Yale NewHaven Health
Yale New Haven Hospital

EMS POLICY & PROCEDURE MANUAL

YALE NEW HAVEN CENTER FOR EMS

Table of Contents

Interfacility Transport

Quality Assurance

Scope of Practice & Medication Formulary

Definitions

***Applicant/Precepting Paramedic**:* An employee or volunteer of an EMS service who has applied to YNHH CEMS for medical authorization.

Direct Medical Oversight (DMO): YNHH emergency medicine or EMS physician that has authorization to give orders to EMS providers related to medical care. This may be on scene or via radio/phone through the York St. YNHH ED Campus.

EMS Medical Director: The EMS Physician who is listed as responsible for medical direction for the YNHH EMS system, including but not limited to, authorization of practice, scope of practice, and oversees policy and procedures related to medical care. This includes authority for overseeing the Medical Direction Team and gives the authority to each EMS Physician as a designee of the medical director.

***EMS Service/Agency**:* An organization or entity that is (a) authorized under applicable state and local laws and regulations to provide emergency medical services, and (b) sponsored by YNHH CEMS.

***Medical Authorization**:* Permission to perform medical care treatments (a) to the extent permitted by the CT Office of Emergency Medical Services; and (b) according to YNHH CEMS protocol under the medical oversight and direction of YNHH CEMS as provided by law. Granted by the YNHH CEMS Medical Direction Team.

Medical Direction Team: The group of core EMS physicians who represent the CEMS physician medical support team. Each EMS physician has authority over the system, permission to give direct on-scene medical control and is a member of the YNHH SHARP team. EMS Fellows are included in this team.

Medical Oversight: The active surveillance by physicians of the provision of emergency medical services sufficient for the assessment of overall emergency medical service practice levels, as defined by state-wide protocols.

Operations Team: YNHH CEMS staff dedicated to the operational functions of the YNHH CEMS EMS system. Members include but are not limited to Education and Operations Manager, EMS Operations Coordinator, EMS Coordinator, Medical Direction Team and their designees.

***Precepting Advanced Life Support (ALS) calls**:* Those calls requiring advanced life support services in which the precepting paramedic is responsible for assessment of the patient, formulation of an appropriate treatment plan, and performance of appropriate ALS skills under the supervision of an approved Paramedic Field Instructor (PFI) or SHARP Team member.

Sponsor Hospital: A hospital that has agreed to maintain staff for the provision of medical oversight, supervision and direction to an emergency medical service organization and its personnel and has been approved for such activity by the Department of Public Health.

Yale New Haven Center for EMS (YNHH CEMS): Yale New Haven Hospital entity responsible for EMS operations who is the sponsor hospital.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 1.1 – Medical Control Overview
Effective Date: 6-2-2023	**Revised Date:**

The following are protocols to be used by all EMS personnel holding medical authorization from Yale New Haven Hospital Center for EMS, to ensure quality and standardized medical care, and to establish standards by which prehospital care may be audited.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 1.2 – Covered Agencies
Effective Date: 6-2-2023	**Revised Date:**

The Yale New Haven Center for EMS is the sponsor hospital for:

- Allied Universal Security Services (Medtronic)
- American Medical Response of CT - New Haven
- Bethany Volunteer Fire Department Ambulance Corps
- Branford Fire Department
- East Haven Fire Department
- Guilford Fire Department
- Hamden Fire Department
- Madison Emergency Medical Services
- Madison Hose Company No. 1
- Madison Police Department
- Nelson Ambulance Service
- New Haven Fire Department
- Yale New Haven Sponsor Hospital Area Response Physician (SHARP) Team
- North Branford Police Department
- North Branford Volunteer Fire Department
- North Haven Fire Department
- North Madison Volunteer Fire Company
- Orange Police Department
- Quinnipiac University EMS
- University of New Haven Student EMS
- West Haven Fire Department
- West Haven Fire Department - Allingtown
- West Shore Fire Department
- Woodbridge Police Department
- Woodbridge Volunteer Fire Department
- Yale University EMS

A. Treatment provided during transport such as oxygen and cardiac monitoring must be continued during the transfer from the ambulance into the emergency department (ED). Exceptions will be clearly communicated to services.

B. Without direct medical oversight (DMO), EMS providers shall not deviate from these protocols.

C. Providers have the right to refuse to carry out orders or perform procedures that are outside of the protocol, inappropriate for the patient's condition, or exceed the provider's scope of practice.

D. With the exception of intravenous fluids and drips that are already infusing, medications are not to be transferred from field personnel to emergency department personnel, even when only a single dose has been drawn out of a multi-dose vial. Incompletely used multi-dose vials are to be discarded in appropriate waste containers in the ED. In the case of controlled substances, unused portions of vials or medication remaining in syringes must be wasted in the ED, with wasting witnessed and documented by a registered nurse, pharmacist, physician assistant, or attending physician.

E. EMS agencies must be in compliance with all YNHH CEMS policies, procedures, and directives for applicants to be considered for medical authorization.

A. As medical professionals, it is expected that all EMS personnel will perform in a professional manner at all times. Interactions with patients, family members, bystanders, other emergency responders, and other medical professionals must be courteous and respectful, regardless of circumstances or provocation.

B. All EMS clinicians must abide by healthcare facility health, safety, privacy policies while on their premises.

C. It is expected that field personnel shall manage their work schedules in order to allow adequate time off and rest. Excessive fatigue jeopardizes the safety of field personnel (e.g., driving emergency vehicles) and patients (e.g., clinical decision making and procedural skills). Working sequential shifts at one agency or working a shift for one agency immediately after a shift at another agency without adequate rest, is strongly discouraged. Work hours may be examined when complaints or continuous quality improvement (CQI) efforts result in case investigation.

D. It is recognized that there are circumstances, particularly involving traumatic mechanisms of injury (as in the case of motor vehicle crashes or industrial accidents), when it is extremely helpful to the Emergency Department clinicians to see what the scene looked like. Photographs can become a part of the patient's hospital medical record. Whenever possible, no persons should be visible in the photograph. Other identifying information, such as license plates, should also be excluded if possible. Patient care and/or transport should not be delayed to obtain photographs. State law strictly limits taking and distributing photographs by public safety and/or medical emergency responders:

Sec. 53-341c. Unauthorized taking or transmission by first responders of images of crime or accident victims. Any peace officer or firefighter, as those terms are defined in section 53a-3, or any ambulance driver, emergency medical responder, emergency medical technician or paramedic, as those terms are defined in section 19a-175, who responds to a request to provide medical or other assistance to a person and, other than in the performance of his or her duties, knowingly (1) takes a photographic or digital image of such person without the consent of such person or a member of such person's immediate family, or (2) transmits, disseminates or otherwise makes available to a third person a photographic or digital image of such person without the consent of such person or a member of such person's immediate family, shall be fined not more than two thousand dollars or imprisoned not more than one year, or both.

EMS providers should not share photographs or other potentially identifiable information (either privately or on public forums such as social media) that could result in the disclosure of a patients' protected health information. Providers are encouraged to remain aware of the public nature of social media and should avoid any posting that disparages patients or otherwise could negatively reflect upon the provider-patient relationship. Additionally, EMS providers should not share scene photographs or other potentially identifiable information (either privately or on public forums such as social media) outside of the transmission of necessary medical information during the transfer of care.

E. To avoid on-scene confusion, only paramedics who have current YNHH CEMS medical authorization should wear "paramedic" rockers and/or other items identifying themselves as paramedics during emergency responses on behalf of a CEMS-sponsored agency.

F. As medical professionals, it is expected that all EMS providers shall provide complete and accurate information during discussions with other providers, including with YNHH CEMS medical oversight personnel (both online and off-line). Intentional misrepresentation or omission of information may result in potential withholding/withdrawal of medical authorization.

A. EMS personnel may accept DMO from an on-scene physician who is not a part of the SHARP Team only after:
    a. The physician has been identified as a Connecticut licensed physician (MD or DO) and has offered some form of identification, such as a copy of the physician license or a hospital ID tag, which confirms the credentials.
    b. Obtaining from the physician a commitment to accompany the patient to the hospital in the vehicle transporting the patient.
    c. Having the physician speak directly to a physician responsible for DMO (DMO in the ED, or Medical Direction Team Physician) and receiving authority to provide on-scene medical oversight.
    d. Unless all the above criteria are met, care will continue as if no physician were on the scene.

B. SHARP Team
    a. On-scene medical oversight may be provided by a member of the SHARP Team without securing permission from the DMO physician in the ED. The SHARP Team provides immediate EMS physician field response to support emergency responders throughout the entire state of Connecticut. The team is a state-certified ALS agency and operates two licensed response vehicles.
    b. The SHARP Team is available to respond to any type of emergency incident. Team members can assist with triage, treatment, logistics, communications, and rehabilitation, as the needs of the incident dictate. A primary purpose of the team is to provide for the safety and medical needs of emergency personnel operating at incident scenes.
    c. The team is dispatched by MedCom/Valley Shore. Contact MedCom/Valley Shore via radio or by phone to request a response. MedCom/Valley Shore policy requires that the Incident Commander authorize the request. The responding team member(s) will report to the IC upon arrival for assignment, accountability, and reporting responsibility, and will remain available at the scene until released through the command structure. Unless specifically requested by the paramedic in charge, SHARP Team members will not assume responsibility for patient care.
    d. SHARP Team members have the authority to periodically audit field operations through unannounced or announced observation for the purposes of continuous quality improvement, education, and research.
    e. Licensed independent practitioners (defined by state regulations as physicians,

PAs, and APRNs) on the SHARP team may deviate from protocols in accordance with their clinical judgment but must document and be prepared to justify such deviations.

A. An electronic patient care report (ePCR) will be used to document every call a unit is dispatched to, including lift assists. An ePCR is required by YNHH CEMS unless the unit is cancelled prior to arrival at scene and appropriate response information (e.g., times and unit identifiers) is captured and stored by the unit's agency (e.g., dispatch/telecommunications records). If there are multiple patients, an ePCR must be completed for each patient. Documenting the care for multiple patients in a single ePCR is not sufficient. All ePCRs must be documented thoroughly. Simply documenting "refer to ___'s ePCR" is not sufficient.

B. Emergency patients may be defined as any person for whom the EMS system has been activated and:
    a. Has a physical or mental complaint, or suspected injury or illness.
    b. Requires or requests evaluation, assistance, treatment, or transport.
    c. Any person who is not alert and oriented, including untimely death.
    d. Any minor less than 12 years old without a parent or guardian present.

C. Crews that transport a patient to the hospital will complete an ePCR at the time the patient is delivered to the receiving facility. If the ePCR cannot be completed prior to the unit being dispatched to another call, the run form must be completed as soon as possible, **always before the end of the crew's shift**, or providers shall be subject to potential discipline.

D. EMS providers are required to enter a patient CSN (contact serial number) from the hospital ID bracelet into the ePCR for all patients transported to a YNHH facility, including non-emergency transfers. This information is required to upload the EMS ePCR directly into the patient hospital record.

