

Idaho Bureau of Emergency Medical Services & Preparedness

Optional Module Addendum

BLS PSYCHOMOTOR EXAM USER'S GUIDE

1 October 2013

COPYRIGHT:

This guide has been modified by the Idaho Bureau of Emergency Medical Services & Preparedness with permission from the National Registry of Emergency Medical Technicians. Only non-commercial reproduction of this material for educational purposes or the advancement of medical science is permitted. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form, electronic, mechanical, photocopying, recording, or by any other means whatsoever. Violators will be subject to prosecution and other actions.

Table of Contents

Introduction for Optional Module Testing	3
Request to Host Optional Module Testing	4
Candidate Request to Test OM's	5
Staffing for Optional Module Testing	5
Retest Considerations	6
Skill Examiners	6
Responsibilities	6
Qualifications	6
EMR OM Examiner Qualifications	8
Spinal Immobilization Skills (Supine).....	8
Spinal Immobilization Skills (Seated).....	8
Long Bone or Joint Injury Skills.....	8
Assistants	8
Simulated Patients for Testing.....	8
EMT OM Skill Examiner Qualifications.....	9
Supraglottic Airway Device Skill	9
Intravenous Therapy Skill	9
Intraosseous Infusion Skill.....	9
Policy on Optional Module Retesting.....	9
Essays to Skills Examiners.....	10
Spinal Immobilization Skills (Supine).....	11
Spinal Immobilization Skills (Seated).....	14
Long Bone or Joint Injury Skills.....	18
Supraglottic Airway Device Skill.....	22
Intravenous Therapy Skill	29
Intraosseous Infusion Skill.....	29
Appendix A: Skill Station Signs.....	34
Appendix B: Candidate Application with Optional Modules.....	41

Introduction for Optional Module Testing

Thank you for your interest in Optional Module (OM) utilization with the Idaho Bureau of Emergency Medical Services and Preparedness, hereafter referred to as the Bureau. Optional Module skills are made available for EMS agency medical directors to adopt for personnel to utilize under requirements of the Idaho EMS Physician Commission (EMSPC) {[2013-1 EMSPC Standards Manual](#)}. The EMSPC has identified optional modules that must comply with EMS Bureau specific criteria. The Bureau has established the policy where an optional module skill which is tested for certification at the floor level is also tested to the same standard of an optional module skill, should it be adopted. This addendum has been generated to provide guidance on how to request and provide optional module skills testing according to the additional scope authorized per the Idaho EMSPC.

The optional module skill testing outlined in this guide contains seven (7) optional module skills. A candidate must have successfully passed the requested OM skills and be credentialed by the medical director in order to perform the additional scope of practice. Optional Module Skills may only be performed under the medical director of record who has authorized the optional module skill for the specific agency where they have been approved.

- A. All training identified by the Idaho EMS Physician Commission as an optional module with specific training required (2,OM), must be conducted according to the approved standards and curriculum for the level where the 2,OM interventions exists as a floor skill. EMS agency medical directors are authorized to credential licensed providers for OM use when they meet the requirements established by the EMSPC.
 1. The training must provide for all didactic, psychomotor, lab and clinical learning over the knowledge and skills as described in the National EMS Education Standards and IEC.
 2. The student must be trained and evaluated to the depth and breadth of competency to the level of training where the skill exists as a floor skill.
 3. Formal skill testing is required for those OM skills that are tested for certification as a floor skill. Skill exam criteria are published in the “BLS Psychomotor Exam Users Guide”. In order for the candidate to be eligible to apply for an OM skills test, the EMS medical director must verify the student has completed the training requirements.

Requesting to Host the Optional Module Skills Test

There are two options to provide Optional Module Skills Testing:

Option 1:

Optional module skill testing may be requested in conjunction with an initial certification skill exam. Depending upon how many candidates are being tested and how many OM's you are choosing to test, your exam time will fluctuate. For each OM skill being tested, please add an additional 5 minutes per candidate per skill station. For example; an EMT exam of 15 candidates testing on just floor skills will take approximately 5 hours (3 candidates per hr). If you add an additional station it would increase your exam by 1 hour 25 minutes ($15 \times 5 = 75 / 60 \text{min} = 1.25 \text{hrs}$).

The Bureau will require every OM skill you are adding to your exam to have a designated station and examiner in addition to the floor skill stations that are required. This will ensure the exam does not over exhaust candidates or examiners. The staffing pattern will be evaluated for every request to confirm your ability to meet the demand for additional examiners.

Option 2:

The Bureau will accommodate optional module skills testing as a stand-alone when there are 10 or more candidates are testing on two or more optional module skills. The length an exam will run is dependent upon how many candidates and how many skill stations are available. Please see exam staff chart located in this addendum for planning purposes.

Once a site has determined the desire to provide OM skills testing, a request to host a test must be received from an approved requesting agency or institution sixty (60) days in advance. A Host Application can be downloaded at www.IdahoEMS.org in the Education section. Also located in this section of the website is a current exam schedule. The exam schedule should be reviewed prior to applying for your exam to determine if there may be an open opportunity for your candidates to test at an already approved site and to determine if the date you intend to request has already been approved for another applicant.

The Bureau can generally schedule exams any day of the week; however, any testing within the week of a state holiday is not authorized to be scheduled. After downloading an application from the website, please return it to the Bureau by e-mail (preferred) to EMSCourses@dhw.idaho.gov, by fax to (208) 334-4015 or by mail to the Idaho Bureau of EMS and Preparedness, PO Box 83720, Boise, ID 83720. While the Bureau will accept applications from any qualified exam host, please consider exam options for your students, and other students in the host area, and combine exams whenever possible. The EMS Bureau Exams Specialist can assist you with this process. Once the exam has been approved, a letter will be sent from the Bureau confirming your date and time.

Candidate Request to Test Optional Module Skills

All candidates must submit an application to test at any site with medical director approval. The application MUST be submitted by the candidate to the Bureau ten (10) days in advance. The application to test can be found on the EMS website at www.IdahoEMS.org in the Education section. Please return it to the Bureau by e-mail (preferred) to EMSCourses@dhw.idaho.gov, by fax to (208) 334-4015 or by mail to the Idaho Bureau of EMS and Preparedness, PO Box 83720, Boise, ID 83720.

If a candidate has not applied and is not listed on the final exam roster provided by the Bureau Exam Administrator before the candidate's arrival at a testing site, the candidate will not be allowed to test. When an EMS Medical Director, Hospital Supervising Physician or Medical Clinic Supervising Physician desires to incorporate an OM, they must:

1. Report patient care response data to the Idaho Pre-hospital Electronic Record Collection System (PERCS) directly or by way of an Idaho validated export from a National EMS Information System (NEMESIS) compliant software application.
2. Submit an addendum to their medical supervision plan to the EMS Bureau that indicates which OM(s) they want to adopt.
3. Submit verification of credentialing to the EMS Bureau prior to utilization of OM skills or interventions.

Equipment

The Exam Coordinator is responsible for obtaining and setting-up the various skills prior to the scheduled OM Skills Testing. If it is not possible to set-up all skills the day before the test, the Exam Coordinator must at least verify the availability of all equipment that is considered to be the minimal essential equipment needed. An equipment list for each station is available with the evaluator essays in this addendum to help with testing coordination. Additionally, each Skill Examiner will need a watch with a second hand and a pen. A sufficient supply of the optional module skill sheets will be provided by the Bureau Exam Administrator the day of testing.

Staffing for the Optional Module Skills Testing

Testing for candidates requires the minimum staffing and resources to open one of each required station requested to complete skills within a reasonable time period. If all skills are duplicated, the testing should be completed in half the projected time. Staffing is the responsibility of the Host Site to coordinate. The Bureau does not provide any staffing to facilitate testing with the proper amount of people to perform objective evaluations of the candidates.

