



Submitted comments for Standards Changes from the 12th Edition to the 13th Edition Standards

Comments for the FIRST Draft

Comments # 1 - # 32

Closed August 31, 2024

Committee responses are in red.

With additional feedback from the November 2024 Aviation Advisory Committee

Date 01/22/2024 #1

Standard # - Suggested Change and Rationale for Change

CHANGE DEFINITION: Accidents – An occurrence associated with the operation of an ambulance/aircraft that takes place between the time any person boards the ambulance/aircraft with the intention of flight/transport and until all such persons have disembarked, and which any person suffers death or serious injury, or in which the ambulance/aircraft was substantially damaged. Substantially damaged is defined as any damage to the aircraft that results in a major repair as outlined in 14 CFR Part 43, Appendix A, of the Federal Aviation Regulations, and documented on an FAA Form 337. This includes missions with a patient on board as well as missions that support the transport service’s operations including maintenance, training, fueling, and marketing.

The committee agrees with the recommendation and believes it needs to better address surface vehicles. The recommended changes are (addition wording in underline):

Accidents – An occurrence associated with the operation of an ambulance/aircraft that takes place between the time any person boards the ambulance/aircraft with the intention of flight/transport and until all such persons have disembarked, and which any person suffers death or serious injury, or in which the ambulance/aircraft was substantially damaged. For aircraft, substantially damaged is defined as any damage to the aircraft that results in a major repair as outlined in 14 CFR Part 43, Appendix A, of the Federal Aviation Regulations, and documented on an FAA Form 337. For surface vehicles, substantial damage is defined as any damage to the vehicle that takes it out of service, temporarily or permanently. This includes missions with a patient on board as well as missions that support the transport service’s operations including maintenance, training, fueling, and marketing.

Date 01/22/2024 #2

Standard # - Suggested Change and Rationale for Change

01.06.02 page 1.10 ADDITION New #2 # 2. A policy or procedure addresses verification of all new advanced certifications and license. Only those verified may be used within the program's employment."

The committee agrees with the suggestion and will add a new standard:

01.06.02, 6. A policy or procedure addresses verification of all new advanced certifications and licenses. Only those verified may be used within the program's employment.

02.03.07 2. d. page 2.14 Addition Helmets are inspected BY AN APPROPRIATELY TRAINED HELMET INSPECTOR on a regularly scheduled basis - at least annually at a minimum.

The committee agrees with the concept of the suggestion but believes this might take some time for programs to develop their workforce, so “strongly encouraged” would better for the 13th edition. The standard currently reads “Helmet are inspected on a regular schedule basis – at least annually at a minimum.” will be changed to read:

Helmets are to be inspected by an appropriately trained helmet inspector on a regularly scheduled basis and at least annually. Helmet manufacturer training of the designated helmet inspector(s) is strongly encouraged.

Date 01/22/2024 #3

Standard # - Suggested Change and Rationale for Change

The current standard reads: “Supplemental oxygen is available for RW pilots who have the potential to fly more than 30 minutes above 9,000 feet MSL, or as applicable to local topography.”

Revision: 02.03.07 2.h, Page 2.16 Change standard to read

“For programs that operate unpressurized aircraft at altitudes above 9000 feet MSL, the following policies should be developed, implemented, and evaluated through an on-going QMS/SMS process:

- o A process to allow flight crew member(s) to become acclimated to high altitude environments at the base elevation and operating altitudes. Process must also consider reacclimating following a prolonged absence at lower elevations.
- o Awareness training to recognize, and if necessary, react to any potential hypoxic events.
- o If possible, use technology to assist in risk mitigation such as operable autopilot, and NVG equipment, as well as personal monitoring equipment that could assist the flight crew in early detection of hypoxia.
- o Make supplemental oxygen available to flight crew member(s) when operating above 9000 feet MSL for more than 30 minutes.

The committee agrees with the changes and will reword the standard to:

For programs that operate unpressurized aircraft at altitudes above 9000 feet MSL, the following policies should be developed, implemented, and evaluated through an on-going QMS/SMS process:

- **A process to allow flight crew member(s) to become acclimated to high altitude environments at the base elevation and operating altitudes. Process must also consider reacclimating following a prolonged absence at lower elevations.**
- **Awareness training to recognize, and if necessary, react to any potential hypoxic events.**
- **If possible, use technology to assist in risk mitigation such as operable autopilot, and NVG equipment, as well as personal monitoring equipment that could assist the flight crew in early detection of hypoxia.**
- **Make supplemental oxygen available to flight crew member(s) when operating above 9000 feet MSL for more than 30 minutes.**