E. Units that do not accompany the patient to the hospital must complete an ePCR as soon as possible, always before the end of the crew's shift, and select the hospital that the patient was transported to in the destination field of the ePCR. The transporting crew must include the name of the first responder service and any relevant information received when they took over care of the patient on their ePCR. Transporting crews (including paramedic intercept units) shall select the hospital that the patient was transported to in the destination field of the ePCR.

F. YNHH CEMS shall set the minimum configurations for ePCR software. All ePCR software

used by CEMS-sponsored agencies must be configured to transmit all ePCRs to the YNHH ESO HDE system and YNHH CEMS ESO umbrella account. The EMS Coordinator, Associate EMS Coordinator, and Operations Coordinator shall be given full access to all agency ePCR software.

G. ePCR software shall be capable of including all trend data, events, and ECGs uploaded from the cardiac monitor in the PDF version of the ePCR and shall be transmitted to the YNHH ESO HDE and YNHH CEMS ESO umbrella accounts. ePCR software shall also be capable of generating a PCO file from the cardiac monitor upload which must be readily available in the ePCR attachments.

H. **All cardiac monitor data and ECGs must be transmitted and uploaded to the ePCR.** A photo of the code summary or ECGs does not meet this requirement. If a 12-lead ECG is performed, the 12-lead ECG printout or a photocopy shall be left with the hospital clinical team. If a clinically relevant ECG strip is obtained then it should be printed and given to hospital staff (e.g., run of A-Fib, VT, etc.).
    a. Cardiac monitor data transmitted and uploaded to the ePCR must contain continuous data from all channels. When transmitting cardiac monitor data to the ePCR, the clinician shall always utilize the "**All**" report type.
    b. If an AED is utilized, the AED data file for the incident must be uploaded to the ePCR.

I. After administration of any medication, the following must be documented on the ePCR:
    a. Dose, route, and time of administration.
    b. Effect of medication on patient's condition.
    c. DMO facility and physician name authorizing administration (if applicable).

J. If a paramedic performs a patient assessment and then releases the patient to a BLS unit, that paramedic must document his or her assessment on an ePCR.

K. All information, including but not limited to all successful and unsuccessful intervention attempts (12-Lead ECG, Intubation, DMO Consult, IV Attempt, Field Presumption Time of Death, Stroke Alert, etc.) and assessment findings shall be documented in the appropriate data field. Solely documenting information in the narrative is not sufficient.

L. For interfacility transport, it is expected that all relevant supporting documents are attached to the PCR including documentation such as PCS, W10, relevant code status paperwork, and face sheets where applicable.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 2.1 – EMT Medical Authorization	
Effective Date: 6-2-2023		**Revised Date:**

***Purpose*:**

To provide a mechanism by which the State of Connecticut certified or licensed EMS personnel can become medically authorized by Yale New Haven Center for EMS (YNHH CEMS) Medical Director. Only employees of EMS services sponsored by YNHH CEMS, or personnel functioning in an EMS role with YNHHS who otherwise meet the requirements of this policy are eligible to obtain medical authorization.

***Eligibility*:**

To be eligible for consideration for temporary medical authorization at the EMT level, an applicant must;

1. Meet all applicable state licensure and certification requirements;
2. Be employed by and in good standing with an EMS service or YNHH agency;
3. Meet all other requirements specified in this policy.
4. Pass the YNHH CEMS EMT medical authorization exam proctored by a CEMS PFI, with a score of 70% or greater.

Within six months of issuance of temporary medical authorization at the EMT level, an applicant must attend an orientation class held by YNHH CEMS to review current policies and procedures. Following completion of the orientation class, applicants will receive full medical authorization.

Process:

To be considered for medical authorization, applicants must provide the following documentation to the YNHH CEMS office:

1. A copy of a current State of Connecticut EMT certification card
2. A copy of a current BLS-HCP card from the AHA, Red Cross and/or the Military Training Network.
3. A letter from the EMS service verifying employment at the level for which medical authorization is being sought.
4. A completed YNHH CEMS Medical Authorization Application.
5. A copy of a current driver's license.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 2.2 – Paramedic Medical Authorization
Effective Date: 6-2-2023	**Revised Date:**

***Purpose*:**

To provide a mechanism by which the State of Connecticut certified or licensed EMS personnel can become medically authorized by Yale New Haven Center for EMS (YNHH CEMS) Medical Director. Only employees of EMS services sponsored by YNHH CEMS, or personnel functioning in an EMS role with YNHHS who otherwise meet the requirements of this policy are eligible to obtain medical authorization.

Eligibility:

To be eligible for consideration for medical authorization, an applicant must;

1. Meet all applicable state licensure and certification requirements;
2. Be employed by and in good standing with an EMS service or YNHH agency;
3. Meet all other requirements specified in this Policy.

Process:

To be considered for medical authorization, applicants must provide the following documentation to the YNHH CEMS office:

1. A copy of a current State of Connecticut Paramedic license card
2. A copy of a current BLS-HCP card from the AHA, Red Cross and/or the Military Training Network.
3. A letter from the EMS service verifying employment at the level for which medical authorization is being sought.
4. A completed YNHH CEMS Medical Authorization Application.
5. A copy of a current driver's license.

In addition, the following must be submitted by the paramedics seeking medical authorization.

1. A current, valid National Registry of EMTs paramedic card, current State of Connecticut paramedic license, and current ACLS, PALS, PHTLS, CPR and EPC cards. Paramedic applicants may apply and begin precepting without current EPC certification on the condition that they will complete course prior to attaining YNHH CEMS medical

authorization. NREMT paramedic registration is mandatory for all paramedic applicants for YNHH CEMS medical oversight.

2. A letter of recommendation is required from the applicant's last medical director who provided medical authorization, verifying that the applicant is eligible for on-going medical authorization and attesting to his/her professionalism; or, if the applicant is a new graduate, a letter of recommendation from the Course Medical Director or Course Coordinator verifying that the applicant graduated in good standing and attesting to his/her professionalism.

3. Upon review and approval of the required application materials by the YNHH CEMS Director, the applicant will schedule a written protocol exam with the YNHH CEMS office, to be completed within 30 days. If the applicant fails (grade < 70%) the protocol exam, he/she may schedule a time to take the exam within an additional 30 days. If the applicant fails the exam a second time, he/she must re-start the application process not less than 90 days after the second failure.

4. Upon successful completion of the protocol exam, the Medical Director will grant probationary medical authorization to the applicant for a period of up to, but not exceeding ninety (90) days. During this probationary period, applicants for medical authorization at the paramedic level must provide pre-hospital patient care under the supervision of a YNHH CEMS-approved Paramedic Field Instructor (PFI). If the applicant is unable to complete the required number of ALS calls set forth in paragraph 5, in the 90-day period, they must request and extension of the probationary period from YNHH CEMS in writing via the operations coordinator.

5. New graduate paramedic applicants must complete a minimum of thirty (30) advanced life support (ALS) calls, each to the satisfaction of the YNHH CEMS PFI. This must include a full ALS assessment, defined as the administration of a medication other than oxygen OR an EKG AND an IV/IO attempt. In certain circumstances and at the discretion of the PFI, it may be appropriate for care to then be transferred to another paramedic unit without riding in the call to the hospital.

6. Paramedic applicants with prior field experience under the auspices of another medical director must complete a minimum of fifteen (15) ALS calls, each to the satisfaction of the YNHH CEMS PFI. This must include a full ALS assessment, defined as the administration of a medication other than oxygen OR an EKG AND an IV/IO attempt. In certain circumstances and at the discretion of the PFI, it may be appropriate for care to then be transferred to another paramedic unit without riding in the call to the hospital. Upon completion of this ride time, the applicant will be eligible to complete the final check ride.

7. Paramedics who have current medical authorization in Connecticut from a Yale New Haven Health System sponsor hospital are eligible for an expedited medical authorization process:

a. After successful completion of the written protocol exam, the applicant must complete a minimum of 20 hours ride time under the supervision of a YNHH CEMS PFI. During this ride time, the applicant must transport a patient to or otherwise visit both campuses of Yale New Haven Hospital to become familiar with local ED operations, including controlled substance exchanges and the ESO HDE system.
b. Upon completion of this ride time, the applicant will be eligible to complete the final check ride.
c. Should the Paramedic applicant fail to successfully complete the check ride process on their first attempt, they must complete 15 advanced life support calls as explained in this section.

8. The supervising PFI will evaluate and document each call on a YNHH CEMS Preceptor Field Evaluation form and/or online Platinum eval. A completed patient care report must be attached to the evaluation form for each call. These forms will be compiled for review at the time of the final evaluation.

9. The minimum requirements set forth in this section may be modified at the sole discretion of the Medical Director, e.g., for paramedics with substantial prior field and teaching experience.

10. When, as determined by the PFI(s) and the EMS Coordinator(s), the applicant has demonstrated sufficient clinical competence and professionalism such that medical authorization is appropriate and in the best interest of the public health and safety, a written or verbal recommendation for final evaluation will be made to the Medical Director. In the event the PFI(s), EMS Coordinator(s), and/or YNHH CEMS Operations Coordinator determine the applicant has not demonstrated sufficient clinical competence and professionalism to warrant final evaluation, the Medical Director will review the applicant's file, discuss the applicant's performance with the PFI(s) and/or EMS Coordinator(s), and determine the appropriate course of action, which may include additional precepting.

11. Following completion of the minimum requirements (and/or such other requirements as the Medical Director may prescribe as above) and recommendation as above, the supervising PFI, as applicable, will submit the applicant's field evaluation documentation to YNHH CEMS Operations Coordinator for review. Arrangements will then be made for final evaluation through the YNHH CEMS office. This final evaluation shall consist of a minimum of four hours of direct field observation by a member of the YNHH CEMS medical oversight group OR a high-fidelity simulation-based assessment. If the Medical Direction Team does not recommend medical authorization, they shall advise the Medical Director how to proceed. Feedback will also be provided directly to the applicant. Typically, additional precepted ALS calls will be required before the applicant is granted another final evaluation. If an applicant fails two attempts, a meeting will be required between the applicant, his or her service chief or training officer, and a member of the YNHH CEMS team in order to discuss a focused learning plan. Additionally, the applicant will be required to be cleared again by a paramedic field instructor before re-

challenging the final assessment after a minimum of 3 months of remediation. The 3rd attempt for final evaluation for medical authorization can include both simulations and field evaluation. To be eligible for field evaluation the applicant must pass simulation examination. If the applicant fails a 3rd attempt, he or she may not challenge again for a minimum of 6 months. Further failures will require additional remediation and timelines at the discretion of the Medical Director. If a paramedic takes 3 or more attempts to gain medical authorization, the YNHH CEMS QA panel will do random review of ePCRs from that individual for the following 6 months. This may range from all charts to any number of randomly selected charts at the discretion of the medical direction team.

MODIFICATION OF MEDICAL AUTHORIZATION FOR PARAMEDICS

Should a medically authorized paramedic wish to function at the EMT level only, but maintain paramedic licensing, written notification of such must be submitted to the YNHH CEMS Operations Coordinator one of the following must occur:

1. The paramedic must continue to complete the requirements of the YNHH CEMS Continuing Education Policy for paramedics, or;

2. The paramedic must successfully complete 40 hours of approved EMT continuing education every two years.

   Note: YNHH CEMS strongly recommends against YNHH CEMS-authorized paramedics serving as paramedics at one YNHH CEMS-sponsored ALS agency, but as an EMT at another YNHH CEMS-sponsored ALS agency.