The following is a list of the skills to be completed and the maximum time limits permissible for each skill:

OM Stations	MAX TIME LIMIT
Spinal Immobilization (Supine or Seated Patient)	10 minutes
Long Bone or Joint Injury (Candidate must be prepared to test either)	5 minutes
Supraglottic Airway Device	No Time Limit
Intravenous Therapy	6 minutes
Intraosseous Infusion	6 minutes

OM SKILLS	Skill Examiner	EMT Assistant	Simulated Patient
1. Spinal Immobilization (Supine Patient)-EMR	1	1	1
2. Spinal Immobilization (Seated Patient)-EMR	1	1	1
3. Splinting (Joint or Long Bone)-EMR	1	1	1
4. Alternate Airway Device (Supraglottic)-EMT	1		
5. Intravenous Therapy-EMT	1		
6. Intraosseous Infusion-EMT	1		

The skills are designed to approximate the out-of-hospital setting by presenting realistic situations that the EMR or EMT can expect to see. Candidates are tested individually in each skill and is responsible for communicating with the patients or bystanders. The candidate will pass or fail based solely on his/her actions and decisions.

Retest Considerations

The time and availability of resources will be considered at each site to determine if retests are available. Retesting skills is an option and not a requirement for any site.

If duplicate skill stations are not setup where candidates can retest in the alternate station, you should allow 30 minutes minimum to reset skill stations with a new evaluator, assistant and/or patient for each station to be retested.

Skill Examiners Responsibilities

- conducting test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help ensure that the Simulated Patient conducts himself/herself in a similar manner throughout testing.
- objectively observing and recording each candidate's performance.
- Acting in a professional, unbiased, non-discriminating manner, being cautious to avoid any perceived harassment of any candidate.

- providing consistent and specific instructions to each candidate by reading the “Instructions to the Skills Candidate” exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate’s performance.
- recording, totaling, and documenting all performances as required on all skill evaluation forms.
- thoroughly reading the specific essay for the assigned skill before actual evaluation begins.
- checking all equipment, props, and moulage prior to and during testing.
- briefing the Simulated Patient for the assigned skill.
- maintaining the security of all issued testing material and ensuring the return of all material to the Bureau Representative.

Qualifications

Skill Examiners may be recruited from the local EMS community. You should only consider people who are currently certified or licensed to perform the skill you wish them to evaluate. In addition, pay careful attention to avoid possible conflicts of interest, local political disputes, or any additional pre-existing conditions that could potentially bias the Skill Examiner towards a particular person or group of candidates. **In no case should a primary instructor serve as a Skill Examiner for any of his/her own students.** Casual instructor staff may be utilized if necessary so long as they are not biased and do not evaluate any skill for which they served as the primary instructor.

Every effort should be made to select Skill Examiners who are fair, consistent, objective, respectful, reliable, and impartial in their conduct and evaluations. Skill Examiners should be selected based upon their expertise and understanding that there is more than one acceptable way to perform all skills. The Exam Coordinator should work to obtain Skill Examiners who are not acquainted with the candidates, if possible. All Skill Examiners are responsible for the overall conduct of his/her skill evaluation area, ensuring the integrity and reliability of the test and his/her skill, and for maintaining strict security of all exam-related items.

The selected examiners should represent a combination of out-of-hospital care providers but may also include nurses, physicians or other appropriately trained allied health personnel. All Skill Examiners should have experience in working with EMRs, EMTs or Advanced level providers, or either teaching or formal evaluation of skills. The Skill Examiner should possess local credibility in the field of out-of-hospital care. At the minimum, you should recruit currently certified EMTs or Advanced level providers to serve as Skill Examiners as they are already familiar with the testing process and possess a previously demonstrated expertise in the skill. Guidelines for qualifications of each Skill Examiner are explained below.

The Bureau should be consulted if you are unable to locate persons that satisfy the qualifications for Skill Examiners. The Bureau Exam Administrator has the authority to dismiss any Skill Examiner for due cause at any point during the test.

EMR OM Skill Examiner Qualifications

Spinal Immobilization and Random EMT Skills

The Spinal Immobilization Skills Examiner and the Random EMT Skills Examiner must be at the minimum, Licensed or a Nationally Registered EMT who is licensed to perform the following skills in the out-of- hospital setting:

1. Spinal Immobilization (Supine Patient)
2. Spinal Immobilization (Seated Patient)
3. Long Bone Immobilization or Joint Immobilization (Candidate must be prepared to test either)

Assistants

Two (2) persons must be selected to serve as the assistant for the Spinal Immobilization and Random EMT skills. These selected individuals must be EMS personnel who are trained and credentialed to the EMT 2011 curricula to perform the skill being tested and will serve as the trained partners for all candidates testing. Assistants cannot be a relative of any candidate or be biased towards any candidate being examined. Candidates may not be tested in pairs to eliminate the necessity of selecting Assistants for testing.

Simulated Patients for Testing

Simulated patients will be assigned to the Spinal Immobilization Skill and Long Bone or Joint Skill. If any of these skills are duplicated, you will need one (1) additional Simulated Patient for each additional skill.

All Simulated Patients should be adults or adolescents who are greater than sixteen (16) years of age. All Simulated Patients should also be of average adult height and weight. Small children may not serve as patients in any skill. The equipment provided for the skills should appropriately fit the respective Simulated Patient. If the patient is familiar with EMS procedures, she/he can assist the Skill Examiner when reviewing the candidate's performance and can verify completion of a procedure or treatment. The Simulated Patient should also be familiar with the typical presentation of signs and symptoms of which the usual patient would complain, given the testing scenario utilized. The Simulated Patient should be capable of being programmed to effectively act out the role of a real patient in a similar out-of- hospital situation, such as simulating sonorous respirations, withdrawing to painful stimuli, moaning to palpation over injuries, and so on. Keep in mind that the more realistic the Simulated Patient presents, the fairer the evaluation process.

Please be aware of Simulated Patient fatigue and discomfort throughout testing. If necessary, be prepared to provide breaks to relieve your Simulated Patient, and for their comfort, a mat may be used on hard floors. To deliver a consistent test, Simulated Patient(s) should remain in their skill for the duration of the skill.

EMT OM Skill Examiner Qualifications

Each Optional Module Skill Examiner must be at the minimum, a Licensed or Nationally Registered Advanced EMT who is licensed to perform the following skills in the out-of- hospital setting:

1. Ventilatory Management (Supraglottic)
2. IO
3. IV

Ventilatory Management (Supraglottic Airway)

The Ventilatory Management Skill Examiner can be a physician, nurse, or must be Licensed or Nationally Registered Advanced EMT or Paramedic. The examiner must be licensed to perform bag-valve-mask ventilation, operate various oxygen adjuncts and equipment, and insert supraglottic airway devices (such as Combitube[®], PTL[®], or King LT[®]).

Intravenous Therapy Skill

The IV Skills Examiner must be a physician, nurse, Licensed or Nationally Registered Advanced EMT or Paramedic. The examiner must be licensed to establish peripheral IVs.

Intraosseous Infusion

The IO Skills Examiner must be a physician, nurse, State Licensed or Nationally Registered Advanced EMT or Paramedic. The examiner must be licensed to establish intraosseous infusions.

Policy on Optional Module Retesting

1. OM candidates are eligible for up to two (2) attempts for each optional module skill at a testing site if retesting is available.
2. The Bureau does not mandate or guarantee same-day retest opportunities at any testing site.
3. Candidate must provide a completed OM application signed by the medical director for each exam attempt prior to testing.
4. No walk-on Optional Module Testing will be authorized.