Date 01/21/2024 #4

Standard # - Suggested Change and Rationale for Change

I respectfully recommend adding a standard that all CAMTS-accredited programs have their information uploaded to, and up to date in, the Emergency Transport Healthcare Operations and Safety (ETHOS) database. I recommend information be updated at least twice per year and more often with any significant base-level alterations including base openings, closing, moves, and aircraft changes. ETHOS is the replacement for the previous ADAMS database. The project is a public/private partnership between Medieval Foundation International, Inc. and multiple national organizations including the American College of Surgeons Committee on Trauma, National Association of EMS Physicians, American College of Emergency Physicians, Air Medical Physicians Association, National Association of State EMS Officials, and many more public and private enterprises. Having a single, comprehensive, and GIS-linked repository of air medical services in the United States is key for important advocacy, operations, and research efforts. Without the ETHOS database, the industry is not armed with important data to inform safe and efficient practices and operations in the future. With the ETHOS database there can be a national repository of air medical service base locations to aid in disaster preparedness among other operational endeavors. For example, the secret service previously used the ADAMS database when planning presidential trips. In addition, national organizations can use the information housed in ETHOS to advocate for patients in a multitude of ways. Without knowing the current landscape of air medical services in the US, we cannot adequately inform future advocacy efforts around patient and aircraft safety, system design, or preparedness. Lastly, the ADAMS data was crucial for many high-impact research projects. Trauma, neuro-critical care, burn, and pediatric literature (just to name a few!) often relies on prehospital data. With the ETHOS data, researchers can continue to publish practice changing research which helps patients and providers alike. Thank you for your consideration.

The committee believes support of the ETHOS data base is important and should be strongly encouraged, but some programs may resist for various reasons. For the 13th Edition the committee suggests the following addition:

01.05.05 Programs are strongly encouraged to report, and keep current, their program information in the Emergency Transport Healthcare and Safety (ETHOS) data base. (<https://ethos.aams.org/>)

Date 01/23/2024 #5

Standard # - Suggested Change and Rationale for Change

Incorporate reporting of data into the ETHOS database as part of the standards.

The committee believes support of the ETHOS data base is important and should be strongly encouraged, but some programs may resist for various reasons. For the 13th Edition the committee suggests the following addition:

01.05.05 Programs are strongly encouraged to report, and keep current, their program information in the Emergency Transport Healthcare and Safety (ETHOS) data base. (<https://ethos.aams.org/>)

Date 01/23/2024 #6

Standard # - Suggested Change and Rationale for Change

Suggestion inclusion of new standard the requires participation in the ETHOS air medical resources database and maintaining updated and accurate information in the database. This will ensure a comprehensive understanding of air medical resources and assets in the US and provide CAMTS will an easy and reliable database of accredited programs with accurate base demographics.

The committee believes support of the ETHOS data base is important and should be strongly encouraged, but some programs may resist for various reasons. For the 13th Edition the committee suggests the following addition:

01.05.05 Programs are strongly encouraged to report, and keep current, their program information in the Emergency Transport Healthcare and Safety (ETHOS) data base. (<https://ethos.aams.org/>)

Date 01/23/2024 #7

Standard # - Suggested Change and Rationale for Change

Addendum - Consider adding the medical elements scoring sheets to the 13th edition addendums.

This suggestion is being referred to the CAMTS Protocol Committee.

Date 01/23/2024 #8

Standard # - Suggested Change and Rationale for Change

03.05.01, Page 3.15 Move the bullet and line to the right as a subsection: "Didactic education that is mission specific and specific to scope of care....."

This was an editing error which will be addressed.

06.05.03 # 4, Page 6.9 The list should be the same as from the RW section but is missing "j"

j. The use of appropriate maintenance ladder stands/fall protection to provide access to the components on the aircraft without risk to the mechanic or damage to the aircraft are strongly encouraged."

This was an editing error, and the committee agrees that the RW and FW sections should be the same. Standard 05.05.03 paragraphs "H", "I" and "J" from the RW section will be copied and pasted into the FW section, 06.05.03.

Date 01/23/2024 #9

Standard # - Suggested Change and Rationale for Change

03.06.01 24. Page 3.36 What is the reason why vehicle temperatures are different? The same human beings are riding in both types of vehicles.

See response under # 10 below.