Any paramedic with current medical authorization but functioning in a non-clinical position for longer than twelve months, or unable to function in a clinical position for longer than twelve months will be required to precept for a minimum of 15 calls and complete a final evaluation by a member of the YNHH CEMS Operations Committee. Once the final evaluation is complete, full privileges will be restored.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 2.3 – EMS Instructor Medical Authorization
Effective Date: 6-2-2023	**Revised Date:**

ELIGIBILITY:

To be eligible for consideration for medical authorization, an applicant must;

1. Meet all applicable state licensure and certification requirements;
2. Be employed by and in good standing with a YNHH CEMS-sponsored EMS service or YNHH agency;
3. Meet all other requirements specified in this policy.

PROCESS:

To be considered for medical authorization, applicants must provide the following documentation to the YNHH CEMS office:

1. A copy of a current State of Connecticut EMS Instructor certification
2. A letter of recommendation from the applicant's EMS service
3. A completed YNHH CEMS Medical Authorization Application.

EMS Instructors who receive medical authorization from YNHH CEMS shall provide the EMS coordinator and EMS medical director with an email copy of all EMS training application forms submitted to OEMS at the time of submission for course approval. Additionally, at that time the instructor is expected to provide the EMS coordinator and EMS medical director with a course syllabus and expected enrollment numbers. After course completion, the instructor must submit data on course outcomes including student evaluations and pass rates (when applicable) to the EMS coordinator and EMS medical director.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 2.4 – Continuing Education for Medical Authorization	
Effective Date: 6-2-2023		**Revised Date:**

All EMTs and Paramedics shall be required to attend the annual 2-hour YNHH CEMS CME, taught by a CEMS approved trainer, to maintain their medical authorization. This shall be done once per calendar year. The Medical Direction Team shall create a lesson plan for each year's YNHH CEMS CME based on system-wide or agency specific deficiencies identified through quality assurance and/or continuous quality improvement, with the goal of improving system-wide performance.

Any EMT or Paramedic with current medical authorization who is unable to attend the annual YNHH CEMS CME, shall complete a YNHH CEMS orientation or annual YNHH CEMS CME within 60 days of returning.

YNHH CEMS will provide or approve an instructor for the specific year's CME topic. This CME can be used towards state and NREMT certification/license renewal as local content.

All EMTs must maintain State of Connecticut EMT certification and BLS-HCP certification from the AHA, Red Cross and/or the Military Training Network.

All Paramedics must maintain a current and valid NREMT paramedic card, State of Connecticut Paramedic license, and BLS-HCP (from the AHA, Red Cross and/or the Military Training Network), AHA ACLS, AHA PALS, NAEMT PHTLS and NAEMT EPC cards (EPC may be substituted by a CEMS Medical Director approved pediatric CME).

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 2.5 – Criminal Arrest/Conviction Policy
Effective Date: 6-2-2023	**Revised Date:**

(Note: This policy is modeled, with permission, on the National Registry of EMT's felony policy.)

EMS practitioners, pursuant to their state licensure, certification, or national registration, have unsupervised contact with patients, as well as unsupervised access to patients' personal property, at a time when patients are at maximum physical and emotional vulnerability. In this capacity, EMS practitioners are placed in a position of the highest public trust, even above that granted to the other public safety professionals and most other health care providers. While police officers require warrants to enter private property and are subject to substantial oversight when carrying out duties of an intrusive nature, such as "strip searches." EMS practitioners are afforded free access to the homes and bodies of patients who, because of their need for medical attention, are extremely vulnerable and often unable to voice objections to offensive actions, provide an accurate account of events at a later time, or otherwise defend or protect themselves.

Citizens in need of EMS services rely on the EMS system and state licensure, certification, or national registration requirements to assure that those who respond to calls for aid and provide the necessary medical and/or transportation services are worthy of this extraordinary trust. Federal law prohibits persons convicted of criminal conduct from serving as police officers, and in YNHH CEMS' view, EMS providers should be held to a similar, if not higher, standard. YNHH CEMS is empowered to grant medical authorization to individual EMS practitioners who meet the applicable criteria, and therefore must ensure that individuals who are granted medical authorization do not present an unreasonable risk to public safety and are otherwise worthy of the high degree of public trust that is placed in them.

1. **General Denial:**

    a. Medical authorization of individuals convicted of certain crimes presents an unreasonable risk to public health and/or safety. Thus, individuals who have been convicted of any of the following types of crimes are not eligible for medical authorization at any level, and shall have their applications denied or their authorization revoked, as applicable:

        i. A felony involving sexual misconduct where the victim's failure to affirmatively consent is an element of the crime (e.g., forcible rape).

ii. A felony involving the sexual or physical abuse or assault of children, the elderly or the infirm, including but not limited to sexual misconduct with a child, making or distributing child pornography or using a child in a sexual display, incest involving a child or assault on an elderly or infirm person.

iii. Any crime in which the victim is a person whose care is entrusted to YNHH CEMS (e.g., an out-of-hospital patient or a patient or resident of a health care facility), including but not limited to abuse, neglect, theft or financial exploitation.

b. Revocation of medical authorization shall be effective immediately upon documentation or determination of conviction of any of the above.

2. **Presumptive Denial**

a. Medical authorization of the following individuals will be denied or revoked except in extraordinary circumstances, and then will be granted only if Medical Director determines, based on clear and convincing evidence, that such authorization will not pose an unreasonable risk to public health and/or safety:

i. Individuals who have been convicted of any crime that can raise an issue of public trust and who are currently incarcerated, on work release, or on probation or parole.

ii. Individuals convicted of any of the following crimes, unless at least five years have passed since the conviction OR at least five years have passed since release from custodial confinement, whichever occurs later:

1. A serious crime of violence against any person, including but not limited to assault or battery with a dangerous weapon, aggravated assault and battery, murder or attempted murder, voluntary manslaughter, kidnapping, robbery of any degree or arson.

2. A crime involving any controlled substance, including but not limited to unlawful possession or distribution, or intent to distribute unlawfully, any Schedule 1 through V drug as determined by the Uniform Controlled Dangerous Substances Act.

3. A serious crime against property, including but not limited to grand larceny, burglary, embezzlement, or insurance fraud.

4. Any crime involving sexual misconduct.

b. The Medical Director's decision shall be final.

3. **Discretionary Denial**

   Notwithstanding any other provisions of this policy, the Medical Director may, in their discretion, deny an individual's application for medical authorization where such individual has been convicted of any other crime (not including minor traffic violations) not specified in this policy. In determining whether denial of such individual's application is appropriate, the Medical Director may consider the following factors:

   a. The seriousness of the crime;
   b. Whether the crime relates directly to the delivery of patient care;
   c. The period of time that has elapsed since the crime was committed;
   d. Whether the crime involved violence to, or abuse of, another person;
   e. Whether the victim of the crime was a minor or a person of diminished capacity;
   f. Whether the applicant's actions and conduct since the crime occurred are consistent with the holding of a person of public trust.

The Medical Director may consider additional factors as are appropriate under the circumstances.

4. **Denial, Suspension, or Withdrawal of Medical Authorization in Cases of Criminal Arrest**

   a. This applies to clinicians following a criminal arrest, issuance of a criminal summons or criminal arrest warrant, or those released pending trial on bond or bail.
   b. Any instance of arrest being made for a significant crime as defined above or that can cause an issue of public trust can result in suspension pending completion of the criminal investigation.
   c. The medical director or the medical direction team will determine if a criminal arrest would create an issue of public trust.
   d. All parties remain innocent until proven guilty, however in the instance of serious claims and arrests that constitute an issue of public trust or potential patient harm, the medical director may suspend the authorization until the completion of the investigation.
   e. If the EMS clinician is found guilty of the crime, then full withdrawal of medical authorization is warranted as defined above.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 3.1 – BLS/ALS Assessment	
Effective Date: 6-2-2023		**Revised Date:**

All patients must be evaluated by the highest-level EMS provider present on scene, regardless of initial dispatch complaint or EMD classification. A paramedic on scene may only delegate care to the BLS provider after they have performed their own assessment and determined that the patient does not require ALS management.

BLS providers may only cancel responding paramedics in certain situations pursuant to the ALS cancellation policy (3.2).

Any paramedic on any ALS first response unit must make patient contact whenever dispatched to an ALS call, unless cancelled by a BLS unit, in accordance with the ALS cancellation policy, or by another ALS unit on scene. The patient is a responsibility of the CT OEMS Primary Service Area Responder at the Paramedic Level until formally handed off to either a BLS unit if appropriate, or to the transport paramedic who must then agree that the first responder paramedic is not needed, or if cancelled by a BLS unit in accordance with the ALS cancellation policy. **If care is relinquished to a transporting paramedic that does not hold the PSA this must be documented in an ePCR stating care was transferred.**

After evaluation and with documentation, paramedics may downgrade level of care to BLS if appropriate. This requires an appropriate physical examination, vital signs, additional testing when appropriate, and written documentation of these assessments in the patient record by the paramedic. Inappropriate downgrades of patients requiring ALS interventions to BLS, or inviting inappropriate refusals of transport, can be considered a form of patient abandonment. In cases in which the call is appropriately given to the BLS provider after a paramedic assessment, the EMT may write the documentation, but the paramedic must also sign the chart and include his or her assessment and justification for BLS only care. Paramedics who are not part of the transport crew are responsible for completion of a full PCR on every patient contact.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 3.2 – ALS Cancellation Policy
Effective Date: 6-2-2023	**Revised Date:**

PURPOSE

To clarify when BLS (EMTs) with Yale New Haven Hospital medical authorization may cancel Advanced Life Support (ALS) that has been dispatched per EMD guidelines but has not yet established direct patient contact. The purpose of this protocol is to allow for efficient use of resources and minimize paramedic response times for true life-threatening emergencies. BLS EMTs employing this protocol must have current YNHH Medical Authorization and must have completed YNHH CEMS EMT orientation and relevant refresher training.

Separate from this protocol, for calls in which ALS is not automatically dispatched per EMD guidelines (e.g., Bravo/Alpha calls, Priority 2 calls) the patient may be managed by BLS personnel. If an ALS unit has been dispatched to an Alpha, Bravo, or Priority 2 call, the response may be cancelled by the BLS unit if considered appropriate by the most senior EMT on scene or supervising EMT.

ELIGIBILITY – patients must meet at least one of the two criteria below.

1. Patients with stable vital signs (see below) for whom there is no reasonable foreseeable need for ALS level care. All EMTs on scene must agree that ALS care is not warranted.
   - Patients must have vital signs within these parameters:
     - HR 60-100
     - RR 12 – 20
     - Systolic Blood Pressure (100-180)
     - O2 Saturation (94-100%)
2. Scenarios in which the patient can be transported to an appropriate health care facility in less time than it would take ALS to arrive on scene or intercept with BLS.

