Skin color	
Work of breathing	
Odors of body or breath	
*If toddler or school-aged child:	
Activity level	
Speaks when addressed	
*If school-aged child:	
Eye contact	
Mood	
Orientation	
Time	
Place	
Person	
Memory	
Recent	
Long term	
Assesses baseline vital signs	
Vital signs	
Blood pressure	
Pulses – brachial, radial, carotid	
Pulse rate	
Pulse amplification	
Respirations	
Respiratory rate	
Tidal volume	
Temperature – oral, tympanic, rectal	
SpO_2	

Secondary physical examination	
Somatic growth	
Length	
Weight	
Head circumference	
Skin	
Colors – flushed, jaundiced, pallor, cyanotic	
Moisture – dryness, sweating, oiliness	
Temperature – hot or cool to touch	
Turgor	
Lesions – types, location, arrangement	
Nails – condition, cleanliness, growth	
Head and neck	
Hair	
Scalp	
Skull	
Face	
Eyes	
Acuity – vision is clear and free of disturbance	
Appearance – color, iris clear	
Pupils – size, reaction to light	
Extraocular movements – up, down, both sides	
Ears	
External ear	
Ear canal – drainage, clear	
Hearing – present/absent	
Nose	
Deformity	
Air movement	
Mouth	
Opens willingly	
Jaw tension	
Mucosal color	
Moisture	
Upper airway patent	
Neck	
Trachea – midline	
Jugular veins – appearance with patient position	
Chest	
Chest wall movement – expansion	
Skin color – closed wounds	
Integrity	
Open wounds	
Rib stability	
Presence/absence of pain	

Lower airway	
Auscultation – anterior and posterior	
Normal sounds and location	
Tracheal	
Bronchial	
Bronchovesicular	
Vesicular	
Heart and blood vessels	
Heart	
Apical pulse	
Sounds	
S_1	
S_2	
Arterial pulses	
Locate with each body area examined	
Abdomen	
Color – closed wounds	
Open wounds	
Size, symmetry, shape	
Scars	
Distention	
Auscultation	
Palpation – quadrants, masses, tenderness, rigidity	
Back	
Color – closed wounds	
Open wounds	
Size, symmetry, shape	
Scars	
Palpation – tenderness, rigidity, masses	
Pelvis	
Stability	
Male genitalia – inspects for:	
Wounds, rashes, external lesions, drainage	
Female genitalia – inspects for:	
Wounds, rashes, external lesions, drainage	
Musculoskeletal	
Legs and feet	
Symmetry	
Range of motion	
Deformity	
Skin	
Color	
Closed wounds	
Open wounds	
Pulses	
Femoral	
Popliteal	
Dorsalis pedis	

Arms and hands	
Symmetry	
Range of motion	
Deformity	
Skin	
Color	
Closed wounds	
Open wounds	
Pulses	
Brachial	
Radial	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner, i.e. uses appropriate name, explains procedures, maintains modesty	

Actual Time Ended: _____

TOTAL /180/194

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to adequately assess airway, breathing or circulation
___ Performs assessment in a disorganized manner
___ Failure to assess the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Performs assessment inappropriately resulting in potential injury to the patient
___ Failure to receive a total score of 136 (toddler)/146 (school-aged) or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

SUPRAGLOTTIC AIRWAY DEVICE ADULT SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	**SCORE**
Selects, checks, assembles equipment	
BVM with mask and reservoir	
Oxygen	
Airway adjuncts	
Suction unit with appropriate catheters	
Supraglottic airway device	
Capnography/capnometry	
Prepares patient	
Takes appropriate PPE precautions	
Manually opens airway	
Inserts adjunct (oropharyngeal or nasopharyngeal airway)	
Ventilates patient at a rate of 10 – 12/minute and sufficient volume to make chest rise	
Attaches pulse oximeter and notes SpO_2	
Preoxygenates patient	
Performs insertion of supraglottic airway device	
Lubricates distal tip of the device	
Positions head properly	
Performs a tongue-jaw lift	
Inserts device to proper depth	
Secures device in patient (inflates cuffs with proper volumes and immediately removes syringe or secures strap)	
Ventilates patient and confirms proper ventilation (correct lumen and proper insertion depth) by auscultation bilaterally over lungs and over epigastrium	
Adjusts ventilation as necessary (ventilates through additional lumen or slightly withdraws tube until ventilation is optimized)	
Verifies proper tube placement by secondary confirmation such as capnography, capnometry, EDD or colorimetric device	
Secures device	
Ventilates patient at proper rate and volume while observing capnography/capnometry and pulse oximeter	

Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL	/50

Critical Criteria

___ Failure to initiate ventilations within 30 seconds after taking PPE precautions or interrupts ventilations when SpO_2 is less than 90% at any time
___ Failure to take or verbalize appropriate PPE precautions
___ If used, suctions the patient for more than 10 seconds
___ Failure to preoxygenate the patient prior to insertion of the supraglottic airway device
___ Failure to disconnect syringe **immediately** after inflating any cuff
___ Failure to properly secure device in patient (cuff inflation or strap placement not acceptable)
___ Failure to assure proper tube placement by auscultation bilaterally **and** over the epigastrium
___ Failure to voice and ultimately provide high oxygen concentration [at least 85%]
___ Failure to ventilate the patient at a rate of at least 10/minute and no more than 12/minute
___ Failure to provide adequate volumes per breath [maximum 2 errors/minute permissible]
___ Insertion or use of any adjunct in a manner dangerous to the patient
___ Exhibits unacceptable affect with patient or other personnel
___ Failure to demonstrate the ability to manage the patient as a minimally competent EMT
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 38 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

CPAP AND PEEP SKILLS LAB FORM

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Prepares patient	
Takes or verbalizes appropriate PPE precautions	
Assures adequate blood pressure	
Positions patient in a position that will optimize ease of ventilation (high Fowler's)	
Assesses patient to identify indications for CPAP:	
Congestive heart failure	
Pulmonary edema	
Asthma	
Pneumonia	
COPD	
Assesses patient to identify contraindications for CPAP:	
Unconscious, unresponsive, inability to protect airway or inability to speak	
Inability to sit up	
Respiratory arrest or agonal respirations	
Nausea/vomiting	
Hypotension (systolic blood pressure < 90 mmHg)	
Suspected pneumothorax	
Cardiogenic shock	
Penetrating chest trauma	
Facial anomalies/trauma/burns	
Closed head injury	
Active upper GI bleeding or history of recent gastric surgery	
Selects, checks, assembles equipment	
Assembles mask and tubing according to manufacturer instructions	
Coaches patient how to breathe through mask	
Connects CPAP unit to suitable O_2 supply and attaches breathing circuit to device (not using oxygen regulator or flow meter)	
Turns on power/oxygen	
Sets device parameters:	
Turns the rate (frequency) dial to 8 – 12 per minute (based on local protocols)	
Turns the oxygen concentration dial to the lowest setting (28 – 29% oxygen)	
Titrates oxygen concentration to achieve an SpO_2 > 94%	
Sets tidal volume to 10 – 12 mL/kg (based on local protocols)	
Sets pressure relief valve at ± 4 cm/H_2O (based on local protocols)	
Occludes tubing to test for peak pressure required to activate pressure relief valve and adjusts as necessary	

Performs procedure	
Places mask over mouth and nose (leaves $EtCO_2$ nasal cannula in place)	
Titrates CPAP pressure (based on local protocols/device dependent):	
Max 5 cm H_2O for bronchospasm	
Max 10 cm H_2O for CHF, pulmonary edema and pneumonia	
Max 5 cm H_2O for pediatric patients	
Coaches patient to breathe normally and adjust to air pressure	
Frequently reassesses patient for desired effects:	
Decreased ventilatory distress	
$SpO_2 > 94\%$	
Decreased adventitious lungs sounds	
Absence of complications (barotrauma and pneumothorax)	
Records settings/readings and documents appropriately	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /84

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to identify 2 indications
___ Failure to identify 2 potential complications
___ Failure to frequently reassess the patient after application of the CPAP device
___ Failure to ensure that the patient understands the procedure
___ Failure to set the proper parameters for the device (pressure relief, tidal volume, oxygen concentration, rate, etc.)
___ Failure to test the pressure relief valve **prior** to application
___ Exhibits unacceptable affect with patient or other personnel
___ Failure to receive a total score of 64 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

TRAUMA ADULT PHYSICAL ASSESSMENT SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary.

Actual Time Started: _____	**SCORE**
Scene size-up	
Safety	
Takes appropriate PPE precautions – gloves, gown, goggles, vest, helmet	
Hazards – chemical, thermal, atmospheric, electrical, weapons	
Environment – bystanders, hostile, ambient temperature, adequate space, day/night	
Number of patients and location	
Additional resources – Hazmat, heavy rescue, power company, bystanders, historians, air medical	
Determines mechanism of injury – height of fall, intrusion, ejection, vehicle telemetry data	
Patient assessment and management	
Begins spinal precautions if indicated	
Primary survey/resuscitation	
General impression – patient appearance	
Estimates age, gender and weight of patient	
Manages any gross visible hemorrhage – direct pressure, tourniquet	
Level of responsiveness	
Awake and oriented	
Response to verbal stimuli	
Opens eyes	
Follows simple commands	
Response to painful stimuli	
Acknowledges presence of stimuli	
Responds to irritation stimuli	
Unresponsive	
Airway	
Assesses airway – position, obstructions	
Manages airway as appropriate – suction, adjunct, modified jaw thrust	
Breathing	
Exposes the chest and inspects for injuries	
Palpates for instability that impairs breathing – sternum and ribs	
Auscultates lung sounds – presence, clarity, abnormal sounds	
Notes minute volume – rate, tidal volume and equal chest rise and fall	
Manages any injury compromising ventilations	
Administers oxygen or ventilates with appropriate device – BVM, NRB	

Circulation	
Pulse	
Presence, rate, quality	
Skin	
Color, moisture, temperature	
Capillary refill	
Removes patient's clothing	
Performs a rapid, full-body sweep for major hemorrhage or other life-threatening injuries	
Controls major hemorrhage when found	
Manages life-threatening injuries if necessary	
Disability	
GCS – calculates score	
Pupils – size, equality, reactivity to light	
Transport decision	
Critical – begins immediate packaging for transport	
Non-critical – continued assessment on scene	
Vital signs	
Blood pressure	
Pulse	
Respirations	
SpO_2	
Pain – if appropriate	
Secondary assessment	
Obtains an oral history – pertinent to situation	
History of the present illness/injury	
SAMPLE – signs/symptoms; allergies; medications; past medical history; last meal; events leading up to injury	
OPQRST – onset; provocation; quality; region/radiation; severity; timing	
Head and Neck	
Immobilization as necessary	
Interviews for pain, inspects and palpates	
Scalp/skull	
Facial bones	
Jaw	
Eyes – PERLA	
Mouth	
Ears	
Nose	
Neck	
Trachea	
Jugular vein status	
Cervical spine processes	
Manages wounds or splints/supports fractures	
Chest	
Inspects	
Palpates	
Auscultates – credit awarded if already performed in Primary survey	

Manages any wound not previously treated	
Abdomen and pelvis	
Inspects	
Assesses pelvic stability	
Manages any wound not previously treated	
Lower extremities	
Inspects and palpates	
Assess distal function – pulse, motor, sensory, perfusion	
Manages wounds or splints/supports fractures	
Upper extremities	
Inspects and palpates	
Assesses distal function – pulse, motor, sensory, perfusion	
Manages wounds or splints/supports fractures	
Posterior thorax, lumbar and buttocks	
Inspects and palpates posterior thorax	
Inspects and palpates lumbar and buttocks	
Transportation decision	
Verbalizes destination decision	
Other assessments and interventions	
Utilizes proper diagnostic tools at the appropriate time – glucometer, capnography	
Performs appropriate treatment at the correct time - splinting, bandaging	
Affective	
Explains verbally the use of team members appropriately	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /152

Critical Criteria

___ Failure to recognize life-threatening injuries
___ Failure to take or verbalize appropriate PPE precautions
___ Failure to provide spinal precautions according to scenario
___ Failure to assess or appropriately manage problems associated with airway, breathing, hemorrhage or shock
___ Failure to perform primary survey/management prior to secondary assessment/management
___ Failure to attempt to determine the mechanism of injury
___ Failure to assess, manage and package a critical patient within 10 minutes
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 116 or greater

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

SPINAL IMMOBILIZATION ADULT (SUPINE PATIENT) SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Long spine immobilization device with straps	
Cervical collar	
Head immobilizer (commercial or improvised)	
Padding material	
Immobilizes patient	
Takes or verbalizes appropriate PPE precautions	
Directs assistant to place/maintain head in the neutral, in-line position	
Directs assistant to maintain manual stabilization of the head	
Assures that patient is a reliable historian (sensorium not currently altered by drugs or alcohol; no recent loss of consciousness)	
Assesses motor, sensory and circulatory functions in each extremity	
Applies appropriately sized extrication collar	
Positions the immobilization device appropriately	
Directs movement of the patient onto the device without compromising the integrity of the spine	
Applies padding to voids between the torso and the device as necessary	
Secures the patient's torso to the device	
Evaluates and pads behind the patient's head as necessary	
Immobilizes the patient's head to the device	
Secures the patient's legs to the device	
Secures the patient's arms	
Reassesses motor, sensory and circulatory function in each extremity	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /44

Critical Criteria

___ Did not immediately direct or take manual stabilization of the head
___ Did not properly apply appropriately sized cervical collar before ordering release of manual stabilization
___ Released or ordered release of manual stabilization before it was maintained mechanically
___ Manipulated or moved the patient excessively causing potential for spinal compromise
___ Head immobilized to the device **before** patient's torso sufficiently secured to the device
___ Patient moves excessively up, down, left or right on the device
___ Head immobilization allows for excessive movement
___ Upon completion of immobilization, head is not in a neutral, in-line position
___ Did not reassess motor, sensory and circulatory functions in each extremity after securing the patient to the device
___ Failure to receive a total score of 34 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

JOINT SPLINTING SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	SCORE
Selects, checks, assembles equipment	
Cravats	
Roller gauze	
Splinting material	
Padding material	
Splints joint	
Takes or verbalizes appropriate PPE precautions	
Directs application of manual stabilization of the injury	
Assesses motor, sensory and circulatory functions in the injured extremity	
Selects appropriate splinting material	
Immobilizes the site of the injury and pads as necessary	
Immobilizes the bone above the injury site	
Immobilizes the bone below the injury site	
Secures the entire injured extremity	
Reassesses motor, sensory and circulatory functions in the injured extremity	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /32

Critical Criteria

___ Did not immediately stabilize the extremity manually
___ Grossly moves the injured extremity
___ Did not immobilize the bones above and below the injury site
___ Did not reassess motor, sensory and circulatory functions in the injured extremity **before and after** splinting
___ Did not secure the entire injured extremity upon completion of immobilization
___ Failure to receive a total score of 24 or greater

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

LONG BONE SPLINTING SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Cravats	
Roller gauze	
Splinting material	
Padding material	
Splints long bone	
Takes or verbalizes appropriate PPE precautions	
Directs application of manual stabilization of the injury	
Assesses motor, sensory and circulatory functions in the injured extremity	
Measures the splint	
Applies the splint and pads as necessary	
Immobilizes the joint above the injury site	
Immobilizes the joint below the injury site	
Secures the entire injured extremity	
Immobilizes the hand/foot in the position of function	
Reassesses motor, sensory and circulatory functions in the injured extremity	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /34

Critical Criteria

___ Did not immediately stabilize the extremity manually
___ Grossly moves the injured extremity
___ Did not immobilize the joint above and the joint below the injury site
___ Did not immobilize the hand or foot in a position of function
___ Did not reassess motor, sensory and circulatory functions in the injured extremity **before and after** splinting
___ Did not secure the entire injured extremity upon completion of immobilization
___ Failure to receive a total score of 26 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

TRACTION SPLINTING SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Traction splint with all associated equipment (ankle hitch, straps, etc.)	
Padding material	
Splints femur	
Takes or verbalizes appropriate PPE precautions	
Directs application of manual stabilization of the injured leg.(not necessary when using a unipolar device [Sagar® or similar] that is immediately available)	
Directs application of manual traction (not necessary when using a unipolar device, but must be applied before elevating the leg if the leg is elevated at all)	
Assesses motor, sensory and distal circulation in the injured extremity	
Prepares/adjusts the splint to proper length	
Positions the splint at the injured leg	
Applies proximal securing device (e.g., ischial strap)	
Applies distal securing device (e.g., ankle hitch)	
Applies appropriate mechanical traction	
Positions/secures support straps	
Re-evaluates proximal/distal securing devices	
Reassesses motor, sensory and circulatory functions in the injured extremity	
Secures patient to the long backboard to immobilize the hip	
Secures the traction splint/legs to the long backboard to prevent movement of the splint	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /38

Critical Criteria

___ Loss of traction at any point after it is assumed or applies inadequate traction
___ Failure to apply manual traction before elevating the leg
___ Did not reassess motor, sensory and circulatory functions in the injured extremity after splinting
___ The foot is excessively rotated or extended after splinting
___ Final immobilization failed to support the femur or prevent rotation of the injured leg
___ Failure to receive a total score of 30 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

HEMORRHAGE CONTROL SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Field dressings (various sizes)	
Kling®, Kerlix®, etc.	
Bandages (various sizes)	
Tourniquet (commercial or improvised)	
Controls hemorrhage	
Takes or verbalizes appropriate PPE precautions	
Applies direct pressure to the wound	
Bandages the wound	
Applies tourniquet	
Properly positions the patient	
Administers high concentration oxygen	
Initiates steps to prevent heat loss from the patient	
Indicates the need for immediate transportation	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /30

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Did not administer high concentration oxygen
___ Did not control hemorrhage using correct procedures in a timely manner
___ Did not indicate the need for immediate transportation
___ Failure to receive a total score of 24 or greater

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

MEDICAL AND CARDIAC PHYSICAL ASSESSMENT SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Scene size-up	
Safety	
Takes appropriate PPE precautions – gloves, gown, goggles, vest, helmet	
Hazards – chemical, thermal, atmospheric, electrical, weapons	
Environment – bystanders, hostile, ambient temperature, adequate space, day/night, patient prone to sudden behavior change	
Number of patients and location	
Clues/evidence at the scene – medication bottles, chemical containers, syringes, illicit drug paraphernalia, etc.	
Additional resources – Hazmat, heavy rescue, law enforcement, bystanders, historians, air medical	
Nature of illness – determines reason for call	
Patient assessment and management	
Begins spinal precautions if indicated	
Primary survey/resuscitation	
General impression	
Patient appearance – posture, position, obvious distress, incontinence, vomiting, odors, pain	
Estimates age, gender and weight of patient	
Manages any gross visible hemorrhage – direct pressure, tourniquet	
Level of responsiveness	
Awake and oriented	
Response to verbal stimuli	
Opens eyes	
Follows simple commands	
Responds to painful stimuli	
Acknowledges presence of stimuli	
Responds to irritation stimuli	
Unresponsive	
Airway	
Assesses airway – position, obstructions	
Manages airway as appropriate – suction, adjunct, modified jaw thrust	
Breathing	
Exposes the chest and inspects for injuries	
Auscultates lung sounds – presence, clarity, abnormal sounds	
Notes minute volume – rate, tidal volume and equal chest rise and fall	

	Manages any injury compromising ventilations	
	Administers oxygen or ventilates with appropriate device – BVM, NRB	
Circulation		
	Pulse	
	Presence, rate, quality	
	Skin	
	Color, moisture, temperature	
	Turgor, edema	
	Capillary refill	
Disability		
	GCS – calculates score	
	Pupils – size, equality, reactivity to light	
Chief complaint		
	Determines chief complaint	
Transport decision		
	Critical – begins immediate packaging for transport or resuscitation	
	Non-critical – continued assessment on scene	
Vital signs		
Blood pressure		
Pulse		
Respirations		
SpO_2		
Pain – if appropriate		
Secondary assessment – performs secondary physical examination and assesses affected body part(s) or system(s)		
Obtains an oral history – pertinent to situation		
History of the present illness		
	SAMPLE – signs/symptoms; allergies; medications; past medical history; last meal; events leading up to injury	
	OPQRST – onset; provocation; quality; region/radiation; severity; timing	
Head and Neck		
	Immobilization as necessary	
	Interviews for pain, recent trauma, events	
	Inspects and palpates	
	Scalp/skull	
	Facial bones	
	Facial muscles – symmetry	
	Jaw	
	Eyes – PERLA, pupil size, ocular movements, visual acuity, position of eyes	
	Mouth – assess tongue, says "Ah," color of palate	
	Ears – aligns to open canal, discharge	
	Nose – discharge, obstruction, nasal flaring	
	Neck – lumps, hard nodules	
	Trachea – checks for stoma	
	Jugular vein status	
	Cervical spine processes	

Chest and cardiovascular		
	Interviews patient – pain, history, current medications	
	Inspects – rate, rhythm, depth, symmetry, effort of breathing, color, scars, lumps	
	Palpates – tenderness, lumps	
	Auscultates – vesicular, bronchial, bronchovesicular breath sounds in proper locations anteriorly and posteriorly, notes adventitious breath sounds	
	Oxygenation/ventilation – adjusts oxygen flow, changes adjunct accordingly, administers appropriate respiratory medications	
Abdomen and pelvis		
	Interviews patient – location, type of pain, duration, events leading up to current complaint, food or products ingested	
	Inspects – scars, distention, pulsations, color, including flanks and posterior	
	Auscultation – bowel sounds	
	Palpation – guarding, tenderness with cough or increasing pressure, pulsations, rigidity	
	Assesses pelvic stability	
Extremities		
	Interviews patient – location, type of pain, duration, events	
	Arms – pulses, edema, capillary refill, grip strength, drift	
	Legs – pulses, edema, pressure sores, extension/contraction of legs/feet	
	Manages wounds or splints/supports fractures	
Mental status examination		
	Appearance – dress, eye contact, posture, depression, violence, facial grimaces, actions, mannerisms	
	Speech – spontaneous, slow/fast, volume, clarity, appropriate	
	Mood – depressed, euphoric, manic, anxious, angry, agitated, fearful, guilty	
	Thoughts – racing, hallucinations, delusions, suicidal, unconnected, disturbed, homicidal	
Neurological		
	Interviews patient – pain, paralysis; location, duration, events leading up to, changes over time, past medical history, medications	
	Stroke scale – facial droop, arm drift, abnormal speech	
	Motor system – posturing, involuntary movements, strength, coordination, flaccid, seizures, gait	
Transportation decision		
Verbalizes destination decision		
Other assessments and interventions		
Utilizes proper diagnostic tools at the appropriate time – ECG, glucometer, capnography		
Performs appropriate treatment at the correct time - , oxygenation/ventilation, medication administration		

Affective	
Explains verbally the use of team members appropriately	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL	/172

Critical Criteria

___ Failure to recognize life-threatening injuries
___ Failure to take or verbalize appropriate PPE precautions
___ Failure to provide spinal precautions according to scenario
___ Failure to assess or appropriately manage problems associated with airway, breathing, cardiac rhythm, hemorrhage or shock
___ Failure to perform primary survey/management prior to secondary assessment/management
___ Failure to attempt to determine the mechanism of injury
___ Failure to properly assess, manage and package a critical patient within 10 minutes
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 130 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

INTRAMUSCULAR AND SUBCUTANEOUS MEDICATION ADMINISTRATION
SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	**SCORE**
Asks patient for known allergies	
Clearly explains procedure to patient	
Selects, checks, assembles equipment	
Medication	
Appropriate syringe and needle(s)	
Sharps container	
Alcohol swabs	
Adhesive bandage or sterile gauze dressing and tape	
Administers medication	
Selects correct medication by identifying:	
Right patient	
Right medication	
Right dosage/concentration	
Right time	
Right route	
Also checks medication for:	
Clarity	
Expiration date	
Assembles syringe and needle	
Draws appropriate amount of medication into syringe and dispels air while maintaining sterility	
Reconfirms medication	
Takes or verbalizes appropriate PPE precautions	
Identifies and cleanses appropriate injection site	
Pinches/stretches skin, warns patient and inserts needle at proper angle while maintaining sterility	
Aspirates syringe while observing for blood return before injecting IM medication	
Administers correct dose at proper push rate	
Removes needle and disposes/verbalizes proper disposal of syringe and needle in proper container	
Applies direct pressure to site	
Covers puncture site	
Verbalizes need to observe patient for desired effect and adverse side effects	

Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /58

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to identify acceptable injection site
___ Contaminates equipment or site without appropriately correcting situation
___ Failure to adequately dispel air resulting in the potential for air embolism
___ Failure to aspirate for blood prior to injecting IM medication
___ Injects improper medication or dosage (wrong medication, incorrect amount, administers at an inappropriate rate)
___ Recaps needle or failure to dispose/verbalize disposal of syringe and needle in proper container
___ Failure to observe the patient for desired effect and adverse side effects after administering medication
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 44 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

INTRANASAL MEDICATION ADMINISTRATION SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	SCORE
Assures that patient is being ventilated adequately if necessary	
Asks patient for known allergies	
Clearly explains procedure to patient	
Selects, checks, assembles equipment	
Medication	
Appropriate syringe, needle, mucosal atomizer device (MAD®)	
Sharps container	
Alcohol swabs	
Sterile gauze	
Administers medication	
Selects correct medication by identifying:	
Right patient	
Right medication	
Right dosage/concentration	
Right time	
Right route	
Also checks medication for:	
Clarity	
Expiration date	
Assembles syringe and needle while maintaining sterility	
Cleanses rubber stopper, draws appropriate amount of medication into syringe and dispels air while maintaining sterility	
Reaffirms medication	
Disposes of needle in proper container and attaches mucosal atomizer device	
Takes or verbalizes appropriate PPE precautions	
Stops ventilation of patient if necessary and removes any mask	
Inspects nostrils to determine largest and least deviated or obstructed nostril	
Inserts mucosal atomizer device into nostril and briskly depresses the syringe plunger	
Disposes/verbalizes proper disposal of syringe and mucosal atomizer device in proper container	
Resumes ventilation of the patient if necessary	
Verbalizes need to observe patient for desired effect and adverse side effects	

Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /58

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Contaminates equipment without appropriately correcting situation
___ Injects improper medication or dosage (wrong medication, incorrect amount, administers at an inappropriate rate)
___ Recaps needle or failure to dispose/verbalize disposal of needle, syringe and mucosal atomizer device in proper container
___ Failure to observe the patient for desired effect and adverse side effects after administering medication
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 44 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

INHALED MEDICATION ADMINISTRATION SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Assures that patient is being ventilated adequately	
Asks patient for known allergies	
Clearly explains procedure to patient	
Selects, checks, assembles equipment	
Medication	
Nebulizer unit (medication cup, mouthpiece/mask, extension tube, etc.)	
Oxygen supply tubing	
Administers medication	
Selects correct medication by identifying:	
Right patient	
Right medication	
Right dosage/concentration	
Right time	
Right route	
Also checks medication for:	
Clarity	
Expiration date	
Places medication into nebulizer unit	
Reaffirms medication	
Attaches mouthpiece/mask and extension tube to the nebulizer unit	
Attaches oxygen supply tubing to nebulizer unit and turns on oxygen until tube/mask is filled with mist of medication	
Takes or verbalizes appropriate PPE precautions	
Removes oxygen mask and directs patient to firmly hold nebulizer unit	
Coaches patient how to breathe correctly to inhale all medication	
Resumes oxygen administration	
Verbalizes need to observe patient for desired effect and adverse side effects	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL	/50

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Administers improper medication or dosage (wrong medication, incorrect amount, administers at an inappropriate rate)
___ Failure to coach patient to breathe correctly to inhale all medication
___ Failure to observe the patient for desired effect and adverse side effects after administering medication
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 38 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ❑ Successful
❑ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

GLUCOMETER SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____	SCORE
Identifies the need for obtaining a blood glucose level	
Identifies the normal parameters for blood glucose level	
Identifies contraindications	
Identifies potential complications:	
Erroneous reading	
BSI exposure	
Clearly explains procedure to patient	
Selects, checks, assembles equipment	
Glucometer	
Test strip	
Needle or spring-loaded puncture device	
Alcohol swabs	
Checks blood glucose level	
Takes or verbalizes appropriate PPE precautions	
Turns on glucometer and inserts test strip	
Preps fingertip with alcohol prep	
Lances the prepped site with needle/lancet device, drawing capillary blood	
Disposes/verbalizes disposal of needle/lancet in appropriate container	
Expresses blood sample and transfers it to the test strip	
Applies pressure and dresses fingertip wound	
Records reading from glucometer and documents appropriately	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /42

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to dispose of blood contaminated sharps immediately at the point of use
___ Contaminates equipment or site without appropriately correcting situation
___ Failure to identify 2 indications
___ Failure to identify 2 potential complications
___ Failure to identify normal blood glucose parameters
___ Failure to obtain a viable capillary blood sample on first attempt
___ Exhibits unacceptable affect with patient or other personnel
___ Failure to receive a total score of 32 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

Indiana Emergency Medical Technician
Psychomotor Competency Portfolio

12-LEAD ECG SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Explains procedure to patient	
Prepares the patient (shaving and cleansing as needed)	
Places limb leads on the limbs	
Places precordial leads at their appropriate locations:	
V1 – attaches positive electrode to the right of the sternum at the 4th intercostal space	
V2 – attaches positive electrode to the left of the sternum at the 4th intercostal space	
V4 – attaches positive electrode at the midclavicular line at 5th intercostal space	
V3 – attaches positive electrode at the line midway between V2 & V4	
V5 – attaches positive electrode at the anterior axillary line at the same level as V4	
V6 – attaches positive electrode to the midaxillary line at the same levels V4	
Ensures the patient is sitting or lying still, breathing normally and not talking	
Turns on ECG machine	
Ensures all leads are still connected and no error message displayed	
Obtains 12-lead ECG recording	
Examines tracing for acceptable quality	
Voices repeating 12-lead ECG every 5 – 10 minutes in high risk patients and post-treatment	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /38

Critical Criteria

___ Failure to properly attach leads to patient
___ Failure to obtain a legible 12-lead ECG recording
___ Failure to correctly interpret 12-lead ECG recording
___ Failure to receive a total score of 30 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

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SPINAL IMMOBILIZATION ADULT (SEATED PATIENT) SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started: _____

	SCORE
Selects, checks, assembles equipment	
Short spine immobilization device with straps	
Cervical collar	
Padding material	
Immobilizes patient	
Takes or verbalizes appropriate PPE precautions	
Directs assistant to place/maintain head in the neutral, in-line position	
Directs assistant to maintain manual stabilization of the head	
Assures that patient is a reliable historian (sensorium not currently altered by drugs or alcohol; no recent loss of consciousness)	
Assesses motor, sensory and circulatory functions in each extremity	
Applies appropriately sized extrication collar	
Positions the immobilization device appropriately	
Secures the device to the patient's torso	
Evaluates torso fixation and adjusts as necessary	
Evaluates and pads behind the patient's head as necessary	
Secures the patient's head to the device	
Reevaluates and assures adequate immobilization	
Reassesses motor, sensory and circulatory functions in each extremity	
Properly moves patient onto a long backboard	
Releases/loosens leg straps	
Secures patient to the long backboard	
Reassesses motor, sensory and circulatory function in each extremity	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /46

Critical Criteria

___ Did not immediately direct or take manual stabilization of the head
___ Did not properly apply appropriately sized cervical collar before ordering release of manual stabilization
___ Released or ordered release of manual stabilization before it was maintained mechanically
___ Manipulated or moved the patient excessively causing potential for spinal compromise
___ Head immobilized to the device **before** device sufficiently secured to torso
___ Device moves excessively up, down, left or right on the patient's torso
___ Head immobilization allows for excessive movement
___ Torso fixation inhibits chest rise, resulting in respiratory compromise
___ Upon completion of immobilization, head is not in a neutral, in-line position
___ Did not reassess motor, sensory and circulatory functions in each extremity after securing the patient to the device and to the long backboard
___ Failure to receive a total score of 36 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