Date 01/23/2024 #10

Standard # - Suggested Change and Rationale for Change

03.06.01 24. Page 3.36, What is the process to advocate for clarity in a standard? Specifically, 03.06.01 24. "The interior of the aircraft must be climate controlled to avoid adverse effects on patients and personnel on board." This is a very vague standard. Here in Arizona, we are experiencing unprecedented heat. I have firsthand knowledge of carriers stating that "putting your hands out the window" counts as climate control. 03.06.01 24A does state "until temperatures are maintained within

the range of 50-95 degrees". I think the intention is very clear, that a system must be on the aircraft with the ability to control to the climate to these parameters. I would like to know how a flight nurse, such as myself, would go about advocating for language that states something like "the interior of the aircraft must be climate controlled to maintain a cabin temperature range of 50-95 degrees"

Temperature ranges for the surface vehicle come for the federal KKK specification and are also required by several states. These are outlined in more details in the Reference section of the 12th Standards. There is very little written about temperature control ranges for air medical, particularly helicopters that may be left outside because there is no hangar. At the time the original Standard was written, there were many air medical helicopters without air conditioning. The CAMTS Board is a little less concerned about the actual temperature ranges and more about how the program records, tracks, trends and mitigates extremes. In the first draft of the 13th Edition we will change the word of the standard as recommended and propose one range for all vehicles. THIS IS ALL NEW WORDING. We will see what additional suggestions and comments we receive.

03.06.01 24. To avoid adverse effects on patients and personnel on board, the interior of the vehicle cabin should be climate controlled to maintain a cabin temperature range of 68 – 78 degrees F (20.0 – 25.5 degrees C).

- a. Thermometer is to be mounted inside the cabin. Electronic thermometers that record temperatures are encouraged.
- b. The program has written policies that address measures to be taken to avoid effects of temperature extremes on patients, crew, equipment, and medications on board.
- c. In the event cabin temperatures are less than 68 degrees F (20 degrees C) or greater than 78 degrees F (25.5 degrees C), the program requires documentation of mitigating actions and outcomes. These will be reviewed by the program QM process for trends and further improvement actions.
- d. For those transports meeting the definition of "long range", additional policies must be in place to address how adequate cabin temperature will be maintained during fueling and/or technical stops to ensure patient, crew, and passenger comfort.

Date 01/23/2024 #11

Standard # - Suggested Change and Rationale for Change

03.05.01 2. b Page 3.18 Open for discussion. Question asked: "We are pursuing CAMTS Accreditation for our pediatric ICU transport team. One questions we had was whether or not each member of the team (RN and RT) needed to be able to intubate or is acceptable for our team to have the capability of bringing a MD along when needed who is able to intubate and secure an airway?" Standard states "No less than 1 successful live, cadaver, HPS or static mannequin airway management experience per quarter is required for each provider, for each type of airway listed within the program protocols (endotracheal, supraglottic, nasal, etc.) and for each age group in scope of care." The way it is written, is the intent of the Standard to allow the management of an airway with supraglottic an/or bag/mask?

The committee agrees to leave the standard unchanged and that both members of a critical care transport team should be trained to the critical care level, which includes advanced airway skills for those patients

that are within their scope of care. This does not necessarily require endotracheal intubation if other advance airways (supraglottic) are in the scope of care, and the providers receive initial skills and quarterly competency verifications as outlined in the Standards.

Date 01/23/2024 #12

Standard # - Suggested Change and Rationale for Change

Please include submission of data and membership in the ETHOS database as a requirement for CAMTS accreditation.

The committee believes support of the ETHOS data base is important and should be strongly encouraged, but some programs may resist for various reasons. For the 13th Edition the committee suggests the following addition:

01.05.05 Programs are strongly encouraged to report, and keep current, their program information in the Emergency Transport Healthcare and Safety (ETHOS) data base. (<https://ethos.aams.org/>)

Date 01/25/2024 #13

Standard # - Suggested Change and Rationale for Change

All HAA operators should be required to fly aircraft with glass windscreens. It is not acceptable to damage or lose an aircraft or crew due to a bird strike. Weight and costs should not outweigh the survivability of an impact in the air.

The committee agrees this would be difficult to impossible to retrofit existing aircraft. Glass windscreens are heavier, require more superstructure, and may reduce the visual field for the pilot. Windscreen design is improving and helmets, with visors, are required within the standards.

Date 01/25/2024 #14

Standard # - Suggested Change and Rationale for Change

01.02.02 6. Page 1.2 Insurance For US operations conducting flights outside of the US, a customs bond appropriate to the size and type of aircraft in the amount that covers any unexpected costs based on port of entry. Comment: A Customs Bond must, by CBP regulation, be in the name of the operator. Can't be in the name of the medical provider. Need to reword.