EXCLUSION - BLS personnel should not cancel responding ALS resources for 'high risk' patients, including but not limited to:

- Cardiac arrest with active CPR
- Cardiac symptoms
- Difficulty breathing

- Acute altered mental status
- Attempted suicide by overdose or a combative patient
- Seizures
- Near drowning
- Active significant hemorrhage
- Pediatric patients <13 years old
- Patients who meet Trauma Triage Criteria

PROCEDURE:

BLS Personnel must:

1. Complete an appropriate patient assessment and provide treatment according to Connecticut Statewide EMS protocols.
2. If BLS determines that patient meets eligibility as defined above, they may cancel the ALS responding unit.
3. BLS must document their assessment and treatment of the patient on their electronic patient care report (ePCR) and document the cancellation as well as reason(s) for cancellation on the ePCR.
4. A completed ePCR is required by the cancelling BLS unit regardless of whether they are ultimately the transporting unit.
5. BLS cancellations will be reviewed by the CEMS operations team to ensure safe and appropriate application of this protocol. CEMS reserves the right to rescind this protocol at any time if significant issues are identified.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 3.3 – Paramedic Airway Policy
Effective Date: 6-2-2023	**Revised Date:**

YNHH CEMS paramedic shall utilize this policy during all attempts at advanced airway management, or when assuming responsibility for an airway already established by a non-YNHH CEMS agency. The term "advanced airway" shall be applied to both the endotracheal tube and any other approved supraglottic airway. A properly secured airway is a lifesaving measure that has the potential for devastating harm if not performed or maintained correctly. The availability of objective methods of tube placement confirmation (quantitative electronic waveform capnography) has given the paramedic a tool to continuously ensure that an advanced airway is positioned correctly. The following steps are designed to assist the paramedic in verifying initial airway placement, and to maintain a correctly positioned airway device until the Emergency Department staff assumes patient care.

A. The paramedic who initially establishes an advanced airway (endotracheal tube or supraglottic) shall assume the role of airway paramedic. The airway paramedic shall take responsibility for airway monitoring until the patient is transferred to the emergency department staff. While ventilation after an airway placement may be delegated to another clinician (including a BLS provider) after appropriate securing of the ETT or SGA, the airway paramedic shall be responsible for all aspects of airway placement (lung sounds, capnography, pulse oximetry, etc.). The airway paramedic may transfer responsibility of the airway to another paramedic in certain circumstances, such as in a cardiac arrest with return of spontaneous circulation in which another paramedic is the code leader and is transporting the patient. In these circumstances, the paramedic assuming the responsibility of airway paramedic must independently confirm appropriate placement of the airway to his or her satisfaction (using an appropriate assessment such as direct visualization, end-tidal CO2 tracing, and presence of bilateral breath sounds). The paramedic who assumes the role of airway paramedic is then fully responsible for that airway, and any issues that are identified will be assumed to have occurred after the transfer.

B. Waveform end-tidal CO_2 confirmation and continuous monitoring is required for all field airway management. Waveform end-tidal CO_2 shall be used to both confirm initial tube placement, and to continuously monitor tube placement until patient care is transferred to the ED staff or care is otherwise terminated including during patient transfer to and from the ambulance. Quantitative capnography must include continuous display of the $ETCO_2$ waveform. Mechanical esophageal detector devices (bulb or syringe types) may also be used to supplement end-tidal CO_2 in

equivocal cases, but some form of end-tidal CO_2 detection is mandatory. Should the patient lose their $ETCO_2$ reading, the paramedic should immediately search for an explanation. Possible reasons include:

a. Lack of perfusion
b. Equipment sensor contamination due to body fluids
c. Other equipment malfunction.
d. Inadvertent tube dislodgement due to tube movement

C. The paramedic should seek to correct the problem resulting in the loss of capnography reading. If after 30 seconds there is no return of $ETCO_2$ measurement, the patient should be extubated and ventilated with SGA or a BVM and airway adjunct. The patient may be re-intubated, however the airway device will only be left in place as long as an $ETCO_2$ reading is measurable.

D. Upon Emergency Department arrival, the Airway Paramedic shall record a quantitative capnography reading. The Airway Paramedic shall request confirmation of airway placement by an Emergency Department physician **before** the patient is physically transferred from ambulance stretcher to hospital bed. The name of the confirming physician must be documented in the ePCR.

E. In the event that a YNHH CEMS paramedic is questioned regarding correct airway placement, an airway debriefing shall be initiated immediately. The paramedic shall contact MedCom/Valley Shore and request notification of the YNHH CEMS EMS Coordinator. If the coordinator cannot be contacted, a Medical Direction Team member shall be contacted through MedCom/Valley Shore. The YNHH CEMS representative performing the debriefing shall either respond directly to the Emergency Department or speak with the involved parties by telephone. All cardiac monitor data will be electronically transmitted to the ePCR and provided to the YNHH CEMS personnel performing the debriefing. If system status allows, the involved crew should remain at the hospital until the debriefing is complete. If possible, the cardiac monitor should be pulled from service in order to ensure data remains retrievable by YNHH CEMS staff.

F. Documentation on the patient care report for each intubated patient (ETT or approved SGA) shall include the methods used to confirm placement, presence of an acceptable ETCO2 waveform, the initial ETCO2 value, and a repeat ETCO2 value documented each time repeat vital signs are taken, the patient is moved, and prior to transferring care at the ED. Patient care documentation shall assure that all data points have been included on the ePCR.

G. Documentation is a key component in protecting a paramedic against claims of a misplaced airway device. The documentation will include initial and final assessment of airway placement, regardless of transportation decision (hospital transport or field termination). Documentation will also reflect a re-assessment performed after each patient movement. The mnemonic “EMS BREATH” may be used as a memory aid for the components of airway verification. The components are:

- E= End Tidal CO2 reading
- M= Measure (size/depth of tube)
- S= SpO2 reading
- B= Bilateral breath sounds
- R= Rise/fall of chest
- E= Esophageal detection
- A= Absent gastric sounds
- T= Tube misting
- H= Hospital confirmation

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 3.4 – Cardiac Cath Lab Activation
Effective Date: 6-2-2023	**Revised Date:**

Inclusion Criteria:

A. 12-lead ECG of good quality showing a STEMI (MUST MEET ALL THREE CRITERIA):
   - ST elevation 2mm or greater in leads V2-V3, or 1mm or greater in at least two other anatomically contiguous leads
   - No left bundle branch block (LBBB) or wide-complex paced rhythm
   - *** ACUTE MI SUSPECTED*** (LP 12), *** MEETS ST ELEVATION MI CRITERIA*** (LP 15), or other device specific STEMI interpretation prints on 12 lead ECG AND paramedic agrees with interpretation

B. Active chest pain or equivalent symptoms (e.g., nausea, dyspnea)

C. No major active bleeding (e.g., Vomiting frank blood)

D. No major surgery within the past six weeks (e.g., abdominal, neurosurgical)

E. No significant trauma

F. If there is significant concern for STEMI based on paramedic interpretation of ECG that does not meet above criteria due to poor ECG quality, the paramedic cannot activate the cardiac cath lab; however, should transport to a STEMI capable destination. The clinician should notify the receiving hospital of this concern via patch and on arrival ensure the receiving triage staff member is notified.

Activation Process:

1. If your service utilizes C3, contact C3 for destination between 0800 - 1700. Monday-Friday (other than federal holidays). Otherwise, proceed to York Street campus.

2. Notify the receiving hospital as soon as the patient has met activation criteria. Contact MedCom/ Valley Shore and advise them of the /destination facility and request cath lab activation.

3. Follow treatment protocols as outlined in CT State EMS Protocol - ACS (3.0)

4. Initiate transport

After stabilization of patient, establish communications with the receiving hospital to provide a full report and ETA. Clearly state that the patient has a STEMI and that this is a cath lab activation.

YNHH Cath Lab Hours:

The cardiac catheterization lab at the Saint Raphael Campus is open from 0800-1700, Monday-Friday (except national holidays). All cath lab activations falling outside of those hours should be transported to the York Street Campus.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 3.5 – Stroke Alert	
Effective Date: 6-2-2023		**Revised Date:**

A. Initiate patient care in accordance with current CT State EMS Protocols.

B. Determine an accurate time of symptom onset.

C. If symptoms began **within the last 24 hours**, the patient is not hypoglycemic (< 60 mg/dL) AND the stroke screen is positive:

   a. If your service utilizes C3, contact C3 for destination.

   b. Notify the receiving facility of a Stroke Alert as soon as possible.

   c. Initiate rapid transport to the Stroke Center (Yale New Haven Hospital-York Street Campus OR Saint Raphael Campus).

   d. Patients < 18 years old should be transported to Yale Children's Hospital ED.

A. Yale New Haven Shoreline Medical Center ED

The Yale-New Haven Shoreline Medical Center ED, known by its MedCom/Valley Shore designation as "Yale Guilford," operates as a regular ED, and is staffed by the same attending emergency physicians, physician assistants, and nurses that staff the YNHH Emergency Department. The facility is equipped and staffed to offer the full range of emergency medicine for patients of all ages.

There are several general categories of patients who typically should not be transported to the Yale Guilford ED:

a. Trauma: Patients meeting the state's physiologic, anatomic, or mechanism of injury trauma triage criteria shall be transported directly to a designated trauma center. Patients with major burns and amputations should be transported directly to a trauma center.
b. Myocardial Infarction: Patients whose 12-lead ECG shows an acute ST-segment elevation myocardial infarction (STEMI) should generally be transported to a facility offering 24-hour percutaneous coronary intervention, and the cardiac cath lab activated from the field. These cases should be discussed with the YNHH York St Campus DMO physician if there are any destination issues.
c. Acute Stroke: Patients being cared for under the Focal Neurological Deficit protocol who meet the EMS Stroke Screen criteria should generally be transported to a facility capable of rapid screening and treatment of stroke. The Yale Guilford ED is unable to provide this level of rapid treatment.
d. Active Labor: Women in active labor should generally be transported to a facility with labor and delivery facilities. The Guilford ED is staffed and equipped to deliver babies, and if delivery is imminent, is an acceptable destination.
e. Psychiatric Emergencies, including alcohol or drug incapacitation: The Yale Guilford ED does not have the resources for prolonged monitoring of restrained patients. Patients who will need an evaluation by a psychiatrist or prolonged observation for substance intoxication should be transported to a hospital-based ED.
f. ROSC (Return of Spontaneous Circulation): Cardiac arrest patients who have been successfully resuscitated in the field should be transported directly to a facility capable of providing the full spectrum of post-arrest care (e.g., PCI, induced hypothermia), – i.e., to the YNHH York Street Campus or YNHH St. Raphael Campus.

g. Complex Medical Devices: All patients with implanted medical devices (other than pacemakers and/or defibrillators) such as left ventricular assist devices (LVAD) or with continuous medication pumps (other than insulin) such as prostacyclin pumps for pulmonary hypertension should be transported to the York Street Campus.
h. In the event a critical patient is in need of emergent intervention that requires an ER Physician (e.g., RSI), EMS may transport to Yale Guilford for the emergent intervention, however, must patch to Yale Guilford as early as possible.