ESSAYS TO SKILL EXAMINERS

Spinal Immobilization (Supine Patient)

Essay to the Skill Examiner

Thank you for serving as a Skill Examiner today. Before you read the specific essay for this station you should review these general responsibilities as a Skill Examiner:

- Conduct test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help ensure that the Simulated Patient conducts himself/herself in a similar manner throughout testing.
- Objectively observe and record each candidate's performance.
- Provide consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Record, total, and document all performances as required on all skill evaluation forms.
- thoroughly read the specific essay for the assigned skill before actual evaluation begins.
- Check all equipment, props, and moulage prior to and during testing.
- Brief the Simulated Patient for the assigned skill.
- Maintain security of all issued test material during the exam and ensure the return of all material to the Bureau.

This skill is designed to evaluate the candidate's ability to immediately protect and immobilize the Simulated Patient's spine by using a rigid long spinal immobilization device. The candidate will be advised that the scene survey and primary survey have been completed and no condition requiring further resuscitation efforts or urgent transportation is present. The Simulated Patient will present lying on his/her back, arms straight down at his/her side, and feet together. Candidates should not have to be concerned with distracters such as limb realignment, prone or other unusual positions. The presenting position of the Simulated Patient must be identical for all candidates.

As the evaluator, you are responsible for controlling access to the testing area. Only personnel authorized by the Bureau Exam Administrator are allowed in the testing station. No part of the test may be electronically recorded or observed unless authorized.

The candidate will be required to treat the specific, isolated problem of a suspected unstable spine. Primary and secondary assessments of airway, breathing, and central circulation are not required in this skill. The candidate will be required to check motor, sensory, and circulatory function in each extremity at the proper times throughout this skill. If a candidate fails to check any of these functions in any extremity, a zero must be awarded for this step in the "Points Awarded" column.

There are various long spine immobilization devices utilized in the EMS community. The evaluation form was designed to be generic so it could be used to evaluate the candidate regardless of the immobilization device used. You should have various long spine immobilization devices available for this skill, specifically long spine immobilization devices used in the local EMS system, long spine board, and a scoop stretcher. The candidate may choose to bring a device with which she/he is familiar. The Bureau must approve this device and you must be familiar with its proper use before evaluation of the candidate begins. Do not indicate displeasure with the candidate's choice of equipment. Be sure to evaluate the candidate on how well she/he immobilizes and protects the Simulated Patient's spine, not on what immobilization device is used.

The candidate must, with the help of an EMT Assistant and the Skill Examiner, move the Simulated Patient from the ground onto the long spinal immobilization device. There are various acceptable ways to move a patient from the ground onto a long spinal immobilization device (i.e. logroll, straddle slide, etc.). You should not advocate one method over the others. All methods should be considered acceptable as long as spinal integrity is not compromised. Regardless of the method used, the EMT Assistant should control the head and cervical spine while the candidate and evaluator move the Simulated Patient upon direction of the candidate.

Immobilization of the lower spine/pelvis in line with the torso is required. Lateral movement of the legs will cause angulation of the lower spine and should be avoided. Additionally, tilting the backboard when the pelvis and upper legs are not secured will ultimately cause movement of the legs and angulation of the spine.

This skill requires that an assistant EMT be present during the evaluation. Candidates are to be evaluated individually with the assisting EMT providing manual stabilization and immobilization of the head and cervical spine. The assisting EMT should be told not to speak, but to follow the commands of the candidate. The candidate is responsible for the conduct of the assisting EMT. If the assisting EMT is instructed to provide improper care, areas on the score sheet relating to that care should be deducted. At no time should you allow the candidate or assisting EMT to perform a procedure that would actually injure the Simulated Patient.

This skill requires the presence of a live Simulated Patient. The Simulated Patient must be an adult or adolescent who is at least sixteen (16) years of age. The Simulated Patient must also be of average adult height and weight. The use of children as Simulated Patients is not permitted in this skill. The Simulated Patient should be briefed on his/her role in this skill. You may use comments from the Simulated Patient about spinal movement in the scoring process as long as she/he is certified at the level of EMT or higher.

Equipment List

Do not open this skill station for testing until you have one (1) EMT Assistant and one (1) Simulated Patient who is an adult or adolescent at least sixteen (16) years of age. The Simulated Patient must also be of average adult height and weight. The following equipment must be available and you must ensure that it is working adequately throughout testing:

- Exam gloves
- Long spine immobilization device (long board, etc.)
- Head immobilizer (commercial or improvised)
- Cervical collar (appropriate size)
- Patient securing straps (6-8 with compatible buckles/fasteners)
- Blankets
- Padding (towels, cloths, etc.)
- Tape

INSTRUCTIONS TO THE CANDIDATE FOR SPINAL IMMOBILIZATION (SUPINE PATIENT)

This skill is designed to evaluate your ability to provide spinal immobilization to a supine patient using a long spine immobilization device. You arrive on the scene with an EMT Assistant. The assistant EMT has completed the scene survey as well as the primary assessment and no critical condition requiring any intervention was found. For the purposes of this evaluation, the Simulated Patient's vital signs remain stable. You are required to treat the specific, isolated problem of a suspected unstable spine using a long spine immobilization device. When moving the Simulated Patient to the device, you should use the help of the assistant EMT and me. The assistant EMT should control the head and cervical spine of the Simulated Patient while you and I move the Simulated Patient to the immobilization device. You are responsible for the direction and subsequent actions of the EMT Assistant and me. You may use any equipment available in this room. You have ten (10) minutes to complete this procedure. Do you have any questions?

Spinal Immobilization (Seated Patient)

Essay to the Skill Examiner

Thank you for serving as a Skill Examiner today. Before you read the specific essay for the skill you should review these general responsibilities as a Skill Examiner:

- Conduct test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help ensure that the Simulated Patient conducts himself/herself in a similar manner throughout testing.
- Objectively observe and record each candidate's performance.
- Provide consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Record, total, and document all performances as required on all skill evaluation forms.
- Thoroughly read the specific essay for the assigned skill before actual evaluation begins.
- Check all equipment, props, and moulage prior to and during testing.
- Brief the Simulated Patient for the assigned skill.
- Maintain security of all issued exam material during the exam and ensure the return of all material to the Bureau.

This skill is designed to evaluate a candidate's ability to provide spinal immobilization to a seated patient in whom spinal instability is suspected. Each candidate will be required to appropriately apply any acceptable half-spine immobilization device on a seated patient and verbalize movement of the Simulated Patient to a long backboard.

As the evaluator, you are responsible for controlling access to the testing area. Only personnel authorized by the Bureau Exam Administrator are allowed in the testing station. No part of the test may be electronically recorded or observed unless authorized.

The candidate is evaluated on his/her ability to protect and provide immediate immobilization of the spine. The candidate will be advised that the scene survey and primary survey have been completed and no condition requiring further resuscitation efforts or urgent transportation is present. A live Simulated Patient who is an adult or adolescent who is at least sixteen (16) years of age is required in this skill. The Simulated Patient must be of average adult height and weight. The use of children as Simulated Patients is not permitted in this skill. The Simulated Patient will present seated in an armless chair, sitting upright with his/her back loosely touching the back of the chair. The Simulated Patient will not

present slumped forward or with the head held in any grossly abnormal position. The position of the Simulated Patient must be identical for all candidates.

The primary survey as well as the reassessment of the Simulated Patient's airway, breathing, and central circulation are not required in this skill. The candidate will be required to check motor, sensory, and circulatory functions in each extremity at the proper times throughout this skill. Once the candidate has immobilized the seated patient, simply ask him/her to verbally explain all key steps she/he would complete while moving the Simulated Patient to the long backboard. The candidate may check motor, sensory, and circulatory functions at any time during the procedure without a loss of points. However, if she/he fails to check motor, sensory, or circulatory function in all extremities after verbalizing immobilization to a long backboard, a zero should be placed in the "Points Awarded" column for this step. The related "Critical Criteria" statement would also need to be checked and documented as required.