The committee agrees to change the wording to:

01.02.02 6. Insurance For U.S. operations conducting flights outside of the US, a customs bond, **in the name of the operator**, appropriate to the size and type of aircraft in the amount that covers any unexpected costs based on port of entry.

01.04.02 Page 1.4 Conflict of Interest The BOD, administrative and management staff are encouraged to complete an annual conflict of interest statement or form disclosing any actual or potential conflicts.

Comment: Does an operator/vendor need this, and if so, why? If you are the vendor for multiple CAMTS accredited programs isn't that an instant conflict? Need to reword this.

The committee agrees the completion of a conflict-of-interest statement does not preclude one from doing business, it just exposes explicit or implicit conflicts. We also received a comment to the same

Standard in comment #21 and the committee agrees this should be moved from encouraged to required. The standard will be reworded to:

01.04.02 Conflict of Interest The BOD, administrative and management staff are **encouraged required** to complete an annual conflict of interest statement or form disclosing any actual or potential conflicts.

01.05.01 12 Page 1.7 TSA No fly Verification of patient/passenger identifications against TSA no fly list or applicable national regulations. Comment: I sent written documentation to remove requirements related to the TSA and the 12-5 program because it doesn't apply to medical transports. I think this standard slipped through. I understand a few operators are claiming their TSA reps say this is required for the passengers, but that doesn't make them correct. Our TSA rep says we can't use the No-Fly List for this purpose, so now I'm in a bind. This needs to be removed asap.

The committee suggested we reach out to the TSA for clear direction. We will attempt to gather more information. This remains open.

(Also being reviewed by the Aviation Advisory Committee)

November 2024 update: The CAMTS Office did reach out to TSA and contacted the Attorney General for TSA. We have received no response. This was also reviewed by the Aviation Advisory Committee and they recommended we delete this Standard. In December 2024 the Standards committee agreed to delete the No Fly Verification requirement.

01.05.01. 13.a page 1.7 FCPA "For FW International as applicable to the program's scope of services and service locations. a. Foreign Corrupt Practice Act (FCPA) 1. There is a policy that addresses how the program maintains compliance with the foreign corrupt practice act (FCPA) and monitors for transactions 2. Personnel are trained on the FCPA and ensure that all expenditures, transactions, ADDING a Standard and the Rationale.: dispositions, and payments involving program funds or assets are properly and accurately recorded in program's financial records 3. All payments made with program funds, or on behalf of the program, must be properly authorized. No undisclosed or unrecorded accounts are to be established for any purpose." Comment: If CAMTS accredits medical providers and therefore relies on the FAA for the aviations regulations, why is CAMTS involved in this? I don't think this is something that CAMTS needs to be involved in. Site Surveyors aren't going to understand it, nor do I think they need to.

The committee agrees not to make a change. CAMTS does not just address medical providers, but the entire program. The site surveyors for a specific program are selected based on their prior experience, so not all site surveyors need to be knowledgeable in every detail of every standard and not all standards are reviewed in every site survey. Some Standards are included to support improved patient care and/or safety and maybe be referenced if there are concerns.

(Also being reviewed by the Aviation Advisory Committee)

November 2024 update: This was also reviewed by the Aviation Advisory Committee and they recommended we delete this Standard because it is already a legal requirement. In December 2024 the Standards committee agreed to delete this Standard.

01.05.01. 13.b page 1.7 "b. General Data Protection Regulation (GDPR), UK Protection Act (FW International) 1. Determine if the transport will initiate, travel through, or terminate in an EU/UK country. 2. Limit the amount of information gathered prior to obtaining a signed Consent form. 3. Obtain a signed Consent form prior to disclosing patient information to any other parties. 4. When personal data has not been obtained directly from the data subject, document the identity and contact details of the person providing the data, why it was obtained indirectly, and for what purpose it is to be used (i.e. providing a quote for transport). 5. Retain the consent and any other documentation with the flight paperwork." Comment: Same as above

The committee agrees not to make a change. CAMTS does not just address medical providers, but the entire program and the standards apply to a number of programs who provide international services. The site surveyors for a specific program are selected based on their prior experience, so not all site surveyors need to be knowledgeable in every detail of every standard and not all standards are reviewed in every site survey. Some Standards are included to support improved patient care and/or safety and be referenced if there are concerns.