B. Patients with Suspected Hip Fractures

Patients aged greater than 65 years with a ground level fall and **not** meeting *state trauma triage protocols but* presenting with signs of hip fracture shall be transported to ***YNHH – Saint Raphael Campus*** for evaluation and treatment, rather than either Yale Guilford or YNHH-York St Campus. Signs of a suspected hip fracture include severe pain, shortening of the leg, with or without inward or outward rotation of the leg, typically after a fall. Other indicators include inability to bear weight on the leg, and/or stiffness, swelling or bruising in the area of the hip immediately after a fall.

C. Transport of Behavioral Health, Corrections and Police Custody Patients

a. Adult PEC
    i. All adult patients on a PEC (emergency certificate signed by a physician, psychologist, licensed clinical social worker or advanced practice RN) should be brought to the York St Campus ED that has full-time psychiatrist staffing.
b. Altercation, assault or other person-on-person violence
    i. If patients representing both sides of an altercation, assault, or person-on-person violence are injured, they should NOT both be brought to the same ED unless both of the individuals involved meet the state trauma criteria for mandatory transport to a trauma center. Otherwise, they should be transported to separate emergency departments. This is for their own protection and for the safety of EMS providers, hospital staff and other patients.
    ii. If the patients or law enforcement officers demand transport to the same facility, the transporting provider or incident commander should call direct medical oversight at the York St. campus for permission to transport to the same facility, or confirmation that they should go to separate ED's. The decision of the direct medical oversight physician carries the same authority as the EMS protocols.

D. Pediatric Transport Destination Guidelines

a. Patients aged 15 years or younger will not be transported by EMS to the St Raphael campus ED. The SRC ED will continue to accept walk-in pediatric patients, but those who are transported by EMS are likely to require consult or other services not readily available at the SRC ED.
b. Patients aged 15 years or younger with an acute behavioral health issue and a history

of same, or in custody of law enforcement or Department of Corrections should be transported to the Yale Children's ED. All such patients 16 years or older should be transported to an ADULT emergency department.

E. Pediatric Refusal of Care/Transport

a. For minors (below 18 years of age) with no parent/legal guardian as defined by CT State Protocol – 6.5 present, the providers must call DMO at the Yale Children's ED prior to obtaining the refusal.
b. Providers may obtain refusals without contacting DMO for minors 12 years or older WITH a parent/legal guardian - as defined by CT State Protocol – 6.5 present, AND the provider agrees that the refusal is reasonable and appropriate. DMO should still be contacted for all children under 12.

F. Obstetrics and Gynecology Destination Guidelines:

a. All OB/GYN patients with a gestational age of 16 weeks or greater should be transported only to the York Street campus and bypass Yale New Haven Shoreline Medical Center ED and YNHH Saint Raphael Campuses, regardless of complaint, provided it is safe to do so.
b. Patients with gynecologic complaints such as vaginal bleeding or vaginal discharge who are not known to be pregnant but have abnormal vital signs (HR greater than 110, systolic blood pressure less than 90) or who have other signs of shock or critical illness should be transported only to the York Street campus and bypass Yale New Haven Shoreline Medical Center ED and YNHH Saint Raphael Campuses provided it is safe to do so.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 3.7 – Trauma Destination Guidelines
Effective Date: 6-2-2023	**Revised Date:**

Patients meeting trauma triage criteria shall be transported to a designated trauma center, as per state regulations. The Emergency Department at YNHH York Street is the designated trauma facility for major trauma patients. Injured patients who do NOT meet the following criteria may be transported to other ED's, at their request.

Patients meeting the following state trauma criteria shall be transported to a Level I or Level II trauma center.

- Physiologic findings of:
  - Glasgow Coma Scale of 12 or less, OR
  - Systolic blood pressure of less than 90 mm Hg, OR
  - Respiratory rate of less than 10 or more than 29 breaths per minute
- Anatomy of the Injury:
  - Gunshot wound to chest, head, neck, abdomen or groin, OR
  - Evidence of spinal cord injury, OR
  - Amputation other than digits, OR
  - Two or more obvious proximal long bone fractures
  - Positive FAST exam (if trained and authorized)
- Mechanism of Injury:
  - Fall from over 20 feet
  - Apparent high-speed impact
  - Ejection of patient from vehicle
  - Death of same car occupant
  - Pedestrian hit by car going faster than 20 MPH
  - Vehicle rollover
  - Significant vehicle deformity, especially steering wheel
- Other factors to consider in addition to anatomy, physiology, and mechanism, when deciding whether an injured patient should be transported to a trauma center:

- Age less than 5 or greater than 55 years
- Known cardiac or respiratory disease
- Penetrating injury to thorax, abdomen, neck, or groin other than gunshot wound

The only exception to these destination guidelines shall be a trauma patient in whom airway control cannot be established or external bleeding cannot be controlled by the EMS providers. EMS units coming from East or North of the Yale Guilford ED can stop there for assistance securing the airway or controlling bleeding site(s) and will then continue transport of the patient to the trauma center.

- Field personnel should communicate the nature of the injuries and mechanism and should NOT request a specific type of trauma activation (modified vs. full). Communicating the nature of the injuries and the mechanism of injury (paying close attention to those criteria triggering a trauma response such as height of the fall, or the amount of MVC interior intrusion) will allow the ED staff to activate the trauma team according to that facility's criteria.
- If field personnel need help deciding whether a patient meets trauma criteria, they should contact DMO at YSC for additional guidance. EMS personnel should NOT call the Saint Raphael Campus or Yale-Guilford to ask permission to bring a patient, nor should ED staff divert an incoming patient based on the patch from EMS personnel.

If a patient meeting trauma criteria refuses transport to a trauma center, and/or demands transport to the St Raphael Campus or the Yale Guilford ED, contact DMO through MedCom/Valley Shore for assistance dealing with the refusal.

Adult Burns: A patient meeting the following criteria shall be transported directly to Bridgeport Hospital unless **the clinician suspects impending airway compromise requiring advanced airway management** (DMO or YNHH CEMS EMS Physician may be contacted if needed to assist with destination decision)

- Partial thickness burns greater than 10% total body surface area (TBSA).
- Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
- Third degree burns in any age group.
- Electrical burns, including lightning injury.
- Chemical burns.

Crystalloid Administration in TBI or ICH: Normal saline is the preferred crystalloid over lactated ringers in patients with suspected TBI or ICH.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 3.8 – Pediatric Destination Guidelines	
Effective Date: 6-2-2023		**Revised Date:**

A. For patients meeting the state trauma triage criteria
   a. <16 years old– YNHH Pediatric ED
   b. 16 years old or greater – YNHH York St Campus Adult ED

B. Pediatric Burns:
   a. IF the patient has no airway involvement, need for orthopedic or neurosurgical intervention, AND the injury is an isolated burn to the hands, feet, face, or genitals, or if the TBSA is ≥ 15%, transport to Bridgeport Hospital for the burn center.
   b. IF the patient has airway involvement, needs surgery intervention other than burn management, or if the burn is < 15%, and doesn't involve the named regions above, the patient should come to the Pediatric ED at YNHH.
   c. If there is traumatic mechanism (blunt, penetrating, etc.) the patient should go to the closest pediatric trauma center.

C. All other patients
   a. <18 years old – any pediatric ED
   b. 21 years old or greater – any adult ED
   c. 18- 20 years old- Pediatric OR adult ED, per patient request

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 3.9 – Lights and Siren Policy	
Effective Date: 6-2-2023		**Revised Date:**

The highest level certified/licensed EMS provider responsible for the patient's care will advise the driver of the appropriate mode of transportation based upon the medical condition of the patient.

When transporting the patient utilizing lights and sirens, the need for immediate medical intervention should be beyond the capabilities of the ambulance crew using available supplies and equipment and the reasons must be documented on the patient care report.

Such conditions include, but are not limited to:

1. Unstable airway or severe respiratory distress
2. Shock without vascular access.
3. Patient with anatomic or physiologic criteria for field triage to a trauma center
4. Status epilepticus that persists after administration of benzodiazepines.
5. Cardiac arrest with persistent ventricular fibrillation, hypothermia, overdose, or poisoning.

However, should traffic be so congested that significant delays in transport may occur, L&S transport may be considered for emergent conditions other than the above.

The mode of transport for emergency interfacility transfers should be based upon the judgment of the paramedic and directions of the referring physician or direct medical oversight physician who provides the orders for patient care during the transport. Generally, emergency interfacility transport patients have been stabilized to a point where the minimal time saved by L&S transport is not of importance to patient outcome (unless the patient's condition has deteriorated enroute).

Lights and sirens use should be documented and justified on the patient care report (e.g., "flail chest", "systolic BP<90", etc.).

Exceptions to these policies can be made under extraordinary circumstances (e.g., disaster conditions or a back log of high priority calls where the demand for EMS ambulances exceeds available resources).

(From the guidelines approved by the state by the Connecticut EMS Advisory Council) Response Guidelines for Authorized Emergency Medical Vehicles (Including Lights and Siren Use)

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 4.1 – Communications	
Effective Date: 6-2-2023		**Revised Date:**

Timely and appropriate communications can allow field EMS personnel to obtain direct medical oversight (DMO) from sponsor hospital-based clinicians and can allow hospital staff to plan for appropriate resource availability, activate clinical response protocols, and improve overall management of hospital patient flow.

A. All requests for DMO should be addressed through MedCom/Valley Shore to the YNHH York Street Campus (adult or pediatric as appropriate), regardless of the patient's location or destination.

B. Patches, Stroke Alerts, and cardiac cath lab activations, when required, will be made to the destination ED through MedCom/Valley Shore.

C. Units should evaluate the scene for possible multiple casualties, hazardous materials, or other special incidents, and follow appropriate medical communication procedures through MedCom/Valley Shore.

D. Identifying information such as patient names, dates of birth, full Social Security Numbers, and other protected health information may not be transmitted by radio. It is acceptable to provide the last four digits of the patient's Social Security Number and the first letter of the patient's last name (NOT the entire last name) when patching to the West Haven VA ED.

E. When requesting DMO, verify that the physician is on the line prior to initiating report. Begin the patch with the question you have or the information you need. This will help the physician know what to listen for during the discussion. When you receive an order from DMO, repeat the order to verify its accuracy. Do not hesitate to ask the physician to repeat or clarify an order if there is any doubt. In those instances where a request for medication or other intervention is denied by a medical oversight physician, the EMS clinician is to document the fact that the request was denied, along with the physician's name and facility. Under no circumstances are EMS clinicians allowed to contact an alternate facility or another medical oversight physician with the same request.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 4.2 – Hospital Notifications
Effective Date: 6-2-2023	**Revised Date:**

Hospital Notifications are made through MedCom/Valley Shore by radio or phone:

MedCom: 203-499-5607 or MED 10 SC
Valley Shore: 860-399-7981 or MED 22 SC

- Identify the hospital by name.
- Request a triage patch or DMO patch.
- Use special case identification as indicated (e.g., trauma, pediatrics, cardiac cath lab activation, stroke alert, hazmat).