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NORMAL DELIVERY WITH NEWBORN CARE SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	SCORE
Takes appropriate PPE precautions	
Obtains a history relevant to the pregnancy	
Estimated date of confinement	
Frequency of contractions	
Duration of contractions	
Intensity of contractions	
Rupture of amniotic sac (time and presence of meconium)	
Previous pregnancies and deliveries (complications, vaginal delivery, C-section)	
Pre-existing medical conditions (HTN, DM, seizure, cardiac)	
Medications taken prior to labor	
Prenatal care (identified abnormalities with pregnancy)	
Vaginal bleeding	
Abdominal pain	
Assessment	
Vital signs (BP, P, R, Temperature)	
Evidence of imminent delivery (crowning, contractions, urge to push, urge to defecate)	
Prepares for delivery	
Prepares appropriate delivery area	
Removes patient's clothing	
Opens and prepares obstetric kit	
Places clean pad under patient	
Prepares bulb syringe, cord clamps, towels, newborn blanket	
Delivers newborn	
During contractions, urges patient to push	
Delivers and supports the emerging fetal head	
Checks for nuchal cord	
Manages nuchal cord if present	
Assesses for and notes the presence of meconium	
Delivers the shoulders	
Delivers the remainder of the body	
Places newborn on mother's abdomen or level with mother's uterus	
Notes the time of birth	
Controls hemorrhage as necessary	
Reassesses mother's vital signs	

Newborn care (Birth – 30 seconds postpartum):	
If newborn is distressed, clears airway as necessary	
Warms and dries newborn	
Wraps newborn in blanket or towels to prevent hypothermia	
Newborn care (30 – 60 seconds postpartum):	
If heart rate is less than 100, gasping or apneic:	
Provides PPV	
Monitors SpO_2 in neonate	
Clamps and cuts umbilical cord	
Places on mother's chest to retain warmth	
Determines 1 minute APGAR score	
Newborn care (after 1 minute postpartum):	
If heart rate is less than 100:	
Takes ventilation corrective steps and continues PPV	
If heart rate is less than 60:	
Considers intubation	
Begins chest compressions	
If heart rate remains less than 60 after chest compressions and PPV:	
Determines 5 minute APGAR score	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /92

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to identify or manage a nuchal cord
___ Failure to immediately suction the newborn nose and mouth
___ Performs any dangerous activity during delivery (pulls on fetus, places fetus in a dangerous position, pulls on umbilical cord to deliver placenta, handles newborn inappropriately)
___ Failure to provide appropriate newborn care
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 70 or greater

Comments:

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful
☐ Unsuccessful

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ABNORMAL DELIVERY WITH NEWBORN CARE SKILLS LAB

Student Name: _____ Date: _____

Instructor Evaluator: _____ Student Evaluator: _____
Signature Signature

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:

	SCORE
Takes appropriate PPE precautions	
Obtains a history relevant to the pregnancy	
Estimated date of confinement	
Frequency of contractions	
Duration of contractions	
Intensity of contractions	
Rupture of amniotic sac (time and presence of meconium)	
Previous pregnancies and deliveries (complications, vaginal delivery, C-section)	
Pre-existing medical conditions (HTN, DM, seizure, cardiac)	
Medications taken prior to labor	
Prenatal care (identified abnormalities with pregnancy)	
Vaginal bleeding	
Abdominal pain	
Assessment	
Vital signs (BP, P, R, Temperature)	
Evidence of imminent delivery (crowning, contractions, urge to push, urge to defecate)	
Prepares for delivery	
Prepares appropriate delivery area	
Removes patient's clothing	
Opens and prepares obstetric kit	
Places clean pad under patient	
Prepares bulb syringe, cord clamps, towels, newborn blanket	
Delivers newborn	
During contractions, urges patient to push	
Delivers and supports the emerging fetal presenting part if not the head	
Recognizes abnormal presentation that requires immediate care and transport (prolapsed cord, hand, foot, shoulder dystocia)	
Delivers legs and body if possible and continues to support fetus	
Delivers head	
If fetal head is not promptly delivered, inserts gloved fingers/hand to establish a space for breathing/relieve pressure on umbilical cord	
Assesses for and notes the presence of meconium	
Initiates rapid transport	
Delivers the shoulders if not previously delivered	
Delivers the remainder of the body if not previously delivered	

Places newborn on mother's abdomen or level with mother's uterus	
Notes the time of birth	
Controls hemorrhage as necessary	
Reassesses mother's vital signs	
Newborn care (Birth – 30 seconds postpartum):	
Warm, dry, and stimulate the newborn	
Clears airway if obvious obstruction to spontaneous breathing or requires PPV	
Wraps newborn in blanket or towels to prevent hypothermia	
Newborn care (30 – 60 seconds postpartum):	
If heart rate is less than 100, gasping or apneic:	
Provides PPV without supplemental oxygen	
Monitors SpO_2 in neonate	
Clamps and cuts umbilical cord	
Places on mother's chest to retain warmth (if not actively resuscitating the neonate)	
Determines 1 minute APGAR score	
Newborn care (after 1 minute postpartum):	
If heart rate is less than 100:	
Takes ventilation corrective steps and continues PPV with supplemental oxygen	
If heart rate is less than 60:	
Considers intubation if no chest rise with PPV	
Begins chest compressions	
If heart rate remains less than 60 after chest compressions and PPV:	
Determines 5 minute APGAR score	
Affective	
Accepts evaluation and criticism professionally	
Shows willingness to learn	
Interacts with simulated patient and other personnel in professional manner	

Actual Time Ended: _____

TOTAL /98

Critical Criteria

___ Failure to take or verbalize appropriate PPE precautions
___ Failure to identify or appropriately manage an abnormal presentation
___ Performs any dangerous activity during delivery (pulls on fetus, places fetus in a dangerous position, pulls on umbilical cord to deliver placenta, handles newborn inappropriately)
___ Failure to provide appropriate newborn care (correct sequence and within recommended time limits)
___ Failure to manage the patient as a competent EMT
___ Exhibits unacceptable affect with patient or other personnel
___ Uses or orders a dangerous or inappropriate intervention
___ Failure to receive a total score of 74 or greater

STUDENT SELF-EVALUATION (The examiner is to ask the student to reflect on his/her performance and document his/her response to the following question:)

Were you successful or unsuccessful in this skill? ☐ Successful ☐ Unsuccessful

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Appendix C

How to Use the Clinical Evaluation Instrument

Introduction:
The overarching objective of EMT experiential learning is to prepare EMT students as competent entry-level EMT's. Students are to conduct themselves in a professional and courteous manner at all times and are expected to be self-motivated to engage consistently in learning opportunities during the Clinical and Field Phase. Goals for participation in the Clinical and Field Phases include:

1) Observe and participate in the dynamic patient care interactions as members of the interdisciplinary healthcare team.

2) Engage patients and family members utilizing various strategies of therapeutic communication.

3) Participate in gathering patient histories and performance of physical examinations, synthesizing the information into appropriate differential diagnoses.

4) Discuss with preceptors and other clinical staff an appropriate treatment plan.

5) Perform psychomotor skills that are within the EMT scope of practice and for which the student has received program approval to perform.

Preceptor Preparation, Training, and Expectations:
Preceptors are busy providing patient care in most locations throughout the clinical and field rotation. Preceptors must work with students and use an evaluation instrument that captures information pertinent to student performance. We suggest that the faculty provide a brief orientation to the evaluation worksheet and review the goals for the clinical rotation for each preceptor prior to beginning student rotations. Preceptors should have access to emergency contact numbers for the appropriate program personnel at all times should any questions or unforeseen issues arise.

Students should assess scene safety, perform patient interviews, conduct physical examinations, and perform treatment and procedures as these opportunities present. Preceptors need to ensure that this occurs without jeopardizing the quality of patient care or adversely affecting the patient. In the event the preceptor deems provider, patient, or public safety is being compromised, the preceptor should intervene in as professional manner as possible to ensure optimal outcomes while ensuring a safe learning environment.

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Student Self-Evaluation:
It is important that the EMT student evaluate his or her own performance, recognize any disparities in knowledge or performance and correct these in subsequent patient encounters. Honest self-evaluation is imperative for continued growth and improvement and is a characteristic of a professional. It is essential that the preceptor assist any student exhibiting difficulty with accurate self-evaluation of his or her performance. There are numerous methods that an EMT education program can use to document the Clinical and Field Phase of the EMT student's education. This document describes a best-practice approach to documentation of these phases.

The "Clinical Shift Evaluation Worksheet" serves as the overall log for the shift or day's clinical activity. This worksheet is used to document and evaluate the EMT student's performance as a Team Member as soon as possible after a patient contact. At the conclusion of each patient encounter, the student should first evaluate his or her performance on the "Clinical Shift Evaluation Worksheet", followed by the evaluator/preceptor's evaluation of his or her performance. This allows the evaluator/preceptor to assess the accuracy of the student self-evaluation prior to providing constructive feedback regarding the process of self-evaluation.

The following list provides a description of what should be entered in each section of the "Clinical Shift Evaluation Worksheet:"

Student Name: Name of Student

Date: Date of clinical or field rotation

Educational Program: Name of the EMT program the student is attending

Clinical Site: Name of the EMS/ ambulance service or Hospital Emergency Department

Page_of_: If additional pages or forms are necessary due to additional patient contacts or additional documentation, indicate the total number of pages.

Time In and Out: Time student arrived and departed from the clinical site

Preceptor: Name of preceptor, credential level (ie: RN, EMS-P, EMT)

Summary of treatments rendered by student: The student uses this section to document treatments performed successfully and is judged based upon information that the student has obtained from the history and physical exam. A successful attempt should be based on the outcome of a discussion between the preceptor and the student that answers the question, "How would you, as an EMT, treat this patient in the field based on your history and physical examination findings?" Each clinical setting is somewhat different, and each patient presentation may be different.

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Preceptor Evaluation and Comments

As soon as possible after the student completes the self-evaluation, the preceptor should review the information that the student entered and document his or her review. Please record any comments necessary to clarify ratings or provide additional feedback. Identify improvements needed for future patient contacts. You may use additional paper or electronic communication to the program as necessary. Any disparate information between the student and evaluator should be discussed. The evaluator should briefly document any suggestions for improvement or other comments in the "Comments" section.

At the completion of the student's shift, the evaluator should document any "Comments on any unsatisfactory ratings or discrepancies" and "Overall plan for improvement for future shifts" if needed. The preceptor should then document the student's affect during the shift and whether follow-up is requested from appropriate program personnel.

After the student and preceptor have discussed any discrepancies, both should sign the "Clinical Shift Evaluation Worksheet" and it should be turned into the appropriate program personnel without further alteration. Systems need to be developed for returning completed instruments to the program. The system should employ methods to prevent alteration of the evaluation by the student and/or discarding of the evaluation instrument by the student. Systems that permit students to alter preceptor-completed evaluations and/or allow students to throw away unsuccessful patient evaluations are not valid.

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Clinical Shift Evaluation Worksheet

Emergency Department Location _____ Date: _____ Time: From _____ to _____

Ambulance Internship Location _____ Date: _____ Time: From _____ to _____

Total hours: _____

Preceptor: _____

Physician _____ RN _____ EMT-P _____ EMT _____

Number of Patient Contacts: _____

Preceptor Comments:

Recommendations:

Received by Instructor: Date:

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Appendix D
How to Create Psychomotor Scenarios

Appendix D, "How to Use Skills Lab Formative Evaluation Instrument," which contains detailed instructions on how to utilize the Skills Lab evaluation instruments to improve evaluator inter-rater reliability.

Introduction:

The Scenario Lab is an opportunity for students to showcase what they have learned in a simulated environment and is based upon the foundations established by the use of Skills Lab Instruments. Scenarios should be introduced to the students at appropriate times throughout the curriculum and with increasing complexity. Scenario performances should occur only after the student has demonstrated acceptable and consistent competence of the skills in that unit (airway, trauma, pediatrics, etc.).

Individual programs should decide how to show competence for each student in each skill prior to performing the skills within a scenario. At a minimum, a student's file should include formative and summative Scenario Lab evaluations for pediatric, adult, and geriatric patients that are tracked in the student's portfolio. These evaluations should cover the following Scenario Topic Areas: Respiratory Distress/Failure, Chest Pain, Cardiac Rhythm Disturbance (including cardiac arrest), Stroke, Overdose, Abdominal Pain, Allergic Reaction/Anaphylaxis, Diabetic Emergencies, Psychiatric Conditions, Seizure, OB/GYN, Blunt Trauma, Penetrating Trauma, Burns, and Hemorrhage.

Students are evaluated based on their assigned role on the team. The student who is in charge of patient care is the Team Leader, all others are Team Members. The Team Leader conducts the physical assessment and management of the simulated patient with the assistance of the Team Members. The Team Leader formulates an appropriate treatment plan for the patient. This means that most, if not all of the decisions have been made by the Team Leader, especially the formulation of a field impression, direction of treatment, determination of acuity, disposition, appropriate delegation, and when applicable, packaging/moving of the patient.

Team Members are responsible for assisting in the treatment of the simulated patient as a competent provider. Team Members should be evaluated along with the Team Leader to assess their competency.

Scenario Development:

These instructions and the "NREMT Scenario Lab Template" **(Appendix E)** are designed as a best-practice tool to assist Program Directors and instructors in developing the scenarios needed for their students throughout the Scenario Lab phase of education. The scenarios should range in complexity from simple patient presentation and management problems used early in the program,

to complex presentation and management issues as students' progress. Authors of these scenarios need to keep the objectives of the evaluation and resources available in mind when designing them.

The scenarios are divided into seven sections: Minimum Equipment, Setup Instructions, and Background Information; Dispatch Information; Scene Survey Information; Patient Assessment, History, Past Medical History, Examination Findings, and Reassessment; Patient Management; Transport Decisions; and Mandatory Actions and Potential Harmful/Dangerous Actions. Each of these sections are separated from the others to aid in the efficient use by the individual setting up a scenario as well as the evaluator. Each of these seven sections are color coded to aid in their identification while referring to the scenario.

Minimum Equipment, Setup, Background, and Moulage Information (Yellow Outline):

The minimum equipment needed for the scenario is listed in this section. The individual setting up the scenarios uses this information to ensure that the resources required are available. It should include EMS equipment and supplies, props, sound clips, medical identification jewelry and additional personnel that may be required to complete the scenario successfully. When selecting EMS equipment, the author should use caution not to provide unintentional clues as to what treatment is necessary for the patient. For example, the patient has a fractured femur and the only splinting equipment available it a traction splint. Props and sound clips can be as simple as a picture of a scene and a recording of lung sounds or as complex as an overhead projection of the scene background onto a wall and audio files played through a sound system.

Authors of the scenarios need to balance the resources of the program, set-up time, and the complexity of the patient presentation when determining what resources are needed. The setup instructions describe how the scene is to be set-up, how props and sound clips will be used, and the level of certification and roles that additional Team Members will play. These factors need to be determined prior to delivery of the scenario to ensure the consistent evaluation of students. Background information is provided to the Team Leader and Team Members prior to beginning the scenario that describes the scene, EMS system, location of the incident, and weather. When assigning ancillary personnel roles, Team Members can be assigned varying roles including bystander, EMR or EMT based on the complexity of the scenario and the phase of education. If additional personnel are provided, they should be EMTs. Any Moulage that needs to be done to the simulated patient needs to be listed in this section. At a predetermined time during the scenario an event will occur. The description of this event and the time that it will occur is listed in this section.

Dispatch Information (Green Outline):

This information is read to the Team Leader and Team Members in such a way that the students are unable to observe the evaluator. Information presented in the dispatch information should correspond to similar information that they would receive on an EMS call. The dispatch information should include the dispatch time and nature of the call.

Scene Survey Information (Red Outline):

When developing scenarios the author should include a safety concern that needs to be addressed for the safety of the Team, patient, or bystanders. Early in the formative phase this can be a simple item such as a barking dog prior to entering the residence, or a trip hazard on the floor near the patient that needs to be addressed. The location of the patient, his or her visual appearance, age, sex, and weight are described.

A simulated patient should be chosen that approximates the patient description given in the scenario to avoid artificiality. If the sex, age, and weight of the patient are not critical, they should be changed to reflect the simulated patient. The immediate surroundings of the patient should be described, including the presence or absence of bystanders and significant others. Additional information or props/sound clips that need to be used are also described here. For example, the evaluator gives the Team Leader and Team Members a picture of a motorcycle crash scene or the overhead projector displays a motorcycle crash scene for all to see.

Primary Assessment, Past Medical History, and Examination Findings (Blue Outline):

This section contains the majority of the information about the patient's condition and should be reviewed by the evaluator and simulated patient prior to beginning the scenario. It is impossible to list all negative findings that can be expected in a scenario. When there is no pertinent finding, place "---" in the associated field so the evaluator can give an answer that would be within normal limits for a patient in a similar condition. The Primary Assessment includes information that the Team Leader uses to form his or her general impression, baseline mental status (AVPU), and airway, respiratory, and circulatory status.

If the simulated patient or bystanders are able to provide it, the history should include information about the patient's chief complaint, history of the present illness, associated symptoms, pertinent negatives and simulated patient responses to the Team's questions or assessment. Past medical history includes any relevant illnesses, injuries, medications, allergies, current health status, immunizations, social or family concerns, and any medical identification jewelry that the patient may be wearing. The examination findings include initial vital signs, examination findings broken down by body systems and the results of any diagnostic test that the Team may perform. The evaluator and simulated patient only provide specific information as the skill is performed, or the body part is examined. If sound files are included, they should be played as the Team Leader or Team Member examines a specific body part or system. Any findings that are unable to be simulated should be described for the Team Leader or Team Member after he or she has assessed that body part or system.

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Patient Management, Event, and Reassessment (Purple Outline):

This section lists initial stabilization and interventions that are needed for the patient. Recommended treatments are listed that the Team needs to perform to manage the patient successfully. It also includes additional resources that should be requested, and the patient's response to the Team's appropriate and inappropriate management.
At a predetermined time in the scenario, an event should occur. This could be a scene safety concern, rapid change in patient condition, or an issue with equipment, bystanders, or additional personnel. The Team Leader and Team Members will need to address this issue while continuing to manage the patient.
Different options should be given in reassessment that describe the patient's response to the Team's treatment. Appropriate management of the patient should result in an improvement in the patient's condition as would be expected in a live patient with a similar condition. Inappropriate management should result in deterioration of the patient's condition as would be expected in a live patient with a similar condition. At no time should the patient's condition drastically change unless it is physiologically possible.

Transport Decision (Orange Filled):

This section lists the suggested transport destination based on the local EMS system. The Team Leader should verbalize his or her transport destination and describe the appropriate transport mode.

Mandatory Actions Potentially Harmful/Dangerous Actions (Pink Filled):

This section is used to list all actions that need to be completed by the Team during the assessment and management of the simulated patient. Potential harmful/dangerous actions are listed that if performed would have an adverse effect on the patient condition.

Scenario Validation:

Prior to using a scenario to evaluate students, it should be reviewed by a committee of subject matter experts. This review committee should include members of the program's educational staff, medical director, and the program's community of interest. The content needs to be reviewed to ensure that it is compliant with the *National Emergency Medical Services Education Standards*). The amended scenario should then be pilot tested with students who have already demonstrated the necessary cognitive and psychomotor abilities to determine if any adjustments in the scenario are necessary. Feedback following the evaluation should be gathered from the students and evaluators. This feedback along with commonly missed issues should be used to further refine the scenario.

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SAMPLE ABDOMINAL PAIN SCENARIO

MINIMUM EQUIPMENT	
EMS equipment and Supplies	1st in bag, oxygen cylinder and supplies, ECG monitor
Props	Throw rug
Sound clips	Clear lung sounds Barking dog
Medical Identification jewelry	---
SETUP INSTRUCTIONS	
• The patient needs to be sitting in the chair holding her RLQ and moaning when the Team enters the room. • The throw rug needs to be on the floor between the door and patient. • 10 minutes into the scenario the barking dog sound clip starts to play until the problem is addressed by the Team	
BACKGROUND INFORMATION	
EMS System description	ALS vehicle: You are the primary caregiver and have 1 Paramedic partner (adjusts as needed for individual scenarios)
Other ancillary personnel needed (define personnel and identify who can serve in each role)	Mother or father for pediatric scenarios, law enforcement officers, fire fighters, EMR's, etc.
MOULAGE INFORMATION	
Integumentary	Pale, cool, diaphoretic
Head	---
Chest	---
Abdomen	---
Pelvis	---
Back	---
Extremities	---

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SAMPLE ABDOMINAL PAIN SCENARIO

DISPATCH INFORMATION (Specific script for each scenario; Must be read over radio, telephone or in such a way that the candidate cannot look at the Examiner as he/she reads the dispatch information)	
Dispatch time	09:45 hrs
Location	Single family residence
Nature of the call	Abdominal pain
Weather	Calm and clear. Temp: 82° F
Personnel on the scene	Law enforcement officer (evaluator, no medical training)

READ TO STUDENT: Medic 51 respond to 1234 Any Street for a 16 year old female who complains of abdominal pain, time out 09:45 hrs.

SCENE SURVEY INFORMATION	
A scene or safety consideration that must be addressed	Throw rug inside the door is a trip hazard
Patient location	Dining room, sitting on a chair
Visual appearance	Patient is in obvious pain, anxious and rubbing her right lower abdominal quadrant
Age, sex, weight	16 year old female, 132 lbs.
Immediate surroundings (bystanders, significant others present)	Patient is home alone
Mechanism of injury/Nature of illness	Abdominal pain

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SAMPLE ABDOMINAL PAIN SCENARIO

PRIMARY ASSESSMENT	
General impression	Patient appears to be in pain
Baseline mental status (AAOX4)	Alert and oriented to person, time, place, and events leading up to complaint
Airway	Open and maintained by patient
Ventilation	Spontaneous
Circulation	No obvious bleeding
HISTORY (if applicable)	
Chief complaint	Abdominal pain
History of present illness	• Over the past 5 days the patient has experienced intermittent pain in her lower abdomen • Today the pain became constant and so severe she stayed home from school • Patient describes sharp, constant pain in her RLQ • Denies N/V/D and pain is non-radiating
Patient responses, associated symptoms, pertinent negatives	Patient denies sexual activity. Her LMP was about 6 – 7 weeks ago, and she tells you she is normally irregular. Denies use of birth control.
PAST MEDICAL HISTORY	
Illnesses/Injuries	—
Medications and allergies	Ibuprofen for menstrual cramps, she took 4 – 200 mg tablets 30 minutes ago.
Current health status/Immunizations (Consider past travel)	She tells you she had a cold last week
Social/Family concerns	—
Medical identification jewelry	—
EXAMINATION FINDINGS	
Initial Vital Signs	BP 84/62 P 120 R 24 Temperature – skin temperature feels cool to the touch Pain 10 of 10 GCS = E: Spontaneous; V: Oriented; M: Obeys Commands
HEENT	—
Respiratory/Chest	Lungs sounds clear and equal (Play sound file)
Cardiovascular	—
Gastrointestinal/Abdomen	Abdomen is flat, tenderness upon palpation of RLQ
Genitourinary	Slight vaginal spotting
Musculoskeletal/Extremities	—
Neurologic	—
Integumentary	Pale, cool, diaphoretic
Hematologic	—
Immunologic	—
Endocrine	—
Psychiatric	Upset
Additional diagnostic tests as necessary	SpO_2: 96% on room air ECG: Sinus tachycardia

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SAMPLE ABDOMINAL PAIN SCENARIO

PATIENT MANAGEMENT	
Initial stabilization	
Interventions	
Treatments	• Keep the patient warm • Establish IV access • Administer fluid bolus to maintain a systolic blood pressure of 80-90 mmHg • Analgesics for pain as BP allows: Fentanyl, 50 mcg
Additional Resources	---
Patient response to interventions	Improved color and BP with fluid bolus; decreased pain if analgesic administered
EVENT	
10 minutes into the scene play the tape of a barking dog. Team Leader needs to address the issue	
REASSESSMENT	
Appropriate management of the patient	Patient stabilizes with improvement in vital signs BP: 94/70 P: 110 R: 18 Integumentary: color improves, diaphoresis resolves
Inappropriate management of the patient	Patient decompensate BP: 76/50 P: 134 R: 28 Neurologic: patient develops altered mental status

TRANSPORT DECISION: Team Leader should verbalize transport decision, reason for choosing the facility, and describe the appropriate transportation mode.
• Emergent transport to a hospital that has surgical capabilities

MANDATORY ACTIONS: List all actions that need to be completed by the Team during the Assessment and Management of the patient
• Recognize need for rapid transportation
• Initiation of IV fluid resuscitation with permissive hypotension
POTENTIALLY HARMFUL/DANGEROUS ACTIONS: List all actions, that if performed, would most likely have an adverse effect on the patient condition
• Delayed transportation for unnecessary interventions • Failure to recognize patient as a surgical emergency with the need for blood transfusion

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

Appendix G
Minimum Requirements

Although completion of the "minimum requirements" is not a recommendation from the Indiana Department of Homeland Security (IDHS), the Indiana EMS Education Work Group, or the EMS Commission; it is understood that some institutions and instructors may have time and staffing restraints beyond their control. Therefore, the minimum requirements for the Indiana EMT Psychomotor Competency Portfolio to fulfill the requirement of **IAC836 4-2-3** must include the following sections:

1. Documented "Peer Review" of the EMT skills addressing each of the following, at a minimum (may utilize the psychomotor skill sheets previously approved by the EMS Commission or National Registry skill sheets):

    A. Patient Assessment Trauma Patient
    B. Patient Assessment Medical Patient
    C. Cardiac Arrest/ AED
    D. Spinal Immobilization Supine
    E. Supraglottic Airway
    F. Bleeding Control and Shock Management
    G. Long Bone
    H. Joint Injury
    I. Oxygen Preparation
    J. Traction Splint
    K. CPAP
    L. Intramuscular Medication Administration
    M. Intranasal Medication Administration
    N. Inhaled Medication Administration
    O. Glucometer
    P. 12 lead Acquisition

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

2. Documented "Instructor Evaluation" of the EMT skills addressing each of the following, at a minimum (may utilize the psychomotor skill sheets previously approved by the EMS Commission or National Registry skill sheets):

    A. Patient Assessment Trauma Patient
    B. Patient Assessment Medical Patient
    C. Cardiac Arrest/ AED
    D. Spinal Immobilization Supine
    E. Supraglottic Airway
    F. Bleeding Control and Shock Management
    G. Long Bone
    H. Joint Injury
    I. Oxygen Preparation
    J. Traction Splint
    K. CPAP
    L. Intramuscular Medication Administration
    M. Intranasal Medication Administration
    N. Inhaled Medication Administration
    O. Glucometer
    P. 12 lead Acquisition

3. Documentation of both the Clinical and Field Phases.

Although several of the EMT skills are documented competent by peers and instructors, a more formal evaluation will also be done by IDHS for core skills prior to certification.

PERIPHERAL INTRAVENOUS LINE MAINTENANCE FOR EMT BASICS

EMS COMMISSION
INDIANAPOLIS, INDIANA

Prepared by:
Indiana State Emergency Management Agency
EMS Division

Indiana Government Center
302 West Washington Street
Indianapolis, Indiana 46204

Revised: January 1996

PERIPHERAL INTRAVENOUS LINE MAINTENANCE FOR EMT-BASICS

The IV maintenance module was developed to assist basic emergency medical technicians manage non-critical patients who have a preestablished peripheral IV line already in place when they need to be transported in an ambulance. EMTs encounter many of these patients at home, in long-term care facilities, or in a hospital setting. These patients may require transportation to other locations for diagnostic examinations, treatments, or emergency care while the IV remains in place.

This module is a mandatory part of the initial EMT-B training course in Indiana. The module may also be taught as part of a continuing education program for EMT-Basics.

This curriculum represents a minimum standard in IV maintenace training. Additional hours and information may be added by a certified EMS training institution or by an EMS provider organization utilizing this curriculum as part of EMT-Basic continuing education.

Note: This curriculum does not change the commission's policy regarding the emergency transportation of patients from home or from an extended care facility to an emergency department or hospital

COURSE DESCRIPTION

This is a one and a half hour course module for EMT-Basic students and for EMT-Basics. It is designed to provide the basic knowledge and skills needed to safely transport a patient with a pre-established periphal IV infusion.

INSTRUCTOR QUALIFICATIONS

1. The instructor must be an individual who is trained at least to the level of a certified Indiana EMT-Basic with formal training in this IV Maintenance module.

2. This module must be taught under the direction of a certified EMS training institution.

3. This module must be supervised under the direction of a licensed Physician.

4. The classroom presentation of this module must be done under the physical supervision of a Primary Instructor, Medical Director or Physician, Registered Nurse, Paramedic or Advanced EMT.

NECESSARY EQUIPMENT

IV practice arm
IV tubing--micro and macrodrip
IV fluids
IV catheters
Armboards
Tapes of various appropriate sizes
Guaze pads
IV dressings of various types and sizes

COURSE OBJECTIVES

At the completion of this course the EMT-B student will be able to:

1. Maintain a continuous peripheral intravenous infusion at the ordered drip rate using aseptic techniques.

2. Monitor the patient's vital signs, overall condition, and IV in order to prevent complications.

3. Adequately stabilize tubing and venipuncture site in preparation for a safe transport.

4. Record at regular intervals all procedures, assessments of patient condition, and fluid intake/output.

5. List the limitations of authorized activities associated with monitoring a peripheral intravenous line and intravenous fluids.

6. List three (3) reasons that an intravenous infusion is established.

7. List three (3) intraveneous solutions most likely to be encountered when transferring a patient with a pre-established intravenous infusion.

8. Identify the types and sizes of containers in which IV fluids are packaged.

9. Describe the information about the patient's IV drip rate which an EMT-Basic must receive from the physician or nurse of a sending institution when an EMT-Basic is authorized to transport the patient from that institution to another location.

10. List five (5) complications of intravenous infusions.

11. Demonstrate the procedures for trouble-shooting an intravenous line when the patient or equipment exhibits any complications.

12. List the additional steps of patient assessment which are necessary prior to transporting a patient with an intravenous infusion.

13. Demonstrate the steps for checking the IV equipment and set-up which need to be completed prior to transporting a patient with an intravenous infusion.

14. List the eight (8) items that need to be documented on the patient report form when the patient has an IV infusion in place.

15. Demonstrate the correct procedure for discontinuing an IV infusion.

16. Demonstrate aseptic technique when handling IV equipment.

17. Demonstrate how to shut off a primary intravenous line and to turn on a secondary intravenous line.

18. Demonstrate how to turn on a primary intravenous line and to turn off a secondary intravenous line.

LESSON PLAN

Topic	Time
THE ROLE OF THE EMT-B IN HANDLING AND MAINTAINING IVs	15 minutes

1. The role of the EMT-B is to safely handle and transport STABLE patients who have indwelling peripheral IVs.

2. The EMT-B is authorized only to transport patients whose IVs contain the following solutions:

a. Crystalloid solutions (i.e. 5% Dextose in Water, Lactated Ringer's, and Normal Saline).
b. Vitamins
c. Sodium chloride, excluding saline solutions in excess of 0.9% concentration
d. Potassium Chloride (20meq/liter maximum concentration)

The EMT-B is NOT authorized to transport a patient whose IV:

a. consists of a "piggy-back" or "secondary" IV set-up.
b. contains blood products.

3. The EMT-Basic must acquire and secure enough of the appropriate IV solution from the authorities at the sending facility to maintain the ordered drip rate throughout the planned transport.

4. The operational goals in handling a patient who presents with a preestablished IV are:

a. To keep the IV patent and infusing fluid at the ordered rate.
b. To handle the patient in a manner which will prevent IV line complications.
c. To monitor the patient and IV equipment in a manner that will identify any IV line complications (such as infiltration, clot occlusion, empty bag, overhydration) in a timely way.
d. To successfully trouble-shoot any complications which may arise in the operation of the IV line during transport of the patient.

5. Personal Safety. The EMT-Basic should perform IV maintenance duties in such a way as to avoid contact with blood through the use of universal precautions and body substance isolation procedures. These precautions and procedures include the use of appropriate protective equipment and following appropriate procedures. At a minimum such equipment includes gloves, masks and eye protection. At a minimum such procedures include aseptic techniques, safe handling and disposal of hazardous IV equipment, and the appropriate documentation and follow-up of any expose incident (such as the reporting of an exposure, follow-up testing and treatment of an exposure).

FLUID ADMINISTRATION 15 minutes

1. The Purpose of IV Fluids

a. Replacement of lost fluids (vomiting, diarrhea, dehydration).
b. Maintenance of luid and electrolyte balance (e.g. patients who are NPO or unable to take enough oral fluids to meet their needs).