(Also being reviewed by the Aviation Advisory Committee)

02.03.07 .2. g. Page 2.14 "g. For international transports • An international checklist is available that includes information about specific locations, use of medical assistance companies, networking and local handlers. • Repatriation insurance, ICAO (International Civil Aviation Organization) regulations • Crew Safety – Policies address crew safety, including o Cultural intelligence o Assess travel risk to other countries and immunization recommendations using a reliable source (for example, the U.S. Department of State and CDC respectively and WHO)." Comment: I'm not necessarily opposed to this standard, but I think CAMTS should publish some sort of example or guide to give operators, and more importantly site surveyors, something to go by. JLI has an international checklist, but its aviation focused and doesn't cover some of this, nor should it. This would mean a second checklist, so who addresses it and is it kept? If so, how long?

The committee agrees that the use of an international checklist is imperative and should even include more preparedness information than those outlined here. For now, the committee agrees to make not changes, but allow the program to determine the details on the checklist based on the areas they service. We will, however, look for examples we can include in the next issue of "Best Practices".

(Also being reviewed by the Aviation Advisory Committee)

November 2024 update: The Aviation Advisory Committee to support this Standard and recommends no changes.

02.03.07 2. k Page 2.17 Individual survival gear carried on each crew member is strongly encouraged. At a minimum, the gear should include an appropriate signaling device. Comment: This should not apply to all FW. I think this is gross over thinking.

The committee agrees of make no change to the standard. As explained in the standard this is "strongly encouraged" and not required and the only item specified is a signaling device. The type of signaling device is specifically not defined and may include a signaling mirror, flare, orange ribbon, strobe, or even a pen light.

Date 01/25/2024 #15

Standard # - Suggested Change and Rationale for Change

06.04.03 Page 6.4 As an alternative to the flight hours in 06.04.03 1. and 2., a program may develop and submit a Pilot in Command (PIC) Experience Evaluation Tool. The tool should evaluate a pilot's education, training, and experience to determine if that pilot has the necessary background and experience to be a safe and effective PIC, taking into consideration the program's operation needs, scope of serve, service area, airframe type, operational environment, etc. To be considered as an alternative to meeting the Standard the program must submit a CAMTS Class Two Report of Change along with the Evaluation Tool. Once accepted, the effectiveness of the tool must be evaluated as part of the program's quality management process. The tool will be specific to the program, however an example that can be used as a starting point can be found in Addenda C. Comment: I think your evaluation checklist is a good start, but we need a process. The aviation subcommittee needs to step up and handle these evaluations and make a recommendation to the site surveyor(s), IMO.

The Aviation Advisory Committee does review each submitted evaluation tool and provides the program with suggestions. The site surveyors are not involved in these initial evaluations, however in subsequent visits they should be looking to see if the program made any of the recommended changes. This will be referred to the Aviation Advisory Committee for review.

November 2024 update: The Aviation Advisory Committee reported they had much discussion about how to verify programs who submitted their risk tools, were evaluation pilot performance, who were hired under the criteria in h risk tool during subsequent site visits. As of November 2024, the subcommittee has thus far accepted 12 risk tools with recommendations that were sent back to the operators. There was discussion about how to follow up in subsequent site visits to ensure the programs' QM is evaluating the outcomes of pilots hired under this new process. The CAMTS office is developing a checklist of the programs that have accepted tools so site surveyors have access to that information during the next site survey. This alternative process began in 2023 so the first programs to apply for this hours vs risk tool process will be re-evaluated in 2026.

06.05.01.4 Page 6.8 4. There is an annual review of infection exposure control, medical systems and installations on the aircraft, patient loading and unloading procedures for all mechanics. Comment: We really need to clear up to whom this applies. Every mechanic, or just employees of the operator? Outsourced repair stations?

For additional clarity, the committee agrees to the following wording change:

06.05.01.4 There is an annual review of infection exposure control, medical systems and installations on the aircraft, patient loading and unloading ~~procedures systems and equipment~~ for all program mechanics.

Date 01/25/2024 #16

Standard # - Suggested Change and Rationale for Change

03.05.01 1. d Page 3.16 Excerpts taken from a longer letter: CAMTS' Current Accreditation Standards Allow Animal Use Section 03.05.01(1)(d) of CAMTS' 12th edition "Accreditation Standards" states that "animal labs are also acceptable," in reference to the five successful airway management experiences

required for providers. 2 There are numerous non-animal training methods—such as cadavers or human patient simulators (HPS), both of which CAMTS approves of in its standards—that are available for completing airway management training. Comments: Based on the information presented below, we request that the Commission on Accreditation of Medical Transport Systems (CAMTS) amend its Accreditation Standards to explicitly prohibit the use of animals in training, education, and certification in favor of human-relevant simulations at all member medical transport organizations—a policy that would align with CAMTS’ core values of being “Fair, Ethical, Consistent, Accountable, and Patient and Safety Focused.” Based on the aforementioned information, we urge CAMTS to add explicit policy language to its Accreditation Standards to prohibit the use of animals in training, education, and certification. Our suggested public policy language is, “CAMTS Accreditation Standards prohibit the use of animals for all associated trainings, education, and certifications, and instead require accredited programs to exclusively use human cadavers, human patient simulators, and other non-animal methods.”