Priority 1 patients:

Provide a concise patient report that includes the following:

- Age and gender of patient.
- Immediate pertinent history.
- Current chief complaint (in the patient's own words if appropriate).
- Medications and medication allergies **only** if pertinent to this event.
- Vital signs and pertinent positive and negative physical exam findings.
- Treatment provided and patient response.
- Estimated time of arrival.
- Any specific needs (e.g., security, OB, respiratory, etc.) or problems (e.g., hazmat).

Priority 2 patients:

No notification patch is required to YNHH facilities (York Street campus, Saint Raphael campus, Yale Pediatric ED, and Yale-Guilford), but may be made if deemed necessary by the transporting unit. Priority 2 patches are still required to the West Haven VA ED. Priority 2 patches should take no more than 15 seconds. Provide only the following:

- Age and gender of patient
- Chief complaint or summary of problem (e.g., “ankle sprain”)
- Vital signs
- Estimated time of arrival
- Any specific needs (e.g., security) or problems (e.g., hazmat).

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 4.3 – YNHH Capacity Coordination Center (C3)
Effective Date: 6-2-2023	**Revised Date:**

The YNHH Capacity Coordination Center (C3) provides real-time recommendations to EMS providers about the most appropriate destination for patients being transported to YNHH. The ED Navigator Nurse has access to the status of all the YNHH Emergency Departments and the overall capabilities, including bed capacity of each campus. They can be reached on SC MED 10 or on the phone at 203-688-1337

If the patient's condition dictates transport to a specific facility, C3 **does not need to be contacted**. These patients will still require a patch to the ED if YNHH CEMS policies and procedures mandate the patch.

Categories that DO NOT require a C3 notification:

- Patients < 18 years old (YSC Pediatric ED)
- Suspected or confirmed hip fractures (SRC)
- Patients that meet state trauma criteria (YSC)
- Transports from Yale Health Plan not meeting other destination criteria (YSC)
- Unstable GYN patients (YSC)
- 16+ weeks pregnant with any complaint (YSC)
- Patients with implanted medical devices (other than pacemakers and/or defibrillators) such as left ventricular assist devices (YSC)
- Patients with any medication pump (other than insulin) such as prostacyclin pumps for pulmonary hypertension (YSC)

Categories that DO require C3 contact:

- Cardiac arrest
- STEMI/Cath lab activations between 0800-1700 Monday-Friday
- Stroke alerts
- Psychiatric and substance abuse patients
- Law enforcement preference

If there is not a protocol related destination, please follow below:

Contact the ED Navigator Nurse using the following steps:

- Identify unit and call C3 on SC MED 10 (Example: 2C2 to C3).
- If you cannot access SC MED 10, use the C3 phone number: 203-688-1337
- State the patient age and chief complaint (do not request a specific destination)
- C3 will recommend a destination, based on optimal ability to care for that patient.

- If the patient is strongly opposed to that destination, notify C3. C3 may ask crews to inform patients of extended wait times or overcrowded conditions at a specific campus to allow the patient to make an informed decision.

C3 cannot override a patient's refusal to be transported to a specific campus unless that campus is on diversion. In the event a patient has a strong preference to a specific campus and is unwilling to be transported unless it is to that campus, advise C3. Please do not make destination decisions or advise patients without first consulting C3.

C3 is available as a resource to all EMS providers. Mandatory use of the system will be determined at the individual agency level in collaboration with YNHH CEMS.

Incident command or designee should prioritize notification to C3 of incidents involving:

- Three or more ambulances to any incident,
- three or more critical (red) victims,
- and/or seven or more patients for transport.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 4.4 – Mass Casualty Incident Communication
Effective Date: 6-2-2023	**Revised Date:**

Purpose*:* To assist agencies operating under YNHH CEMS Operations in the setting of a mass casualty incident with communicating with the hospital, distributing patients among hospital campuses, and activating hospital resources.

Policy*:* Once a mass casualty incident has been identified and an incident command structure established, the incident commander (or his/her designee such as a transport officer) will contact the YNHH Capacity Coordination Center (C3) to serve as the primary point of contact with the hospital. C3 staff will then notify the receiving emergency departments, activate internal hospital protocols as needed, and give guidance on distributing the patients to YNHH campuses.

The incident commander (or his/her designee) will re-contact C3 as needed throughout the event to provide updates and get further guidance on patient transport destinations. C3 will serve as the primary point of contact for EMS and will distribute information to hospital staff in real-time.

This should not take the place of activating the YNHH SHARP team if physician presence on scene is desired. The SHARP team is dispatched by MedCom/Valley Shore. Contact MedCom/Valley Shore via radio or by phone to request a response.

During large scale events with high numbers of patients, in order to avoid heavy radio traffic and obstruction of radio communication, the Incident Commander's designee should perform abbreviated hospital notifications regarding patients enroute rather than each individual inbound medic performing detailed patches to the ED.

YNHH C3 can be reached via radio or by direct phone communication:

- Radio: SC MED 10
- Phone: 203-688-1337

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 5.1 – Interfacility Transport Ventilator
Effective Date: 6-2-2023	**Revised Date:**

Mechanical ventilators should be used during the interfacility transfer of patients with advanced airways (endotracheal tube/tracheostomy) who are on existing mechanical ventilation. These transports should only be performed by paramedics who have completed CEMS-approved ventilator training.

Exclusion criteria:

1) Patients with high potential for clinical instability (ED to ICU, ICU to ICU transfers).
2) Patients with anticipated need for ventilator adjustments during transport.
3) Patients < 18 years old.
4) Patients requiring specialized ventilator modes not available on transport ventilator.
5) Patients without adequate sedation/analgesia.
6) Intubated patients with a known pneumothorax and without a chest tube.

Guidelines:

1) Confirm correct airway placement in accordance with CT Statewide EMS Protocols
2) Verify ventilator settings from the sending facility. Standard ventilator settings for EMS transports are:

    a) Ventilator mode: Assist Control (AC)
    b) Tidal volume: 6-8 ml/kg (ideal body weight)
    c) Rate: 10-20 breaths/minute
    d) FiO_2: 21-100% (titrate to SpO_2 > 92%)
    e) PEEP: 2-10 cm H_2O

    Patients with ventilator settings other than those listed above require the approval of DMO prior to the initiation of transport.

3) Connect patient to EMS monitor (including capnography) and pulse oximetry prior to switching ventilators.
4) Patients must be observed, by the sending facility, for a minimum of 20 minutes after any adjustment in ventilator settings.
5) Patient should be stable on the transport ventilator for 20 minutes prior to departure.
6) Ensure the availability of a BVM, suction, and sufficient portable oxygen supply prior to switching ventilators.

7) Transfer patient to transport ventilator and monitor for any clinical signs of distress. Once the patient has become comfortable on the transport ventilator and has no signs of distress, he or she may be moved to the EMS stretcher.
8) During transport, repeat vital signs every 5 minutes, including pulse oximetry and capnography. The repeat assessment should also include an assessment of patient lung sounds, and evaluation for any signs of respiratory distress.
9) After arrival at the receiving facility, follow the steps above when transferring from the EMS stretcher to the facility stretcher.
10) All ventilator transports should be submitted for CQI review.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 5.2 – Interfacility Transport to Hospice
Effective Date: 6-2-2023	**Revised Date:**

Purpose*:*

To assist agencies operating under YNHH CEMS operations with patient care of patients enrolled in hospice and requiring transport to home or hospice facilities. These patients are near the end-of-life and their treatment should prioritize relief and pain from distressing symptoms, affirmation of dying as a natural process and emotional support to family and patients.

Assessment, Treatment, and Interventions:

1. Prior to transportation from sending facility:
    - **a.** Review and confirm approved advance care planning documents including valid DNR and Medical Order for Life Sustaining Treatment (MOLST) forms.
        - **i.** If the patient can communicate and has capacity to make medical decisions, consult with them directly before treatment.
        - **ii.** If the patient lacks capacity to make decisions regarding treatment, identify the guardian, power of attorney or other accepted healthcare proxy.
    - **b.** Confirm a plan in writing and signed by sending Physician/Advanced Practice Provider (APP) that outlines (a) contingency planning, (b) paramedic orders for infusing medications not included in the CT Statewide EMS protocols drug formulary and (c) hospice contact information. Contingency plan should mention, in the event the patient decompensates (e.g., becomes pulseless) during transport, whether the patient should be diverted to the nearest Emergency Department, or whether they should proceed to the receiving facility. If no plan is outlined, the default will be to transport to the closest Emergency Department.
2. For intubated hospice patients, paramedics may not extubate. Any de-escalation of patient care should be performed by the receiving medical team (e.g., hospice physicians and nurses).
3. If hospice patients and their families have non-emergent concerns, please encourage them to call hospice.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 5.3 – Interfacility Transport Formulary and Scope of Practice	
Effective Date: 12-1-2023	**Revised Date:**	

Medications			
Medication	ALS	SCT – Adult Only (Call for Peds)	CCT+
Amiodarone (bolus)	*	*	*
Amiodarone (infusion)	*	*	*
Antibiotics	*	*	*
Bicarbonate infusion	*	*	*
Blood – continuation (after 15 min)	*	*	*
Blood – initiation			*
Calcium	*	*	*
D25 (Adult)		*	*
D5/10 (Adult)	*	*	*
D50 bolus	*	*	*
Dexmedetomidine		*	*
Diazepam	*	*	*
Epinephrine	*	*	*
Esmolol (infusion, no titration)	*	*	*
Esmolol (infusion, titration)		*	*
Fentanyl (bolus)	*	*	*
Fentanyl (infusion, no titration)	*	*	*
Fentanyl (infusion, titration)		*	*
Heparin (infusion, no titration)	*	*	*
Hydromorphone (infusion, titration)		*	*
Insulin (infusion)		*	*
Lidocaine	*	*	*
Lorazepam (bolus)	*	*	*
Lorazepam (infusion)		*	*
Magnesium Sulfate	*	*	*
Metoprolol	*	*	*
Midazolam (bolus)	*	*	*
Midazolam (infusion, titration)		*	*
Morphine (bolus)	*	*	*
Morphine (infusion, no titration)	*	*	*
N-acetylcysteine	*	*	*
Naloxone	*	*	*

Nicardipine (infusion, no titration)	*	*	*
Nicardipine (infusion, titration)		*	*
Nitroglycerin	*	*	*
Norepinephrine	*	*	*
Phenylephrine (infusion)		*	*
Potassium	*	*	*
Propofol		*	*
Thrombolytic Therapy (tPA, TNK)	*	*	*

Devices			
Device	ALS	SCT – Adult Only (Call for Peds)	CCT+
BiPAP/CPAP for Resp Failure		*	*
Chest Tube (Water Seal)		*	*
Chronic Ventilator– Home Settings	*	*	*
Complex or Unstable Ventilator			*
ECMO			*
High Flow Nasal Cannula		*	*
IABP			*
Impella			*
Pericardial Drain – 24 hours or older		*	*
Pericardial Drain – less than 24 hours			*
Stable Ventilator– ACVC, SIMV, ACPC, PS		*	*

CCT+: May have additional capabilities and anything outside of this outline should be discussed with Direct Medical Oversight (DMO) for scheduling transport.