You should have various half-spine immobilization devices collected in the testing room that represent those devices utilized in the local EMS system (KED, XP-1, OSS, half spine board, Kansas board, etc.) or other accepted devices. It is required that at least one (1) rigid wooden or plastic half-spine board and one (1) commercial vest-type immobilization device with all other associated immobilization equipment provided by the manufacturer be available in this room. You are responsible to check that all equipment listed is present and in proper working order (not too frayed or worn, all buckles and straps are present, etc.). The candidate may choose to bring a device with which she/he is familiar and the Bureau must approve these devices. You must also be familiar with the proper use of these devices before any evaluation of the candidate can occur. Be sure to give the candidate time to survey and check the equipment before any evaluation begins. You must not indicate any displeasure with the candidate's choice of any immobilization device.

The skill evaluation skill sheet was designed to be generic in order to evaluate the candidate's performance regardless of the half-spine immobilization device utilized. Manufacturer instructions should describe the order in which the straps and buckles are to be applied when securing the torso for various commercial half-spine immobilization devices. This skill is not designed to specifically evaluate each individual device but to *generically* verify a candidate's competence in safely and adequately securing a suspected unstable cervical spine in a seated patient. **Therefore, while the specific order of placing and securing straps and buckles is not critical, it is imperative that the patient's head be secured to the half-spine immobilization device only after the device has been secured to the torso.** This sequential order most defensibly minimizes potential cervical spine compromise and is the most widely accepted and defended order of application to date regardless of the device. Placement of an appropriate cervical collar is also required with any type of half-spine immobilization device. Given the chosen device, your careful observation of the candidate's technique and a reasonable standard of judgment should guide you when determining if the device was appropriately secured to the torso before the head was placed in the device. You must also apply the same reasonable standard of judgment when checking to see if the device was applied too loosely or inappropriately fastened to the Simulated Patient.

A trained EMT Assistant will be present in the skill station to assist the candidate by applying manual in-line immobilization of the head and cervical spine only upon the candidate's commands. The assistant must be briefed to follow only the commands of the candidate, as the candidate is responsible for the actions that she/he directs the assistant to perform. When directed, the assistant must maintain manual in-line immobilization as a trained EMT Assistant would in the field. No unnecessary movement of the Simulated Patient's head will be tolerated, nor is it meant to be a part of this test.

However, if the assistant is directed to provide improper care, points on the evaluation form relating to this improper care should be deducted and documented. For example, if the candidate directs the assistant to let go of the head prior to its mechanical immobilization, the candidate has failed to maintain manual, neutral, in-line immobilization. You must check the related statement under "Critical Criteria" and document your rationale. On the other hand, if the assistant accidentally releases immobilization without an order, you should direct the assistant to again take manual in-line immobilization. Immediately inform the candidate that this action will not affect his/her evaluation. At no time should you allow the candidate or assistant EMT to perform a procedure that would actually injure the Simulated Patient. The candidate should also verbally describe how she/he would move and secure the Simulated Patient to the long backboard.

The Simulated Patient should be briefed on his/her role in this skill and act as a calm patient would if this were a real situation. You may question the Simulated Patient about spinal movement and overall care in assisting with the evaluation process after the candidate completes his/her performance and exits the room.

Equipment List

Do not open this skill for testing until you have one (1) Simulated Patient who is an adult or adolescent at least sixteen (16) years of age. The Simulated Patient must also be of average adult height and weight. One (1) assistant EMT is also required in this skill. The following equipment must be available and you must ensure that it is working adequately throughout the test:

- Exam gloves
- Half-spine immobilization device* (wooden or plastic)
- Vest-type immobilization device*
- Padding material (pads or towels)
- Armless chair
- Cervical collars (correct sizes)
- Cravats (6)
- Kling, Kerlex, etc.
- Long immobilization straps (6 of any type)
- Tape (2" or 3" adhesive)
- Blankets (2)

* It is required that the skill include one (1) plain wooden or plastic half board with tape, straps, blankets, and cravats as well as one (1) common vest-type device (complete). Additional styles and brands of devices and equipment may be included as a local option.

INSTRUCTIONS TO THE CANDIDATE FOR SPINAL IMMOBILIZATION (SEATED PATIENT)

This skill is designed to evaluate your ability to provide spinal immobilization to a sitting patient using a half-spine immobilization device. You arrive on the scene of an auto crash with an EMT Assistant. The scene is safe and there is only one (1) patient. The assistant EMT has completed the scene survey as well as the primary assessment and no critical condition requiring any intervention was found. For the purposes of this evaluation, the Simulated Patient's vital signs remain stable. You are required to treat the specific, isolated problem of a suspected unstable spine using a half-spine immobilization device. You are responsible for the direction and subsequent actions of the EMT Assistant. Transferring and immobilizing the Simulated Patient to the long backboard should be described verbally. You have ten (10) minutes to complete this skill. Do you have any questions?

Long Bone and Joint Immobilization

Essay to the Skill Examiner

Thank you for serving as a Skill Examiner today. Before you read the specific essay for the skill you should review these general responsibilities as a Skill Examiner:

- Conduct test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help ensure that the Simulated Patient conducts himself/herself in a similar manner throughout testing.
- Objectively observe and record each candidate's performance.
- Provide consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Record, total, and document all performances as required on all skill evaluation forms.
- Thoroughly read the specific essay for the assigned skill before actual evaluation begins.
- Check all equipment, props, and moulage prior to and during testing.
- Brief the Simulated Patient for the assigned skill.
- Maintain security of all issued exam material during the exam and ensure the return of all material to the Bureau.

This skill is designed to evaluate a candidate's ability to immobilize a suspected long bone fracture properly using a rigid splint. The candidate will be advised that a primary survey has been completed on the victim and that a suspected long bone fracture was discovered during the secondary survey. The Simulated Patient will present with a non-angulated, closed, suspected long bone fracture of the upper or lower extremity (specifically a suspected fracture of the radius, ulna, tibia, or fibula). You should alternate injury sites throughout today's testing.

As the evaluator, you are responsible for controlling access to the testing area. Only personnel authorized by the Bureau Exam Administrator are allowed in the testing station during the test. No part of the test may be electronically recorded or observed unless authorized.

The candidate will then be required to treat the specific, isolated injury. The primary survey as well as reassessment of the patient's airway, breathing, and central circulation do not need to be tested during this skill. The candidate will be required to check motor, sensory, and circulatory functions in the injured extremity prior to splint application and after completing the splinting process.

The use of traction splints, pneumatic splints, and vacuum splints is **not** permitted and should not be available for use. The candidate is required to secure the entire injured extremity after the splint has been applied. There are various methods of accomplishing this particular task. Long bone fractures of the upper extremity may be secured by tying the extremity to the torso after a splint has been applied. Long bone fractures of the lower extremity may be secured by placing the victim properly on a long backboard or applying a rigid long board splint between the victim's legs and then securing the legs together. Any of these methods should be considered acceptable and points should be awarded accordingly.

When splinting the upper extremity, the candidate is required to immobilize the hand in the position of function. A position that is to be avoided is one in which the hand is secured with the palm flattened and fingers extended. The palm should not be flattened. Additionally, the wrist should be dorsiflexed about 20 – 30° and all the fingers should be slightly flexed.

When splinting the lower extremity, the candidate is required to immobilize the foot in a position of function. Two positions that are to be avoided are gross plantar flexion or extreme dorsiflexion. No points should be awarded if these positions are used.