The committee strongly believes the standard should remain unchanged. While many programs have moved to primarily simulation, animal labs are still an excellent way to train when there is no regular/easy access to human cadaver labs. Discouraging animal labs would decrease quality training opportunities, which are in very short supply already. For the most part, animals used for training are classified as “food products” and when live animals are used, a veterinarian is often present or is involved in setting training and animal care parameters.

Date 02/08/2024 #17

Standard # - Suggested Change and Rationale for Change

01.06.02, 2., Page 1.10 Currently states "A policy requires staff to self-report any investigation, arrest or convictions" I suggest changing the wording to: "A policy requires staff to self-report any investigations, arrest, convictions, or licensure sanctions and/or other actions that may impact their ability to perform their role."

The committee agrees to the change. The standard will be changed to:

01.06.02, 2. A policy requires staff to self-report any investigations, arrests, convictions, licensure, or certification sanctions.

03.06.01, 25, Page 3.37 Suggest changing the wording to: "Crews have life preservers easily accessible for operations over water. As an alternative, rotorcraft must remain within auto rotation of the shoreline." I think this should no longer just be "strongly encouraged" and should also apply to FW and surface (boats).

This is being referred to the Aviation Advisory Committee for comments.

November 2024 update: The Aviation Advisory Committee recommends deleting this Standard as it is already required under FAR Part 135.167 and 135.168. In December 2024, the Standard Committee agreed to delete this Standard.

Date 02/08/2024 #18

Standard # - Suggested Change and Rationale for Change

01.09.01 Page 1.14 Meeting minutes: The current standards basically require written meeting minutes; however, more and more hospitals and programs are moving to electronic capture of the meetings. There should be consideration to change the wording in this section to allow for electronic recording and of the meeting minutes. Many programs are also moving to using PowerPoints as their meeting documentation.

The committee agrees to not change the standards. Meeting minutes are designed to be a summary of the key discussions, actions, and follow-up. Written documentation needs to include those in attendance, by name and title, discussions, actions and follow-up and loop closure, without having to sit through a video or audio copy. PowerPoint presentations may meet this standard if attendance is included, notes are added with content of discussions, decisions, action items, assignments, and follow-up.

Date XX/XX/2024 #19

Standard # - Suggested Change and Rationale for Change

Left Blank – **No comment**

Date XX/XX/2024 #20

Standard # - Suggested Change and Rationale for Change

Left Blank – **No comment**

Date 04/05/2024 #21

Standard # - Suggested Change and Rationale for Change

Current standard states: “The Board of Directors, administrative and management staff are encouraged to complete an annual conflict-of interest statement or form, disclosing and actual or potential conflicts.”

01.04.02, Page 1.3 - change "encouraged" to "required". This is standard ethical business practice.

The committee agrees the completion of a conflict-of-interest statement does not preclude one from doing business, it just exposes explicit or implicit conflicts. We also received a comment to the same Standard in comment #14 and the committee agrees this should be moved from encouraged to required. The standard will be reworded to:

01.04.02 Page 1.4 Conflict of Interest The BOD, administrative and management staff are **encouraged required** to complete an annual conflict of interest statement or form disclosing any actual or potential conflicts.

01.02.01, Better under 02.03.07, 2.d, Page 2.13 - reflective material or piping on helmets for RW crew who engage routinely in overwater operations. This is routine for over-water RW aircrew in Coast Guard and US Navy. While benefit may be somewhat small (thankfully very few crashes and even fewer over-water), has been found in Navy investigations to decrease time to identify aircrew occupants separated from their aircraft. No downside, with potential upside.

This suggestion was proposed during the last edition but was not included because of the concern of reflective materials covering cracks in the helmet shells during helmet inspections. We reached out to several Navy and Coast Guard pilots, and they encouraged the use of reflective strips. We received this response from CWO3 Jason Nix, ALSE/GSE MANAGER, USCG Office of Aeronautical Engineering (CG-41)

“The CG for the most part has always used the reflective tape on our helmets. We apply 3 1’x16’ strips on the helmets for the very same reason you mentioned. The tape for the most part is easy enough to remove if the user has suspicion that there may be a crack. We typically conduct a thorough inspection yearly, but the user does a visual inspection before each flight.