- Where a patient has a medical condition that cannot be appropriately treated under the existing protocols and has provided the provider with a written treatment plan prepared by the patient's sending physician and approved by the provider's direct medical oversight, the provider may perform the treatments prescribed in the treatment plan provided they are within their level and scope of practice. This specific instance would not require contact with direct medical oversight.

- All non-titratable infusions can be continued per sending physician orders. In the instance of pump failure, stop infusion and hold until arrival at destination or call DMO for instruction if infusion falls outside of Connecticut Statewide EMS Protocol.

- All sending physician orders should be in writing or printed and documented or uploaded in the ePCR.

- All medications without a specific protocol should be given in accordance with Connecticut Statewide EMS Protocol or YNHH CEMS Policy and Procedure Manual.
    - If there is a medication out of scope or of question that is not included in SCT protocol, state protocol or YNHH CEMS Policy and Procedure Manual call DMO.

- Interfacility Transport DMO
    - Contact EMS Physician via MedCom. Specify this is not for the Red Phone but rather the EMS Physician for Interfacility or Specialty Care Transport.

SCT Medication Protocols

Blood Continuation Protocol

- Confirm blood has been cross matched with standard hospital protocol
    - Note: have a higher level of suspicion for reactions with uncrossed blood
- Continue blood transfusion per sending physician orders
- Repeat vitals and exam of patient at least every 20 minutes while blood is running and for at least 1 hour post transfusion is complete
- For any suspected transfusion reaction
    - STOP the infusion if any of the above symptoms are discovered!
    - Start infusion of normal saline
    - Treat hypotension and anaphylactic reaction with CT EMS Statewide Protocol
    - Contact DMO
    - If minor allergic reaction (urticaria) administer **diphenhydramine**, 50 mg IV
    - If SpO2 is below 92% or patient experiences wheezing / rales, administer high-flow supplemental oxygen and consider positive pressure ventilation per Statewide CT EMS Protocol. If significant signs of volume overload, consider furosemide, 40 mg IV if available.
    - Notify issuing hospital's blood bank of any suspected reaction.
        - GH: 863-3080, BH: 384-3062, SRC: 789-4010, YNH: 688-2443, LMH: 860-444-5110, WH: 401-348-3305

D25 (Adult)

- **Rare to be used, call DMO for infusion**
- Obtain an order from the sending provider for a D25 bolus or infusion and reasoning for high concentration, dose, rate, titration parameters with glucose goals
- Central line infusion only
- ****serum glucose levels must be monitored every 30 minutes (q30 min) while on an D25 infusion****

Dexmedetomidine

- This is a poor choice for transport due to the stimulation during transport compared to the ICU. Please discuss with sending physician on dexmedetomidine as only sedative, first ask for alternatives and significant PRN boluses of other medications for emergent sedation.
    - If denied call DMO for discussion with sending physician
    - Keep patient in soft wrist restraints for duration of transport given **high risk of self-extubating**
- Infusion: 0.2 – 0.7 mcg/kg/hr
- Titration: 0.1 mcg/kg/hr q30min for RASS -1 to +1 or sending physician RASS goal order
- No bolus dosing of Dexmedetomidine
- Adjunct Emergent Sedation:
    - Midazolam 2.5 mg IV q5min max of 5 mg **OR**

- Fentanyl 100mcg IV q5min max 300mcg

Esmolol (infusion, titration)

- Obtain HR/BP goal orders from sending physician
  - Note – Esmolol is better at controlling HR than BP
  - Ask for 2nd agent if being used for BP control
- Dose range: 50-200 mcg/kg/min
- Titrate by: 50mcg/kg/min every 4 minutes as needed for HR goal
- Hold with HR < 60 beat/min, MAP <65, SBP <90, or any contraindications

Fentanyl (Infusion, titration)

- Indication: Sedation and Analgesia in the Intubated Patient
  - Infusion: 0.5 mcg/kg/hr
  - Titrate by: 0.25 mcg/kg/hr q2 minutes
  - Maximum dose range: 10 mcg/kg/hr
  - Goal RASS -1 to +1 or sending physician RASS goal order
  - Hold for SBP < 100mmHg or HR < 60bpm, oversedation, or any contraindications
- Emergent bolus with infusion
  - Fentanyl 1 mcg/kg slowly IV/IO/IM
    - Maximum 100mcg per dose
    - May repeat every 5 minutes x 3 doses
    - Hold with SBP < 100mmHg or with any contraindication
    - Contact Medical Control if additional doses are required

Hydromorphone (infusion, titration)

- Infusion: 0.2 to 5 mg/hr
- Titration should be avoided but if necessary, should be a stable infusion: 0.2 mg/hr every 30 min for RASS -1 to +1 or sending physician RASS goal order
- Rarely used infusion, obtain indication from sending physician rather than more common alternatives

Insulin (Infusion)

- Do not bolus insulin, up titration orders need to be discussed with DMO prior to transport
- ****serum glucose levels must be monitored every 30 minutes (q30 min) while on an insulin infusion****
- Obtain an order from the sending provider for an insulin drip, dose, rate
  - Including when to decrease and add dextrose containing fluids in DKA
    - Default option if no sending orders

        - When BGL 250 mg/dL or less in DKA
            - STOP the insulin infusion and obtain BGL every 15 minutes
            - Contact DMO if glucose is over 350 mg/dL and ask about re-initiation and dosing of insulin infusion
    - **SCT can only down titrate insulin by sending physician orders, for any up titration contact DMO**
- Discuss regular insulin drip rate with the sending provider
    - Standard Initiation dose – 0.1 units/kg/hr or less
    - Maximum dose 15 units/hr
- With decrease in serum blood glucose by more than 100 mg/dL/hr
    - STOP the insulin infusion
- With hypoglycemia < 70 mg/dL
    - STOP the insulin infusion
    - Dextrose 50% (D50) OR Dextrose 10% infusion (D10), 25g IV bolus
        - Glucagon 1mg SQ/IM if no IV access
    - Repeat BGL every 15 minutes and continue until stabilized above 150 mg/dL

Lorazepam (infusion)

- Infusion: 1-20mg/hr
- Titration: 0.5mg/hr q15min for RASS -1 to +1
- Emergent Bolus: 1 mg q30 min
    - Use CT State Protocol dosing for breakthrough seizure and contact DMO

Midazolam (Infusion, titration)

- Infusion: 0.5 mg/hr
- Titrate by: 0.5 mg/hr q5 minutes
- Maximum dose: 20 mg/hr
- Goal RASS -1 to +1 or sending physician RASS goal order
- RASS less than -1: Decreased to prior effective dose or by half
- Hold with hemodynamic instability, or any contraindications
- Emergent Bolus: 1 mg IV over 1 minute (bolus from infusion bag or EMS Narcotics)
    - Use CT State Protocol dosing for breakthrough seizure and contact DMO

Nicardipine (infusion, titration)

- Obtain BP goal orders from sending physician
- Infusion: 5-15mg/hr
- Titrate by 2.5mg/hr q10minutes
- Maximum dose: 15mg/hr
- Hold with HR < 60 beat/min or any contraindications

Phenylephrine (infusion, titration)

- Obtain BP goal orders from sending physician, if patient is stable on dose, this dose can be continued as starting infusion dose.
- Starting infusion: 0.25-9 mcg/kg/min for a goal of MAP >65 or SBP >90
- Infusion range for PIV: 0.25- 4.5 mcg/kg/min
- Titrate by 0.25 mcg/kg/min every 1-2 minutes
- Max Dose: 9 mcg/kg/min

Propofol

- Starting infusion: 5mcg/kg/min, if patient is stable on dose of less than 80mcg/kg/min this dose can be continued as starting infusion dose.
- Titrate by: 5mcg/kg/min q5 minutes to a RASS -1 to +1 or sending physician RASS goal order
- Reduce dose by half OR 10 mcg/kg/min for any SBP of less than 90mmHg or MAP less than 65 and start pressors.
- Maximum dose range: 80mcg/kg/min.
    - Note: contraindicated in patients with allergies to eggs, egg products, soybean, or soy products.
    - Note: avoid in patients with pancreatitis

SCT Miscellaneous and Device Protocols

BiPAP/CPAP

- **Bilevel positive airway pressure (BiPAP)**
  - Indication: hypercapnia, or hypercapnia and hypoxia
  - Continue current BiPAP settings with orders from sending physician
  - Standard initiation and minimum is IPAP 10 cmH_2O and EPAP 5 cmH_2O (**BiPAP 10/5** cmH_2O)
    - Increase the delta pressure by increasing IPAP as needed for improved ventilation
    - Titrate FiO_2 as needed for O_2 Sat >94%,
      - increase EPAP as needed for FIO_2 resistant hypoxia
    - Max Settings: **BiPAP 20/15,**
    - Minimum delta pressure (IPAP – EPAP)**: 5 cmH_2O**
    - ** Note: closely monitor hemodynamic status in patients with increasing delta pressure, as it can result in abrupt hypotension **
  - Monitor tidal volume and respiratory rate (RR), and adjust settings as needed
  - If failing BiPAP management call DMO
- **Continuous positive airway pressure (CPAP)**
  - (only if desired over BiPAP from sending physician)
  - Indication: hypoxia without hypercapnia initiate continuous positive airway pressure (CPAP)
    - Start with CPAP 5 cmH_2O
      - ** Note: closely monitor hemodynamic status in patients with increasing CPAP levels, as it can result in abrupt hypotension **
    - Titrate FiO_2 as needed for hypoxia

Ventilator – ACVC, SIMV, ACPC, PS

- Obtain the following information from the sending provider prior to transfer:
  - Reason for intubation
  - Number of days intubated
  - Ventilator settings, any recent adjustments, failed modes of ventilation
  - Patient's height and ideal body weight
  - ETT placement (<u>at the teeth</u>) and confirmatory imaging studies

- Ventilator mode: Assist Control (AC)
  - Tidal volume: 6-8 ml/kg (ideal body weight)
  - Rate: 10-20 breaths/minute
  - FiO2: 21-100% (titrate to SpO2 > 92%)
  - PEEP: 2-15 cm H2O

- Call DMO for other approved ventilator modes (SIMV, ACPC, PS) for specific settings
    - First ask if the patient can be transitioned to ACVC for transport, if not then knowing why from sending physician will be helpful for DMO physician decision making
- All intubated patients should be in soft wrist restraints
- All advanced airways need continuous ETCO2 monitoring

Tube Thoracostomy (Chest Tubes)