Equipment List

Do not open this skill for testing until you have one (1) Simulated Patient who is an adult or adolescent at least sixteen (16) years of age. The Simulated Patient must also be of average adult height and weight. One (1) EMT Assistant EMT is also required in this skill. The following equipment must be available and you must ensure that it is working adequately throughout testing:

- Exam gloves
- Rigid splint materials (various sizes)
- Roller gauze
- Cravats (6)
- Tape

INSTRUCTIONS TO THE CANDIDATE FOR LONG BONE IMMOBILIZATION

This skill is designed to evaluate your ability to properly immobilize a closed, non-angulated suspected long bone fracture. You are required to treat only the specific, isolated injury. The scene survey and primary survey have been completed and a suspected, closed, non-angulated fracture of the _____ (radius, ulna, tibia, or fibula) is discovered during the secondary survey. Continued assessment of the patient's airway, breathing, and central circulation is not necessary in this skill. You may use any equipment available in this room. You have five (5) minutes to complete this skill. Do you have any questions?

Joint Immobilization

Essay to the Skill Examiner

Thank you for serving as a Skill Examiner today. Before you read the specific essay for the skill you should review these general responsibilities as a Skill Examiner:

- Conduct test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor. The Skill Examiner must help ensure that the Simulated Patient conducts himself/herself in a similar manner throughout testing.
- Objectively observe and record each candidate's performance.
- Provide consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Record, total, and document all performances as required on all skill evaluation forms.
- Thoroughly read the specific essay for the assigned skill before actual evaluation begins.
- Check all equipment, props, and moulage prior to and during testing.
- Brief the Simulated Patient for the assigned skill.
- Maintain security of all issued exam material during the exam and ensure the return of all material to the Bureau.

This skill is designed to evaluate a candidate's ability to immobilize a suspected shoulder injury using a sling and swathe. The candidate will be advised that a primary survey has been completed on the victim and that a suspected shoulder injury is discovered during the secondary survey. The Simulated Patient will present with the upper arm positioned at his/her side while supporting the lower arm at a 90° angle across his/her chest with the uninjured hand. For the purposes of this skill, the injured arm should not be positioned away from the body, behind the body, or in any complicated position that could not be immobilized by using a sling and swathe.

As the evaluator, you are responsible for controlling access to the testing area. Only personnel authorized by the Bureau Exam Administrator are allowed in the testing station during testing. No part of the test may be electronically recorded or observed unless authorized.

The candidate will then be required to treat the specific, isolated injury. The primary survey as well as reassessment of the patient's airway, breathing, and central circulation do not need to be tested during this skill. The candidate will be required to check motor, sensory, and circulatory functions in the injured extremity prior to splint application and after completing the splinting process. Additionally, the only splint available in this skill is a sling and swathe.

Any other splint, including a long backboard, may not be used to complete this skill. If a candidate asks for a long backboard, simply inform the candidate that the only acceptable splinting material approved for completion of this skill is a sling and swathe.

Equipment List

Do not open this skill for testing until you have one (1) Simulated Patient who is an adult or adolescent at least sixteen (16) years of age. The Simulated Patient must also be of average adult height and weight. One (1) EMT Assistant is also required in this skill. The following equipment must be available and you must ensure that it is working adequately throughout testing:

- Exam gloves
- Cravats (6) to be used as a sling and swathe

INSTRUCTIONS TO THE CANDIDATE FOR JOINT IMMOBILIZATION

This skill is designed to evaluate your ability to properly immobilize an uncomplicated shoulder injury. You are required to treat only the specific, isolated injury to the shoulder. The scene survey and primary survey have been completed and a suspected injury to the _____ (left, right) shoulder is discovered during the secondary survey. Continued assessment of the patient's airway, breathing, and central circulation is not necessary. You may use any equipment available in this room. You have five (5) minutes to complete this skill.

Ventilatory Management (Supraglottic Airway Device)

Essay to Skill Examiners

Thank you for serving as a Skill Examiner today. Before you read the specific essay for the skill you will be evaluating today, please take a few moments to review your general responsibilities as a Skill Examiner:

- Conducting test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor.
- Objectively observing and recording each candidate's performance.
- Acting in a professional, unbiased, non-discriminating manner, being cautious to avoid any perceived harassment of any candidate.
- Providing consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Recording, totaling, and documenting all performances as required on all skill evaluation forms.
- Thoroughly reading the specific essay for the assigned skill before actual evaluation begins.
- Checking all equipment, props, and moulage prior to and during testing.
- Assuring professional conduct of all personnel involved with the particular skill throughout testing.
- Maintaining the security of all issued examination material during the examination and ensuring the return of all material to the Bureau Representative.

These sequential skills are designed to evaluate a candidate's ability to provide ventilatory assistance to an apneic patient with a palpable central pulse and no other associated injuries. Today you could be evaluating candidates who were trained over several different education standards and have different scopes of practice. You must determine the level at which each candidate is testing before beginning his/her actual evaluation so that you do not mistakenly evaluate a candidate over a skill that he/she may not have been trained. The instructions you read to the candidate will assist you in determining his/her level of training and which skills to evaluate today.

For the purposes of this evaluation, the cervical spine is intact and cervical precautions are **not** necessary. These skills were developed to simulate a realistic situation where an apneic patient with a palpable pulse is found supine on the floor. **The adult manikin must be placed and left on the floor for these skills.** Bystander ventilations have not been initiated. A two (2) minute time period is provided for the candidate to check and prepare any equipment he/she feels necessary before the actual timed evaluation begins. When the actual timed evaluation begins, the candidate must immediately open the patient's airway and initiate ventilation using a bag-valve-mask device unattached to supplemental oxygen. If a candidate chooses to set-up the reservoir and attach supplemental oxygen to the BVM device prior to establishing a patent airway and ventilating the patient, it must be accomplished within thirty (30) seconds of beginning his/her performance. **Regardless of the candidate's initial ventilatory assistance (either with room air or supplemental oxygen attached), it must be accomplished after body substance isolation precautions have been taken and within the initial thirty (30) seconds after taking body substance isolation precautions or the candidate has failed to ventilate an apneic patient immediately.** It is acceptable to insert a simple airway adjunct prior to ventilating the patient with either room air or supplemental oxygen. You must inform the candidate that no gag reflex is present when he/she inserts the oropharyngeal airway.

After the candidate ventilates the patient for a minimum of thirty (30) seconds, you must inform the candidate that ventilation is being performed without difficulty and that pulse oximetry indicates the patient's blood oxygen saturation is 85%. The candidate should call for integration of supplemental oxygen at this point in the procedure if it was not attached to the BVM initially. You should now take over BVM ventilation while the candidate gathers and assembles the adjunctive equipment and attaches the reservoir to supplemental oxygen if non-disposable equipment is being used. If two or more testing rooms are set-up and one is using a disposable BVM, be sure to leave the mask and reservoir attached to all the non-disposable BVMs throughout testing. To assist in containing costs of the practical examination, the oxygen tank used may be empty. The candidate must be advised to act as if the oxygen tank were full. However, the supplemental oxygen tubing, regulator, BVM, and reservoir should be in working order.

After supplemental oxygen has been attached, the candidate must pre-oxygenate the patient by ventilating at a rate of 10 – 12 ventilations/minute with adequate volumes of oxygen-enriched air. It is required that an oxygen reservoir (or collector) be attached. Should the candidate connect the oxygen without such a reservoir or in such a way as to bypass its function, he/she will have failed to provide a high percentage (at least 85%) of supplemental oxygen. You must mark the related statement under "Critical Criteria" and document his/her actions. Determination of ventilation volumes is dependent upon your observations of technique and the manikin's response to ventilation attempts. Ideally, these volumes range between 500 – 600 mL (6 – 7 mL/kg), but specific and accurate measurements of these volumes are quite difficult with the intubation manikins currently available.