For the most part, cracks are rare on our helmets unless the user banged their head or dropped the helmet. In those cases, I would remove the tape and re-apply after inspection and using rubbing alcohol to clean tape residue.

As far as manuals, we use our internal guidance on helmet inspections, but it is basically a thorough visual inspection of the entire helmet. If we find any discrepancies that can’t be fixed by a part replacement, then we just issue a new helmet. We do work in a saltwater environment, so most issues occur with comms parts and degraded inserts.”

Another Coast Guard pilot stated that inspections for cracks can also be done by removing the web and padding and inspecting from the inside of the helmet. He also pointed that adding the reflective materials is not much different for added Velcro for the NVGs

The committee agreed to include the wording that was removed at the last minute from the 12th editions. The size, shape, and extent of the reflective materials is left to the program. The standard will state:

02.03.09 2. d Head Strike Envelope

- **Helmets have reflective striping or other markings that can be seen in the event the wearer is in the water or other environments requiring search and rescue**

(Also being reviewed by the Aviation Advisory Committee)

November 2024 update: The Aviation Advisory Committee has no conclusive suggestions. Some on committee believe reflection interferes with NVGs but others see it as over and above and maybe an example to exceed the standards. CAMTS staff spoke to three helmet and one NVG manufacture and they all state that the reflective materials do not interfere with either the NVG or with helmet inspections. We also spoke with several pilots (military, air medical, search, and law enforcement) that currently use reflective materials and they are strongly supportive in its use, pointing out increased visibility on the ground as well as an aid in search and rescue. In the December 2024 Standard Committee meeting the committee agreed to leave the proposed Standard as written.

03.07.01 #7. Page 3.38: Remove requirement for annual TB testing. No longer required anywhere in the United States.

The committee agrees with the existing standard, however, believes there could be more clarification.

The wording will be changed to:

03.07.01 # 7. Programs conducting international transports or operating in localized regions determined at high risk for tuberculosis, must provide annual tuberculosis testing (purified protein derivative), as consistent with current and other testing, screening, and vaccinations, and as consistent with current national guidelines (such as the WHO, CDC, AHJ). This includes medical personnel, pilots, and mechanics.

01.05.01 #7, Page 1.6 - transport organization is not beholden to EMTALA, it is the sending ER that is responsible. There is no requirement and there is no power inherent to the transport organization to alter and consider this. It is a source of wide-spread confusion in transport organizations, primarily, again since there is no specific mandate for the transport organization itself. Would remove
The committee agrees to leave the standard unchanged. While EMTALA may not apply to some programs, it might apply to others. Regardless, the committee believes all program personnel should understand EMTALA concepts and requirements.

Same with **03.02.12., Page 3.10** This is not a reasonable ask of a transport organization to police the sending hospital compliance. Would remove.
The committee agrees to leave the standard unchanged. While EMTALA may not apply to some programs, it might apply to others. Regardless, the committee believes all program personnel should understand EMTALA concepts and requirements.

Date 04/16/2024 #22

Standard # - Suggested Change and Rationale for Change

03.01.03 (2)(a), Page 3.4 - Can we please clarify primary provider experiential requirements? Either pick a timeframe (i.e., 3 years) or an hourly requirement (i.e., 4000 hours), but not both, since they do not agree with each other. Standard full-time employment is between 1872 (0.9 FTE) to 2080 (1.0 FTE) hours per year, meaning 4000 hours is around 2 years of FT experience (+/- based on FTE status). If 4000 hours is all that is required, we could bring candidates with FT experience in an entire year earlier at 2 years; if we need to wait 3 years, I suggest increasing the hourly requirement to between 5,000 to 6,000 hours to account for 3 years of actual FT practice. Alternatively, remove the "years" requirement altogether and just set an hourly requirement, since that is a more objective way to measure someone's experience regardless of their FTE during that timeframe.

The committee agrees the wording can be confusing and will change as below.

03.01.03 2. a. The primary care provider of the clinical care crew may be a resident or staff physician, advanced practice nurse, registered nurse, physician assistant, or a paramedic. The primary care provider must have 3 full time equivalent years of critical care experience. (Critical care experience is defined as ~~not less than 4000 hours~~ experience in an ICU or an emergency department.) In addition, clinicians in the primary-care-provider role must have pre-hire experience and/or education in the medications and interventions as defined in the program's scope of care and services.

Date 04/24/2024 #23

Standard # - Suggested Change and Rationale for Change

01.08.01 4. b, Page 1.13 - Reflective vest.