2. Major Complications of IV Fuid Administration
a. OVERHYDRATION--Overhydration may lead to pulmonary edema and congestive heart failure. Signs and symptoms of these conditions include: rales in the lungs, shortness of breath, tachypnea, dependent edema, irregular pulse and/or tachycardia, jugular vein distention, possible hyper- or hypotension. Should such conditions occur, contact on-line medical direction, report your findings and follow medical direction orders. You may be advised to keep the infusion open but reduce the rate of the infusion to a new rate determined by the medical director. You will likely need be advised to keep the patient in a sitting position.

b. CLOT OCCLUSION--If an IV line is not infusing, the catheter in the vein will become clotted-over, occluding the flow. In such a case DO NOT FLUSH THE IV LINE. Rather, contact on-line medical control for advice. You may be directed to discontinue the infusion.

c. INFILTRATION OF THE IV FLUID INTO THE SURROUNDING TISSUES--Extravasion at the IV site presents as cold, puffy, painful area around the site; the IV does not infuse properly; there is no blood return into the IV line. In such a case, contact on-line medical direction. You may be advised to to discontinue the IV infusion.

d. POSITIONAL IV--Occasionally the position of the patient or equipment will interrupt the flow of the IV. In this case reposition the patient's limb, the IV tubing, and/or the catheter/tubing connection. Restablize the IV when the infusion is again flowing smoothly.

e. PYROGENIC REACTION--foreign proteins enter the body by way of contaminated fluid. Discuss the signs and symptoms of such a reaction and the procedures for discontinuing the IV. Contact with on-line medical control will guide the EMT-B in handling this situation.

f. ALLERGIC REACTION--discuss the signs and symptoms for such a reaction, the procedures for handling the IV in such a situation, and the steps to take in managing the allergic reaction. Contact with on-line medical control will control will guide the EMT-Basic in handling this situation.

g. INFECTION. Poor aseptic technique may have resulted in an infection to the patient.

3. Types of Intravenous Cannulas
a. 14 gauge--20 gauge size cannulas are commonly used for adult patients.
b. 20 gauge--25 guage size cannulas are commonly used for children patients.
c. Depending on the gauge size of the cannulas, the length of the catheter will vary from 1/2" to 3".

DISPLAY OF IV EQUIPMENT AND
DEMONSRATION THE TECHNIQUES FOR APPROPRIATE HANDLING 45 minutes

1. Demonstrate the technique for safely changing an IV bag, at the appropriate time (when 50 cc of solution remain in the bag) and using aseptic techniques.

2. Demonstrate the stabilization of IV and tubing at the IV site. The site must be covered, the cannula and IV tubing stabilized (using two taped stress loops to avoid accidential extravasion as well as an armboard, if appropriate and needed). The intial stabilization should be done and/or approved by the sending hospital/facility staff.

3. Demonstrate the nature and use of the IV equipment for maintaining and adjusting the IV flow rate which is ordered by medical authority. The student should be introduced to and have a chance to operate the IV line features and positions which affect flow rates. The demonstration and discussion should include such topics as:

a. establishing and rechecking the rate of flow by counting the drops/minute in the drip chamber. Adjusting the roller clamp, counting for 15 seconds initially while adjusting the flow rate, then counting the drops for a full minute when checking the established flow rate. Note acceptable margin of variation--1 to 2 drops/per minute.

b. how flow rate is influennced by the height of the bag, the amount of fluid in the bag, the position of the patient's limb and iv site relative to the heart, and the influence of altitude during transport.

4. Demonstration of techniques for trouble-shooting an IV line, which is not infusing.

a. Check for an object which is contricting circulation above the IV site (for example, a blood pressure cuff, bandage, even tourniquet.)

b. Check IV tubing attachments.

c. Check for air venting into bottled fluids.

d. Check for a flooded drip chamber.

e. Check the height of the IV fluid. Sometimes, cramped quarters during transport may inhibit gravity required for proper flow of the intravenous fluid.

f. If EMT-Basic is unable to reestablish flow, discontinue the flow of the infusion and contact medical control.

RECORDING AND DOCUMENTING — 15 minutes

1. The following data items should be recorded in a complete documentation of IV maintenance handling:

a. Patient condition, including vital signs, lung sounds and other signs and symptoms should be assessed and reassessed and documented on a regular basis.
b. Condition of the IV site should be assessed and reassessed and recorded on a regular basis.
c. Amount of fluid infused and the amount of fluid in the IV bag should be noted and recorded at least every hour.
d. Record the amount of urine output or emesis (using a definite measure of the amount such as cc or ml).
e. When changing an IV bag, record the time and the solution used.
f. If an IV must be discontinued, record the time and the type/size of the catheter removed, and the reason for the discontinuation.
g. Record changes in patient condition.
h. Record any abnormalities or problems encountered with the IV.
i. Record the type of solution and of the administration set.

IV MAINTENANCE PRACTICE SESSION — 50 minutes

The EMT-B student should practice all of the techniques demonstrated and discussed in the previous sections of the module, including:

1. Adjusting and maintaining ordered flow rates.

2. Changing an IV bag, bottle using sterile technique.

3. Discontinuing an IV using safe and sterile techniques.

4. Stabilizing IV sites, equipment and tubing.

5. Noting, reporting and documenting all of the involved assessments and procedures.

TESTING AND EVALUATION — 40 minutes

1. Written Test
2. Practical Skills Test
   a. Stabilize site and tubing.
   b. Adjust flow to a specified rate.
   c. Change the IV bag using appropriate sterile and safe techniques.
   d. Discontinue IV.

PREPARATION

Motivation:	Acetylsalicylic acid or ASA is in widespread use for it's antiplatlet effects. It is currently being used to prevent recurrent myocardial infarction and to lessen the effects of MI in progress. Clinical trials show a 20% decrease in death and nonfatal reinfarction. Pre-hospital administration of aspirin has been in use at the Advanced Life Support level for quite some time.
Prerequisites:	BLS, Preparatory, Airway and Patient Assessment. This addendum is to be included in the Cardiovascular Emergencies module.

MATERIALS

AV Equipment:	Utilize various audio-visual materials relating to cardiac emergencies. Examples: video, local protocols, overheads of run reports.
EMS Equipment:	Blood pressure cuff, stethoscope, oxygen tank and delivery systems, aspirin training bottle.

PERSONNEL

Primary Instructor:	One instructor with knowledge and experience in administration of aspirin.
Assistant Instructors:	The instructor to student ratio is 1:6 for psychomotor skill practice. Individuals used as assistant should be knowledgeable in cardiac emergencies.
Recommended Minimum Time to Complete:	This addendum is included in the Cardiovascular Emergencies module.

PRESENTATION

I. DESCRIPTION

A. Common uses

1. Acetylsalicylic acid or ASA is in widespread use as an antipyretic, anti-arthritic, and analgesic. It has antiplatlet effects that are currently being used to prevent recurrent myocardial infarction and to lessen the effects of MI in progress. Clinical trials show a 20% decrease in death and nonfatal reinfarction.

B. How supplied

1. Available in tablets ranging from 65mg to 650mg. Also available in capsule, chewing gum, powder and suppositories. Chewable tablets are the only type to be given by the EMT-B.

II. MECHANISM OF ACTION

A. How aspirin works

1. The mechanism of action reduces clot formation in the MI patient.

2. Produces relief of pain.

3. Exerts an anti-inflammatory effect at higher doses.

4. Relieves fever.

III. INDICATIONS

A. Chest pain/discomfort

1. Chest pain/discomfort in the adult patient that is believed to be of cardiac orgin is the only indication for the EMT to give aspirin.

IV. CONTRAINDICATIONS

A. Do not give aspirin if these conditions exist:

1. Known hypersensitivity to aspirin

IV. (cont.)

2. Bleeding, internal or external

3. Patient who is on coagulant therapy such as Coumadin or Heparin. Administer only with on line medical control approval.

V. SIDE EFFECTS

A. High doses

1. Effects of high dose aspirin include tinnitis (ringing in the ears), nausea/vomiting, and bleeding of the GI tract.

B. Other

1. Doses of 1000mg per day may cause prolonged bleeding time, nausea and vomiting.

2. Allergy to aspirin could result in allergic reaction and anaphylaxis. Always ask the patient if they are allergic to aspirin. If yes, withhold the medication.

VI. EMT PRECAUTIONS

A. To be used in the adult patient only

1. Patients with asthma and nasal polyps have an increased incidence of hypersensitivity. Administer only with on line medical control approval.

2. Use with caution if patient has a past history of GI bleeding. Administer only with on line medical approval.

VII. ASPIRIN MEDICATION ADMINISTRATION

A. Considerations

1. Enteric aspirin has a coating that allows the medication to dissolve more slowly. This type of aspirin is not for use in the acute situation. The patient with chest pain/discomfort should be given aspirin that dissolves quickly.

2. Baby aspirin can be chewed in the mouth and swallowed.

3. Aspirin that smells like vinegar should be discarded.

VII. (cont.)

4. Aspirin is a drug that is carried on the ambulance. The expiration date should be checked monthly. Replace prior to expiration date.

5. If the patient takes aspirin on a regular basis, it is still acceptable to give aspirin for suspected MI.

6. There are no contraindications for administering aspirin and nitroglycerin together.

B. Dosage

1. Two (2) baby aspirin (81mg each) that total 162mg.

C. Time

1. Time is heart muscle. The patient should be treated and transported without delay to the nearest medical facility that can treat myocardial infarction.

2. Aspirin should be given as soon as possible as directed my medical control.

D. Communication/Documentation

1. Aspirin is given only with on line medical approval of medical director either on line of off line.

2. Call early! Let the receiving hospital know as soon as possible that you are enroute with a possible MI. This allows hospital staff to prepare the equipment and medications needed to care for this patient.

3. Include in your verbal report that aspirin was administered. Give the time and dose administered.

4. Document on the run sheet that aspirin was administered. Document the time and dose administered and include information that this was verbally reported to the emergency department.

APPLICATION

Procedural (How)

1. Demonstrate the assessment and emergency medical care of a patient experiencing chest pain/discomfort.
2. Perform the steps in administering aspirin for chest pain/discomfort using a substitute candy tablet.
3. Demonstrate the assessment and documentation of patient response to aspirin.
4. Demonstrate the verbal and written documentation required after administration of aspirin.

Contextual (When, Where, Why)

1. The training lab must provide simulated cardiac situations for the student to practice demonstrated skills. The student must integrate many single skills into one simulated cardiac emergency scenario in order to perform safe and effective patient care.

STUDENT ACTIVITIES

Auditory (Hear)

1. The student should hear of actual cases where cardiac emergency patients were treated with administration of aspirin.
2. The student should hear recorded verbal reports of patients who experienced chest pain/discomfort.

Visual (See)

1. The student should see an instructor appropriately care for a simulated patient with chest pain/discomfort.
2. The student should see an instructor administer appropriately a small candy to simulate a patient receiving aspirin for chest pain/discomfort.
3. The student should see reenactments or videos of EMS calls where the patient has been assessed and given aspirin.

Kinesthetic (Do)

1. The student should practice the assessment and emergency medical care of a patient experiencing chest pain/discomfort.

2. The student should simulate the administration of aspirin using a small candy.

3. The student should practice the assessment and documentation of patient response to the aspirin.

4. The student should practice verbal and written reports for a patient with a cardiac emergency.

EVALUATION

Written: Develop evaluation instruments, e.g. quizzes, verbal reviews, handouts, to determine if the students have met the cognitive and affective objectives of the lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

Indiana Department of Homeland Security
Emergency Medical Technician Psychomotor Portfolio

Appendix H

References:

National Registry of Emergency Medical Technicians.
2015 Paramedic Psychomotor Competency Portfolio (PPCP)

Indiana Department of Homeland Security EMS Division

Indiana Administrative Code

Indianapolis Fire Department
"Red Book"

2019 National Scope of Practice Model

Indiana EMS Education Work Group

- Association of Primary Instructors
- Goal to promote quality EMS education in Indiana
- Goals
  - Advancement of EMS Education
  - Curriculum Development and Update
  - Development of PI knowledge and skills
  - Assist IDHS and EMS Commission as requested

Approved by the Commission :

- Transition to NREMT Skills sheets as of September 1, 2019
- Staff with Work Group to develop a "New" Psychomotor Exam to be effective January 1, 2020

Support the request from staff to *immediately* discontinue the use of the Indiana skills sheets

ETCO2/ Capnography

- As discussed at last meeting
  - 2019 Scope of Practice study agrees that Waveform Capnography is a skill that may be taught at the EMT Level.
  - Indiana currently allows Supraglottic Airway at EMT without the ability to confirm placement
  - Creates a patient safety issue

ETCO2/ Capnography

- 2015 Study
- Veer D.VithalaniMD SabrinaVikMS CCRC LP Steven Q.DavisMD MS LP Neal J.RichmondMD
  - 344 Supraglottic Airways placed by 911 providers
  - 19 or 5.6% recognized by providers as unsuccessful
  - 47 or 13.8% misplaced and not identified by provider
  - Capnography increased [illegible]ss [illegible]5% w[illegible]ly 1.2% placement failure

98.5%

ETCO2/ Capnography

- Request that the Commission consider adding Wave Form Capnography to the Scope of Practice in Indiana to the EMT?
  - Taught fully. For both the apneic and conscious patients.
  - Training program to be approved by the Commission and role out first quarter of 2020

Approved by the Commission :

- Transition to NREMT Skills sheets as of September 1, 2019
- Staff with Work Group to develop a "New" Psychomotor Exam to be effective January 1, 2020
- Staff with Work Group to develop an "EMT/ Candidate Portfolio" to document skills proficiency to be effective January 1, 2020

The Future ....

Data, data, data ....

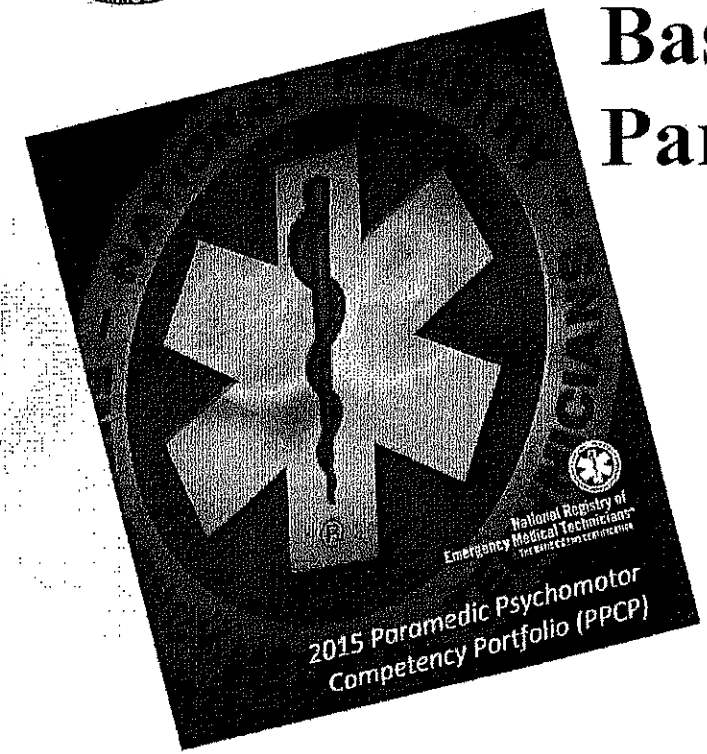
Data based medicine, data based education, data based protocols .....

National Registry of Emergency Medical Technicians®

THE NATION'S EMS CERTIFICATION™

Indiana EMT Psychomotor Portfolio

Based off the NREMT Paramedic Portfolio



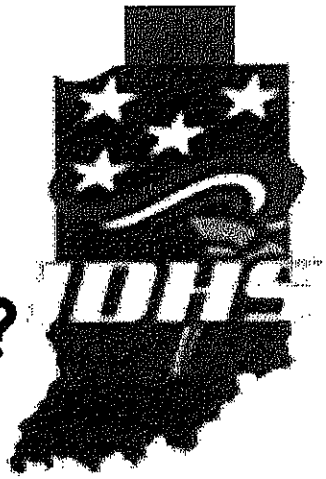
Designed for <u>Best Practices</u>

Indiana EMS Education Work Group

836 IAC 4-2-3

"(C) Attesting on **forms provided by the agency** to the competency of the course graduates to perform the **medical skills required by the certification for which the student has been trained.**"

How do you currently meet the 836 requirements?



- The Random Skills that were not evaluated at the Psychomotor Exam
- IV Maintenance
- IM Medication Administration
- Inhaled Medication Administration
- Glucometer
- Intranasal nasal Medication Administration
- 12 lead ECG acquisition and transmission

on **forms provided by the agency?**

Mr. Webster says:

portfolio

noun

port·fo·lio | \ pȯrt-ˈfō-lē-ˌō \
plural **portfolios**

Definition of *portfolio*

1: a hinged cover or flexible case for carrying loose papers, pictures, or pamphlets

2[from the use of such a case to carry documents of state] **:** the office and functions of a minister of state or member of a cabinet

3: the securities held by an investor **:** the commercial paper held by a financial house (such as a bank)

4: a set of pictures (such as drawings or photographs) usually bound in book form or loose in a folder

5: a selection of a student's work (such as papers and tests) compiled over a period of time and used for assessing performance or progress

Based off competency

- Easier skills require less time for students and instructors
- More time may be spent on the more difficult skills
- Better time management (Flip the class)
- Increases critical thinking

For Example:

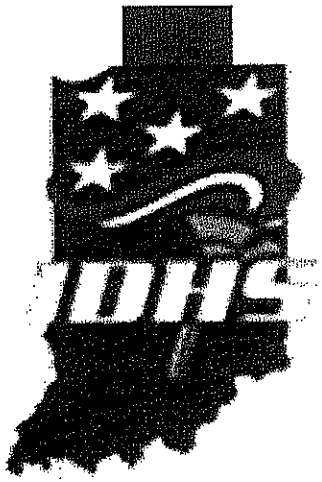
- Hemorrhage Control
  - Competency after 1 attempt

- Supraglotic Airway
  - Up to 17 attempts for competency

How many times does the candidate have to perform the skill?:

We do not know!

Former Random Skills, are now moved to portfolio:



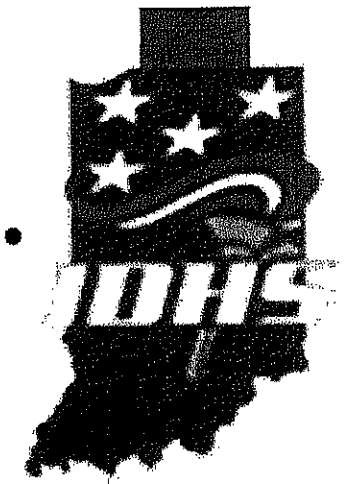
- Long Bone
- Joint Injury
- Oxygen Preparation and Application
- Traction Splint
- Spinal Immobilization Seated

Added and now in the Portfolio:

- CPAP
- IV Maintenance
- IM Epi
- MDI
- Glucometer
- Intranasal nasal
- 12 lead
- Capnography

NREMT has sheets to cover these

Current controversies ....



- **EMT candidates memorize the skills sheets**
  - To use the sheets or not, that **IS** the question?
- **Teach to the sheet and not the skill**
  - Lose the cognitive thinking portion

Option/ Solution:

- NREMT has sheets to assist in patient assessment without the actual exam sheets

- Teaches the EMT to be a better clinician rather than memorization skills

OBTAIN A PATIENT HISTORY FROM AN ALERT AND ORIENTED PATIENT

SCORING	
N/A	Not applicable for this patient
0	Unsuccessful; required critical or excessive prompting; inconsistent; not yet competent
1	Not yet competent, marginal or inconsistent, this includes partial attempts
2	Successful; competent; no prompting necessary

Actual Time Started:	**SCORE**
Demographic data	
Age	
Weight – estimated/translated to kg	
Sex	
Ethnic origin	
Source of referral	
"Who called EMS?"	
Source of historical information	
Who is telling you the information?	
Reliability	
Do you believe the patient?	
Does the patient have appropriate decision-making capacity to consent for care?	
Is the patient oriented appropriately?	

Chief complaint	
"Why did you call us?"	
Duration of this episode/complaint	
History of the present illness	
Onset	
"When did this begin?"	
"Was it sudden or gradual?"	
Provocation	
"What brought this on?"	
"Is there anything that makes it better or worse?"	
Quality	
"How would you describe your pain or symptoms?"	
"Has there been any change in your pain or symptoms since it began?"	
Region/Radiation	
"Can you point and show me where your pain or symptoms are located?"	
"Does the pain move or radiate anywhere else?"	
Severity	
"How would you rate your level of discomfort right now on a 0 – 10 scale?"	
"Using the same scale, how bad was your discomfort when this first began?"	
Timing	
"When did your pain or symptoms begin?"	
"Is it constant or how does it change over time?"	

Again …

- Providing the Best Practices

The Process…

1. Instructor provides the information/ classroom on the skill

2. Instructor demonstrates the proper performance of the skill

The Process…

3. Students practice the skill with peer review

4. Peer evaluation of the skill

5. Instructor evaluation of the skill

Old Chinese adage:

"When I hear it I forget it
When I see it I remember it
When I do it I know it
When I teach it I understand"

Used over the ages by:

Xun Kuang (3rd Century)

Benjamin Franklin

Homer Dubs in 1928

Bingham, New York elementary school in 1954

U.S Department of Health Education and Welfare in 1958

Princeton University Study 2014

Basically …

the Flipped Classroom Concept

Indiana EMS Education Work Group

Indiana EMT Psychomotor Portfolio

- Introduction
  - Background for the development
- Skills Lab
  - Studies on the development of psychomotor domain
- Clinical Phase
  - Setting up clinical rotation and educating preceptors
- Field Phase

Indiana EMT Psychomotor Portfolio

- Psychomotor Competency
- Appendix A
  - Indiana Skills/ Exam Sheets
- Appendix B
  - Skills Competency
  - Sheets
- Appendix C
  - How to use the Clinical and Field Evaluations

Indiana EMT Psychomotor Portfolio

- Appendix D
  - Creating Psychomotor Scenarios
- Appendix E
  - Minimum portfolio contents
- Appendix F
  - Indiana EMT IV Maintenance Skills

Indiana EMT Psychomotor Portfolio

- Minimum components.
  - Peer Evaluation
    - Documented for each skill
  - Instructor Evaluation
    - Documented for each skill
  - Both Clinical and Field Phase Documentation

32-36 total pages!

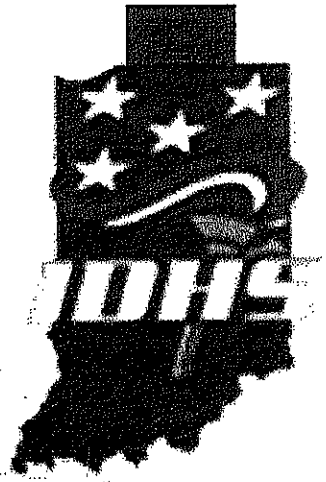
- Must be maintained by Training Institution:

Indiana EMT Portfolio

- Competency evaluated by Peers
  - Patient Assessment Trauma Patient
  - Patient Assessment Medical Patient
  - Cardiac Arrest/ AED
  - Spinal Immobilization Supine
  - Supraglotic Airway
  - Bleeding Control and Shock Management
  - Long Bone
  - Joint Injury
  - Oxygen Preparation
  - Traction Splint
  - Intramuscular Medication Administration
  - Intranasal Medication Administration
  - Inhaled Medication Administration
  - Glucometer
  - 12 lead Acquisition
  - **CPAP and Capnography**

When adopted by the Commission

Indiana EMT Portfolio



- **Competency evaluated by an instructor**
  - Patient Assessment Trauma Patient
  - Patient Assessment Medical Patient
  - Cardiac Arrest/ AED
  - Spinal Immobilization Supine
  - Supraglotic Airway
  - Bleeding Control and Shock Management
  - Long Bone
  - Joint Injury
  - Oxygen Preparation
  - Traction Splint
  - Intramuscular Medication Administration
  - Intranasal Medication Administration
  - Inhaled Medication Administration
  - Glucometer
  - 12 lead Acquisition
  - **CPAP and Capnography**

When adopted by the Commission

Indiana EMS Education Work Group

Commission has approved that Staff with the Work Group develop an "EMT/ Candidate Portfolio" to document skills proficiency to be effective January 1, 2020

Work Group would like to respectfully request that the Commission adopt the "Indiana EMT Psychomotor Portfolio", as presented in your packet (version 4) as the mandated portfolio already approved.

Documentation of Clinical and Field Phase

- State Minimums:
  - Emergency Room eight (8) hours
  - Ambulance eight (8) hours
  - Ten (10) patient contacts

Is this really a good measure for EMT's

- What is the actual goal of the clinical?
- What constitutes a patient contact?
- Each district has different hurdles, availabilities and issues.
- Modify the clinical to competency based or location based

New Tasks/ New Business:

- EMT sheets updated
- Update Training Manual
- Scenarios for EMT
- Primary Instructor updated

New Tasks/ New Business:

- **Clinical and Field Phase of the EMT course**

Work Group 2020

- All meetings from 1000 to 1200 ish
  - February 20 – Ivy Tech
  - April 23 at FDIC
  - June 18 – Ivy Tech
  - September 9 at IERC
  - November 12 – Ivy Tech

Special Congratulation!

to "THE" Chief Randell

Indiana EMS Education Work Group

Thank you!

Question?

ATTACHMENT #2

October 10th, 2019

Dear EMS Commissioners:

At the last meeting of Indiana EMS Commission, myself and IDHS staff introduced our intent to initiate discussion of adopting the NHTSA 2018 EMS Scope of Practice. You may recall this discussion ensued last year and was deferred to a point in time after the educational curriculum had been developed. Now that the proposed curriculum is available, IDHS staff believe that now is the appropriate time to discuss and ultimately adopt the NHTSA 2018 EMS Scope of Practice with several Indiana specific modifications.

Our original intent was to discuss the EMR and EMT provider scope at the November EMS Commission meeting and then discuss the AEMT and Paramedic Scope of Practice at the February 2020 EMS Commission meeting. Depending on the depth and degree of discussion at each provider level, I would ask the EMS Commission to consider discussing all provider levels at the November 2019 EMS Commission meeting. The attached spread sheet will help you visualize differences between the current Indiana EMS Scope of Practice and the proposed NHTSA 2018 EMS Scope of Practice. Likewise, I have attached the entirety of the NHTSA 2018 EMS Scope of Practice along with my presentation from 2018 providing detail on the history and creation of the NHTSA EMS Scope of Practice model.

Please review all of the attached information and be prepared for a spirited discussion. It is my recommendation and that of the IDHS/EMS Division staff for the EMS Commission to adopt the NHTSA 2018 EMS Scope of Practice with the following modifications already in place as part of the Indiana EMS Scope of Practice:

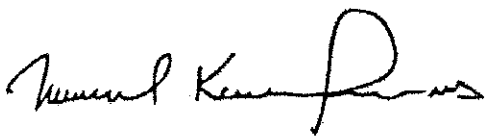
- The use of supraglottic airways at the EMT level
- The use of pulse oximetry at the EMR level
- The use of the long spine board at the EMR level
- Intramuscular medication administration at the EMT level (within current scope of practice, i.e. Epi)
- The use of epinephrine auto injectors at the EMR level
- Maintenance of IV infusions of some medicated and non-medicated infusions at the EMT and AEMT level
- Blood glucose monitoring at the EMR level

Likewise, we also recommend that the EMS Commission approve the following modifications to the NHTSA 2018 EMS Scope of Practice by approving the following:

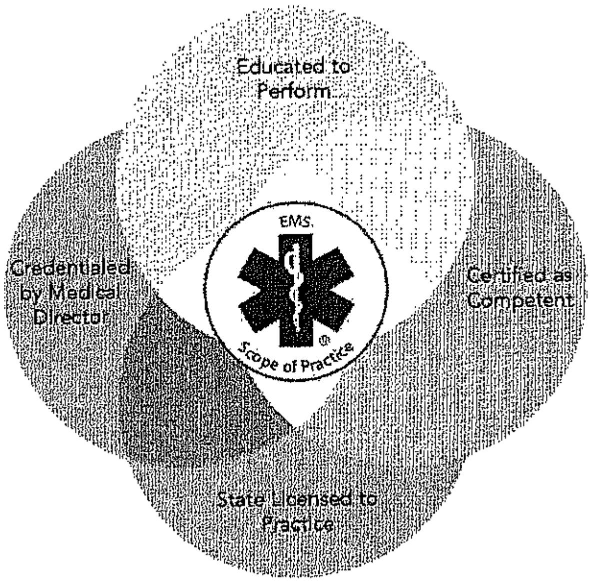
- The use of nasal airways at the EMR level
- The use of CPAP at the EMT and AEMT level
- The use of ETCO2 monitoring and interpretation of waveform capnography at the EMT and AEMT level
- The use the aerosolized/nebulized route of medication administration to the EMT level (for medications within the EMT scope of practice)
- The administration of inhaled beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing to the EMT level
- The use of oral glucose for suspected hypoglycemia at the EMR level
- The administration of oral over the counter (OTC) analgesics for pain or fever at the AEMT and EMT level
- The administration of parenteral analgesia for pain at the AEMT level
- The use of automated blood pressure monitoring at the EMR level

All of the recommended changes listed above would be subject to medical director approval and credentialing. It is anticipated that general training for several of the more substantive proposed changes such as nebulizer treatments for EMT, CPAP, and ETCO2 monitoring would be provided by IDHS via the ACADIS portal.

On behalf of the entire staff of the Indiana Department of Homeland Security EMS Division, thank you for your participation and guidance as we move to advance the scope of care provided by Hoosier EMS providers.



Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director
Indiana Department of Homeland Security
MKaufmann@dhs.in.gov
317-514-6985

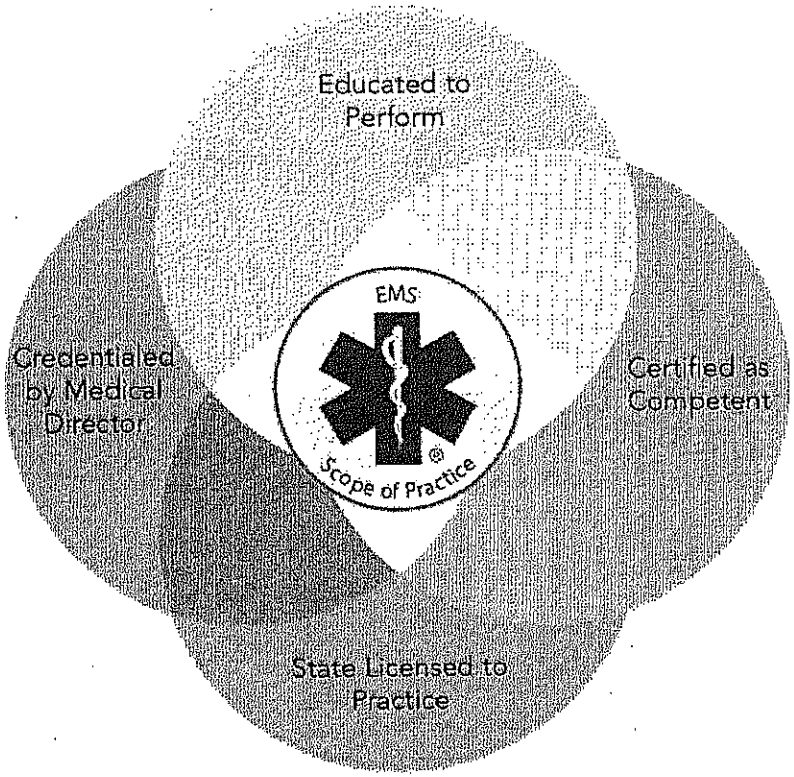


2018 EMS Scope of Practice

Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director

EMS Scope of Practice

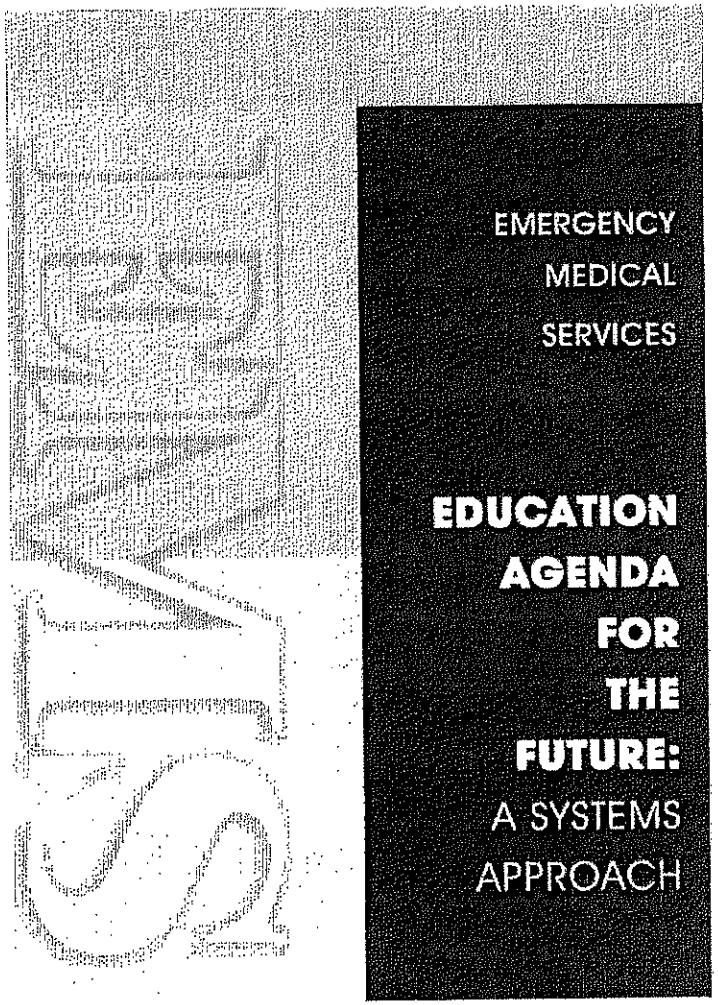
- Defines the licensure levels of EMS personnel
- Currently recognized as
  - EMR
  - EMT
  - AEMT
  - Paramedic
- How did this come about?