After the candidate ventilates the patient with supplemental oxygen for at least thirty (30) seconds, you must automatically auscultate breath sounds. Inform the candidate that breath sounds are present and equal bilaterally and medical control has ordered the placement of a supraglottic airway device (either Combitube[®], PTL[®], or King LT[®]) of the candidate's choosing.

Be sure to document the supraglottic airway utilized by noting the specific device the candidate chooses on the evaluation form. This will also help clarify any performance documentation at a later time if necessary.

You must then take over ventilation while the candidate prepares supraglottic airway device equipment. When the candidate is prepared to insert the airway and instructs you to move, you must also remove the oropharyngeal airway (nasopharyngeal airways may be left in place). The candidate place the supraglottic airway device. An "attempt" for this examination is defined as introduction of the supraglottic airway device into the manikin's mouth regardless of trying to pass the tube or not. Throughout these attempts, ventilation may **not** be interrupted for more than thirty (30) seconds. The candidate must recognize the need for re-oxygenation of the patient and order you to re-oxygenate the patient. At this point, you may only ventilate the patient upon the candidate's command and must document any interruption in ventilation for more than thirty (30) seconds under "Critical Criteria" on the evaluation form. Do not stop the candidate's performance if he/she exceeds this 30 second maximum time limit on any attempt but document the ventilation delay as required.

Key Information on Supraglottic Airway Devices

Proper evaluation requires that the Skill Examiner be fluent in the proper use of each piece of equipment that could be used in these skills. Due to the likelihood that the Skill Examiner may be more knowledgeable in the use of one of the supraglottic airway devices, included is a more detailed review than customary in the following guidelines. Be sure that you review all related information for these devices before you begin evaluation of the candidates and insert each device to help ensure that all equipment is in proper working order, the manikin is compatible with insertion of each device, and you are familiar with the appropriate use of all devices.

Combitube[®] and PTL[®]

The Combitube[®] and PTL[®] are similar airway devices that are blindly inserted so that the distal tip of the tube becomes placed in either the esophagus or trachea outside of the operator's control. The tube contains two separate lumens, one of which is used for ventilation if the tip becomes placed in the esophagus and the other if in the trachea. Both the Combitube[®] and PTL[®] contain two inflatable cuffs which surround the tube. Once the device has been inserted to the proper depth, the proximal cuff is positioned so it is inflated in the pharynx to seal the mouth and nose, thereby replacing the need for a mask and maintenance of a mask seal. The second cuff provides a seal around the distal end of the tube and isolates either the esophagus or trachea depending on where the distal tip has become placed. The tip should be lubricated with a water soluble lubricant prior to insertion in a patient.

Placement in the midline and to the proper depth is a critical factor with the insertion of both devices. The Combitube[®] is placed to the proper depth when the ring printed on the tube is at the level of the teeth or gum line in toothless patients. The PTL[®] is placed to the proper depth when the flange of the bite block is at the level of the teeth. After insertion of the PTL[®] to the proper depth, it is critical that the head strap be secured before the cuffs are inflated to prevent movement and displacement of the device. Once the Combitube[®] has been inserted to the proper depth, it is manually held in place until the pharyngeal and distal cuffs are separately inflated using the two differently sized syringes provided by the manufacturer. The pharyngeal cuff is inflated by connecting the 140 mL syringe to the one-way valve on the blue pilot bulb and injecting 100 mL of air (80 mL in the Small Adult SA Size Combitube[®]). The distal cuff is inflated by connecting the smaller syringe to the one-way valve on the white pilot bulb and injecting 15 mL of air (12 mL in the Small Adult SA Size Combitube[®]). If the candidate does not immediately remove either syringe after inflating the cuff, the Skill Examiner must check and document this action listed in the "Critical Criteria" section of the evaluation instrument.

The PTL[®] contains a single one-way valve and mouthpiece into which the operator blows (by mouth or BVM device) to inflate both cuffs simultaneously. **For the purposes of evaluation, no candidate is permitted to inflate the cuffs of the PTL[®] by mouth but should inflate them by using the BVM.** Proper cuff pressure is determined by feeling the resistance produced and confirmed by palpation of the pilot bulb. Should the candidate state that the cuffs are sufficiently inflated; the Skill Examiner should ask the candidate to clarify how that determination was made. Remember that the head strap must be secured before inflation of the cuffs is attempted when using the PTL[®].

After the cuffs have been inflated, it is critical that the patient be ventilated to determine which lumen should be used to deliver ventilation. For the purposes of evaluation, the Skill Examiner must always respond with clinical signs that indicate ventilation is not occurring when the candidate directs you to ventilate through the initial lumen. Your initial response should be:

- There appears to be no chest rise when the patient is ventilated.

Then if/as each is auscultated or verbalized, you should respond as follows:

- Air and gurgling sounds are heard over the epigastrium.
- No sounds are heard over either lung.

The candidate should then instruct the Skill Examiner to remove the BVM from the adaptor on the initial lumen (esophageal placement), attach it to the adaptor on the second lumen (endotracheal placement), and ventilate the patient. If the PTL[®] was used, the candidate must remove the stylette from the second lumen before you attach the BVM. If the candidate does not remove the stylette, you should inform the candidate that you cannot attach the BVM properly to the second lumen. You should continue to present this finding until the stylette is removed.

Once you have re-instituted ventilation through the second lumen (endotracheal placement), it is critical that the candidate determines if the correct lumen is being used to ventilate the patient. You should now respond with clinical signs that indicate ventilation is now occurring by stating:

- You observe adequate chest rise and fall

Then if/as each is auscultated or verbalized, you should respond as follows:

- No air or gurgling sounds are heard over the epigastrium.
- Good and equal breath sounds are heard over each lung.

Should auscultation either over the epigastrium or lungs bilaterally be omitted, the candidate has failed to confirm that the proper lumen is being used. If the candidate meets all other critical criteria and successfully works through the sequence until the alternate lumen is confirmed as the appropriate route to provide ventilation of the patient, it is not critical if the candidate directs ventilation attempts to occur in an order different from that which the manufacturer recommends.

Lastly, the candidate should secure the Combitube[®] with a strap or tape. When using the PTL[®], the candidate should confirm that the device has remained properly secured.

King LT[®] Oropharyngeal Airway

The King LT[®] Oropharyngeal Airway (and other related devices) consists of a curved tube with several ventilation outlets located between two high volumes, low pressure inflatable cuffs. When properly inserted, these ventilation outlets align with the patient's laryngeal inlet, allowing for adequate oxygenation and ventilation to occur. Both cuffs are inflated using a single pilot balloon. The distal cuff is designed to seal the esophagus and reduce the possibility of gastric insufflation. The proximal cuff is intended to stabilize the tube by anchoring at the base of the tongue after it is inflated, thereby blocking the nasopharynx and the oropharynx. A pressure gauge or syringe is used to attach to the single pilot balloon and inflate both cuffs simultaneously. Inflation volumes typically range between 60 – 90 mL of air depending on the size of the King LT[®] Oropharyngeal Airway device. A standard 15 mm connector is attached to the proximal end of the tube for attachment to a bag-valve-mask or other ventilation device. Several reference markings are also located on the proximal tube to assist in determining the proper depth of insertion of the device.

Prior to insertion, the King LT[®] Oropharyngeal Airway device should be inspected for visible damage. The Valve Actuator is then disconnected from the Inflation Valve, and both cuffs are inflated simultaneously by injecting the maximum recommended volume of air into the cuffs depending on the size of the device being used (Size 3 – 60 mL; size 4 – 80 mL; size 5 – 90 mL). After assuring that no leaks are present, the Valve Actuator is disconnected from the Inflation Valve and all air is removed from both cuffs. A water-based lubricant should be applied to the beveled distal tip and posterior aspect of the tube, taking care to avoid introduction of lubricant in or near the ventilatory openings.