- Obtain orders from sending physician related to chest tube
    - Indication, position, suction status and duration it has been present
- Listen to breath sounds to get baseline before moving patient
    - Examine patient and repeat vital signs often to ensure tube is still functional
- Ensure tube is connected to the patient and re-evaluate the connections after every patient movement to ensure no leaks
- Monitor the following items after routine assessment of patient's vital signs:
    - Drainage (document the appearance and amount of fluid, at the start and at the conclusion of transport)
    - Bubbling in the water seal chamber
    - Gentle rise and fall of the water level, which corresponds with the patient's respirations is called "tidalling" and indicates that the system is functioning properly.
- Keep drain chamber lower than thorax and ensure there are no hanging loops or kinks in the tubbing
    - Keep the drainage chamber system (pleuavac, atrium, ect.) up right, ensure there is space for drainage remaining, if nearly full should be exchanged or emptied by sending facility prior to transport
        - If the system falls over: place upright without fully rotating device, see if the air leak area has fluid remaining and if it is still at marked line, if so no changes, if not call DMO for instructions.
    - If a tube becomes fully dislodged from the chest: place a 3 sided dressing, especially in spontaneously breathing patients
        - Call DMO as soon as possible
        - Closely monitor for changes in breath sounds
        - If tension pneumothorax is suspected, then proceed with needle decompression per CT Statewide EMS Protocol
    - If partially dislodged and sentinel fenestration is visible, place an occlusive dressing over the fenestration and treat as fully dislodged
    - Never clamp a chest tube that is working, if clamped at sending facility, ask to unclamp for transport, if denied call DMO
- If the chest drainage system is crushed or broken open, or the chest drain becomes detached from the chest tube
    - **Call DMO** immediately, do not reconnect; you may be instructed to place the end of the chest tube in a bottle of sterile water to create a seal.
- **Call DMO for instructions as soon as possible for any complications**

Pericardial Drain (non-traumatic indications only)

- Obtain orders from sending physician related to pericardial drain
    - Indication, position, and duration it has been present
        - Pericardial drain must be present and functional for **>24 hours** prior to SCT Transport
    - Keep the drainage bag below the level of the heart
    - Pay special attention to the drain while moving patient
- **If a complication of any type occurs call DMO**

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 6.1 – Clinical Investigation and Remediation Policy
Effective Date: 6-2-2023	**Revised Date:**

Purpose:

This serves to define the process for all clinical investigations including but not limited to deviations from protocol, policy or procedure; protocol violations, failure to write an EMS ePCR, other poor documentation, inappropriate downgrades, inappropriate invitations or acceptance of patient refusals, failure to recognize a critical condition (stroke, STEMI, etc.), and any other negligent or inappropriate care of patients that resulted or could have resulted in poor patient outcomes. Clinical investigations can be opened via complaint, chart review, data from continuous quality improvement or as part of a prior remediation plan.

This policy is not designed to apply to cases of professional misconduct (drug diversion, assault, etc.) but is reserved for clinical errors or potential errors.

Procedure:

YNHH CEMS will conduct all clinical investigations. All documentation from the calls will be considered. In the event that additional information is needed it shall be requested from all relevant team members and/or supervisors. The EMS clinicians have seven (7) days to complete requested documentation of events of the call. If unable to complete documentation in this time written explanation is required to be given to YNHH CEMS EMS Coordinator. Medical authorization may be suspended until this documentation is complete after seven (7) days or immediately upon opening an investigation at the discretion of the YNHH CEMS medical direction team.

The YNHH CEMS medical direction team will conduct clinical investigations as a panel of experts including peers, EMS physicians and paramedics. This will be known as YNHH CEMS QA/QI panel. Upon discussion of the case, the panel will determine if there is a violation based on CT State Protocol, YNHH CEMS Policy and Procedure Manual, or QA/QI panel judgement of appropriate clinical care.

All clinical investigations will be documented and tracked within YNHH CEMS in a secure manner. All historical investigations, performance improvement plans, and positive feedback cases can be considered during each individual investigation in order to complete a wholistic review. Self-disclosure of errors or near misses will also be considered as favorable in the remediation planning, however; self-disclosure may not fully absolve clinician and investigations after self-disclosure can still result in withdrawal of medical authorization.

Each investigation can result in 3 possible outcomes, unfounded complaint, performance improvement plan (PIP), withdrawal of medical authorization. A PIP will be a customized plan for each clinician who requires performance improvement based on the investigation. The PIP can include but is not limited to any combination of modification of medical authorization, re-education (via primary agency or YNHH CEMS, at discretion of the YNHH CEMS QA/QI panel), formal remediation and precepting, or withdrawal of medical authorization all at the discretion of the YNHH CEMS QA/QI panel and YNHH CEMS Medical Director. Suspension or withdrawal of medical authorization shall be reserved for serious offenses, repeat offenses, or for the failure of a clinician meet the expectations outlined in a PIP.

The re-education deemed necessary in the investigation will be targeted based on the clinician's needs and the findings of the investigation. Re-education can include but is not limited to simulation, skills training and testing, review of current research and discussion, course requirements (ex. AMLS, PALS, EPC, TECC, etc.), repeat EMS Physician signoff ride, ED precepting, or field precepting. Additional requirements for education and/or monitoring are at the discretion of the YNHH CEMS Medical Director.

The EMS clinician has the right to give testimony during the investigation process. Labor representatives may be present to observe the meeting only but are welcome at any point in an investigation at the request of the EMS clinician.

All cases of QA can be referred to the CT State Office of EMS at the sole discretion of the YNHH CEMS Medical Director.

Any purposeful deception or purposeful omission shall be deemed serious and can directly result in withdrawal of medical authorization.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 6.2 – Medication Error Policy
Effective Date: 6-2-2023	**Revised Date:**

Purpose:

In the event that a YNHH CEMS paramedic or EMT administers an incorrect medication or medication dose (either concentration, quantity or duration of infusion) the following procedure shall be initiated immediately to mitigate patient harm and initiate re-education.

Procedure:

First, the paramedic or EMT shall notify the receiving clinical staff (bedside nurse or charge nurse if bedside nurse unavailable **AND attending physician)** who is directly responsible for care of patient in question- this notification must be documented in the ePCR and include:

1. Name of physician and nurse and time of notification.
2. Medication administered.
3. Medication dose and concentration.
4. (If applicable) duration of time medication was infused.

Next, the paramedic or EMT shall contact MedCom/Valley Shore and request notification of the hospital EMS Coordinator. If the coordinator cannot be contacted, the on-call SHARP Team member shall be contacted through MedCom/Valley Shore. The paramedic or EMT should also contact his or her agency supervisor.

A debriefing shall then be performed, with the YNHH CEMS Medical Direction Team or CEMS representative either directly in the Emergency Department or by speaking with the parties involved by telephone. All medication errors will be Quality Assurance cases to track and evaluate for trends and the need for broader re-education.

If system status allows, the involved crew should remain at the hospital until the debriefing is complete.

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS** **Policy & Procedure Manual** 7.1 – Scope of Practice
Effective Date: 6-2-2023	**Revised Date:**

Airway Management	EMR	EMT	PARAMEDIC
BPAP			✓
BVM	✓	✓	✓
Chest Tube Maintenance			*
Cleared, Opened, Heimlich	✓	✓	✓
CPAP		*	✓
Endotracheal Intubation			✓
Orogastric/Nasogastric Tube			✓
Nasopharyngeal Airway	✓	✓	✓
Nasotracheal Intubation			✓
Nebulizer Treatment			✓
Needle Decompression			✓
Oral Suctioning	✓	✓	✓
Oropharyngeal Airway	✓	✓	✓
Oxygen Administration	✓	✓	✓
PEEP		✓	✓
Pulse Oximetry		✓	✓
Rapid Sequence Intubation			
Tracheobronchial Suctioning of Intubated Patient		*	✓
Tracheostomy Care		✓	✓
Ventilator Operation			*
Supraglottic Airway (i-gel, etc.)			✓
Surgical & Percutaneous Cricothyrotomy			✓

Medication Administration Route	EMR	EMT	PARAMEDIC
Auto Injector		✓	✓
Endotracheal			✓
Inhalation		MDI	✓
Intramuscular		*	✓
Intranasal	Naloxone	✓	✓
Intraosseous			✓
Intravenous			✓
Intravenous Pump			*
Oral		✓	✓
Rectal		Assist Diastat	✓
Subcutaneous			✓

Cardiac Management	EMR	EMT	PARAMEDIC
Application of 12 Lead ECG			✓
Application of 3 or 4 lead ECG			✓
CPR	✓	✓	✓
Defibrillation - AED	✓	✓	✓
Defibrillation - Manual			✓
Interpretation of 12 Lead ECG			✓
Interpretation of 3 or 4 lead ECG			✓
Mechanical CPR		✓	✓
Synchronized Cardioversion			✓
Transcutaneous Pacing			✓

Vascular Access	EMR	EMT	PARAMEDIC
Blood Draw			✓
Blood Glucose Analysis		✓	✓
Indwelling Catheter & Central IV Port Access			✻
Central Line Monitoring			✻
Intraosseous			✓
Peripheral Venous Access			✓

OTHER SKILLS	EMR	EMT	PARAMEDIC
Advanced Spinal Assessment		✓	✓
Burn Care	✓	✓	✓
Cervical Spinal Immobilization	**Manual Stabilization**	✓	✓
Childbirth	✓	✓	✓
Cold Pack	✓	✓	✓
Extrication		✓	✓
Eye Irrigation (Morgan Lens)			✓
Hot Pack	✓	✓	✓
PEEP		✓	✓
Restraints - Pharmacological			✓
Restraints - Physical		✓	✓
Spinal Immobilization - Lying (Long board)	**Manual Stabilization**	✓	✓
Spinal Immobilization - Seated (KED)	**Manual Stabilization**	✓	✓
Spinal Immobilization - Standing	**Manual Stabilization**	✓	✓
Splinting	**Manual Stabilization**	✓	✓
Splinting - Traction	**Manual Stabilization**	✓	✓
Stroke Scale		✓	✓
Temperature		✓	✓
Point of Care Ultrasound			✻
Wound Care - Occlusive Dressing	✓	✓	✓
Wound Care - Pressure Bandage	✓	✓	✓
Wound Care - Tourniquet	✓	✓	✓
Wound Care - Wound Packing	✓	✓	✓

✻ After Approved CEMS Training

Yale NewHaven Health Yale New Haven Hospital	**Yale New Haven Center for EMS**
	Policy & Procedure Manual 7.2 – Medication Formulary
Effective Date: 6-2-2023	**Revised Date:**

The following medications are approved for use by EMS services receiving medical oversight from YNHH CEMS, in accordance with CT State EMS Guidelines. Medications in **bold** are optional and may be carried at the discretion of the EMS agency

- Acetaminophen (PO tablet/suspension mandatory, **IV optional**)
- Adenosine
- Albuterol
- Amiodarone
- Aspirin
- Atropine
- **Atropine/Pralidoxime Auto Injector**
- Calcium Chloride
- Calcium Gluconate
- **Cefazolin**
- **Dexamethasone**
- Dextrose
- Diltiazem
- Diphenhydramine
- Epinephrine (1:1,000)
- Epinephrine (1:10,000)
- Fentanyl
- Glucagon
- Glucose (oral)
- Haloperidol
- **Hydroxocobalamin**
- Ipratropium Bromide
- Ketorolac
- **Lactated Ringers**
- Lidocaine
- Magnesium Sulfate
- Methylprednisolone
- Metoclopramide
- Metoprolol
- Midazolam

- Morphine Sulfate
- Naloxone
- Nitroglycerin (SL and IV)
- Norepinephrine
- Normal Saline
- Ondansetron
- Oral Glucose
- Oxygen
- Sodium Bicarbonate
- Normal Saline
- Tetracaine