EMS Education Agenda for the Future

- In **1996** NHTSA, in partnership with HRSA, published the EMS Agenda
  - The document created a vision for the future of EMS systems in the United States and led to EMS system improvements across the Nation.

- In January 1998, NHTSA convened a group of experts to review the process for future curricula projects which evolved into a document entitled the "EMS Education Agenda for the Future", which continues to serve as the standard for development of EMS educational curriculum.
- Published 2000



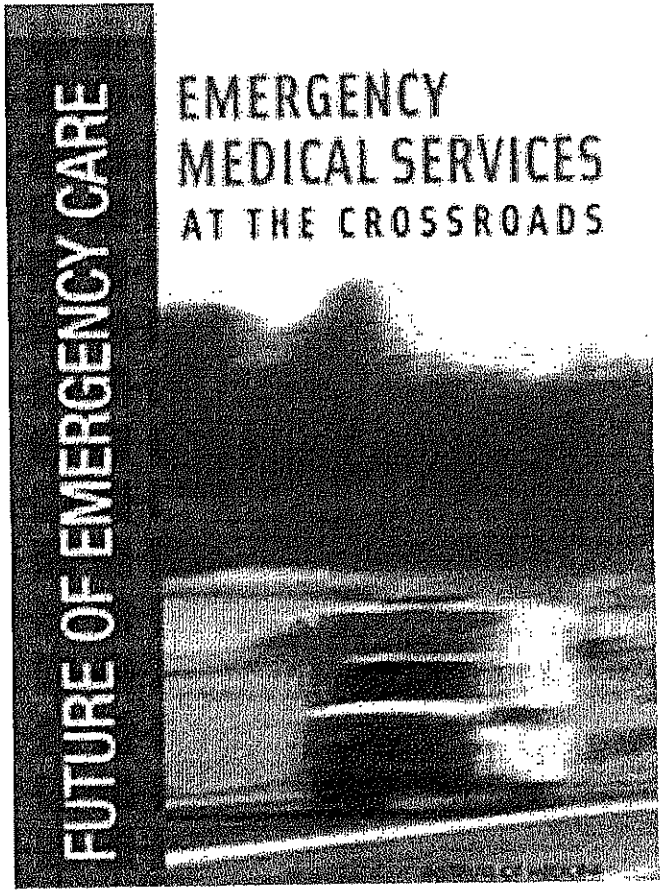
THE Education Agenda

- Developed by a task force representing the full range of professions involved in EMS education.
- Proposed an education system with five integrated primary components:
  - National EMS Core Content – The universe of EMS knowledge and skills
  - National EMS Scope of Practice – Delineation of provider practice levels
  - National EMS Education Standards – Replaced the National Standard Curr.
  - National EMS Testing – NREMT
  - National EMS Education Program Accreditation

NASEM Calls for Consistency in 2007

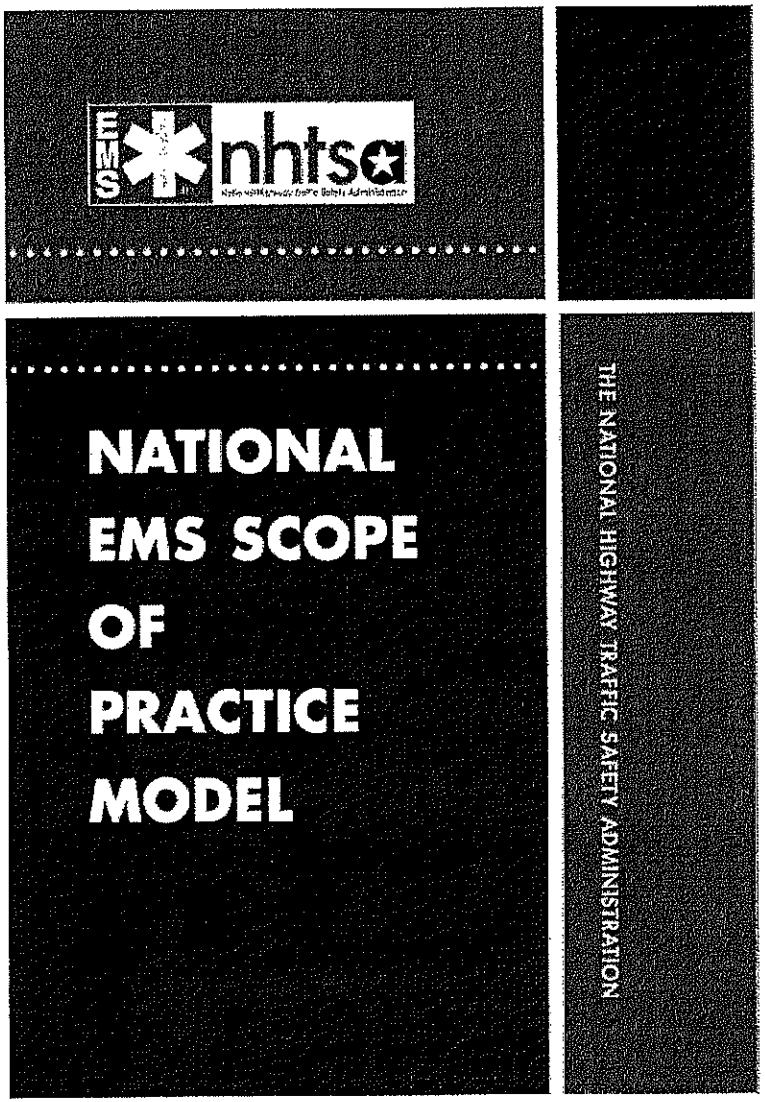
- 4.1 State governments should adopt a common scope of practice for EMS personnel
- 4.2 States should require national accreditation for paramedic education programs
- 4.3 States should accept a national certification as a prerequisite for state licensure and local credentialing of EMS providers

The National Academies of SCIENCES ENGINEERING MEDICINE



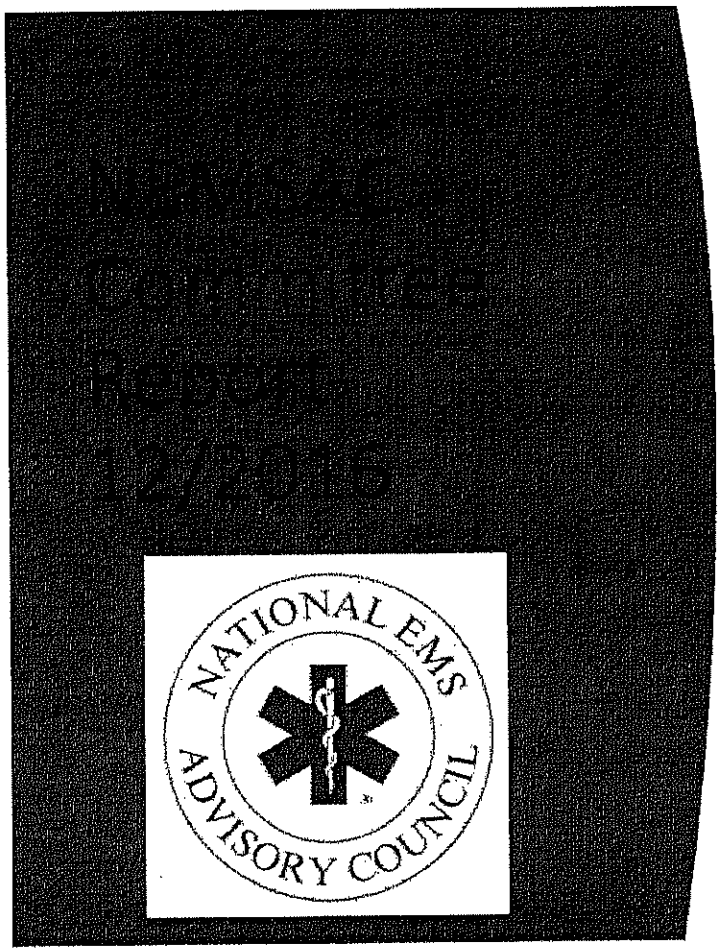
The Hoosier State

- January 21st, 2011 – EMS Commission partially adopted TAC recommendations.
  - National Education Agenda
    - Core Content
    - Scope of Practice
      - EMR
      - EMT
      - A-EMT
      - Paramedic
    - Educational Standards



National EMS Scope of Practice

- Consensus document published in 2006/7
- Defines levels of EMS licensure
- Delineates practice and minimum competencies for each level
- Does not have regulatory authority but provides guidance to each state
- Increases uniformity of EMS practice and allows for reciprocity among states
- Delegated to the NASEMSO
- Funded by the NHTSA



The need for alignment of the 2000 EMS Education Agenda for the Future: A systems approach, the 2005 National EMS Core Content, the 2007 National EMS Scope of Practice Model, and the 2009 National EMS Education Standards with the current practice of EMS Medicine

Bottom Line: Numerous national EMS guidance documents have been created in the last 2 decades and would benefit from being aligned with the modern practice of EMS.

2017 SOPM Expert Panel Convened

Co-Chairman	Peter Taillac, MD
Co-Chairman	Scott Bourn, PhD
American Academy of Pediatrics	Brian Moore, MD
American Ambulance Association	John Russell, MD
American College of Emergency Physicians	David Lehrfeld, MD
American College of Surgeons-Committee on Trauma	Mark Gestring, MD
International Association of Fire Chiefs	David Becker, M.S.
International Association of Fire Fighters	Robert McClintock, NRP
National Association of EMS Educators	Mike Miller, NRP
National Association of EMS Physicians	John Gallagher, MD
National Association of EMTs	Dennis Rowe, EMT-P
National Association of State EMS Officials	Kyle Thornton, M.S.
International Association of Flight and Critical Care Paramedics	Aaron Byrd, NRP, FP-C
National EMS Management Association	Sean Caffrey, NRP
National Registry of EMTs	Ashish Panchal, MD
Unaffiliated SME (member at-large)	Leaugeay Barnes, NRP
Unaffiliated SME (member at-large)	Ann Bellows, EdD, NRP
Unaffiliated SME (member at-large)	Douglas Kupas, MD
Unaffiliated SME (member at-large)	Richard Kamin, MD
Unaffiliated SME (member at-large)	Jules Scadden, EMT-P

2018 SOPM Revision

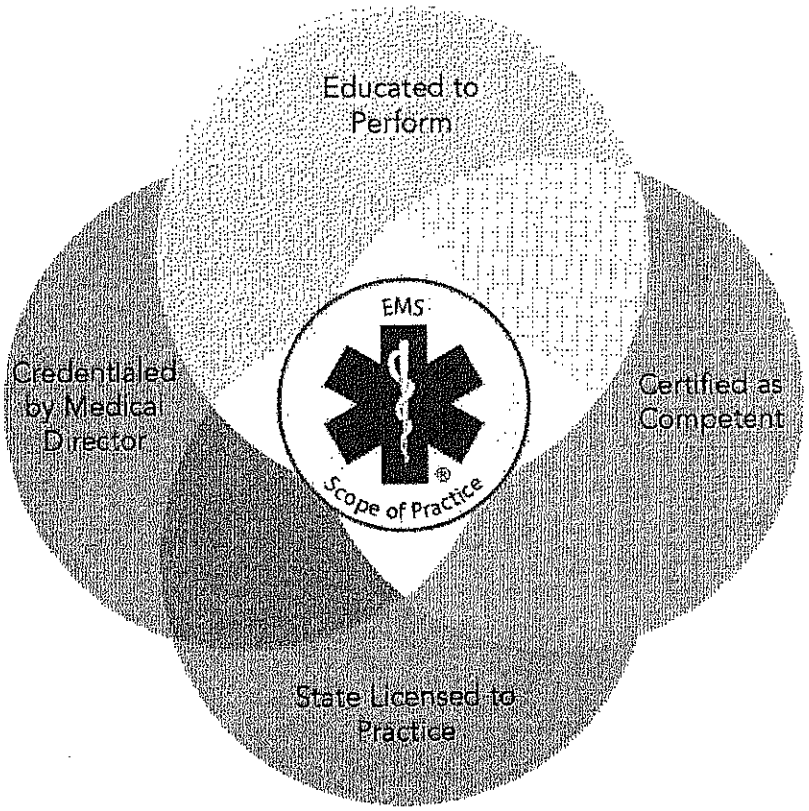
- Identify new evidence and science regarding the regulation and State licensure of EMS personnel
- Facilitate implementation of the Scope Model with State EMS regulators including medical directors
- Provide opportunities for broad public and EMS community input and participation
- Incorporate new evidence and science as well as public and EMS community input into the document
- Improve the consistency and uniformity of EMS throughout the nation while still honoring the unique needs of individual states

Why a National EMS Scope of Practice Model?

- CONSISTENCY!
- Defines MINIMUM practice requirements in advance of gaining field experience and prior to supervised or individual work experience
- It is NOT intended to define the limits of EMS practice
- Implies performing skills universally – EVERY EMR, EMT, AEMT, and Paramedic in every state MUST be educated and credentialed at the minimum practice level.

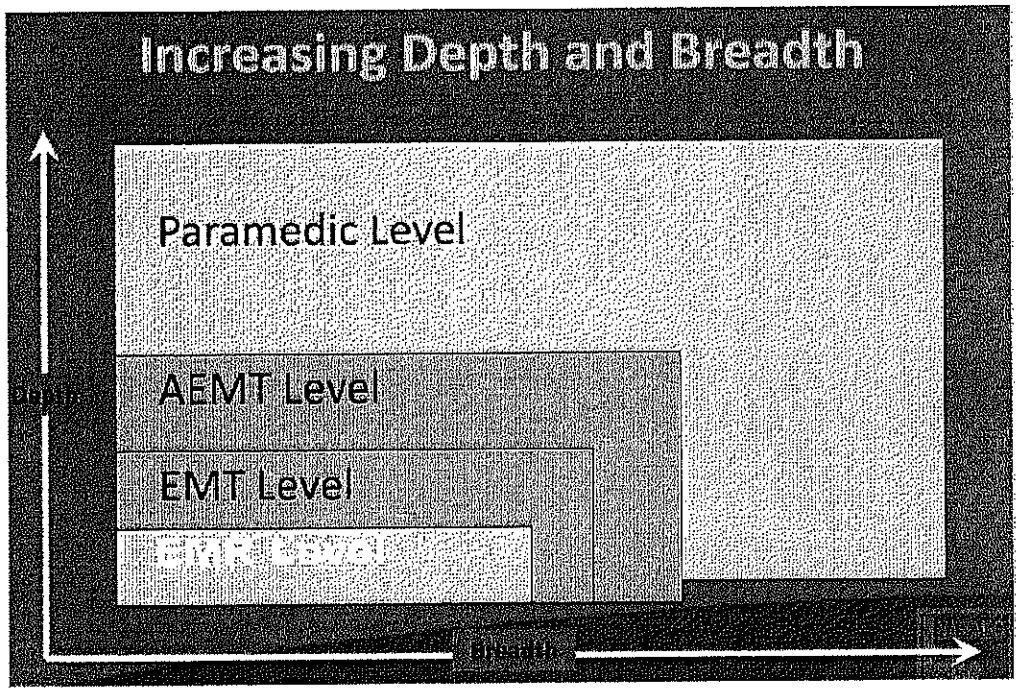
How it all fits together!

- The interdependent relationship between education, certification, licensure, and credentialing.
- An individual may perform only those procedures for which they are educated, certified, licensed, AND credentialed.

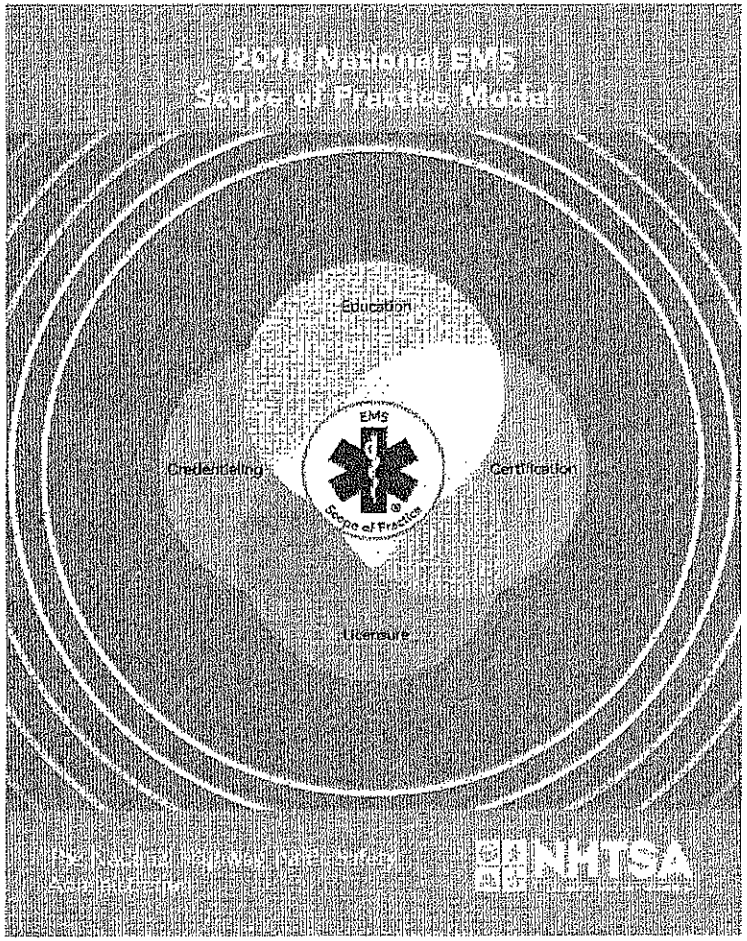


Increasing Depth and Breadth

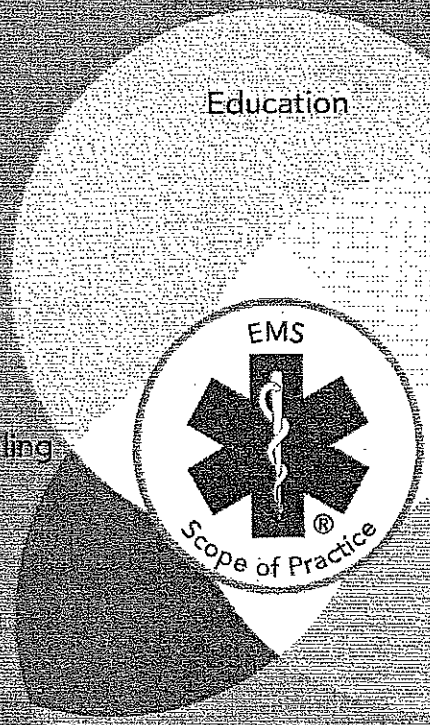
- The national EMS Scope of Practice Model and National EMS Education Standards presume there is a progression in practice from the EMR to the Paramedic level.
- That is, licensed personnel at each level are responsible for all knowledge, judgements, and skills at their level and all levels preceding their level.
- Therefore, content applied at the EMS level pertains to all EMS levels!



October 2018



2018 National EMS Scope of Practice Model



The National Highway Traffic Safety Administration

NHTSA

Table of Contents

This document was produced by the National Association of State EMS Officials with support from the US Department of Transportation, National Highway Traffic Safety Administration (NHTSA), Office of Emergency Medical Services (OEMS) through Contract DTNH2216C00026, with supplemental funding from the Health Resources and Services Administration (HRSA) Emergency Medical Services for Children Program. The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of USDOT, NHTSA, or HRSA.

Executive Summary

The National EMS Scope of Practice Model (*"Practice Model"*)[1] is a continuation of the commitment of the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services Administration (HRSA) to the implementation of the EMS Agenda for the Future *("EMS Agenda")*[2]. It is part of an integrated, interdependent system, first proposed in the EMS Education Agenda for the Future: A Systems Approach *("Education Agenda")*[3] that endeavors to maximize efficiency, consistency of instructional quality, and student competence. It supports a system of EMS personnel licensure that is common in other allied health professions and is a guide for States in developing their Scope of Practice legislation, rules, and regulation.

> *Scope of practice—Defined parameters of various duties or services that may be provided by an individual with specific credentials. Whether regulated by rule, statute, or court decision, it represents the limits of services an individual may legally perform.*

Each State has the responsibility to protect the health and safety of its citizens through powers that are granted by the 14th Amendment of the United States Constitution[4]. State policymakers play a critical and longstanding role in occupational licensing policies, dating back to the late 19th century when the U. S. Supreme Court decision in *Dent v. West Virginia*[5] established States' rights to regulate certain professions. Shortly after, States began developing their own systems of occupational regulation and licensing. Most recently (2015), in *North Carolina State Board of Dental Examiners v. Federal Trade Commission*[6], the U.S. Supreme Court held that an occupational licensing board has immunity from antitrust law only when it is actively supervised by the State, reinforcing the need to maintain the regulatory hierarchy that currently serves a variety of occupational and professional disciplines. Since the legal authority to practice can be obtained only from the State, the State licensure process provides a means for States to pursue unlawful practice by unlicensed individuals. This affords title protection to EMS personnel that comply with State regulations, and protection of the public from individuals who have not met minimum standards.

The *Practice Model* has been utilized as a model by States as a means to increase regulatory uniformity in emergency medical services (EMS) for over a decade. Core to this document and the practice of every licensed health professional is compliance with four domains intended to serve the legal and ethical obligation of States to ensure the public is protected from unqualified individuals:

An individual may only perform a skill or role for which that person is:
EDUCATED (has been trained to perform the skill or role), **AND**
CERTIFIED (has demonstrated competence in the skill or role), **AND**
LICENSED (has legal authority issued by the State to perform the skill or role), **AND**
CREDENTIALED (has been authorized by medical director to perform the skill or role).

While many users of the 2018 *Practice Model* may be more interested in the list of psychomotor skills that appear as interpretive guidelines, this list is neither prescriptive nor finite. What is even more important are the fundamental principles that serve any professional scope of practice model explained throughout the document. To be clear: a licensed practitioner is not permitted to perform any skill if they fail to conform with any of the four domains related to that particular skill, including the demonstration of ongoing competency.

A Subject Matter Expert Panel *("Expert Panel")* was selected to revise the *Practice Model* in 2017. Comprised of representatives from several national EMS organizations and the EMS public including experienced field personnel, EMS educators, EMS medical directors, EMS agency administrators, and State EMS regulators, the *Expert Panel* utilized the Grades of Recommendation Assessment, Development and Evaluation (GRADE) process to consider evidence and establish consensus on a number of topics. When the scientific literature was inconclusive, expert opinion was used to improve descriptions, roles, and attributes of each level that would support changes in practice by addressing two fundamental questions:

1. Is there evidence that the procedure or skill is beneficial to public health?
2. What is the clinical evidence that the new skill or technique as used by EMS personnel will promote access to quality health care or improve patient outcomes?

It is important to note that the *Expert Panel* was tasked to define entry-level expectations to ensure a level of national consistency. In other words, the *Practice Model* suggests the minimum practice requirements in advance of gaining field experience prior to supervised or individual work experience at the levels of an Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), or Paramedic.

National EMS Program Accreditation was identified in the *Education Agenda* as the means to "provide minimum program requirements for sponsorship, resources, students, operational policies, program evaluation, and curriculum" at all EMS levels. The Commission on Accreditation of Allied Health Education Programs (CAAHEP), the largest programmatic accreditor in the health sciences field, currently accredits over 2200 education programs in 30 health sciences fields including 611 at the paramedic level across all 50 states. The *Expert Panel* considered the evidence related to the value of National EMS Program Accreditation towards student and patient outcomes and encourages collaboration among stakeholder groups for full implementation of national EMS program accreditation at the AEMT level by 2025.

Finally, the U.S. is transforming its health care system to provide quality care leading to improved health outcomes achieved through interdisciplinary collaboration. EMS personnel are key to this transformation through innovative approaches in a variety of practice settings. The *Expert Panel* strongly supports the national call for the elimination of barriers for all professions to practice to the full extent of their education, training, and competence with a focus on collaborative teamwork to maximize and improve care throughout the health care system[7].

I. Background

Overview of the EMS Profession

The *Practice Model* provides a resource for defining the practice of Emergency Medical Services (EMS) personnel. EMS clinicians are unique health care professionals in that they provide medical care in many environments, locations, and situations. Much of this care occurs in out of hospital settings with little onsite supervision. Physician medical directors provide medical oversight to ensure and maintain safe EMS practices. This is occasionally performed in-person by medical directors in the field or through electronic communications, but more commonly is accomplished through protocol development and quality improvement based on evidence-based treatment standards and resources such as this *Practice Model*. EMS personnel are not independent clinicians, but are expected to execute many treatment modalities based on their assessments and protocols in challenging situations. They must be able to exercise considerable judgment, problem-solving, and decision-making skills.

In the vast majority of communities, residents call for EMS by dialing 9-1-1 when they need emergency medical care, and the appropriate resources are dispatched. EMS personnel respond and provide care to the patient in the setting in which the patient became ill or injured, including the home, field, recreational, work, and industrial settings. Many of these are in high-risk situations, such as on highways and freeways, violent scenarios, and other unique settings.

Many EMS personnel provide medical transportation services for patients requiring medical care while enroute to or between medical facilities, in both ground and air ambulance entities. These transport situations may originate from emergency scenes, or may be scheduled transports moving patients from one licensed facility to another. The complexity of care delivered by EMS personnel can range from very basic skills to exceptionally complex monitoring and interventions for very high acuity patients.

Medical care at mass gatherings (e.g., concerts or sporting events) and high-risk activities (e.g., fireground operations, or law enforcement tactical operations) are a growing expectation of EMS personnel. EMS personnel sometimes serve in an emergency response or primary care role combined with an occupational setting in remote areas (e.g., off-shore oil rigs and wildland fires). EMS personnel also work in more traditional health care settings in hospitals, urgent care centers, doctor's offices and long-term care facilities. Finally, EMS personnel are involved in numerous community and public health initiatives, such as working with health care systems to provide non-emergent care and follow up to certain patient populations as well as providing immunizations, illness and injury prevention programs, and other health initiatives.

EMS is a local function and organized in a variety of ways. These include agencies that are volunteer, career, or a combination; agencies that are operated by government, health care system, or private entities; and agencies that are stand-alone EMS, fire-based or law

enforcement-based. Common models are municipal government (fire-based or third-service) or a contracted service with a private (profit or nonprofit) entity. Multiple levels of licensure exist for EMS personnel, each offering different levels of scopes of practice. EMS personnel provide medical care to those with emergent, urgent, and in some cases chronic medical needs. EMS is a component of the overall health care system, and delivers care as part of a system intended to reduce the morbidity and mortality associated with illness and injury. EMS care is enhanced through the linking with other community health resources and integration within the health care system.

The Evolution of the EMS Agenda for the Future

The original *Practice Model* was developed in 2007 as one part of the NHTSA's commitment to its *EMS Agenda*. Released in 1996, the *EMS Agenda* established a long-term vision for the future of EMS in the United States:

> "EMS of the future will be community-based health management that is fully integrated with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow up, and contribute to treatment of chronic conditions and community health monitoring. This new entity will be developed from redistribution of existing health care resources and it will be integrated with other health care professionals and public health and safety agencies. It will improve community health and result in a more appropriate use of acute health care resources. EMS will remain the public's emergency medical safety net."

A process to update the *EMS Agenda* is underway (http://emsagenda2050.org/).

As a follow up to the *EMS Agenda*, the *Education Agenda,* released in 2000, called for the development of a system to support the education, certification and licensure of entry-level EMS personnel that facilitates national consistency:

> "The *Education Agenda* established a vision for the future of EMS education, and called for an improved structured system to educate the next generation of EMS personnel. The *Education Agenda* built on broad concepts from the 1996 *Agenda* to create a vision for an educational system that will result in improved efficiency for the national EMS education process. This was to enhance consistency in education quality ultimately leading to greater entry-level graduate competence."

The *Education Agenda* proposed an EMS education system with five integrated components: National EMS Core Content, National EMS Scope of Practice Model, National EMS Education Standards, National EMS Certification, and National EMS Education Program Accreditation. The *National EMS Core Content*[8], released in 2004, defined the domain of out of hospital care. The 2007 *Practice Model* divided the core content into levels of practice, defining the minimum corresponding skills and knowledge for each level. Our nation has made great progress in implementing these documents over the preceding decade.

Several forces have combined to revise the *Practice Model*:

1. As States have widely implemented the *Practice Model*, many have chosen to add skills to their authorized scopes of practice beyond the floor called for in the national model.
2. EMS research is providing new evidence about the effectiveness of interventions in the out of hospital setting.
3. Our nation is facing new health problems including explosive growth in opiate abuse, threats of violence and terrorism, and new challenges related to a growing population over the age of 65.
4. The National EMS Information System (NEMSIS) is maturing to provide information about what levels of EMS personnel are performing which skills and interventions.

The development and publication of the *Practice Model* represents a transition from the historical connection between scope of practice and the EMS National Standard Curricula. The *Practice Model* is a consensus document, guided by data and expert opinion that reflects the skills representing the *minimum* competencies of the levels of EMS personnel.

This update of the *Practice Model* is a natural and expected activity in assuring that our EMS personnel are prepared to meet the needs and expectations of the communities they serve.

Implementation of the 2007 National EMS Scope of Practice Model

EMS crews today are better equipped than ever for the worst kinds of emergencies, from cardiac arrests and gunshot victims to car crashes and other life-threatening emergencies. In its "Future of Emergency Care" series, the National Academies of Science, Engineering, and Medicine (formerly known as the Institute of Medicine) envisioned high integration of the emergency and trauma care systems to function effectively. "Operationally," said the NASEM, "this means that all of the key players in a given region...must work together to make decisions, deploy resources, and monitor and adjust system operations based on performance feedback[9]."

A system that attracted a generation of emergency care personnel depicted in the popular 1970's television series, "Emergency," is now faced with the realities of providing care in a fragmented health care system with limited resources, overcrowded emergency departments, inadequate mental health resources, a nationwide opioid epidemic, escalating domestic and street violence, hazardous material risks and exposures, high consequence infectious disease, an aging population with complex needs, increasing threats from terrorism and other mass casualty events that require 24/7 operational readiness along with constant non-urgent social, medical, and transport requests that were not fully contemplated in the 2007 *Practice Model*. These competing concerns illustrate a crucial need to find innovative strategies to improve EMS care delivery inside and outside the boundaries of an ambulance. The licensure of EMS personnel, like that of other health care licensure systems, is part of an integrated and comprehensive system to improve patient care and safety and to protect the public. The challenge facing the EMS community including regulators is to develop a system that establishes national standards for

personnel licensure and their minimum competencies while remaining flexible enough to meet the unique needs of State and local jurisdictions.