After the patient is pre-oxygenated, the patient's head should be placed in the sniffing position. If necessary, the head can also be left in the neutral position during insertion and use of the device. The device should be grasped at the connector while the patient's mouth is held open using a tongue-jaw lift if possible. A tongue depressor can also be used to lift the tongue anteriorly to facilitate easy advancement. The device should be rotated laterally 45 – 90° while the tip is introduced into the mouth and advanced behind the base of the tongue. The device should then be rotated back to midline as the tip reaches the posterior wall of the pharynx. Insertion can also be accomplished by a midline approach. A tongue-jaw lift is performed; the distal tip is inserted on a midline and slid along the palate until properly positioned in the hypopharynx. In either case, the device should then be advanced until the base of the connector is aligned with the teeth or gums, making sure that excessive force is not exerted during insertion.

If a proprietary pressure gauge is available, the cuffs should be inflated to a maximum pressure of 60 cm H₂O. If a cuff pressure gauge is not available, a syringe should be used to inflate the cuffs with the minimum volume necessary to seal the airway at peak ventilatory pressure. Typically, these volumes are as follows:

- Size 3: 45 – 60 mL
- Size 4: 60 – 80 mL
- Size 5: 70 – 90 mL

The breathing circuit is then attached to the 15 mm connector of the device. While the patient is gently ventilated, the device should be withdrawn while the patient is assessed until ventilation is easy and free-flowing (large tidal volume with minimal resistance felt on insufflation). In this manner, ventilation can be optimized and usually results in the best depth of insertion. Proper position should then be further confirmed by auscultation, chest movement and verification by waveform capnography. The cuff inflation pressure should be readjusted to 60 cm H₂O if a pressure gauge is available. Finally, the device should be secured using tape or other acceptable means while noting the depth of insertion as indicated on the proximal reference marks. A bite block can also be inserted if desired.

You should then dismiss the candidate from this skill and disconnect all equipment to reset your room. Be certain to evacuate all air from the cuffs before attempting to remove the airway device utilized. You should re-package all equipment as supplied from the manufacturer before permitting another candidate to enter your room. Also, be sure to organize the equipment in an orderly fashion to minimize potential confusion.

Equipment List

Do not open these skills for testing until the following equipment is available. You must ensure that all equipment is working adequately throughout testing. All equipment must be disassembled (reservoir disconnected and oxygen supply tubing disconnected when using only non-disposable equipment, regulator turned off, etc.) before accepting a candidate for evaluation:

- Examination gloves (may also add masks, gowns, and eyewear)
- Adult Intubation manikin
- Syringes (10 mL, 20 mL, 35 mL, etc.)
- Stylette
- Bag-valve-mask device with reservoir
- Oxygen cylinder with regulator (may be empty)
- Oxygen connecting tubing
- Selection of oropharyngeal airways
- Selection of nasopharyngeal airways
- Various supplemental oxygen devices (nasal cannula, non-rebreather mask with reservoir, etc.)
- Suction device with rigid and flexible catheters and appropriate suction tubing
- Sterile water or saline
- Supraglottic airway of choice:
 - Combitube[®]
 - PTL[®]
 - King LT[®] Oropharyngeal Airway or similar
- Stethoscope
- Lubricant (silicone spray)
- 1/2" tape
- Spare batteries
- Tongue blade

INSTRUCTIONS TO THE SKILLS CANDIDATE FOR VENTILATORY MANAGEMENT (SUPRAGLOTTIC AIRWAY)

These progressive skills are designed to evaluate your ability to provide immediate and aggressive ventilatory assistance to an apneic adult patient who has no other associated injuries. This is a non-trauma situation and cervical precautions are not necessary. You are required to demonstrate sequentially all procedures you would perform, from simple maneuvers and adjuncts to placement of a supraglottic airway device of your choosing.

[NOTE: Skill Examiner now begins to fill-out appropriate form. If the PTL[®] is available, you must inform the candidate that the cuffs may not be inflated by mouth. The candidate must inflate the PTL[®] cuffs by using the BVM.]

You will have three (3) attempts to successfully place the supraglottic airway device. You must actually ventilate the manikin for at least thirty (30) seconds with each adjunct and procedure utilized. I will serve as your trained assistant and will be interacting with you throughout these skills. I will correctly carry-out your orders upon your direction. Do you have any questions?

At this time, please take two (2) minutes to check your equipment and prepare whatever you feel is necessary.

[After two (2) minutes or sooner if the candidate states, "I'm prepared," the Skill Examiner continues reading the following:]

Upon your arrival to the scene, you observe the patient as he/she goes into respiratory arrest and becomes unresponsive. A palpable carotid pulse is still present. Bystander ventilations have **not** been initiated. The scene is safe and no hemorrhage or other immediate problem is found.

IV & IO Skills Essay to Skill Examiners

Thank you for serving as a Skill Examiner at today. Before you read the specific essay for the skill you will be evaluating today, please take a few moments to review your general responsibilities as a Skill Examiner:

- Conducting test-related activities on an equal basis for all candidates, paying particular attention to eliminate actual or perceived discrimination based upon race, color, national origin, religion, gender, age, disability, position within the local EMS system, or any other potentially discriminatory factor.
- Objectively observing and recording each candidate's performance.
- Acting in a professional, unbiased, non-discriminating manner, being cautious to avoid any perceived harassment of any candidate.
- Providing consistent and specific instructions to each candidate by reading the "Instructions to the Skills Candidate" exactly as printed in the material provided by the Bureau. Skill Examiners must limit conversation with candidates to communication of instructions and answering of questions. All Skill Examiners must avoid social conversation with candidates or making comments on a candidate's performance.
- Recording, totaling, and documenting all performances as required on all skill evaluation forms.
- Thoroughly reading the specific essay for the assigned skill before actual evaluation begins.
- Checking all equipment, props, and moulage prior to and during the examination.
- Briefing any Simulated Patient and EMT Assistant for the assigned skill.
- Assuring professional conduct of all personnel involved with the particular skill throughout the examination.
- Maintaining the security of all issued testing material ensuring the return of all material to the Bureau Representative.

These skills are designed to verify a candidate's competency in establishing a peripheral IV on a manikin arm and administering an intravenous bolus injection of medication. These skills are scenario-based and the candidate must choose the appropriate IV solution and medication following the instructions and scenarios in accordance with American Heart Association guidelines and other accepted medical practice.

Intravenous Therapy

In this skill, you will evaluate the candidate's ability to establish a peripheral IV on a manikin arm. Several patient scenarios are provided for you to read to the candidates. Respond to any of the candidate's questions as a patient would in the field, but do not provide any misleading or "tricky" responses.

You should prepare the equipment to include an assortment of catheters, IV solutions, and administration sets for representative purposes. If costs are a major consideration, it is acceptable for all candidates to infuse one specific solution with only one size of catheter and administration set. For example, if a large quantity of microdrip tubing is available and a large supply of any expired solution has been obtained from pharmacy services, it is acceptable to use these items in lieu of the supplies selected by the candidate from the representative supplies.

As soon as the candidate chooses the solution from the representative sample of equipment assembled, you will need to hand him/her the expired solution and state, "For the purposes of this evaluation, we'll assume this is the solution you selected. You may continue." By the same token, you should replace large catheters (14-16 ga.) with smaller catheters (20-22 ga.) after they are chosen to prolong the useful life of the manikin arm skin. Likewise, total taping of the IV with immobilization of the limb is not mandatory and can be verbalized to assist in cost control.

Self-protecting catheters are common in practice. As the stylette is removed from the catheter, several different mechanisms are used to automatically shield the bevel of the contaminated sharp, thereby reducing the possibility of a needle stick injury with a contaminated sharp. However, these mechanisms may not be infallible. In accordance with current OSHA recommendations, any blood-contaminated sharp should be disposed of immediately into a proper container at the point of use. Be sure to uphold this standard for the testing, too.