According to the 2011 National EMS Assessment[10], 826,111 licensed EMS personnel encounter nearly 37 million patients a year in the United States and reflect a multi-billion dollar enterprise. Implementing the 2007 *Practice Model* required consideration of funding, reimbursement, transition courses, grandfathering of current personnel, development of educational and instructional support materials, workforce issues, labor negotiations, impact on volunteerism, and other important issues. The majority of States required legislative and rulemaking changes but the effort resulted in four nationally recognized levels of EMS clinicians as described by the 2007 *Practice Model* compared to at least 44 different levels of EMS personnel certification reported in the United States in 1996.

According to data collected by NASEMSO in 2013[11], 100% of States use the *Practice Model* as the minimum allowable psychomotor skill set at the EMT and paramedic levels. 76% of States are using the *Practice Model* as the minimum allowable psychomotor skill set at the EMR level and 88% of States are using the *Practice Model* as the minimum allowable psychomotor skill set at the AEMT level. Several States have completed the transition of the Intermediate-85 level to AEMT. In December 2017, the National Registry of Emergency Medical Technicians (NREMT) announced plans to permanently retire the Intermediate-99 exam currently being used by a handful of States as a State assessment exam. The effective date for this transition to be complete is December 31, 2019.

According to data collected by NASEMSO in 2014, 90% of States effectively require National EMS Program Accreditation at the Paramedic level.

As of March 31, 2018, CAAHEP lists accredited EMS programs at the paramedic level in all 50 States. 611 paramedic programs have successfully completed the accreditation process and are fully accredited, a 92% increase in the number of nationally accredited paramedic programs from 2007. Another 78 paramedic programs hold a Letter of Review (LoR) from the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP), meaning that they are actively engaged in the accreditation process.

According to real time data[12] available from the NREMT:

- 23 States and the District of Columbia require National EMS Certification as a basis for initial State licensure at the EMR level. An additional 4 States utilize National EMS Certification as an optional or alternate entry process at the EMR level. 22 States do not license EMRs.
- 42 States and the District of Columbia require National EMS Certification as a basis for initial State licensure at the EMT level. An additional 4 States utilize National EMS

Certification as an optional or alternate entry process at the EMT level. 4 States maintain a State-based or combination process for certification and licensure at this level.

- 36 States and the District of Columbia require National EMS Certification as a basis for initial State licensure at the AEMT level. An additional 4 States utilize National EMS Certification as an optional or alternate entry process at the AEMT level. 10 States do not license AEMT's.
- 45 States and the District of Columbia require National EMS Certification as a basis for initial State licensure at the paramedic level. An additional 3 States utilize National EMS Certification as an optional or alternate entry process at the paramedic level. 2 States maintain a State-based process for certification and licensure at this level.

Approach to Revising the National EMS Scope of Practice Model

Since the original 2007 *Practice Model* document, the evidence for which interventions and treatments are useful and effective in an EMS setting has expanded significantly. Similarly, growing interest in EMS research is putting a sharper focus on how specific interventions are affecting the care and outcomes of patients in the out of hospital setting.

This 2018 document makes use of a Patient, Population, or Problem, Intervention, Comparison, and Outcome (PICO) Model to examine five clinical topics relevant to EMS treatment. The topics were selected for a systematic review of literature for consideration as high priority issues requiring analysis due to the frequency or need of the interventions being provided at different levels from the 2007 *Practice Model* in some States. These are:

1. Use of opioid antagonists by all levels of EMS personnel
2. Therapeutic hypothermia in cardiac arrest (i.e. Targeted temperature management)
3. Pharmacological pain management following an acute traumatic event
4. Hemorrhage control (i.e tourniquets and hemostatic dressings)
5. CPAP/BiPAP at the EMT level

Two limitations on using evidence to establish an EMS scope of practice are:

1. While evidence may tell us what is or is not effective, it generally does not suggest what level(s) of EMS personnel are appropriate to perform a specific intervention, and;
2. There are still limitations on the evidence for much of what is included in an EMS scope of practice.

Several suggestions were received during the national revision process to increase the EMS scope of practice at all levels. To address each of these suggestions, therapeutic benefits to the overall patient care and expected clinical outcomes were considered with the level of risk to patients, the economic burdens of additional hours of education, requirements to maintain competency, and level of supervision needed to complete the task/skill. Clinical acts that were viewed by the *Expert Panel* to require experience and additional training beyond the basic

education program required for licensure while not providing significant measurable benefit were not adopted as a national model. States following the *Practice Model* as closely as possible will increase the consistency of the nomenclature and competencies of EMS personnel nationwide, facilitate reciprocity, improve professional mobility and enhance the name recognition and public understanding of EMS. (See Appendix II: Changes and Considerations from the 2007 Practice Model.)

The administration of an opioid antagonist and hemorrhage control including tourniquets and wound packing were considered urgent and a change notice to add these skills at all levels was promulgated by NHTSA in 2017[13].

As the *2018 National EMS Scope of Practice Model* has been developed it has relied upon extensive literature review, systematic analysis of policy documents regarding health care licensing and patient safety, the input of an *Expert Panel*, and extensive public input.

Analysis and research on patient safety, scope of practice, and EMS personnel competency must remain a priority among the leadership of national associations, Federal agencies, and research institutions. When EMS data collection, subsequent analysis, and scientific conclusions are published and replicated, later versions of the *Practice Model* should be driven by those findings.

The Role of State Government

Each State has the statutory authority and responsibility to regulate EMS within its borders and to determine the scope of practice of State-licensed EMS personnel. The *Practice Model* is a consensus-based document that was developed to improve the consistency of EMS personnel licensure levels and nomenclature among States; it does not have regulatory influence unless adopted by the State. However, the widespread use and adoption of the *Practice Model* suggests that it represents an accepted national standard. Any state that adopts a scope of practice that significantly deviates below or above this national model should be guided by a collaborative process that analyzes the potential benefit, safety risks, costs and required training that are specific to the structure of the EMS system within the State.

The *Practice Model* identifies the psychomotor skills and knowledge necessary for the minimum competence of each nationally identified level of EMS personnel. This competence is assured by completion of a nationally accredited educational program and national certification. This model will be used to revise the National EMS Education Standards[14], national EMS certification exams, and national EMS educational program accreditation. Under this model, to be eligible for State licensure, EMS personnel must be educated and verifiably competent in the minimum cognitive, affective, and psychomotor skills needed to ensure safe and effective practice at that level. Eligibility to practice is dependent on education, certification, State licensure, and credentialing by the physician medical director.

While each State has the right to establish its own levels of EMS personnel and their scopes of practice, staying as close to this model as possible, *and especially not going below it for any level*, will facilitate reciprocity, standardize professional recognition, and decrease the necessity of each State developing its own education and certification materials. The *Education Standards*, national certification, national educational program accreditation, and publisher-developed instructional support material provide States with essential infrastructure support for each nationally defined EMS licensure level.

Some States permit licensed EMS personnel to perform skills and roles beyond the minimum skill set as they gain knowledge, additional education, experience, and (possibly) additional certification (See also Section III Specialty Care Delivered by Licensed EMS Personnel.) Care must be taken to consider the level of cognition and critical thinking necessary to perform a skill safely. For instance, some skills may be simple to perform, but require considerable clinical judgment to know when they should, and should not, be performed.

The *Practice Model* will continue to serve EMS in the future as it is revised and updated to include changes in medical science, new technology, and research findings.

II. Understanding Professional Scope Of Practice

Overview

"Scope of practice" is a legal description of the distinction between licensed health care personnel and the lay public and among different licensed health care professionals. It describes the authority vested by a State in individuals that are licensed within that State. In general, scopes of practice focus on activities that are regulated by law (for example, starting an intravenous line, administering a medication, etc.). This includes technical skills that, if done improperly, represent a significant hazard to the patient and therefore must be regulated for public protection. Scope of practice establishes which activities and procedures that would represent illegal activity if performed without a license and restricts the use of professional titles to persons that are authorized by the state. In addition to drawing the boundaries between the professionals and the layperson, scope of practice also defines the boundaries among professionals, creating either exclusive or overlapping domains of practice.

> *Scope of Practice is a description of what a licensed individual legally can, and cannot, do.*

This *Practice Model* should be used by the States to develop scope of practice legislation, rules, and regulation. The specific mechanism that each State uses to define the State's scope of practice for EMS personnel varies. State scopes of practice may be more specific than those included in this model and may specifically identify both the minimum and maximum skills and roles of each level of EMS licensure.

> *Generally, changing a law is more difficult than changing a regulation; changing a regulation is more difficult than changing a policy.*

Scopes of practice are typically defined in law, regulations, and/or policy documents. Some States include specific language within the law, regulation or policy, while others refer to a separate document using a technique known as "incorporation by reference." The *Practice Model* provides a mechanism to implement comparable EMS scopes of practice between States.

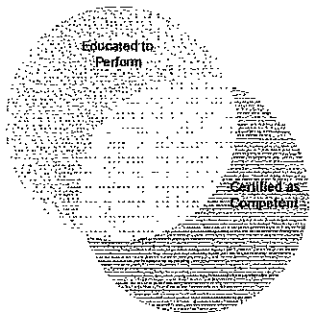
Scopes of practice need not define every activity of a licensed individual (for example, lifting and moving patients, taking a blood pressure, direct pressure for bleeding control, etc.). The *Practice Model* includes suggested verbiage for the State scopes of practice in the section entitled "EMS Personnel Scopes of Practice." The interpretive guidelines include a more detailed list of skills discussed by the *Expert Panel*. These skills, which generally should not appear in scope of practice regulatory documents, are included to provide the user with greater insight as to the deliberations and discussion of the group and are not intended to serve as a comprehensive list of permitted skills.

The Interdependent Relationship Between Education, Certification, Licensure, and Credentialing

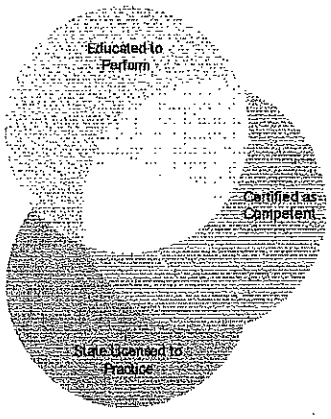
The *Practice Model* establishes a framework that ultimately determines the range of skills and roles that an individual possessing a State EMS license is authorized to do on a given day, in a given EMS system. It is based on the notion that education, certification, licensure, and credentialing represent four separate but related activities.

Education includes all of the cognitive, psychomotor, and affective learning that individuals have undergone throughout their lives. This includes entry-level education, continuing professional education, formal and informal learning. Clearly, many individuals have extensive education that in some cases exceeds their EMS skills or roles.

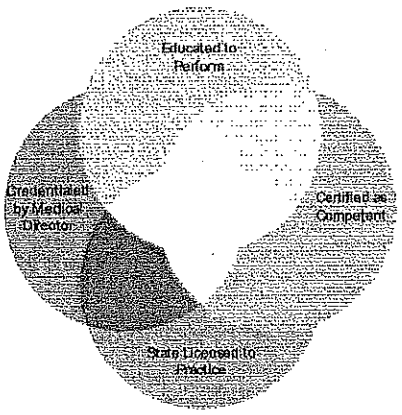
Certification is an external verification of the competencies that an individual has achieved and typically involves an examination process. While certification exams can be set to any level of proficiency, in health care they are typically designed to verify that an individual has achieved minimum competency to assure safe and effective patient care.



Licensure represents legal authority granted to an individual by the State to perform certain restricted activities. Scope of practice represents the legal limits of the licensed individual's performance. States have a variety of mechanisms to define the margins of what an individual is legally permitted to perform. This authority granted by the state is defined as licensure in this document, but some states still use "certification" to describe the same granting of authority to practice for EMS personnel. In these cases, this state authority should not be confused with certification to verify competency as described in the preceding paragraph. Throughout this document, licensure will refer to the authority of the State to grant an individual the ability to practice at a certain level of EMS practitioner, whether or not a State refers to this process as certification.



Credentialing is a clinical determination that is the responsibility of a physician medical director. It is the employer or affiliating organization's responsibility to act on the clinical credentialing status of EMS personnel in making employment and deployment decisions.

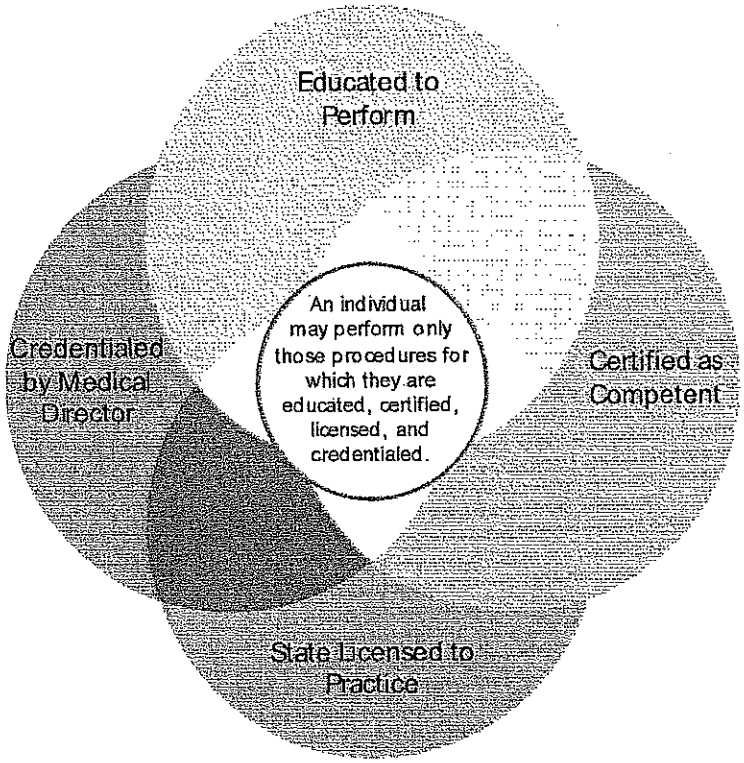


For every individual, these four domains are of slightly different relative sizes. However, one concept remains constant: an individual may only perform a skill or role for which that person is:

- educated (has been trained to perform the skill or role), AND
- certified (has demonstrated competence in the skill or role), AND
- licensed (has legal authority issued by the State to perform the skill or role), AND
- credentialed (has been authorized by medical director to perform the skill or role).

This relationship is represented graphically in Fig. 1.

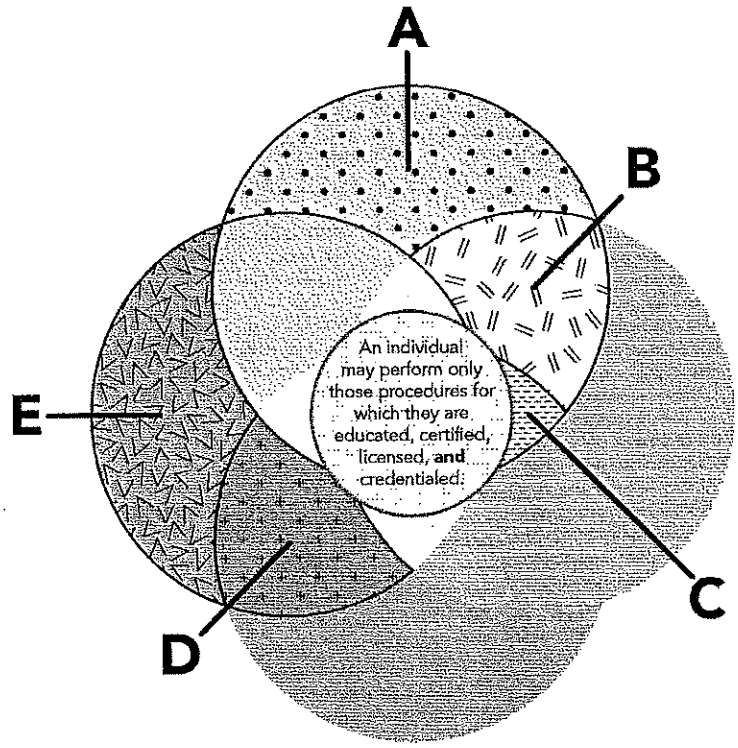
Figure 1: The relationship among education, certification, licensure, and credentialing.

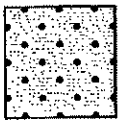


The center of Fig 1, where all the four elements overlap, represents skills and roles for which an individual has been educated, certified, licensed by a State, and credentialed. This is the only acceptable region of performance, as it entails four overlapping and mutually dependent levels of public protection: education, certification, licensure, and credentialing. Individuals may perform those roles and skills for which they are educated, certified, licensed, AND credentialed.

A significant risk to patient safety occurs when EMS personnel are placed into situations and roles for which they are not experientially or educationally prepared. It is the shared responsibility of medical oversight by a physician, clinical and administrative supervision, regulation, and quality assurance to ensure that EMS personnel are not placed in situations where they exceed the State's scope of practice. For the protection of the public, regulation must assure that EMS personnel are functioning within their scope of practice, level of education, certification, and credentialing process. Figure 2 illustrates the interconnections among education, certification of baseline competency, licensing by a regulating body, and credentialing by the medical director.

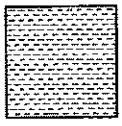
Figure 2: Skill and role situations not covered by all four elements for protection of the public.



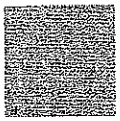


Region "A": represents skills and roles for which an individual has received education, but is neither certified, licensed, nor credentialed. For example, an EMT in a paramedic class is taught paramedic level skills; despite being trained, the EMT cannot perform those skills until such time that he is certified, licensed, and credentialed by the Local EMS Medical Director.

Region "B": represents skills and roles in which an individual has been educated and certified, but are not part of the State license and credentialing. For example, a Paramedic that trained as a corpsman is educated and certified in basic suturing, however, the skill is not considered "core" in the civilian sector. It would now be out of his/her scope of practice, and cannot be performed without special review and authorization by the State and medical director.



Region "C": represents skills and roles for which an individual is educated, certified, and licensed, but has no local/jurisdictional credentialing. For example, an off duty Paramedic arriving at the scene of an incident outside of his jurisdiction usually is not credentialed to perform advanced skills. In this case, performing an advanced skill would represent a violation of his scope of practice.



Region "D": represents skills or roles the State has authorized (licensed) but are not addressed by initial education programs or certification processes. These skills require local entities to assure the education and competency verification, in addition to local credentialing. For example, rapid sequence induction for intubation (RSI) in some States is legally permitted, but usually not taught as part of the initial education, nor is it part of the certification process. Some individuals (for example, flight paramedics) may be authorized to perform RSI; however, this is only permissible if the local entity assumes the responsibility for satisfying the requirements of education and certification of competency. Credentialing remains mandatory, and additional process may be needed to satisfy local physician medical direction that skills in this region are safe and appropriate. Nonetheless, all four domains must be accomplished before any skill or role can be authorized.

Region "E": represents skills or roles which a medical director wants an individual to perform but for which they have not yet been educated, certified, or licensed to perform. Typically, skills and roles in this region are new or emerging interventions that have the potential to drive the future of EMS practice based on evolving evidence. Innovations such as waveform capnography, CPAP, and the use of naloxone by EMRs have all originated in this region. There is considerable State-to-State variability in dealing with this situation. Some States have regulations that restrict licensed individuals from functioning beyond their scope of practice. In others, regulatory mechanisms exist that enable a local physician to assume responsibility for the performance of new skills and roles performed by an EMS provider. Most States fall somewhere between these extremes and have mechanisms by which local medical directors can obtain an expansion/variance of a scope of practice if they can demonstrate the need and appropriate mechanism to reasonably assure patient safety. In these circumstances, if no process exists to obtain State level authorization for additional skills or roles, then items that fall in Region "E" cannot be practiced. Therefore it is important that States recognize the need for innovation and progression within the field, and establish processes for Region E interventions to be performed; appropriate education, evaluation and certification under the medical director's oversight must occur prior to implementation. Only then can these new interventions work their way into the standardized education, certification, and licensing domains to become part of the ever-evolving standard of care.

In many States, day-to-day clarification of scopes of practice, management of an appeal process, or otherwise assuring the adequacy of medical direction is the role of the State EMS Medical Director. Some States have licensure boards, often consisting of medical directors, administrators, peers, and public representatives that help adjudicate and clarify scope of practice issues.

Scope of Practice versus Standard of Care

Scope of practice does not define a standard of care, nor does it define what should be done in a given situation (i.e., it is not a practice guideline or protocol). It defines what is legally permitted to be done by some or all of the licensed individuals at that level, not what must be done. Table 1 describes some of the differences between scope of practice and standard of care.

Table 1: Relationship between scope of practice and standard of care

	Scope of Practice	Standard of Care
Purpose	Deals with the question, "Are you/were you *allowed* to do it?"	Deals with the question, "Did you do the right thing and did you do it properly?"
Legal implications	Act of commission is a criminal offense.	Acts of commission or omission not in conformance with the standard of care may lead to civil liability
Variability	May vary from individual to individual. Does not vary based on circumstances.	Situational, depends on many variables
Defined by	Established by statute, rules, regulations, precedent, and/or licensure board interpretations.	Determined by scope of practice, literature, expert witnesses, and juries
Miscellaneous	It is difficult to regulate knowledge through scope of practice.	Used to evaluate the totality of circumstances. What would a reasonable EMS person do in the same or similar circumstances?

A Comprehensive Approach to Safe and Effective Out of Hospital Care

Scope of practice is only one part of health care regulation and regulation is only one component of a comprehensive approach to improved patient care and safety. The primary goal of State regulation of EMS personnel is to protect the public from harm by ensuring EMS personnel possess a minimum level of competency and professional behaviors. Safe and effective EMS care is the cumulative effect of a cascade of many individual decisions involving every level of EMS leadership, medical direction, supervision, management, and regulation. Safe and effective patient care is the first priority and shared responsibility of everyone within an EMS agency and the EMS system. Safe and effective care cannot be accomplished through any single activity, but is best accomplished with an integrated system of checks and balances. All components of this comprehensive approach to safe and effective patient care are mutually supportive of and dependent upon each other.

III. Special Considerations

Liability in EMS Licensing and Oversight

A license is the official or legal permission to engage in or perform a regulated activity. In the United States, State governments generally hold the authority to issue licenses including EMS licenses. This is important because States ultimately need to be in a position to halt EMS personnel from performing in ways that are dangerous or harmful to the public.

Licensing differs from certification in that certification is an affirmation of competence while licensing is the authorization to perform the regulated health care activity. EMS personnel most commonly function on behalf of some volunteer or career organization that acts in a supervisory relationship as the person's employer.

EMS personnel have functioned under the supervision of physician medical directors since the 1960s. This physician oversight has been invaluable in assuring and improving the quality of care provided by EMS personnel. The close relationship of EMS personnel and physicians in this evolving health care discipline and descriptions of medical direction in early EMS curricula has led to the impression and belief by some that medical direction physicians are extending their licenses to authorize EMS practice. The logic of that belief would be that if an EMS person acted incompetently or dangerously, the State would take an action on the physician medical director's license. Not only would that be ineffective in halting the EMS practitioner's practice, it would put at risk the physician who might be in a position to help correct whatever problem exists with the EMS practitioner's practice.

The concept that EMS personnel are somehow practicing "under the physician's license" is simply not accurate. The umbrella of physician supervision and collaboration can never be used to replace the certification, scope of practice and individual responsibility of licensed EMS personnel. EMS personnel hold their own license and the relevant State authority can restrict or remove that license to stop incompetent or dangerous practice.

EMS personnel do however, practice under the oversight of physician medical directors. Medical directors are expected to provide appropriate supervision in the interest of public safety and are obligated to revoke or restrict local credentialing as appropriate. Failure to provide appropriate oversight can be determined to be inadequate supervision and expose the physician to professional liability. In this respect, physician medical directors can be accountable, not for individual acts of EMS personnel, but for their larger oversight role.

Scope of Practice for Special Populations

EMS personnel are expected to meet the urgent health care needs of all patients with consideration to age, race, gender, cultural, religious, and ethnic considerations consistent with their defined scope of practice. Recognized special populations include, but may not be limited

to, children, older patients, lesbian, gay, bisexual, transgender, and questioning (LGBTQ) patients, bariatric patients, patients with disabilities, and patients with limited access to health care due to geographic, demographic, socioeconomic, or other reasons.

Scope of Practice During Disasters, Public Health Emergencies, and Extraordinary Circumstances

The *Practice Model* is intended to cover a range of situations and circumstances where EMS personnel may provide emergency care. It is virtually impossible to create a scope of practice that takes into account every unique situation, extraordinary circumstance, and possible practice situation. In some cases, EMS personnel may be the only medically trained individuals at the scene of a disaster when other health care resources are overwhelmed. This document cannot account for every situation, but rather is designed to establish a system that works for entry-level personnel under normal circumstances. States may wish to modify or expand the scope of practice of EMS personnel in times of disaster or crisis with proper education, medical oversight, and quality assurance to reasonably protect patient safety.

Scope of Practice for EMS Personnel Functioning in Nontraditional Roles

The delivery of health care has been transformed over the last half-century by exponential and significant advances in medicine, research, and technology. The increasing portability and affordability of diagnostic and treatment equipment and the demand to increase care quality while reducing the cost of providing it has changed the demand for health care services in ways that were not envisioned with the passage of the National Highway Safety Act in 1966[15]. EMS personnel are identifying volunteer and career opportunities in a range of nontraditional settings that fulfill an important public health, public safety, and patient care need, such as large-scale concerts, sporting events and festivals, industrial, frontier and wilderness environments, wildland fire settings, community health, and more. Enabled by progressive rulemaking, occupational partners and innovative health care systems have been successfully utilizing educated, experienced, and licensed EMS personnel in patient care settings, such as health clinics and hospitals for the past several years and they have become recognized as an invaluable member of the health care team. States with practice restrictions based on location, vehicle use, agency type, or transport provisions are encouraged to review existing laws, regulations, and policies to identify barriers that prevent EMS personnel from functioning in any setting at a level to the full extent of their education, certification, licensure, and credentialing.

Specialty Care Delivered by Licensed EMS Personnel

Specialization of EMS personnel continues to be an evolving area of interest to the national EMS community. This reflects a broader specialization trend that has occurred in medicine for over a century as well ongoing specialization in nursing and other allied health fields. In general, specialization occurs in response to an identified need for an expanded body of knowledge and

skills that are best served by a formal supplemental educational and credentialing process. In many instances throughout health care the development and oversight of a specialty recognition process is lead by health professionals through specialty boards and implemented in conjunction with State regulators. This approach effectively combines national consistency achieved through the specialty certification process with the legal authority to practice.

Specialty recognition, credentialing, or endorsement is the outcome of a formally defined process and mechanism for actively assessing that an individual possesses and has mastered a unique body of knowledge *over and above entry-level* cognitive, affective, and psychomotor domains of learning and that they can apply this knowledge and related skill set to improve care provided for patients. Numerous health care and non-health care professions regulated by States have one or more specialty certification areas that have been defined, in part, by members of the profession itself. Several EMS specialties have emerged since the 2000 release of the *Education Agenda.*

Integration of specialty care requires appropriate educational preparation, a rigorous certification process, integration with State scope of practice and licensure regulations, and local credentialing by the medical director and EMS agency.

The legal authority for personnel to practice is established by State legislative action. Licensure authority prohibits anyone from practicing a profession unless they are licensed and authorized by the State, regardless of whether or not the individual has been certified by a nongovernmental or private organization.

States often approach specialization policy though two mechanisms. The first is development of an additional licensure level beyond those described in this model. The second is to enact scope of practice regulations at the State level that allow for additional practice, often called an endorsement, in addition to an existing license level. This second approach is used extensively in the medical and nursing professions. Both approaches benefit from ongoing cooperation and coordination with non-governmental specialty boards.

Military to Civilian EMS Transition

Military medics and corpsmen treat combat wounds in some of the harshest conditions that the majority of civilian EMS personnel will likely never see and they are undoubtedly well qualified to serve a domestic mission to achieve zero preventable deaths in the war on trauma (#ZPD2025). While support for military to civilian EMS transition is broad, the cognitive, affective, and psychomotor coursework for military medical trainees is variable depending on the individual service member's military assignment, which makes determining related equivalency and awarding experiential credit for military service across five armed services branches somewhat complex. Much work has been done to identify pathways for military corpsmen to transition to civilian EMS positions:

- The U.S. Department of Defense has consolidated a vast majority of health care specialist training across the armed services branches to the operational center at the Medical Education and Training Campus (METC) at Fort Sam Houston, TX. METC is working to ensure that more service-required education and training programs satisfy the ever-increasing course completion requirements of the civilian sector.
- EMS programs are increasingly providing "advanced placement" evaluation and assistance to separating service members, particularly at the AEMT and paramedic levels.
- Over the next several years, health science training programs at METC will transition to the METC Branch Campus of the College of Allied Health Sciences at the Uniformed Services University so that all military students will receive a consistent and recognizable transcript from a regionally accredited degree granting institution of higher education.[16]
- States have developed an updated model for conducting EMS personnel licensure evaluations including the integration of EMS licensees from other States and from the military setting.

Course completion of a program that meets or exceeds the *Education Standards* signifies that an individual has fulfilled entry-level education requirements that lead to National EMS Certification provided by the National Registry of Emergency Medical Technicians (NREMT). Active NREMT Certification has been demonstrated to be the most expeditious path for military personnel to seek EMS licensure with the States.

IV. Description of Levels

Emergency Medical Responder (EMR)

Description

The EMR is an out of hospital practitioner whose primary focus is to initiate immediate lifesaving care to patients while ensuring patient access to the emergency medical services system. EMRs possess the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and rely on an EMS or public safety agency or larger scene response that includes other higher-level medical personnel. When practicing in less populated areas, EMRs may have a low call volume coupled with being the only care personnel for prolonged periods awaiting arrival of higher levels of care. EMRs may assist, but should not be the highest-level person caring for a patient during ambulance transport. EMRs are often the first to arrive on scene. They must quickly assess patient needs, initiate treatment, and request additional resources.

Emergency Medical Responders:

- Function as part of a comprehensive EMS response, community, health, or public safety system with clinical protocols and medical oversight.
- Perform basic interventions with minimal equipment to manage life threats, medical, and psychological needs with minimal resources until other personnel can arrive.
- Are an important link within the 9-1-1 and emergency medical services systems.

Other Attributes

The focused and limited scope of this level makes it suitable for employee cross training in settings where emergency medical care is not the EMRs primary job function. Examples include firefighters, law enforcement, lifeguards, backcountry guides, community responders, industrial workers and similar jobs. EMRs advocate health and safety practices that may help reduce harm to the public.

Education Requirements

Successful completion of an EMR training program that is:

- Compliant with a uniform national standard for quality, and
- Approved by the State or US territory

Primary Role

Initiate patient care within the emergency medical services system.

Type of Education

Vocational/Technical setting

- Certificate awarded for successful completion

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles.

Level of Supervision

General medical oversight required. Assist higher-level personnel at the scene and during transport.

Emergency Medical Technician (EMT)

Description

An EMT is a health professional whose primary focus is to respond to, assess and triage emergent, urgent, and non-urgent requests for medical care, apply basic knowledge and skills necessary to provide patient care and medical transportation to/from an emergency or health care facility. Depending on a patient's needs and/or system resources, EMTs are sometimes the highest level of care a patient will receive during an ambulance transport. EMTs often are paired with higher levels of personnel as part of an ambulance crew or other responding group. With proper supervision, EMTs may serve as a patient care team member in a hospital or health care setting to the full extent of their education, certification, licensure, and credentialing. In a community setting, an EMT might visit patients at home and make observations that are reported to a higher-level authority to help manage a patient's care. When practicing in less populated areas, EMTs may have low call volume coupled with being the only care personnel during prolonged transports. EMTs may provide minimal supervision of lower level personnel. EMTs can be the first to arrive on scene; they are expected to quickly assess patient conditions, provide stabilizing measures, and request additional resources, as needed.

Emergency Medical Technicians:

- Function as part of a comprehensive EMS response, community, health, or public safety system with defined clinical protocols and medical oversight.
- Perform interventions with the basic equipment typically found on an ambulance[17] to manage life threats, medical, and psychological needs.
- Are an important link within the continuum of the emergency care system from an out of hospital response through the delivery of patients to definitive care.

Other Attributes

The majority of personnel in the EMS system are licensed at the EMT level. The EMT plays many important roles and possesses the knowledge and skill set to initially manage any emergency until a higher level of care can be accessed. In areas where AEMT or Paramedic response is not available, the EMT may be the highest level of EMS personnel a patient

encounters before reaching a hospital. EMTs advocate health and safety practices that may help reduce harm to the public.