Notoriously, manikin IV arms are perhaps best noted for malfunction of the "flashback" system during an testing. Should this occur, you should immediately attempt to correct the problem or replace the arm. If these efforts fail, you must explain the problem to each candidate before evaluation begins. At the point where a flashback would occur in his/her performance of the skill, simply state, "Blood is now seen in the flash chamber of the catheter." You may also need to supply other logical clinical information that cannot be simulated with the manikin arm. For example, if the tourniquet is left in place and the candidate turns the IV on, immediately report the IV won't run. If the candidate analyzes the problem and remediates the omission in a timely manner, credit should be awarded for this step.

At the conclusion of the performance, carefully review all "Critical Criteria" statements on the evaluation form and be sure to document your rationale for checking any of these statements. Be sure that all your paperwork is complete, totaled, signed, and your room has been prepared to appear in a consistent manner before accepting the next candidate for evaluation.

Intraosseous Infusion

These skills are designed to evaluate a candidate's ability to establish an intraosseous infusion in the patient. An array of commonly used equipment to establish an intraosseous line in a patient should be available on the testing table from which the candidate must select the appropriate materials. Manual insertion of Jamshidi[®] needles as well as the use of electric, drill-type devices and spring-loaded devices such as the B.I.G. Bone Injection Gun[®] are permitted in this skill. To help control costs for the testing, expired solutions may be used. As soon as the candidate chooses the solution from the representative sample of equipment assembled, you will need to hand them the expired solution and state, "For the purposes of this evaluation, we'll assume this is the solution you selected. You may continue." In a similar way, any other equipment in this skill may be repackaged and reused. If multiple skills are set-up, be sure all equipment is identically labeled.

After reading the prepared scenario, each candidate must select, prepare, and establish an intraosseous infusion in the intraosseous infusion manikin. **The use of wet tissue (chicken legs, etc.) for this skill is prohibited.** You should respond to the candidate's questions as the parent of this patient would in the field. Do not provide any misleading or "tricky" responses. If asked, you should answer any questions about the patient and should state the weight of the patient in pounds only as listed in the scenario.

When preparing the solution, administration set, and syringe, some systems use a three-way stopcock valve instead of the additional extension tubing. The use of extension tubing is optional in this skill and subject to local practices. Please keep this in mind when reviewing the step that reads, “Attaches syringe and extension set to IO needle and aspirates; or attaches 3-way stopcock between administration set and IO needle and aspirates; or attaches extension set to IO needle.” Remember that many successful IO sticks are “dry sticks” that yield no marrow return upon aspirating the IO needle. It is acceptable for the candidate to immediately connect the infusion set to the IO needle and slowly infuse fluid while watching for early signs of infiltration. In this case, the candidate properly evaluated the patency of the IO line in an acceptable manner.

The candidate has a maximum of two (2) attempts to establish an intraosseous infusion within the six (6) minute time limit. You should immediately dismiss the candidate when the six (6) minute time limit expires or he/she is unsuccessful in placing the needle after two (2) attempts. It is imperative that the correct landmark be identified before insertion of the needle to avoid damage to the epiphyseal plate. The candidate should locate the tibial tuberosity and insert the needle 2 – 3 fingers’ width below this landmark on the anteromedial surface. After properly cleansing the site, the needle should be inserted at about a 90 degree angle or slightly directed away from the joint. The Jamshidi[®] needle should be inserted using firm pressure and in a twisting, back-and-forth, boring motion until penetration through the bone is noted by feeling a “pop” and the sensation of a sudden lack of resistance. When using an electric, drill-type device, the needle is advanced until there is a noticeable lack of resistance. When using the B.I.G. Bone Injection Gun[®], the depth of insertion should be adjusted based upon the patient’s age.

No matter what device is used, the site should also be stabilized in a safe manner while the puncture is being performed. If the candidate holds the leg in the palm of one hand while performing the puncture directly over top of his/her hand, you should mark the related “Critical Criteria” statement for this potentially dangerous action and document the candidate’s actions as required. Additionally, it is imperative that the safety device is only removed after firmly placing the B.I.G. Bone Injection Gun[®] on the leg and stabilizing the device before deploying the trochar. The Skill Examiner must be vigilant and immediately stop any dangerous act before actual harm may occur. Be sure to dismiss the candidate, check the Critical Criteria statement for “Uses or orders a dangerous or inappropriate intervention,” and specifically document the situation on the back side of the skill evaluation form.

After removing the trochar, the IO catheter should stand up unsupported if it has been properly placed in the bone. Extension tubing or a three-way stopcock valve with a syringe should be attached and aspiration of blood or bone marrow can be attempted to confirm proper placement or fluid can be injected slowly while watching for signs of infiltration. Remember that it is not always possible to aspirate cloudy marrow or blood from a properly placed intraosseous needle and you may wish to alter your response between candidates accordingly. The candidate should slowly inject fluid and observe for signs of infiltration around the injection site and then adjust the appropriate flow rate. Finally, the needle should be secured in place and stabilized with sterile gauze or other bulky dressings.

At the conclusion of the performance, carefully review all "Critical Criteria" statements on the evaluation form and be sure to document your rationale for checking any of these statements. Be sure that all your paperwork is complete, totaled, signed, and your room has been prepared to appear in a consistent manner before accepting the next candidate for evaluation.

Equipment List

Do not open these skills for testing until the following equipment is available. You must ensure that all equipment is working adequately throughout testing:

- Examination gloves
- IV infusion arm
- Intraosseous infusion manikin with replacement tibias (6-8 sticks/tibia)
- IV solutions*
- IV extension tubing or 3-way stopcock
- IV catheters***
- Administration sets**
- Intraosseous needles (either Jamshidi®; electric, drill-type; or spring-loaded device)
- Tape
- Gauze pads (2x2, 4x4, etc.)
- Bulky dressing
- Syringes (various sizes)
- Tourniquet
- Alcohol preps or similar substitute
- Approved sharps container

NOTE: Please refer to the essay for a detailed discussion of the following:

* Need a selection array but may be expired

** Need a selection array and must include microdrip tubing (60 gtt/cc)

*** Need a selection array and can replace with small (20-22 ga.) catheters

**INSTRUCTIONS TO THE SKILLS CANDIDATE FOR
IV THERAPY**

Welcome to the Intravenous Therapy Skill.

This skill is designed to evaluate your ability to establish an IV just as you would in the field. You will be required to establish a patent and flowing IV in a maximum of three (3) attempts within a six (6) minute time limit. Although we are using the manikin arm, you should conduct yourself as if this were a real patient. You should assume that I am the actual patient and may ask me any questions you would normally ask a patient in this situation. Do you have any questions?

The patient you are treating is ...

**INSTRUCTIONS TO THE SKILLS CANDIDATE FOR
INTRAOSSEOUS INFUSION**

Welcome to the Intraosseous Infusion skill. This skill is designed to test your ability to establish an intraosseous infusion in a patient just as you would in the field. You will have a maximum of two (2) attempts to establish a patent and flowing intraosseous infusion within a six (6) minute time limit. Within this time limit, you will be required to properly administer fluid to a patient just as you would in the field based on a given scenario. Although we are using the manikin, you should conduct yourself as if this were a real patient. You should assume that I am the parent of this patient and may ask me any questions you would normally ask in this situation. Do you have any questions?

The patient you are treating is...

Appendix A: Signs for Skill Stations

SPINAL IMMOBILIZATION (SUPINE PATIENT)

SPINAL IMMOBILIZATION (SEATED PATIENT)

EXTREMITY SPLINTING

**(JOINT OR LONG
BONE INJURY)**

INTRAVENOUS THERAPY

INTRAOSSEOUS INFUSION

VENTILATORY MANAGEMENT