Education Requirements

Successful completion of an EMT training program that is:

- Compliant with a uniform national standard for quality, and
- Approved by the State or US territory

Primary Role

Provide basic patient care and medical transportation within the emergency care system.

Type of Education

Vocational/Technical setting

- Diploma or certificate awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgments.

Level of Supervision

General medical oversight required. Some autonomy at basic life support level, assist higher-level personnel at the scene and during patient transport.

Advanced Emergency Medical Technician (AEMT)

Description

The AEMT is a health professional whose primary focus is to respond to, assess and triage non-urgent, urgent, and emergent requests for medical care, apply basic and focused advanced knowledge and skills necessary to provide patient care and/or medical transportation, and facilitate access to a higher level of care when the needs of the patient exceed the capability level of the AEMT. The additional preparation beyond EMT prepares an AEMT to improve patient care in common emergency conditions for which reasonably safe, targeted, and evidence-based interventions exist. Interventions within the AEMT scope of practice may carry more risk if not performed properly than interventions authorized for the EMR/EMT levels. With proper supervision, AEMTs may serve as a patient care team member in a hospital or health care setting to the full extent of their education, certification, licensure, and credentialing. In a community setting an AEMT might visit patients at home and make observations that are reported to a higher-level authority to help manage a patient's care.

Advanced Emergency Medical Technicians:

- Function as part of a comprehensive EMS response, community, health, or public safety system with medical oversight.
- Perform interventions with the basic and advanced equipment typically found on an ambulance.
- Perform focused advanced skills and pharmacological interventions that are engineered to mitigate specific life-threatening conditions, medical, and psychological conditions with a targeted set of skills beyond the level of an EMT.
- Function as an important link from the scene into the health care system.

Other Attributes

The learning objectives and additional clinical preparation for AEMTs exceed the level of an EMT. In areas where Paramedic response is not available, the AEMT may be the highest level of EMS personnel a patient encounters before reaching a hospital. AEMTs advocate health and safety practices that may help reduce harm to the public.

Education Requirements

Successful completion of a nationally accredited or CAAHEP accredited AEMT program that meets all other State/territorial requirements. (The target for full implementation of AEMT program accreditation is January 1, 2025.)

Primary Role

Provide basic and focused advanced patient care; determine transportation needs within the health care system.

Type of Education

Vocational/Technical or Academic setting

- Diploma, certificate, or associates degree awarded for successful completion.

Critical Thinking

Within a limited set of protocol-driven, clearly defined principles that:

- Engages in basic risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgments.

Level of Supervision

Medical oversight required. Minimal autonomy for limited advanced skills. Provides some supervision of lower level personnel. Assist higher-level personnel at the scene and during transport.

Paramedic

Description

The paramedic is a health professional whose primary focus is to respond to, assess, and triage emergent, urgent, and non-urgent requests for medical care, apply basic and advanced knowledge and skills necessary to determine patient physiologic, psychological, and psychosocial needs, administer medications, interpret and use diagnostic findings to implement treatment, provide complex patient care, and facilitate referrals and/or access to a higher level of care when the needs of the patient exceeds the capability level of the paramedic. Paramedics often serve as a patient care team member in a hospital or other health care setting to the full extent of their education, certification, licensure, and credentialing. Paramedics may work in community settings where they take on additional responsibilities monitoring and evaluating the needs of at-risk patients, as well as intervening to mitigate conditions that could lead to poor outcomes. Paramedics help educate patients and the public in the prevention and/or management of medical, health, psychological, and safety issues.

Paramedics:

- Function as part of a comprehensive EMS response, community, health, or public safety system with advanced clinical protocols and medical oversight.
- Perform interventions with the basic and advanced equipment typically found on an ambulance, including diagnostic equipment approved by an agency medical director.
- May provide specialized interfacility care during transport.
- Are an important link in the continuum of health care.

Other Attributes

Paramedics commonly facilitate medical decisions at an emergency scene and during transport. Paramedics work in a variety of specialty care settings including but not limited to ground and air ambulances, occupational, in hospital, and community settings. Academic preparation enables paramedics to use a wide range of pharmacology, airway, and monitoring devices as well as to utilize critical thinking skills to make complex judgments such as the need for transport from a field site, alternate destination decisions, the level of personnel appropriate for transporting a patient, and similar judgments. Due to the complexity of the Paramedic scope of practice and the required integration of knowledge and skills, many training programs are moving towards advanced training at the Associate degree or higher level.

Education Requirements

Successful completion of a nationally accredited Paramedic program that meets all other State requirements.

Primary Role

Provide advanced care in a variety of settings; interpretive and diagnostic capabilities; determine destination needs within the health care system; specialty transport.

Type of Education

Academic setting

- Diploma, Certificate, Associate, or Bachelors/Baccalaureate Degree awarded for successful completion.

Critical Thinking

Within a set of protocol-driven, clearly defined principles that:

- Engages in complex risk versus benefit analysis.
- Participates in making decisions about patient care, transport destinations, the need for additional patient care resources, and similar judgments.

Level of Supervision

Paramedics operate with collaborative and accessible medical oversight, recognizing the need for autonomous decision-making. Frequently provides supervision and coordination of lower level personnel.

V. Depth and Breadth of Knowledge

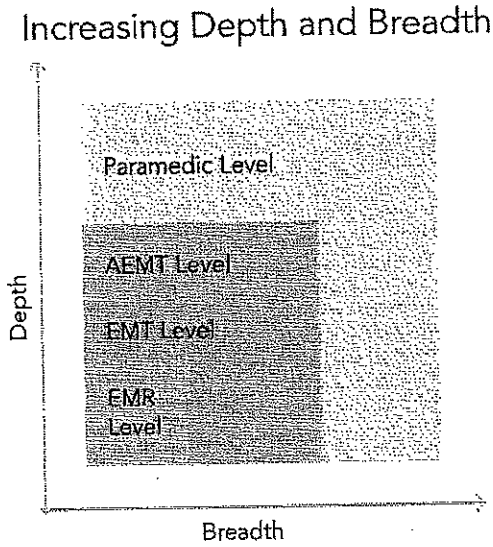
> *"Breadth of learning refers to the full span of knowledge of a subject. Depth of learning refers to the extent to which specific topics are focused upon, amplified and explored. Within any area of study, there will be both breadth and depth of learning, which increase as students advance their knowledge.[18]"*

It is important to note that the *Practice Model* and *Education Standards* assume a progression of the three domains of learning (cognitive, affective, and psychomotor) that affects EMS practice from the EMR level through the Paramedic level. That is, licensed personnel at each level are responsible for all knowledge, judgments, and skills at their level and all levels *preceding* their level. The *Practice Model* also assumes that EMS personnel not only receive requisite knowledge, but they can comprehend data, apply knowledge, analyze and synthesize information, and evaluate the outcomes of their actions.

Typically, scope of practice refers to the tasks and roles that licensed personnel are legally authorized to perform. In general, it does not describe the requisite knowledge necessary to perform those tasks and roles competently. As outlined in the *Education Agenda*, the responsibility for determining the knowledge necessary to safely perform skills, tasks, and roles falls to the EMS educators.

The increasing depth and breadth of cognitive, affective, and psychomotor material envisioned across each level of EMS licensure is graphically represented in Figure 3.

Figure 3: Increasing Depth and Breadth of Knowledge from EMR through Paramedic



VI. Interpretive Guidelines

The interpretive guidelines are used to help guide the users of this document by providing additional insight into the discussions and deliberations that revolved around the decisions of the *Expert Panel*. These interpretive guidelines represent the collective opinions of the *Expert Panel* in June 2018.

The interpretive guidelines are included to allow future users to apply similar methodology in deciding appropriateness of new interventions at each personnel level. They are illustrative and NOT all-inclusive.

I. Skill – Airway/Ventilation/Oxygenation

I. Skill – Airway / Ventilation / Oxygenation	EMR	EMT	AEMT	Paramedic
Airway – nasal		X	X	X
Airway – oral	X	X	X	X
Airway – supraglottic			X	X
Bag-valve-mask (BVM)	X	X	X	X
CPAP		X	X	X
Chest decompression - needle				X
Chest tube placement – assist only				X
Chest tube – monitoring and management				X
Cricothyrotomy				X
End tidal CO_2 monitoring and interpretation of waveform capnography			X	X
Gastric decompression – NG Tube				X
Gastric decompression – OG Tube				X
Head tilt - chin lift	X	X	X	X
Endotracheal intubation				X
Jaw-thrust	X	X	X	X

I. Skill – Airway / Ventilation / Oxygenation	EMR	EMT	AEMT	Paramedic
Mouth-to-barrier	X	X	X	X
Mouth-to-mask	X	X	X	X
Mouth-to-mouth	X	X	X	X
Mouth-to-nose	X	X	X	X
Mouth-to-stoma	X	X	X	X
Airway Obstruction – dislodgement by direct laryngoscopy				X
Airway Obstruction – manual dislodgement techniques	X	X	X	X
Oxygen therapy – High flow nasal cannula				X
Oxygen therapy – Humidifiers		X	X	X
Oxygen therapy – Nasal cannula	X	X	X	X
Oxygen therapy – Non-rebreather mask	X	X	X	X
Oxygen therapy – partial rebreather mask		X	X	X
Oxygen therapy – simple face mask		X	X	X
Oxygen therapy – Venturi mask		X	X	X
Pulse oximetry		X	X	X
Suctioning – Upper airway	X	X	X	X
Suctioning – tracheobronchial of an intubated patient			X	X

II. Skill – Cardiovascular/Circulation

II. Skill – Cardiovascular / Circulation	EMR	EMT	AEMT	Paramedic
Cardiopulmonary resuscitation (CPR)	X	X	X	X
Cardiac monitoring – 12 lead ECG acquisition and transmission		X	X	X

II. Skill – Cardiovascular / Circulation	EMR	EMT	AEMT	Paramedic
Cardiac monitoring – 12 lead electrocardiogram (interpretive)				X
Cardioversion – electrical				X
Defibrillation – automated / semi-automated	X	X	X	X
Defibrillation – manual				X
Hemorrhage control – direct pressure	X	X	X	X
Hemorrhage control – tourniquet	X	X	X	X
Hemorrhage control – wound packing	X	X	X	X
Transvenous cardiac pacing – monitoring and maintenance				X
Mechanical CPR device		X	X	X
Telemetric monitoring devices and transmission of clinical data, including video data		X	X	X
Transcutaneous pacing				X

III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint

III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint	EMR	EMT	AEMT	Paramedic
Cervical collar	X	X	X	X
Long spine board		X	X	X
Manual cervical stabilization	X	X	X	X
Seated SMR (KED, etc)		X	X	X
Extremity stabilization - manual	X	X	X	X
Extremity splinting	X	X	X	X

III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint	EMR	EMT	AEMT	Paramedic
Splint – traction		X	X	X
Mechanical patient restraint		X	X	X
Emergency moves for endangered patients	X	X	X	X

IV. Skill – Medication Administration – Routes

IV. Skill – Medication Administration – Routes	EMR	EMT	AEMT	Paramedic
Aerosolized/nebulized		X	X	X
Endotracheal tube				X
Inhaled		X	X	X
Intradermal				X
Intramuscular			X	X
Intramuscular – auto-injector	X	X	X	X
Intranasal			X	X
Intranasal - unit-dosed, premeasured	X	X	X	X
Intraosseous			X	X
Intravenous			X	X
Mucosal/Sublingual		X	X	X
Nasogastric				X
Oral		X	X	X
Rectal				X
Subcutaneous				X

IV. Skill – Medication Administration – Routes	EMR	EMT	AEMT	Paramedic
Topical				X
Transdermal				X

V. Medical Director Approved Medications

V. Medical Director Approved Medications	EMR	EMT	AEMT	Paramedic
Use of epinephrine (auto-injector) for anaphylaxis (supplied and carried by the EMS agency)		X	X	X
Use of auto-injector antidotes for chemical/hazardous material exposures	X	X	X	X
Use of opioid antagonist auto-injector for suspected opioid overdose	X	X	X	X
Immunizations			X	X
Inhaled – beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing		X	X	X
Inhaled – monitor patient administered (i.e. nitrous oxide)			X	X
Intranasal - opioid antagonist for suspected opioid overdose	X	X	X	X
Intravenous			X[1]	X
Maintain an infusion of blood or blood products				X
Oral aspirin for chest pain of suspected ischemic origin		X	X	X
Oral glucose for suspected hypoglycemia		X	X	X
Oral over the counter (OTC) analgesics for pain or fever		X	X	X
OTC medications, oral and topical				X
Parenteral analgesia for pain			X	X

[1] Limited to analgesia, antinausea/antiemetic, dextrose, epinephrine, glucagon, naloxone, and others defined by state/local protocol.

V. Medical Director Approved Medications	EMR	EMT	AEMT	Paramedic
Sublingual nitroglycerin for chest pain of suspected ischemic origin – limited to *patient's own prescribed medication*		X		
Sublingual nitroglycerin for chest pain of suspected ischemic origin			X	X
Thrombolytics				X

VI. Skill – IV Initiation/Maintenance Fluids

VI. Skill – IV Initiation/Maintenance Fluids	EMR	EMT	AEMT	Paramedic
Access indwelling catheters and implanted central IV ports				X
Central line – monitoring				X
Intraosseous – initiation, peds or adult			X	X
Intravenous access			X	X
Intravenous initiation - peripheral			X	X
Intravenous – maintenance of non-medicated IV fluids			X	X
Intravenous – maintenance of medicated IV fluids				X

VII. Skill – Miscellaneous

VII. Skill – Miscellaneous	EMR	EMT	AEMT	Paramedic
Assisted delivery (childbirth)	X	X	X	X
Assisted complicated delivery (childbirth)		X	X	X
Blood chemistry analysis				X
Blood pressure automated		X	X	X
Blood pressure – manual	X	X	X	X

VII. Skill – Miscellaneous	EMR	EMT	AEMT	Paramedic
Blood glucose monitoring		X	X	X
Eye irrigation	X	X	X	X
Eye irrigation –hands free irrigation using sterile eye irrigation device				X
Patient transport		X	X	X
Venous blood sampling			X	X

VII. Definitions

Academic—Based on formal education; scholarly; conventional.

Academic institution—A body or establishment instituted for an educational purpose and providing college credits or awarding degrees.

Accreditation—The granting of approval by an official review board after specific requirements have been met. The review board is non-governmental and the review is collegial and based on self-assessment, peer assessment, and judgment. The purpose of accreditation is student protection and public accountability.

Advanced level care—Care that has greater potential benefit to the patient, but also greater potential risk to the patient if improperly or inappropriately performed, is more difficult to attain and maintain competency in, and requires significant background knowledge in basic and applied sciences. These include invasive and pharmacological interventions.

Administered medication—The act of giving a medication to a patient that has been stocked and carried by EMS personnel. The patient may not have previously been determined by a physician to be an appropriate recipient of the medication.

Certification—An external verification of the competencies that an individual has achieved that typically involves an examination process.

Continuing education—The continual process of life-long learning.

Competence—The application of knowledge and the interpersonal, decision-making and psychomotor skills expected for the practice role, within the context of public health, safety and welfare.

Core content—The central elements of a professional field of study. The core content does not specify the course of study.

Credentialing—A clinical determination that is the responsibility of a physician medical director that authorizes a practitioner to perform a skill or role.

Curriculum—A particular course of study, often in a special field. For EMS education it has traditionally included detailed lesson plans. (The responsibility for EMS curriculum has shifted to EMS educators and EMS programs based on the *Education Standards*.)

Educational affiliation—An association with a learning institution (academic), the extent to which can vary greatly from recognition to integration.

Entry-level competence—The level of competence expected of an individual who is about to begin a career. Entry-level competence is sometimes defined as the minimum competence necessary to practice safely and effectively.

EMS system—Any specific arrangement of emergency medical personnel, equipment, and supplies designed to function in a coordinated fashion. May be local, regional, State, or national.

Licensure—The legal authority granted to an individual by the State to perform certain restricted activities. A license is generally considered a privilege and not a right.

National EMS Core Content—The document that defines the domain of out of hospital care.

National EMS Education Program Accreditation—The national accreditation process for institutions that sponsor EMS educational programs identified by the *Education Agenda*.

Nationally recognized accrediting agency—An accrediting agency that the U.S. Secretary of Education recognizes under Title 34 CFR Part 602—The Secretary's Recognition of Accrediting Agencies[19].

National EMS Education Standards—The document that defines the terminal learning objectives for each Nationally defined EMS licensure level.

National EMS Scope of Practice Model—The document that defines scope of practice for each Nationally defined EMS licensure level.

Outcome—The short-, intermediate-, or long-term consequence or visible result of treatment, particularly as it pertains to a patient's return to societal function.

Practice analysis—A study conducted to determine the frequency and criticality of the tasks performed in practice.

Registration—A listing of individuals who have met the requirements of the registration service.

Registration agency—Agency traditionally responsible for the delivery of a product used to evaluate a chosen area. States may voluntarily adopt this product as part of their licensing process. The registration agency is also responsible for gathering and housing data to support the validity and reliability of their product.

Regulation—Either a rule or a statute that prescribes the management, governance, or operating parameters for a given group; tends to be a function of administrative agencies to which a legislative body has delegated authority to promulgate rules/regulations to "regulate a given industry or profession." Most regulations are intended to protect the public health, safety, and welfare.

Scope of practice—Defined parameters of various duties or services that may be provided by an individual with specific credentials. Whether regulated by rule, statute, or court decision, it represents the limits of services an individual may legally perform.

Testing agency—Agency traditionally responsible for delivering a contracted examination. The responsibility of interpreting the results and defending the validity of those judgments is placed on the contractor.

Vocational/Technical—Refers to schools or programs specializing in the skilled trades, applied sciences, technology, and career preparation.

Appendix I. History of Occupational Regulation in EMS

The development of modern civilian EMS stems largely from lessons learned in providing medical care to soldiers injured in military conflict.

Building on these lessons, a number of rescue squads and ambulance services emerged in the civilian sector, often community-based in nature. Hospitals and funeral homes were also common sources of nascent response and transportation systems. While well intentioned, most of these personnel were untrained, poorly equipped, unorganized, and unsophisticated. The systems were unregulated, and no State or national standards existed. By the 1960s, prehospital care in the United States had evolved into a patchwork of well intentioned but uncoordinated efforts. This all changed in the mid-1960s.

In 1960, the President's Committee for Traffic Safety recognized the need to address "Health, Medical Care and Transportation of the Injured" to reduce the nation's highway fatalities and injuries.

In 1966, the National Academy of Sciences published a "white paper" report titled *Accidental Death and Disability: The Neglected Disease of Modern Society*[20]. This report quantified the magnitude of traffic-related death and disability while vividly describing the deficiencies in prehospital care in the United States. The white paper made a number of recommendations regarding ambulance systems, including a call for ambulance standards, State-level policies and regulations, and adopting methodology for providing consistent ambulance services at the local level (National Academy of Sciences National Research Council, 1966).

The Highway Safety Act of 1966 required each State to have a highway safety program that complied with uniform Federal standards, including "emergency services." This provided the impetus for the National Highway Traffic Safety Administration's early leadership role in EMS system improvements. Initial NHTSA EMS efforts were focused on improving the education of prehospital personnel such as the writing of the National Standard Curricula (NSC). Funding was also provided to assist States with the development of State EMS Offices. Subsequent NHTSA efforts were oriented toward comprehensive EMS system development and included, for instance, model State EMS legislation (Weingroff and Seabron, circa 2003).

The genesis of State EMS systems can also be traced to the early 1970s, when an unprecedented level of funding from the Federal Government and the Robert Wood Johnson Foundation prompted the establishment of regional EMS systems and demonstration projects throughout the country. The Emergency Medical Services Systems Act of 1973[21] (enacted by Congress as Title XII of the Public Health Service Act), yielded eight years and over $300 million of investment in EMS systems planning and implementation. The availability of EMS personnel and their training were two components that eligible entities were required to focus on, resulting in the first

generation of legislation and regulation of EMS personnel levels (National Highway Traffic Safety Administration, 1996).

In 1966, the National Academy of Sciences/National Research Council Committee on Trauma published the landmark document; *Accidental Death and Disability: The Neglected Disease of Modern Society* that called for improved training of ambulance personnel. Also in 1966, the Federal Highway Safety Act required each State to have a highway safety program that complied with uniform Federal standards, including "emergency services." That requirement provided the impetus for the National Highway Traffic Safety Administration's (NHTSA) early leadership role in EMS system improvements. Initial NHTSA EMS efforts were focused on improving the education of prehospital personnel such as the writing of the National Standard Curricula (NSC). Funding was also provided to assist States with the development of State EMS Offices. Subsequent NHTSA efforts were oriented toward comprehensive EMS system development and included, for instance, model State EMS legislation

Beginning in 1971 NHTSA published the first 81-hour curriculum for training EMT-Ambulance personnel. Other NSC followed for EMT-Paramedics and EMT-Intermediates. These propelled EMS systems forward in terms of standardizing the preparation of people filling roles in providing prehospital emergency care. The NSC gave detailed "how to teach this course" guidance down to the minute in how much time to spend on specific learning objectives. It was initially helpful to instructors who had never taught anyone to care for patients in the prehospital environment. The NSC became functionally synonymous with the *scope of practice* that EMS personnel could perform. EMS textbooks were published to align with the NSC. Many States referenced the NSC in their statutes and rules.

The practical effect of the NSC for EMS personnel was, an EMS person could generally do what they were taught to do. The practice and educational preparation of most other allied health professions begins with agreement on what a person in the job can do (i.e. a scope of practice) and then developing the education resources to prepare a qualified person to do that role. For EMS, education was driving practice and for all other professions, practice drives education.

As EMS systems began to mature, limitations of the NSC became increasingly evident. A few examples of these limitations included:

- **Integration of new technologies and evidence.** When AEDs became available and proved to be both reliable and effective for cardiac arrest resuscitation, there had to be an update to the NSC before use of AEDs could be widely taught to EMS personnel. The opposite was also true as EMS devices or practices began to be shown as harmful. The only way to remove content from teaching and practice was to revise the NSC.
- **The professionalism of EMS educators.** EMS courses began to be taught in many areas by experienced adult educators. These educators questioned the constraints of the NSC

when they found they needed more or less time than what was called for. The NSC provided no flexibility for how to deliver EMS courses.

- **State EMS Office role conflict.** States have the responsibility of setting scopes of practice for all levels of health care personnel and those who adopted the NSC functionally handed off this responsibility to a national document. There was no effective way structurally for States to reference the NSC and make local adaptations to both teaching and practice.

As a practical matter, the NSC also proved difficult and expensive to update. Controversy on periodic revisions stemmed from debate about EMS practice rather than updates to the education program.

The development of the *EMS Agenda for the Future* and the follow on *EMS Education Agenda for the Future: A Systems Approach* called for a new model of EMS education. Central to the new model was a National EMS Scope of Practice Model (SoPM) setting a floor on expectations for what every person would be prepared to do in their role. Once the SoPM was established, National EMS Education Standards were developed to guide instructors in the depth and breadth of content to be taught. The development of curricula on how best to teach the courses at each level is now left to individual instructors. EMS publishers provide an array of texts and other educational support materials.

One function of State EMS offices was to ensure the competence of the State's EMS personnel. States employed a number of strategies to help assure safe and effective EMS practice, including licensure and certification. Unfortunately, these terms developed multiple connotations in EMS. In some cases, the meanings differed from other disciplines, causing confusion and inconsistency at the national level.

In 1981, the Omnibus Budget Reconciliation Act (OBRA) eliminated the categorical federal funding to states established by the 1973 EMS Systems Act in favor of block grants to states for preventive health and health services. This change shifted responsibility for EMS from the federal to the state level[22]. By 1990, EMS in the United States had enjoyed many successes. Not only did EMS systems grow, but EMS became a career and volunteer activity for hundreds of thousands of talented, committed, and dedicated individuals. Emergency medical care was available to virtually every citizen in the country by simply dialing 9-1-1 from any telephone. Despite this progress, EMS was affected by a number of factors in the broader health care system.

In 1992, the National Association of EMS Physicians (NAEMSP) and the National Association of State EMS Directors (NASEMSD) saw a need for a long-term strategic direction for EMS, and the *EMS Agenda for the Future* was initiated with support from the National Highway Traffic Safety Administration and the Maternal and Child Health Bureau (MCHB) of the Heath

Resources and Services Administration (HRSA). Published in 1996, the *EMS Agenda for the Future* proposed a bold vision for greater integration of EMS into the U.S. health care system.

In 1993, the National Registry of EMTs (NREMT) released the *National Emergency Medical Services Education and Practice Blueprint*. The *Blueprint* defined an EMS educational and training system that would provide both the flexibility and structure needed to guide the development of national standard training curricula and guide the issuance of licensure and certification by the individual States.

In 1998, the Pew Health Professions Commission Taskforce on Health Care Workforce Regulation published *Strengthening Consumer Protection: Priorities for Health Care Workforce Regulation* (Finocchio, Dower et al., 1998)[23]. The report recommended that a national policy advisory board develop standards, including model legislative language, for uniform scopes of practice authority for the health professions. The report emphasized the need for States to enact and implement scopes of practice that are nationally uniform and based on the standards and models developed by the national policy advisory body.

Also in 1998, demonstrating their commitment to the *EMS Agenda*, NHTSA and HRSA jointly supported a two-year project to develop an integrated system of EMS regulation, education, certification, licensure, and educational program accreditation. The result was the *EMS Education Agenda for the Future: A Systems Approach*, which recognized the need for a systematic approach to meet the needs of the current EMS system while moving toward the vision proposed in the 1996 *EMS Agenda for the Future*. The *EMS Education Agenda* called for a more traditional approach to licensing EMS personnel.

A coordinated national EMS system continues to be in the best interest of States, EMS personnel, and the public. State EMS offices, while working in cooperation with their stakeholders, should implement scope of practice regulations that are as close as possible to those described in the *National EMS Scope of Practice Model*. This will help with professional recognition of EMS personnel, facilitate reciprocity, decrease confusion, and enable the development of high quality support systems to benefit the entire system.

Appendix II. Changes and Considerations from the 2007 Practice Model

The 2018 version of the *Practice Model* represents one frame of a motion picture of evolving EMS practice. Research and technology are constantly evolving and will continue to drive changes to EMS education and practice. Having the context for what did or did not change from the 2007 *Practice Model* may be useful in understanding some of the content in this document. The entire revision team deeply appreciates the thoughtful input received from the EMS community during multiple public reviews. While not every comment or suggestion was ultimately incorporated in the revision, all of them were considered and collectively played an important role in shaping the 2018 National EMS Scope of Practice Model.

Much of the effort in updating the 2018 *Practice Model* was focused on describing the interdependence between education, certification, licensure and credentialing and the narrative descriptions of each level, while attempting to more clearly document expectations in a way to minimize scope creep between the levels. While it is tempting to look at the specific list of skills included in the Interpretive Guidelines section, that list cannot be used to provide a complete understanding of the 2018 *Practice Model* for any level. The Interpretive Guidelines included in this document are intended to illustrate the kinds of skills and interventions personnel at various levels are educated, certified, licensed and otherwise qualified to do. This does not mean that every person at a particular level will routinely do every skill on the Interpretive Guideline list. One example of this is the obtaining and transmitting 12 lead electrocardiograms (ECG) at the EMT level. The *Expert Panel* recognized the strong research evidence to support the value of this skill for improving patient outcomes, especially in rural settings, however some systems have readily available paramedics and EMT's might not be utilized to provide this technology in such systems. The *Expert Panel* also recognized that the cost of technology might be prohibitive for some EMT level agencies. Accordingly, this is one example of a skill on which EMTs (and other levels of EMS personnel) will routinely be educated and tested but that preparation does not imply that the technology must or even should be available in every practice setting where EMTs function. In other words, such a task should be valued/permitted but not required if the necessary equipment/resources to complete the task are not available to personnel.

Finally, States maintain the regulatory flexibility to permit licensees to exceed the *Practice Model* but they do so along with the need to develop learning objectives, educational content, competency measures, and a credentialing process to ensure safe practice. As an example, some States allow licensed EMTs to draw up a unit dose of epinephrine for IM injection to treat anaphylaxis from a single or multi-dose vial although this activity is dependent on strict oversight by a physician medical director and is not permitted in all jurisdictions.

Nomenclature

The *Expert Panel* considered a recommendation[24] from the National EMS Advisory Council (NEMSAC) to recognize and use the term "paramedicine" to describe the professional discipline that is currently recognized as EMS. Because the national discussion on this important topic has just begun, the group ultimately did not support a change to nomenclature for the 2018 *Practice Model* revision. When greater consensus among national EMS organizations and other EMS stakeholders is achieved, the recommendation could be considered during the next revision cycle.

Academic Degree Requirements for Paramedics

Consideration was given by the *Expert Panel* to calling for an associate degree as an entry-level education requirement for paramedics. Arguments in favor of this change include recognition of the complexity and sometimes ambiguity inherent to paramedic practice, increasing the professional recognition of paramedics, a logical pathway towards better compensation, and comparability with other health care professions. Arguments against this change include the challenges of integrating associate degree academic preparation into fire, hospital or other non-academic institution based programs. Concerns were voiced that increasing academic preparation requirements could increase the cost of education, shrink the hiring pool of paramedics for employers and threaten existing paramedic level service delivery programs. The *Expert Panel* considers this topic as a subject worthy of further national debate and exploration. While the group clearly recognizes education as the foundation of any profession's scope of practice, the difficulty of considering transitional variables such as grandfathering existing personnel and programs, workforce recruitment and retention, etc. were beyond the scope of this project.

Attendant Qualifications for Ambulance Transport

The *Expert Panel* was asked to evaluate the practice of EMRs serving as part of an ambulance crew, and more specifically as the primary care giver during ambulance transport; meaning an EMR attending to the patient in the back of an ambulance enroute to a medical facility without a higher level of licensed EMS practitioner physically present in the same compartment as the patient.

While defining ambulance crew composition is outside the scope of this document, the *Expert Panel* did consider the lack of scientific evidence to support the utilization of EMRs as a means to fulfill clinical staffing requirements during the transport phase of EMS care when it developed the description for an EMR in Section IV of this document. Considering the education, certification, licensing, and credentialing processes pertaining to EMS practice, the *Expert Panel* reaffirms that while an EMR may be used to assist patient care in an ambulance, an EMT (or higher level personnel) must be physically present in the patient compartment and assume responsibility for the delivery of care during transport.

Patients transported by ambulance require ongoing assessment and treatment that is intended to ensure their continued safety and positive clinical outcomes. Patient condition during transport can decompensate quickly, requiring a greater depth and breadth of knowledge that enables EMS personnel to anticipate and interpret subtle physiologic changes and provide interventions that are not taught at the EMR level.

States are encouraged to help communities identify resources to ensure licensed practitioners at the EMT or higher levels are available to care for patients that require transport by an ambulance.

Portable Technologies

Exponential improvements and availability of portable technologies, such as left ventricular assist devices (LVAD), patient controlled analgesia pumps, transport ventilators, etc., creates complex challenges for education and credentialing that did not exist a decade ago. Such patient care needs may be encountered by all levels of personnel in community and 9-1-1 settings and also with patients originating in health care facilities during transfers. Even when the patient's condition would not require EMS interaction with a device or intervention during transport, the variability of circumstances under which EMS delivery systems will likely encounter these patients steered the *Expert Panel* away from a call for specific levels of EMS personnel to be qualified in managing complex technologies, including non-invasive diagnostic equipment (e.g., ultrasound.) The actions of EMS personnel with regard to portable equipment and technologies have intentionally been left to local medical director credentialing.

Deletions/Updates

Evolution and fine-tuning of the Interpretive Guidelines to eliminate redundancy resulted in changes that may be perceived as certain skills being eliminated from the *Practice Model*. The only "true" deletions include Military AntiShock Trousers (MAST)/Pneumatic AntiShock Garment (PASG), spinal "immobilization" (this terminology has been revised), demand valves, carotid massage, automated transport ventilators at the EMT level (deferred to a decision by the medical director), and modified jaw thrust for trauma. Newer evidence suggests that these references are antiquated and/or no longer recommended. Spinal immobilization was amended to reflect current thinking on spinal motion restriction and additional skills were incorporated at all levels. The topic of "assisting" patients with their own prescribed medications was also revisited. The mechanical task of opening bottles or providing a drink of water aside, aid associated with placing a tablet in the patient's mouth, activating an inhaler, or delivering a dose of medication via autoinjector is clearly an act of medication administration. Administration of medication requires a thorough understanding of the drug, including how it moves through the body, when it needs to be administered, possible side effects and dangerous reactions, proper storage, handling, and disposal, and an entire process for confirming patient identification (for

the prescription), route, dose, timing, expiration dates, and that the container actually contains the medication the label says is intended. Medication errors happen all too often in the United States, even when drugs are given by professionals. In fact, medication errors are the cause of 1.3 million injuries each year. These errors are due to the wrong drug, dose, timing, or route of administration. Preparing, giving and evaluating the effectiveness of prescription and non-prescription medication is not in the scope of practice for EMS personnel, with the exceptions described in the Interpretive Guidelines and those authorized by the State and physician medical director. References to "assist patients in taking their own prescribed medications" have been identified as confusing by educators and practitioners and the *Expert Panel* has advised they be removed from the *Practice Model.*

Other elements that were removed from the 2007 Interpretive Guidelines were intended to minimize redundancy and not intended to reflect removal from the *Practice Model.* Examples include cricoid pressure (considered to be a component of airway management) and therapeutic PEEP (considered to be a component of ventilator management at the paramedic level).

Additions to the Interpretive Guidelines

The *Expert Panel* considered several proposed additions to the Interpretive Guidelines and an NREMT Practice Analysis was utilized to evaluate the frequency and level of skills. Sensitive to the impact of increased didactic and psychomotor instruction that effectively translates to added course time and potential monetary expense to programs and student candidates, the *Expert Panel* considered changes in practice by addressing the following questions:

1. Is there evidence that the procedure or skill is beneficial to public health?
2. What is the clinical evidence that the new skill or technique as used by EMS personnel will promote access to quality health care or improve patient outcomes?
3. What is the appropriate level of education, certification, licensure and credentialing needed to safely perform the task/skill?

Several of the suggestions received by the *Expert Panel* were felt to be above the level of entry-level personnel and were not included. In particular, interventions that are regularly performed by the lay public, such as self-administered medications, blood glucose monitoring, and pulse oximetry were considered at length. It is noted that patients receive health education and training from their primary care provider to perform activities that are tailored to their personal medical histories and response to prescribed interventions over time. The *Expert Panel* maintains that licensed individuals at all levels are highly accountable for the medical care they provide as well as the maintenance and calibration of medical equipment used in the course of a patient encounter. Health professionals are not only educated to provide an intervention, they receive education in the associated risks and potential complications, related pharmacology (when medications are involved), and they are able to analyze the effectiveness of treatment. Perhaps the most critical difference between the lay public and EMS personnel assuming responsibility for a particular task/skill: licensed individuals are taught to assimilate information and apply

critical thinking skills to know when to and when not to apply an intervention in a particular scenario. In the example of blood glucose monitoring, it is also important to note that the use of such devices by EMS personnel invokes the federal-level Clinical Laboratory Improvement Amendments[25] (CLIA) to the Public Health Services Act. In regards to pulse oximeters (that can be purchased inexpensively at discount stores), there is no evidence to support an assertion that a pulse oximeter in the hands of an EMR (or other level of EMS practitioner) is more effective than hands on patient assessment in determining the need for supplemental oxygen although false readings from a variety of causes have resulted in undetected patient compromise and a false sense of security by users. Such equipment are adjuncts that should be used judiciously in conjunction with sound clinical judgment. Of the remaining tasks/skills, the *Expert Panel* deliberated which level was most appropriate to implement the task/skill.

The *Expert Panel* concluded that spinal motion restriction using cervical collars and basic splinting for suspected extremity fractures were appropriate additions to the *Practice Model* at the EMR level.

At the EMT level, the *Expert Panel* agreed on the administration of beta agonists and anticholinergics, oral over-the-counter (OTC) analgesics for pain or fever, blood glucose monitoring, continuous positive airway pressure devices (CPAP), and pulse oximetry. The *Expert Panel* also agrees that there will be instances of lower level personnel providing assistance to higher levels — assisting with skills of the high-level personnel when the higher-level personnel does the key portion of the procedure, the assistance is authorized by the medical director, the assistance is in the direct presence and supervision of the higher-level personnel, and the assistance is permitted by the State.

The use of supraglottic airways (SGA) and waveform capnography at the EMT level was extensively debated. Several public commenters expressed a lack of support on draft language that proposed to add them to the interpretive guidelines for EMTs during the national engagement period. The *Expert Panel* was evenly divided on the topic. Several "pros" and "cons" for adding SGA and waveform capnography for EMTs at the national level were considered. It was noted that several jurisdictions are already using SGA as a more definitive airway than the BVM although some panelists added that the BVM is not taught well or used effectively in many cases. Major "cons" point to a critical patient safety concern if an SGA is not placed properly or is not verified using waveform capnography. Many felt the education for SGA and waveform capnography would add significant time and increase expense to the EMT program, a consideration that was worrisome and expressed by the public and members of the *Expert Panel.* Others suggested that BVM ventilation may not be done well, but a misplaced advanced airway could lead to no ventilation and patient detriment or demise. Finally, a limited review of the literature highlights the fact there is a general lack of evidence that SGA improves outcomes in cardiac arrest or other etiologies over BVM ventilation. The *Expert Panel* concluded that while SGA and waveform capnography could successfully be taught and measured at the EMT level, it is an intervention that should be reserved for an experienced practitioner and

therefore, is not a prudent addition as an entry-level skill to the *Practice Model* for an EMT at this time. Some States currently allow licensed EMTs to use SGA and/or waveform capnography although this activity is dependent on strict oversight by a physician medical director and is not permitted in all jurisdictions.

Additions to the AEMT level include monitoring and interpretation of waveform capnography, additional intravenous medications (such as epinephrine during cardiac arrest and ondansetron), and parenteral analgesia for pain.

The Paramedic scope of practice was considered most in alignment with current practice, however, the *Expert Panel* recommended the addition of high flow nasal cannula, and expanded use of OTC medications.

None of these changes should be considered "in effect" until officially adopted by the State licensing authority and medical director.

Appendix III. Legal Differences Between Certification and Licensure

Used with permission: National Registry of Emergency Medical Technicians

https://www.nremt.org/rwd/public/document/certification_licensure

Although the general public continues to use the terms interchangeably, there are important functional distinctions between certification and licensure.

Certification

The federal government has defined "certification" as the process by which **a non-governmental organization grants recognition to an individual who has met predetermined qualifications specified by that organization.**[26] Similarly, the National Commission for Certifying Agencies defines certification as "a process, often voluntary, by which individuals who have demonstrated the level of knowledge and skill required in the profession, occupation, role, or skill are identified to the public and other stakeholders."[27]

Accordingly, there are three hallmarks of certification (as functionally defined). Certification is:

1. voluntary process;
2. by a private organization;
3. for the purpose of providing the public information on those individuals who have successfully completed the certification process (usually entailing successful completion of educational and testing requirements) and demonstrated their ability to perform their profession competently.

Nearly every profession certifies its members in some way, but a prime example is medicine. Private certifying boards certify physician specialists. Although certification may assist a physician in obtaining hospital privileges, or participating as a preferred provider within a health insurer's network, it does not affect his legal authority to practice medicine. For instance, a surgeon can practice medicine in any state in which he is licensed regardless of whether or not he is certified by the American Board of Surgery.

Licensure

Licensure, on the other hand, is the state's grant of legal authority, pursuant to the state's police powers, to practice a profession within a designated scope of practice. Under the licensure system, states define, by statute, the tasks and function or scope of practice of a profession and provide that these tasks may be legally performed only by those who are licensed. As such, licensure prohibits anyone from practicing the profession who is not licensed, regardless of whether or not the individual has been certified by a private organization.

What if my state certifies, not licenses, EMS professionals?
Confusion between the terms "certification" and "licensure" arises because many states call their licensure processes "certification," particularly when they incorporate the standards and requirements of private certifying bodies in their licensing statutes and require that an individual be certified in order to have state authorization to practice. The use of certification by the NREMT by some states as a basis for granting individuals the right to practice as EMTs and calling the authorization granted "certification" is an example of this practice. Nevertheless, certification by the National Registry, by itself, does not give an individual the right to practice.

Regardless of what descriptive title is used by a state agency, if an occupation has a statutorily or regulatorily defined scope of practice and only individuals authorized by the state can perform those functions and activities, the authorized individuals are licensed. It does not matter if the authorization is called something other than a license; the authorization has the legal effect of a license.

In sum, the NREMT is a private certifying organization. The various State EMS Offices or like agencies serve as the state licensing agencies. Certification by the NREMT is a distinct process from licensure; and it serves the important independent purpose of identifying for the public, state licensure agencies and employers, those individuals who have successfully completed the Registry's educational requirements and demonstrated their skills and abilities in the mandated examinations. Furthermore, the NREMT's tracking of adverse licensure actions and criminal convictions provides an important source of information, which protects the public and aids in the mobility of EMS providers.

Appendix IV. Acknowledgements

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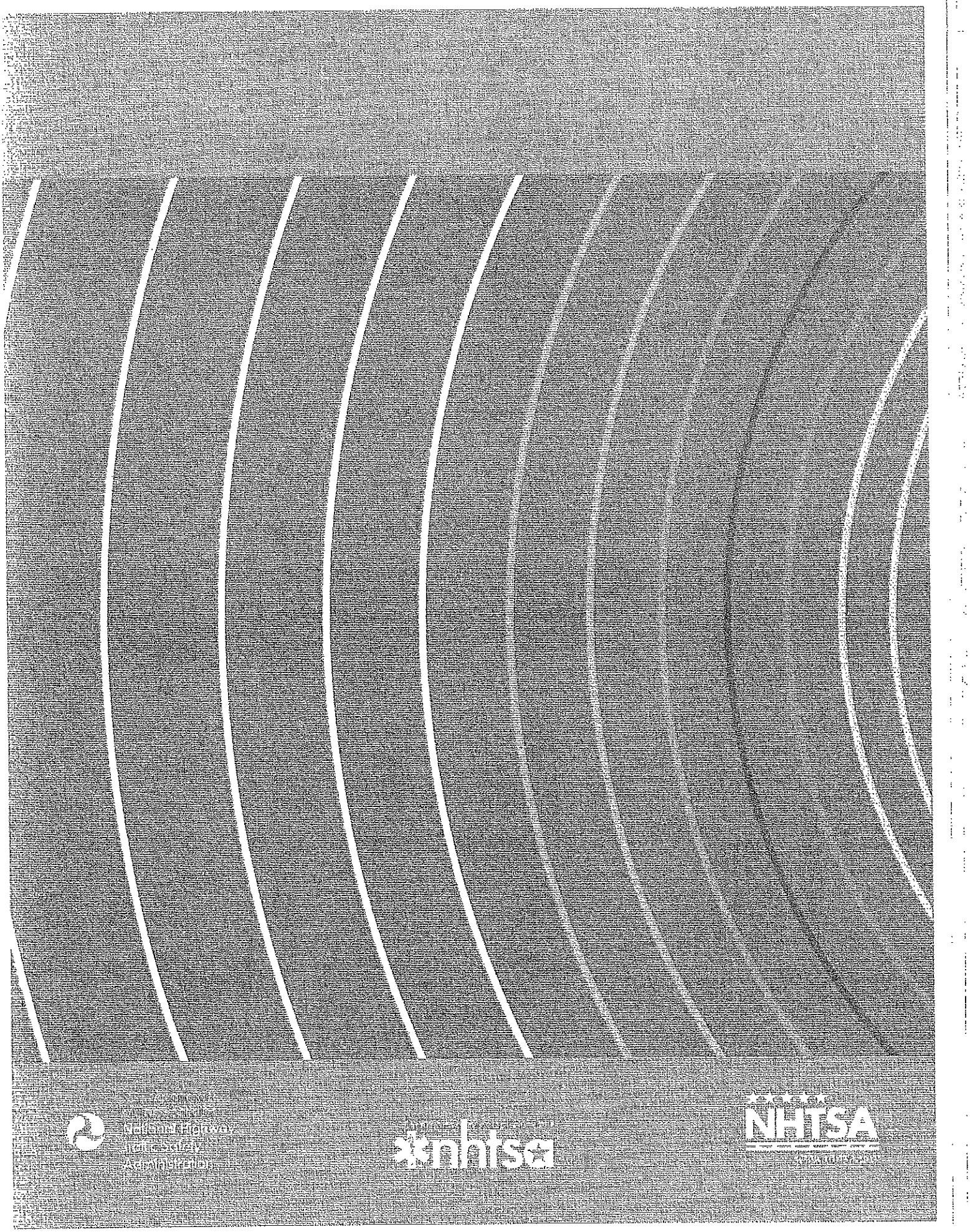

National Highway
Traffic Safety
Administration
NHTSA

IDHS Scope of Practice Clarification Spreadsheet
10/10/2019
To be presented at the November EMS Commission meeting

Key/Legend
X = NHTSA 2018 EMS Scope of Practice
Green = Current Indiana EMS Scope of Practice
Yellow = Current Indiana allowed skill, but NOT p
Red = Not part of the current Indiana Scope of pr
Blue = Not specifically mentioned in current India
* See discussion in notes section

I. Skill – Airway / Ventilation / Oxygenation	EMR	EMT	AEMT	Paramedic
Airway – nasal		X	X	X
Airway – oral	X	X	X	X
Airway – supraglottic			X	X
Bag-valve-mask (BVM)	X	X	X	X
CPAP				X
Chest decompression - needle				X
Chest tube placement – assist only				X
Chest tube – monitoring and management				X
Cricothyrotomy				X
End tidal CO_2 monitoring and interpretation of waveform capnography				X
Gastric decompression – NG Tube				X
Gastric decompression – OG Tube				X
Head tilt - chin lift	X	X	X	X
Endotracheal intubation				X
Jaw-thrust	X	X	X	X
Mouth-to-barrier	X	X	X	X

I. Skill – Airway / Ventilation / Oxygenation	EMR	EMT	AEMT	Paramedic
Mouth-to-mask	X	X	X	X
Mouth-to-mouth	X	X	X	X
Mouth-to-nose	X	X	X	X
Mouth-to-stoma	X	X	X	X
Airway Obstruction – dislodgement by direct laryngoscopy				X
Airway Obstruction – manual dislodgement techniques	X	X	X	X

Oxygen therapy – High flow nasal cannula				X
Oxygen therapy – Humidifiers		X	X	X
Oxygen therapy – Nasal cannula	X	X	X	X
Oxygen therapy – Non-rebreather mask	X	X	X	X
Oxygen therapy – partial rebreather mask		X	X	X
Oxygen therapy – simple face mask		X	X	X
Oxygen therapy – Venturi mask		X	X	X
Pulse oximetry		X	X	X
Suctioning – Upper airway	X	X	X	X
Suctioning – tracheobronchial of an intubated patient			X	X

II. Skill – Cardiovascular / Circulation	EMR	EMT	AEMT	Paramedic
Cardiopulmonary resuscitation (CPR)	X	X	X	X
12 lead ECG acquisition and transmission		X	X	X
12 lead electrocardiogram (interpretive)			*	X
Cardiac monitoring (3 lead - continuous)			*	X

II. Skill – Cardiovascular / Circulation	EMR	EMT	AEMT	Paramedic
Cardioversion – electrical				X
Defibrillation – automated / semi- automated	X	X	X	X
Defibrillation – manual				X
Hemorrhage control – direct pressure	X	X	X	X
Hemorrhage control – tourniquet	X	X	X	X
Hemorrhage control – wound packing	X	X	X	X
Transvenous cardiac pacing – monitoring and maintenance				X
Mechanical CPR device		X	X	X
Telemetric monitoring devices transmission of clinical data including video		X	X	X
Transcutaneous pacing				X

III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint	EMR	EMT	AEMT	Paramedic
Cervical collar	X	X	X	X

Long spine board		X	X	X
Manual cervical stabilization	X	X	X	X
Seated SMR (KED, etc.)		X	X	X
Extremity stabilization - manual	X	X	X	X
Extremity splinting	X	X	X	X
Splint – traction		X	X	X
Mechanical patient restraint		X	X	X

III. Skill – Splinting, Spinal Motion Restriction (SMR), and Patient Restraint	EMR	EMT	AEMT	Paramedic
Emergency moves for endangered patients	X	X	X	X

IV. Skill – Medication Administration – Routes	EMR	EMT	AEMT	Paramedic
Aerosolized/nebulized			X	X
Endotracheal tube				X
Inhaled	X	X	X	X
Intradermal				X
Intramuscular		X	X	X
Intramuscular – auto-injector	X	X	X	X
Intranasal			X	X
Intranasal - unit-dosed, premeasured	X	X	X	X
Intraosseous – initiation, peds or adult			X	X
Intravenous			X	X
Mucosal/Sublingual		X	X	X
Nasogastric				X
Oral		X	X	X
Rectal				X
Subcutaneous			X	X
Topical				X
Transdermal				X

V. Medical Director Approved Medications	EMR	EMT	AEMT	Paramedic

Use of epinephrine (auto-injector) for anaphylaxis (supplied and carried by the EMS agency)		X	X	X
Use of auto-injector antidotes for chemical/hazardous material exposures	X	X	X	X
Use of opioid antagonist auto-injector for suspected opioid overdose	X	X	X	X
Immunizations			X	X
Inhaled – beta agonist/bronchodilator and anticholinergic for dyspnea and wheezing			X*	X
Inhaled – monitor patient administered (i.e., nitrous oxide)			X	X
Intranasal - opioid antagonist for suspected opioid overdose	X	X	X	X
Intravenous				X
Maintain an infusion of blood or blood products				X
Oral aspirin for chest pain of suspected ischemic origin		X	X	X
Oral glucose for suspected hypoglycemia		X	X	X
Oral over the counter (OTC) analgesics for pain or fever				X
OTC medications, oral and topical				X
Parenteral analgesia for pain				X
Sublingual nitroglycerin for chest pain of suspected ischemic origin – limited to *patient's own prescribed med*		X	X	X
Sublingual nitroglycerin for chest pain of suspected ischemic origin			X	X
Thrombolytics				X

VI. Skill – IV Initiation/Maintenance Fluids	**EMR**	**EMT**	**AEMT**	**Paramedic**
Access indwelling catheters and implanted central IV ports				X
Central line – monitoring				X
Intraosseous – initiation, peds or adult			X	X
Intravenous access			X	X
Intravenous initiation - peripheral			X	X
Intravenous – maintenance of non- medicated IV fluids		*	X	X
Intravenous – maintenance of medicated IV fluids		*	*	X

VII. Skill – Miscellaneous	**EMR**	**EMT**	**AEMT**	**Paramedic**
Assisted delivery (childbirth)	X	X	X	X
Assisted complicated delivery (childbirth)		X	X	X
Blood chemistry analysis				X
Blood pressure automated		X	X	X
Blood pressure – manual	X	X	X	X

Blood glucose monitoring		X	X	X
Eye irrigation	X	X	X	X
Eye irrigation –hands free irrigation using sterile eye irrigation device				X
Patient transport		X	X	X
Venous blood sampling			X	X

art of the 2018 Scope of Practice
actice but IDHS would like to add
ına Scope of Practice but is allowed with medical director approval

Notes

Already being taught. Would not require a skills sheet change.

Already taught, already tested in Indiana at EMT level.

Not taught, not part of current curriculum. Will be part of 2021 curriculum. Will require medical director approval/credential for all existing EI

BLS for confirmation only vs. for all monitoring and diagnostic purposes. Is there an impact to billing and reimbursement. Will require medical

Note that lines 47, 48, 49 were modified from NHTSA 2018 published scope for clarification purposes.
* Warrants discussion

Intepretted to mean transmission of clinical data without adding to scope

Must be within scope of practice
IDHS to provide State required training to all existing EMTs. Would still require local protocol and credentialling.

AEMT currently limited to only Albuterol, this would add others.

Limited to analgesia, antinausea/antiemetic, dextrose, epinephrine, glucagon, naloxone, and others defined by state/local protocol. (currently D50 and saline.)

Medication administration is already taught, education to be provided locally. Would still require local protocol and medical director approval

Local medical director training. Would still require local protocol and medical director credential/approval

Some limited and allowed by current Indiana Scope of practice

Already done in practice and taught how to do manual.

MT, AEMT.

director approval/credential for all existing EMT, AEMT. IDHS to create and publish State required training. Would still require local MD protocol and

credentialling.

ATTACHMENT #4

Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director
302 W. Washington St. Room E241
Indianapolis, Indiana 46204
MKaufmann@dhs.in.gov
317-514-6985
10/31/2019

Dear EMS Commissioners:

At the last meeting of Indiana EMS Commission, myself and IDHS introduced our intent to initiate discussion and movement on further developing Mobile Integrated Healthcare/Community Paramedic (MIHP) programs in the State of Indiana. You will recall the passage and adoption of SEA498 (copy sent along with this letter as a separate attachment) that gives the EMS Commission, in consultation with the Department of Homeland Security (IDHS EMS Division) the authority to do the following:

- Develop a mobile integrated healthcare program
- Define the type of healthcare that can be provided under this program
- Define the training or education that is needed in providing services under this program
- Address the issues of certification, endorsement, oversight, and reporting for this program
- Establish an application for EMS provider agencies wishing to develop these programs
- Establish a committee to review and approve applications and provide general guidance to the development of MIHP programs

IDHS has been working diligently collecting information for your consideration to move forward on these action items. Over the summer months, we conducted a state by state survey and assessment of the status of MIHP programs across our county. To date, MIHP programs are recognized in more than 33 other states, many of which have already developed training and education requirements, as well as rules and regulations to guide the development of new MIHP programs. This compilation of this data is also attached to this email. Likewise, IDHS engage and collaborated with the School of Public Health from Purdue University to further analyze this data and make some specific recommendations for the EMS Commission to consider as next steps in better defining the practice of MIHP for EMS provider agencies and their licensed providers in Indiana. You will find that summary, along with specific recommendations also attached to this email.

The EMS Scope of practice is scheduled to be discussed at the November EMS Commission meeting. If time allows, I would also request that the EMS Commission discuss this information and or adopt the recommendations provided to better define the practice of MIHP. Those recommendations include the following:

MIH-CP Certification

- **MIH-CP Initial Certification**
  - Completion of an accredited MIH-CP training program; OR
  - An EMS Commission approved MIH-CP training program; OR
  - Documented post-secondary education with at least two credit hours in each of the following content areas: social determinants of health, cross-cultural communication, public health, roles and responsibilities of community paramedicine, management of chronic disease AND a three credit hour practicum/supervised clinical practice; OR
  - International Board of Specialty Certification (IBSC): Certified Community Paramedic

- **MIH-CP Certification Renewal**
  - Four hours every two years in MIH-CP specific content areas (Examples: social determinants of health, chronic disease, addiction, maternal/infant health, etc.); AND
  - Verification of MIH-CP skill competence

MIH-CP Oversight

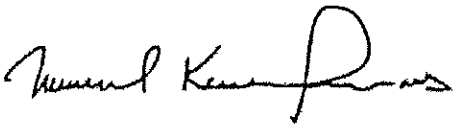
- **Program Monitoring**
  - Quarterly evaluation of program processes and outcomes for the first two years of operation for each service provider organization followed by standard service provider renewal process

- **MIH-CP Advisory Board**
  - Dedicated MIH-CP board with seats representing the diverse stakeholders in MIH-CP in Indiana, including but not limited to:
    - State EMS Medical Director
    - State EMS Director
    - EMS Medical Directors
    - MIH-CP program director
    - Municipal EMS CP program
    - Non-municipal CP program
    - College/University
    - MIH-CP provider
    - MIH-CP patient
    - Professional organizations
    - Representatives from other relevant professions
    - FSSA Representative

- Insurance Industry Representative
- Indiana State Department of Health representative
- Indiana Hospital Association representative

If time at the November EMS Commission meeting doesn't allow for an in-depth discussion of this topic, this can be moved to the January EMS Commission meeting. My hope is that we can work cooperatively to further define this new and exciting opportunity to create new roles for the EMS provider that positively impact the healthcare of Hoosiers all across our state. Creating rule and regulation is not intended to stifle new program development, but rather provide guidance to establish a minimum requirement and standard for which all programs will need to follow. This will be necessary to bring a level of accountability and credibility to these programs as a precursor to pursing reimbursement mechanisms for these new provider activities.

On behalf of the entire staff of the Indiana Department of Homeland Security EMS Division, thank you for your participation and guidance of our EMS system of care.



Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director

MIH-CP STATE BY STATE ANALYSIS

1. ALABAMA

A. Scopes of practice as of January 2018 (9th edition of scope of practice law)

i. Defined as an EMS personnel that visits patients for preventative purposes (reducing emergencies)

ii. During regularly scheduled visits, they are limited to BLS interventions only

1. *If emergency treatment is identified to be needed, they can then perform within their scope of practice the necessary interventions and then set up transport to the hospital*

iii. https://www.alabamapublichealth.gov/ems/assets/9thEditionProtocolsFinal.pdf

iv. February 7th, 2018 is when a "community paramedicine protocol" was added

1. *Coincides with "national prehospital scopes of practice"*
2. *https://www.alabamapublichealth.gov/ems/assets/9thEditionProtocolSummary.pdf*
3.

B. Responsibility of patient section for EMS protocols 420-2-1-.20

i. Shall discontinue patient care when directed to do so by on-line medical direction

1. *Does this mean that for regularly scheduled visits as part of community paramedicine that they still have to contact a MD to terminate patient contact?—nothing says either way*

C. EMS rules of Alabama (updated as of April 6th, 2019) make no mention of MIH or CP specifically except in scope of practice

i. No specific requirements as to what a CP is (unlike critical care or flight, which have specific education guidelines)

ii. Does state that all preventative care should be approved by Medical Director

D. Billing

i. In "home health" section of Alabama Medicaid billing, Paramedic is NOT an "authorized non-physician practitioner" and therefore can not provide billable "home-health" services

ii. 17.2.2 specifically states that paramedical personnel are NOT covered

1. https://www.medicaid.alabama.gov/content/Gated/7.6.1G_Provider_Manuals/7.6.1.2G_Apr2019/Apr19_17.pdf

iii. Nothing in "Ambulance (Ground & Air)" mentions CP, it is all billing by miles traveled and intervention level (ALS1, ALS 2, BLS, etc.)

E. ACTION team used in Tuscaloosa, AL but uses an NP rather than a medic

i. Probably makes this a billable practice to Medicaid

ii. Started with a 500k Medicaid grant (can't find an actual legal document saying this)

1. https://www.emsworld.com/news/219651/ala-city-launches-paramedicine-program
2. https://www.tuscaloosa.com/fire/action

2. ALASKA

A. There is NO program that is referred to a MIH, CP, or EMS 3.0-Their version is "Community Health Aide Program Certification Board"

i. Have various levels of home health aids that have different scopes of practice

1. *These are all unique to Alaska*

3. ARIZONA

A. Referred to as "Treat and Refer program"

i. An EMS agency must be recognized under this program in order to bill for these kinds of services

1. *Can then bill AHCCCS*

ii. This program establishes "guidelines" **not** scope, can therefore be tailored to individual community needs

1. *Increases role that EMS plays in the community*

iii. Program has a lot of internal checks to make sure it is being implemented well and having a positive impact on community (refer to document for how this is done)

1. *"Performance monitoring and improvement plan"*

B. Education (under treat and refer)

i. Each agency can develop their own education program to best fit the needs of their community but there are 12 hours of required competencies (listed below)

ii. Required hours for initial certification: 12

1. *Patient transportation: 0.5hrs*
2. *Transportation destinations: 1.0hrs*

3. *Patient Risk assessment: 1.0hrs*
4. *Medical Training and education: 3.0hrs*
5. *Special Patient populations: 2.0hrs*
6. *Patient follow-up: 1.0hrs*
7. *Medical-legal considerations, definitions & documentation: 2 hrs*
8. *Information exchange and collaboration: 1hrs*
9. *Public education: 0.5hrs*

iii. **4 hours of continuing education required every year**

C. EMS law (36-2239)

i. States that ambulance can bill for ALS for BLS service as long as treatment OR transport occurred

ii. Problem for MIH: Ambulance must have been requested via 911 (or a similar number) for emergency services

1. *Therefore only agencies recognized under "treat and refer" can provide non-emergency services*

iii. Analysis of EMS law: http://www.astho.org/Preparedness/ASTHO-EMS-and-Law-Report/

iv.

4. ARKANSAS

i. HB 1133 (2015)- Creates an actual license for community paramedics

1. *Education- 300 hours of classroom and clinical time per law but what I found online seemed to contradict. Will need to check with specific curriculum*

a. *Cannot find more specific information as to what is required or specific curriculum*

5. CALIFORNIA

A. All programs are pilot programs and this is required due to current California EMS law not allowing for Community paramedicine (indirectly due to stringent wording of law)

B. AB-3115 allows CP's to triage and transport to more appropriate facility that is not the ER

C. Paper in EMS world states the California Medicaid reimburses for MIH-CP but I can't find any evidence this is true (now waiting on email from author)

i. https://www.emsworld.com/article/219934/georgia-medicaid-pay-treatment-scene-alternative-destinations

D. CORE education program (name given to community paramedic curriculum as it was adapted from North Central EMS's program (Community Paramedic Curriculum 3.0) as well as The paramedic foundation (St. Cloud, Minn.)

i. There were 11 sessions with the 12 session being final examination. They don't mention length of each session. Each session topic listed below

1. *Intro to California CP program/ Role of CP in the healthcare system*
2. *Public health and primary care role of the CP*
3. *Social determinants of health*
4. *Developing a culture of competency*
5. *CP role in community Part 1*
6. *CP role in community Part 2*
7. *CP role in community Part 3*
8. *Psychosocial standardized patient encounters*
9. *CP's personal safety and wellness*
10. *Clinical assessment, application and skills for the CP*
11. *Standardized patient encounters of patients with medical complaints*
12. *Final exam*

ii. EMS 3.0 that this is based on states that it takes approximately **100 hours** to get through the course materials

6. COLORADO

A. EMS law CCR 1015

i. Section 17-Community Paramedicine

ii. To obtain CP endorsement

1. *Certified by IBSC (International board of specialty certification) via examination*
   a. *Do not require course to take test*
   b. *In order to recertify, must retest every 4 years*
2. *Completion of a CP course from accredited program, college, or university*

B. CCR 1011-3

i. Section 5.3.1- Staff and CIHCS

1. *Continuing education minimum of 12 hours or 12 sessions per year*

ii. 5.3.4

1. ***Scope of practice increases** for a qualified CP*

C. Education

i. Must be through an accredited institution (medic program, college, or university)

ii. Seem to use EMS 3.0 curriculum

1. *Based on other places, roughly 100 hours to complete*

iii.

iv. Colorado Mountain College (should be returning my call)

D. Billing

i. Does not appear to have any way to reimburse for services

1. *Eagle County is self funded through grants*
2. *No mention of CP in any of the Colorado Billing manuals- https://www.colorado.gov/hcpf/billing-manuals*

7. CONNECTICUT

A. Senate Bill 317 (March 30, 2017) allowed for 3 pilot programs of CP/MIH to start

i. Requested a report of effectiveness of these programs no later than January 1st, 2020

B. HB 7222 (June 30, 2017) allowed for a paramedic to provide home health services under a mobile integrated healthcare plan

i. Established a "Working group" to implement MIH

C. Legislative report to general assembly (March 1st, 2019)

i. Outlined specific ways MIH could help and how it should be implemented

ii. Currently a few laws that need to be revised before MIH can be implemented outside of a pilot program

iii. Lists a series of 7 recommendations (including core competencies) that each CP should have. Does not expand into how these competencies are tested

D. No current education requirements

E. No way to bill for non-emergent treatment via MIH

8. DELAWARE

A. Title 16 states that medic services are used in emergencies only

https://www.dhss.delaware.gov/dhss/dph/ems/files/demsocreport2017.pdf

i. "In Delaware however, to utilize paramedics and EMTs for non-emergency work under the control of non-emergency physicians will require a change in the Delaware EMS legislation"

B. According to the DEMSOC report 2018, the Delaware EMS medical director was interested in starting a pilot MIH program between Sussex county EMS and Beeb medical center.

i. https://www.dhss.delaware.gov/dhss/dph/ems/files/demsocreport2018.pdf

ii. Could not find current info on if this program has begun (Probably hasn't)

9. FLORIDA-WAITING ON EMAIL

A. 64J-1.009 Paramedic law-Does not mention CP

B. **Chapter 401**- Medical Telecommunications and transportation

i. 401.272- EMS community healthcare (2018)

1. *"Paramedics may perform health promotion and wellness activities..."*
2. *Allows them to operate in this capacity in nonemergency situations*

C. Does not seem to be a way to bill for reimbursement of these services

i. Funding has come through grants from the state and local hospital systems

ii. Agency for Healthcare Administration has been giving grants to start programs all over the state but continued funding is up to individual program

D. Programs

i. Manatee county EMS, Gainesville fire & Rescue,

E. Education

i. There isn't a standard in the state

ii. Seminole state college has a regionally accredited CP program (12 credit hours)

1. *Introduction to CP (3)*
2. *Mobile Integrated Healthcare (6)*
3. *Advanced practice paramedicine (3)*

10. GEORGIA

A. 31-11-54 EMS law regarding role of a paramedic is vague and therefore MIH-CP is allowed

B. No law that directly addresses MIH

C. There are examples of MIH-CP but no details about how they are run or what kind of educational requirement are needed for the medics

i. Seems to be entirely up to the individual department/program as to what is required.

D. Funding for programs seems to be grant based, no way to bill

i. RURAL COMMUNITY CARE COORDINATION TOOLKIT FOR EMS GRANT (2017)

1. *Gives EMS agencies resources to connect with local healthcare agencies to provide alternative transport destinations*

ii. Mobile Healthcare Access and Integration Pilot Study (July 1st 2018-June 30th 2020)
    1. *No education requirements for paramedics, puts all responsibility on the medical director for ensuring the competency of medics*
iii. EMS-Ambulance.law is a Georgia based website that provides insight into Georgia laws as they pertain to MIH-CP

11. HAWAII

A. HCR90 (2016) requested a working group and pilot programs be made to investigate MIH-CP
B. SB2374- would have started a 3 year pilot program for CP but died in committee (2018)
    i. Would have also requested education of CP's be done through university/college
    ii. Bill for service would have been set up
C. Doesn't seem to be any laws preventing MIH-CP, just lack of funding to get them started

12. IDAHO

A. Education-law requires standardized education for medics to become CP's (no increase in scope of practice, just role)
    i. Idaho state university offer CP program certificate
        1. *9 academic credit hours-entirely online*
    ii. Hennepin Technical college-14 credit hours total
        1. *Role Advocacy and outreach-3hrs*
        2. *Community assessment-2hrs*
        3. *Care and prevention development strategies-4 hours*
        4. *Community Paramedic clinicals-5 hours*
B. Community Health EMS (CHEMS)-Is what the state calls their CP program
    i. EMT's or Paramedics can function in this capacity
    ii. Began as part of the Statewide Healthcare Innovation plan (SHIP)
C. Idaho code: 56-1012
    i. Establishes Community paramedic and Community EMT into law
D. HB153 amended EMS law to establish CHEMS
    i. A CP is a medic with extra standardized education
E. Billing

i. As a compliment to home-health billing to Medicaid
ii. No way to bill for just CP services
iii. Blue-cross insurance pilot is occurring to show cost savings

F. ET3 pilot-Bill for treatment in place
i. 911 limited
ii. Medicare patients only

13. ILLINOIS

A.

14. INDIANA

A. IC 16-31-12 of Indiana code outlines MIH-CP rules
i. Defines MIH-CP as medics and EMTs expanding access to healthcare and facilitate more appropriate use of EMS
ii. MIH-CP must be approved by IDHS in order to be implemented by a department
iii. Grant funding available (MIH Grant fund)
1. *Only Public EMS is available*
2. *To help start up MIH-CP at various departments in the state*

B. No education requirement outlined
i. IC 16-31-12 states that the commission may request a medic to undergo more education but there is not minimum requirement stated

C. Billing
i. SB 498 seems to expand billing to services that are provided via MIH-CP
ii. 12-15-5-18 states that an approved MIH-CP program can seek reimbursement through Medicaid

15. IOWA

A. Iowa code 147A describes EMS as providing emergency and nonemergency care within scope of practice of provider
i. Allows for MIH-CP

B. Iowa Administrate Code section 641, chapters 131 and 132
i. Allows for MIH-CP

C. There is no educational requirement when providing MIH-CP, the medic must stay within scope of practice and protocols put in place by medical director

i. Each agency has the ability to set their own educational standards for MIH-CP

D. Billing

i. Cost of programs paid for via grants, no way to bill

ii. State Medicaid billing practices have not changed for EMS since 10/1/15

16. KANSAS

A. State Attorney general reviewed state EMS law to determine legality of medics providing non-emergency service (AG opinion 2014-20)

i. Found that medics CAN provide services in non-emergency situations (within scope of practice)

B. No legislation that expressly defines MIH-CP

i. No educational standards

ii. No ability to bill for services

C. Few places performing MIH-CP

i. Grant funded

ii. Olathe fire & EMS mih@olatheks.org or (913)971-5199

1. *Only place I found that was providing service*

17. KENTUCKY

A. HB 106 (3/26/19) amended law to specifically include MIH and CP's

i. CP's must be board certified to practice medicine in MIH

1. *Through Ky's EMS board*

ii. CP classification is under "Advanced Practice Paramedic"

B. Educational requirements

i. They are currently making these regulations. KY EMS board predicts it will take a paramedic 1 year to obtain Community Paramedic designation

C. Billing

i. None

18. LOUISIANA

A. Ready Responders program in New Orleans

i. Uses medics, NPs, physicians, and nurses for home urgent care needs

ii. Is a private organization, not an extension of EMS

B. Nothing in legislation

19. MAINE

A. Has a dedicated CP board, below are the requirements of each seat on the board. (https://www.maine.gov/ems/boards/community_paramedicine_committee/index.html)

i. Medical direction and practice board member
ii. Community Paramedic program medical director
iii. Municipal EMS CP program
iv. Non-municipal CP program
v. Maine EMS training center
vi. Hospital EMS CP program
vii. College/university
viii. At-large CP provider
ix. At-large CP provider
x. Maine medical association
xi. Home health
xii. Hospital

B. 18 active CP programs

C. L.D. 1837, HP 1359: An act for establishing pilot projects for CP (2012)

i. Extends sphere of practice, but not scope
ii. No funding is provided here, each organization must come up with that themselves

D. No formal education standard, left up to individual departments with the larger departments requiring more standardized training

i. Multiple large departments required their CP's to get education from Colorado Mountain College's CP program

E. 2 types of pilot programs

i. One that was tailored to fill a need the community had
ii. One that was a "General Practice CP"
    1. *This required the CP to have some sort of nationally accredited CP degree*

F. Billing

i. No ability to reimburse for services, all CP programs are self funded
ii. As of January 1st, 2018 Anthem allowed for reimbursement of 911 treatment without transport
    1. *Helps but does not include routine follow ups*
iii.

20. MARYLAND

A. MIH-CP prolific in the state

B. Billing

i. SB 682 (2018) requires development of a plan to reimburse EMS for MIH programs and treatment without transport

ii. Had to be submitted by Jan 1st, 2019

iii. Current programs are funded by grants from state and local agencies

C. Education

i. No clear requirements

D.

21. MASSACHUSETTS- DIFFERENCE BETWEEN CP AND MIH

A. MIH and CP are considered to be separate programs that you apply for

i. According to 105 CMR 175, the difference appears to have MIH use ER avoidance primarily while CP provides the home healthcare. An MIH can also provide CP services. Its not very clear the difference or why they delineated the two

ii. VERY clear application process that outlines how the program should benefit the community and patients individually

B. 105 CMR 175: MIH and CP programs

i. Clear definition of CP

ii. Scope of practice is defined by initial state-approved MIH/CP application and could therefore mean they can operate outside of normal paramedic SOP

C. Education

i. Up to MIH MD's discretion (state board can also require things, but nothing is clearly required)

ii. They definitely need some sort of continuing education to function as a CP, just up to MD

D. Emailed to ask about billing and functional difference between MIH and CP

22. MICHIGAN

A. Community Integrated Paramedicine (CIP) is how Michigan classifies it

i. CP interfaces with the 911 system as well as making preplanned visits to patients-heading toward being licensed

ii. MIH just focuses on education and specific patient populations

iii. All programs are on "special study" status

iv. https://www.michigan.gov/documents/mdhhs/FAQ_CIPtab_March2019_649703_7.pdf

B. Education

i. Currently 2 approved methods of education

1. *Hennepin Technical College (Minnesota)*

a. *CP Technician: 10 total credit hours*

i. Role advocacy and outreach-3 hours

ii. Community Assesment- 2 hours

iii. Care and prevention development strategies-4 hours

iv. CP clinical 1- 1 hour

b. *CP Clinician: 14 total credit hours*

i. Role advocacy and outreach-3 hours

ii. Care and prevention development strategies-4 hours

iii. Community assessment-2 hours

iv. CP clinical 1-1 hours

v. CP clinical 2-4 hours

2. *MobileCE (Cincinnati, Ohio)*

a. *Uses North central EMS curriculum*

b. *Has variety of levels of degrees for CP*

C. Billing

i. Grant based

ii. Hospitals may contract EMS

iii. Insurance is waiting for regulatory standards for CP to then begin reimbursement (this is in process)

23. MINNESOTA

A. 256B.0625, Subd 60

i. Puts in to law the ability for a CP to charge/get reimbursed for their services

B. Statute 144E.28

i. Outlines requirements in order to be a certified CP

ii. Must graduate from an accredited course

C. Billing

i. Have specific billing codes in place for CP

ii. https://www.dhs.mn.gov/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16_177475

D. Education

i. Must graduate from accredited college or university

ii. Figure out what the accredited colleges/universities are and then what their curriculum is

iii. EMS regulatory board 651-201-2812

24. MISSISSIPPI

A. Nothing

25. MISSOURI

A. 19 CSR 30-40.800 (12/30/16)

i. CP certification: https://health.mo.gov/safety/ems/pdf/communityparamedicapplicationforcertification.pdf

ii.

B. Education requirement (outlined in 19 CSR 30-40.800)

i. Must obtain degree from an accredited institution

1. *accredited by Committee on Accredidation of education programs for the emergency medical services professions (coAEMSP)*

ii. 60 hours didactic training covering

1. *CP role in healthcare system*
2. *Social determinants of health model*
3. *Role of CP in public and primary care*
4. *Developing cultural competency*
5. *Personal safety and wellness of the CP*

iii. 40 hours of clinical experience in clinical setting

C. Billing/funding

i. Either through local budgets or grants

26. MONTANA

A. Community Health EMS (CHEMS) is their policy name

i. Use this name to promote inclusivity with all EMS staff. ie. EMT's, Advanced EMTS, and Paramedics all practicing community healthcare

B. There is no legislation in effect right now but there are pilot programs operating via grant funding. Effort to get legislation enacted that directly addresses CHEMS.

27. NEBRASKA

A. LB 924, Section 1, 13-303: Allows for EMS to provide scheduled and unscheduled visits and to be reimbursed for them

28. NEVADA

A. NRS 450B- put community paramedicine into legislation
   i. Provides actual endorsement on license

B. Education (NAC 450B.486)
   i. 5 modules which must include: Role of CP in healthcare system, social determinants of health, Role of CP in public and primary care, Cultural competency and personal safety and wellness for CP
   ii. EMT hours: 30 didactic and 12 clinical
   iii. EMT-A: 34 didactic and 12 clinical
   iv. Paramedic: 52 didactic and 24 clinical

C. Billing
   i. Medicaid **will** reimburse CP services (as of 7/1/16)

29. NEW HAMPSHIRE

A. Is currently in pilot stage
   i. There is an application available on the state EMS website that outlines the requirements in order to be approved

B. According to NASEMSO the enabling legislation is Saf-C 5922.01 but it doesn't actually mention MIH/CP. More than likely it just doesn't outlaw it.

C. Legislation DHHS He-P 809 allows EMS to be excluded from home healthcare rules- expires on September 25, 2019

D. Education
   i. Does require comprehensive outline of education and continuing education but there is no standard that is set. (no minimum)

E. Billing
   i. In pilot stages and therefore is all grant funded or self funded in existing budgets

30. NEW JERSEY

A. Can't find anything-try again later

31. NEW MEXICO

A. 7.27.11 F legislation

i. Allows community paramedics to provide community EMS care

ii. States that the CP must have completed an approved Community EMS caregiver course

iii. Can expand scope of practice but must be approved

B. Central New Mexico Community college has a certificate program but doesn't appear to be needed to actually work as a CP (?)

C. Left a voicemail with EMS program manager

32. NEW YORK

A. Senate bill 5588 was introduced to allow CP services explicitly-**Died in committee**

i. Seems to have been opposed by the largest nursing union in the state

B. No legislation in place

C. There are some programs that are in place but they appear to be run from existing budgets and grants

33. NORTH CAROLINA

A. 10A NCAC 13P .0102

i. Clear definition of MIH

ii. Clearly defines CP as a medic working outside of the 911 response system

B. 10A NCAC 13P .0506

i. Outlines practice settings for EMS personnel

ii. Community Paramedicine programs are included

C. Funding

i. Grant based

ii. State is working towards reimbursement model

1. *CMS 1115 waiver approval*

D. Education

i. No standard

ii. To be determined by each medical director

34. NORTH DAKOTA

A. Call on Friday

B. Kari Klkrikava@nd.gov

35. OHIO

A. R.C. 4765.361 allows EMS personnel to perform nonemergency care under their scope of practice
   i. No specific mention of MIH/CP
B. Momentarily was a committee, has since been "sunsetted" in 2015
   i. Submitted a paper that outlined suggestions in order to implement MIH/CP in Ohio.
C. Education
   i. There is no standard or anything the mentions MIH
D. Billing
   i. No MIH/CP in law, therefore no billing
   ii. The few places that are providing MIH/CP are doing so via existing budgets
      1. *Maybe grants too but I can't find anything*

36. OKLAHOMA

A. Nothing about MIH/CP
   i. Can't even find an example of an agency practicing this in the state

37. OREGON

A. ORS 682 definitions do not limit prehospital healthcare providers to emergency situations, therefore MIH/CP should be allowed
B. There is no direct mention of MIH/CP in legislation
C. Education
   i. Nothing
D. Billing
   i. Nothing
E. City of Albany head CP Hillary Kosmicki 541-917-7733
   i. Only CP service I could find

38. PENNSYLVANIA

A. HB 1013 session 2017

i. An insurance company may not deny a bill because EMS did not transport or patient refused transport-MIH/CP therefore is allowed to be reimbursed

ii. Does not specifically mention MIH/CP

B. No specific mention of MIH/CP in any legislation

i. No educational requirements

39. RHODE ISLAND

A. Has a state wide MIH/CP board to help agencies set up programs

B. State wide EMS protocol (published 2018) directly addresses MIH (Section 1.05)

i. Outlines requirements when submitting MIH proposal

ii. No specific education requirement

iii. Does not expand scope of practice, just role

C. Billing

i. No current way to bill. Programs work within existing budgets.

40. SOUTH CAROLINA

A. EMS regulation 61.7

i. Section 908 allows for departments to endorse a medic as a CP

B. Have a dedicated state wide CP protocol

C. Education

i. Doesn't appear to have a true requirement but they have set guidelines/recommendations

1. *100 hours didactic*
2. *150 hours clinical*
3. *50 hours lab*

ii. TriCounty technical college

D. Billing

i. Grant based

41. SOUTH DAKOTA

A. Currently outlawed due to legislation that is too narrow in its definition of EMS

42. TENNESSEE

A. SB1270 (May, 2017)

i. Directly addresses and defines community paramedic

ii. Requires that EMS board create standardized requirements for CP

iii. No actual requirements are in place

B. Education

i. None

C. Billing

i. None (there are no programs currently)

43. TEXAS

A. There is no legislation that mentions CP/MIH

i. No educational requirements

ii. No billing

B. There are programs in place but it's entirely up to the medical director of each EMS agency

44. UTAH

A. No legislation that mentions CP/MIH

i. There are some programs but they are pilot programs without any set regulations

B. Education

i. Nothing

C. Billing

i. Grant based

45. VERMONT

A. Have published a MIH feasibility report in 2016

i. Legislation recommendations have not been implemented

B. There is no legislation that addresses MIH/CP

i. Therefore no requirements

ii. There are pilot programs in effect

46. VIRGINIA

A. Currently have a Community Paramedicine workgroup that is attempting to outline how this will be implemented in the state

   i. http://www.vdh.virginia.gov/emergency-medical-services/community-paramedicine-mobile-integrated-healthcare/

B. SB1226 defines CP requirements (NOT YET PASSED, but looks likely according to MIH/CP group minutes from 1/29/19)

   i. Must be certified via IBSC

   ii. Must have completed a certified CP training program

C. Billing

   i. Anthem will now pay EMS for non-transport services but it is unclear if that would extend to MIH/CP

D. Education

   i. No set standard right now

   ii. SB1226 would make an IBSC certification necessary alongside a certified CP training program

      1. *Nothing stated about what a certified CP training program would look like (hours required unknown)*

47. WASHINGTON

A. SB 5591 (2015)

   i. Allows for Fire and EMS to develop CP programs

   ii. There is no education standard, it is left up to the individual medical director

B. HB 1358 (2017)

   i. Allows for Fire and EMS to bill for their CP services

   ii. Does state that in order for a specific health intervention to be billable, the health care professional must have documented training that covered that intervention. The bill does state that departments may request legislative changes in regard to education in order to better fit billing standards. (Section 3)

C. Education

   i. No standard, but it does sound like eventually they will be putting one into law once other states standards are looked into.

D. Billing

   i. A CP service may be grant based, contracted with a hospital, or (as of HB 1358) bill for their services

48. WEST VIRGINIA

A. CSR 64-48 Chapter 12 (established 2016, still current in 2018 law)

i. "Community Paramedicine demonstration projects"

ii. May establish up to 6 CP pilots projects

iii. No educational requirements

iv. Funds must be found by each agency wishing to participate

B. Education

i. No standard

C. Billing

i. Pilot projects must come up with funds themselves, there is no billing

49. WISCONSIN

A. Assembly bill 151

i. 256.205 defines community paramedic as well as what a medic is required to do before being able to be certified as one

ii. Each CP is certified by the individual department upon

1. *Minimum 2 years as medic*
2. *Completed a department training program (no guidelines for what that entails)*

iii. 256.215 Also allows for EMT's to be certified in community EMT's

1. *Must also complete a department training program*

B. Education

i. No guidelines, it is up to individual departments to train them (they must submit their training to State EMS board)

C. Billing

i. Funded via grants or existing budgets

50. WYOMING

A. W.S. 33-36-101 Chapter 14

i. Directly defines Community Paramedic

ii. An EMT or Medic can obtain community designation

iii. There are 2 separate types

1. *Community EMS Technician (lower)*
2. *Community EMS Clinician (Highest designation)*

B. Education

i. A medic who has obtained IBSC CP-C endorsement can be Community EMS Clinician certified
   1. *Or they can complete a program that the state has certified*

ii. Community EMS Technician program requirements
   1. *40 hours of didactic training in*
      a. *Community EMS Technician role in healthcare system*
      b. *Social determinants of healthcare model*
      c. *Role of CEMST in primary care and public health*
      d. *Developing cultural competency*
      e. *Personal safety and wellness of CEMST*
   2. *40 hours lab skills training*

iii. Community EMS Clinician program requirements
   1. *114 hours of didactic training*
      a. *Community EMS Clinician role in healthcare system*
      b. *Social determinants of healthcare model*
      c. *Role of CEMSC in primary care and public health*
      d. *Developing cultural competency*
      e. *Personal safety and wellness of CEMSC*
   2. *200 hours of clinician experience in*
      a. *The compiling of the medical history of sub-acute, semichronic patients;*
      b. *The performance of physical examinations and documentation;*
      c. *The utilization of specialized equipment in performing physical examinations; 14-4*
      d. *The recognition of the clinical differences between populations;*
      e. *Obtaining specimens and samples for laboratory testing;*
      f. *Interpreting test and report results;*
      g. *The use and maintenance of home health equipment and devices; and*
      h. *Proper accessing, care, and maintenance of implanted ports, central lines, catheters, and ostomies.*

C. Billing
   i. Funds are provided through grants or within existing budgets

D. https://health.wyo.gov/wp-content/uploads/2016/08/Chapter-14-Community-EMS-Practitioners-Agencies-and-Education-Program.pdf
   i.

Additionally, in mid-2017, Anthem Blue Cross announced that effective January 1, 2018, it has initiated a reimbursement policy change in 14 states that is aimed at shifting the fee-for-service (volume based) method of reimbursing ambulance providers to a more value based form of reimbursement by payment for certain treat and non-transport types of ambulance calls. The reimbursement will be offered for HCPCS A0998-coded 9-1-1 responses in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, New York, Ohio, Virginia, and Wisconsin.

https://portal.ct.gov/-/media/Departments-andAgencies/DPH/dph/ems/pdf/Committees-and_Workgroups/LegislativeMIHWorkingGroup/MIH-Report-to-CT-General-Assembly_2019_03-01.pdf?la=en

The Status of Mobile Integrated Healthcare (MIH) - Community Paramedicine (CP) in US States:
A Review of State Policies and Procedures

Status of State Programs

- 36 states had an MIH-CP program with sufficient development and/or detail to include in this review
- 14 state either did not have an MIH-CP program and/or the description contained minimal detail

Funding for State Programs

- 13 states allowed MIH-CP agencies to bill for services
    - If recognized as a formal MIH-CP program, agencies may bill Arizona Health Care Cost Containment System for services (Arizona)
    - MIH-CP programs may bill Medicaid or health insurance for services (California, Indiana, Maryland, Nebraska, Nevada, Pennsylvania, Virginia,
    - If a health care professional has documented training in health intervention they may bill for MIH-CP services (Washington)
    - Minnesota Health Care Programs (MHCP) has a billing manual for CP (Minnesota)
    - May bill for MIH-CP services if Nurse Practitioner is used, cannot bill if a paramedic is used(Alabama)
- 4 states required MIH-CP programs to work within existing budgets or to be self-funded (Maine, West Virginia, Ohio, Rhode Island)
- 14 states funded MIH-CP agencies through grants
    - Alabama MIH-CP programs were funded through a Medicaid grant
    - Ten states had MIH-CP programs with grants directed to the agency (Colorado, Florida, Georgia, Iowa, Kansas, Michigan, Montana, North Carolina, South Carolina, Utah)
        - Florida had grants from state and local hospitals
        - Georgia used the rural community care coordination toolkit for ems grant
    - Indiana, Maryland, and Washington had other sources of grant funding
- 5 states were self-funded through a combination of grants and existing budgets (New Hampshire, Missouri, New York, Wisconsin, Wyoming)

Continuing Education

4 states indicated some form of continuing education

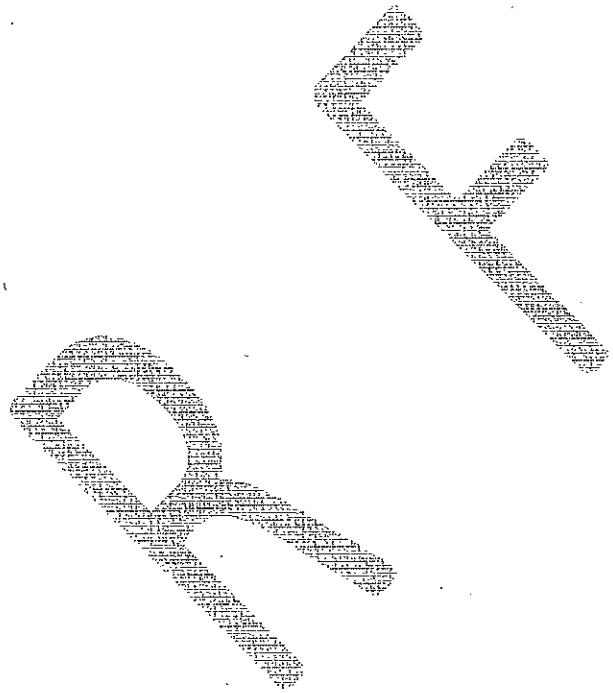
- Arizona required 4 hours of continuing education every year
- Colorado had a minimum of 12 hours or 12 sessions per year
- Indiana had no minimum requirement but the commission can request the medic to undergo more education
- New Hampshire required continuing education but has not standard

Credentials

8 states required practicing CPs to have certifications

- Arkansas created a license for the CPs
- Three states required a certification from the International Board of Specialty Certification (Colorado, Virginia, Wyoming)
- Kentucky required CPs to be board-certified by their EMS board

- Three states required a CP certification (Minnesota, Missouri, Wisconsin)



Education Requirements

18 states required at least some education prior to practicing as a CP

- Nine states required education through an accredited institution or a certified CP training program (Colorado, Florida, Idaho, Maine, Michigan, Minnesota, Missouri, Virginia, Wyoming)
- Arkansas required 300 hours of classroom and clinical time
- Arizona required a training program consisting of 12 hours with required competencies in 1) Patient transportation, 2) Transportation destinations, 3) Patient risk assessment, 4) Medical training and education, 5) Special patient populations, 6) Patient follow-up, 7) Medical-legal considerations, definitions, and documentation, 8) Information exchange and collaboration, 9) Public education
- California required 11 education sessions (approximately 100 hours) with a final exam
- Kentucky was in the process of developing education requirements
- Nevada required In-class training modules that cover 1) Role of CP in healthcare, 2) Social determinants of health, 3) Role of CP in public and primary care, 4) Cultural competency, 5) Personal safety and wellness for CP
    - EMT: 30 hours of didactic (in-class), 12 hours of clinical hours
    - EMT-A: 34 hours of didactic (in-class), 12 hours of clinical hours
    - Paramedic: 52 hours of didactic (in-class), 24 hours of clinical hours
- New Hampshire required a comprehensive outline of education but no standard is set
- New Mexico required an approved community EMS caregiver course
- South Carolina recommended 100 hours of didactic (in-class) training, 150 hours of clinical time, and 50 hours of lab
- Wisconsin required a department training program

Program Monitoring

Arizona monitored programs to determine if they are being implemented appropriately and positively impacting the community

MIH-CP Oversight

Maine had a dedicated CP board with seats in:

- Medical direction and practice board member
- Community Paramedic program medical director
- Municipal EMS CP program
- Non-municipal CP program
- Maine EMS training center
- Hospital EMS CP program
- College/university
- At-large CP provider
- At-large CP provider
- Maine medical association
- Home health
- Hospital

Recommendations for Indiana

MIH-CP Certification

- **MIH-CP Initial Certification**
  - Completion of an accredited MIH-CP training program; OR
  - An EMS Commission approved MIH-CP training program; OR
  - Documented post-secondary education with at least two credit hours in each of the following content areas: social determinants of health, cross-cultural communication, public health, roles and responsibilities of community paramedicine, management of chronic disease AND a three credit hour practicum/supervised clinical practice; OR
  - International Board of Specialty Certification (IBSC): Certified Community Paramedic

- **MIH-CP Certification Renewal**
  - Four hours every two years in MIH-CP specific content areas (Examples: social determinants of health, chronic disease, addiction, maternal/infant health, etc.); AND
  - Verification of MIH-CP skill competence

MIH-CP Oversight

- **Program Monitoring**
  - Quarterly evaluation of program processes and outcomes for the first two years of operation for each service provider organization followed by standard service provider renewal process

- **MIH-CP Advisory Board**
  - Dedicated MIH-CP board with seats representing the diverse stakeholders in MIH-CP in Indiana, including but not limited to:
    - State EMS Medical Director
    - State EMS Director
    - EMS Medical Directors
    - MIH-CP program director
    - Municipal EMS CP program
    - Non-municipal CP program
    - College/University
    - MIH-CP provider
    - MIH-CP patient
    - Professional organizations
    - Representatives from other relevant professions
    - FSSA Representative
    - Insurance Industry Representative
    - Indiana State Department of Health representative
    - Indiana Hospital Association representative

First Regular Session of the 121st General Assembly (2019)

SENATE ENROLLED ACT No. 498

AN ACT to amend the Indiana Code concerning health.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 12-15-5-18 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2019]: **Sec. 18. (a) This section applies to an emergency medical services provider agency that meets the following requirements:**

(1) Is requesting reimbursement for services provided as part of a mobile integrated healthcare program that has been approved by the emergency medical services commission under IC 16-31-12.

(2) Is a Medicaid provider.

(b) The office of the secretary may reimburse an emergency medical services provider agency that is a Medicaid provider under this article for Medicaid covered services provided to a Medicaid recipient.

(c) The office of the secretary may apply to the United States Department of Health and Human Services for any amendment to the state Medicaid plan or for any Medicaid waiver necessary to implement this section.

SECTION 2. IC 16-18-2-110 IS AMENDED TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2019]: Sec. 110. "Emergency medical services", for purposes of IC 16-31, means the provision of **any of the following:**

(1) Emergency ambulance services or other services, including

extrication and rescue services, utilized in serving an individual's need for immediate medical care in order to prevent loss of life or aggravation of physiological or psychological illness or injury.

(2) Transportation services, acute care, chronic condition services, or disease management services provided as part of a mobile integrated healthcare program under IC 16-31-12.

SECTION 3. IC 16-18-2-239.2 IS ADDED TO THE INDIANA CODE AS A NEW SECTION TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2019]: **Sec. 239.2. "Mobile integrated healthcare", for purposes of IC 16-31-12, has the meaning set forth in IC 16-31-12-1.**

SECTION 4. IC 16-31-12 IS ADDED TO THE INDIANA CODE AS A NEW CHAPTER TO READ AS FOLLOWS [EFFECTIVE JULY 1, 2019]:

Chapter 12. Mobile Integrated Healthcare

Sec. 1. As used in this chapter, "mobile integrated healthcare" means community based health care in which paramedics and emergency medical technicians employed by an emergency medical services provider agency function outside of customary emergency response and transport to do the following:

(1) Facilitate more appropriate use of emergency care services.

(2) Enhance access to:

(A) primary care for medically underserved populations; or

(B) underutilized and appropriate health care services.

Sec. 2. (a) The commission, in consultation with the state department, may develop a mobile integrated healthcare program.

(b) In developing the mobile integrated healthcare program, the commission may consider the following:

(1) Whether to limit the type of health care that can be provided under the program.

(2) Whether additional training or education is necessary for a paramedic in providing services under the program.

(3) Whether additional certification of a paramedic should be required in order to participate in the program.

(4) The degree of oversight, reporting, and enforcement by the commission needed for the program.

Sec. 3. (a) The commission may establish an application and process for an emergency medical services provider agency to submit for approval an application and information requesting the implementation of a mobile integration healthcare program.

(b) The commission may establish a subcommittee to provide the initial review of an application submitted by an emergency medical services provider agency for a mobile integrated healthcare program and determine whether to grant approval for the program. In reviewing an application, the subcommittee or commission may request additional information from the emergency medical services provider agency that submitted the request.

(c) If a subcommittee is established by the commission, the subcommittee shall make recommendations to the commission concerning a submitted application. The commission must approve or deny the application not more than ninety (90) days after the submission of a complete application.

(d) An emergency medical services provider agency may appeal a denial of the application by the commission under IC 4-21.5.

Sec. 4. (a) The commission may establish a mobile integration healthcare grant to assist communities in the development and implementation of a mobile integration healthcare program that has been approved by the commission under this chapter.

(b) The commission may do the following:

(1) Administer the grant.

(2) Create a grant application for the grant.

(3) Develop a process for receiving and evaluating grant applications.

(4) Establish eligibility requirements for the grant.

(5) Select recipients of the grant and distribute the funds for an awarded grant.

(c) The commission may only award a grant under this section to an emergency medical services provider agency that is operated by a:

(1) city;

(2) town; or

(3) township.

Sec. 5. (a) The mobile integration healthcare grant fund is established within the state general fund for the purpose of the development and implementation of a mobile integration healthcare program.

(b) The commission shall administer the fund. The expenses of administering the fund shall be paid from money in the fund.

(c) The treasurer of state shall invest the money in the fund not currently needed to meet the obligations of the fund in the same manner as other public money may be invested. Interest that

accrues from these investments shall be deposited in the fund.

(d) Money in the fund at the end of a state fiscal year does not revert to the state general fund.

Sec. 6. The commission may adopt rules under IC 4-22-2 that are necessary to implement and administer this chapter.

President of the Senate

President Pro Tempore

Speaker of the House of Representatives

Governor of the State of Indiana

Date: _____ Time: _____