The current wording implies that safety vests are optional during the day and only required at night. OSHA Standard 1926.651(d) states: "Employees exposed to public vehicular traffic shall be provided with, and shall wear, warning vests or other suitable garments marked with or made of reflectorized or high-visibility material." I suggest leaving the existing wording in the Standards but delete the word "night"

The committee agrees and will delete the word "night". The new wording will read:

01.08.01 4. b. High-visibility reflective vests or appropriate Department of Transportation (DOT) approved clothing worn by flight and ambulance crews in accordance with ANSI-SEA 107 standard or equivalent national standard (required for medical crews and vehicle operators responding to ~~night~~ scene requests).

Date 04/27/2024 #24

Standard # - Suggested Change and Rationale for Change

Move the entire standard **04.08.04** regarding PAIP to the 02.03.00 safety management section, suggest to new standard numbered 02.03.08. Too often the medical transport systems consider PAIP a responsibility of the communications center and then, too often PAIPs are not completed, in some cases because of poor support from management. Moving this standard under safety is appropriate since PAIP drills represent a safety item and also elevates it to the safety department responsibility, where I believe it will be completed more consistently since we all say, "safety first".

The committee agrees the Post Accident/Incident Plan section is more than a communication center responsibility and this entire standard 04.08.04 is better positioned within the safety standards. The committee also agreed to add the wording "or Emergency Response Plan". This will be moved and become 02.03.08.

Move standard **04.08.06** regarding participation in regional disaster preparedness drills to the first sentence of 1. under 03.05.03 Community Outreach Safety Program as the participation in regional drills is not a function of the communication center, but a function of the entire medical transport system as a whole, and this section already speaks to involvement in regional disasters.

The committee agrees this standard is better positioned under the Community Outreach Safety Program and will be moved to 03.05.03.

Three-part suggestion. Time to move **03.02.02 10**. Just Culture for physician medical directors to be required rather than strongly encouraged. Add in, "(at least every three years)" to this requirement as once every three years is both reasonable and consistent with other medical director requirements. Consider adding the language, "or equivalent" because just culture is a component of High Reliability Organization (HRO) training, which is a hospital requirement of many physicians (unless you think it is unique enough, then leave this last suggestion out).

The committee agrees with this change and will make the following wording changes:

03.03.02 10. "Just Culture" and "Informed Culture" or equivalent education ~~is strongly encouraged~~ **encouraged (at least every three years)** (see References).

Time to move **03.02.08** safety and risk management training for physician medical directors to be required.

The committee agrees with this change and will make the following wording changes:

03.02.08 The medical director(s) receives safety and risk management training on an annual basis **(strongly encouraged)**.

Three-part suggestion. Move **03.02.09** regarding medical directors orienting physicians that provide on-line medical control to the 03.02.14 Medical Control section as the last sentence of 1. because as a stand-alone, 03.02.09 is duplicative and has different language. Specify this orientation requirement for on-line physicians, "at least every 3 years" because there may not be yearly changes to discuss but likely within three years, something important will have changed that on-line medical direction needs. Change the name of this whole section from, "Medical Control" to, "On-Line Medical Direction" which is the language that NAEMSP uses and then change, "medical control" to, "medical consult" throughout this section.

The committee agrees with this change but also believes that orientations or updates should be more frequent if changes are made to the programs protocols or policies that impact patient care.

Standard 03.02.09 will be moved and become part of Standard 03.02.14 and that section will be retitled and part renumbered. We will make the following wording changes:

03.02.14 ~~Medical Control~~ On-Line Medical Direction

1. The medical director(s) is actively involved in orienting physicians providing on-line (in-transport) medical direction according to the policies, procedures, and patient care protocols of the medical transport services. **Periodic updates will be provided whenever there are changes to the protocols or program policies that may impact patient care.**

2. ~~Medical Control~~ On-Line Medical Direction Physicians- On-line medical ~~control~~ direction physicians who are trained and identified by the service must be available 24/7/365 and have the appropriate knowledge base and experience sufficient to ensure proper medical care and medical control during transport for all patient types served by the medical transport service.

3. If the medical ~~control~~ direction physician's experience is lacking in a clinical area, he or she must seek prompt consultation as appropriate to ensure proper medical care and medical control during transport for all patient types served by the medical transport service. This consultant should be an appropriate designated physician or the patient's receiving attending physician.

4. Medical ~~control~~ direction physicians are provided with triage guidelines to determine appropriate transport mode and team composition, and on-scene triage guidelines developed and accepted by the specific EMS region. See References. (RW)

a. Triage guidelines may include provisions for auto launch if part of the scope of service

Time to move **03.03.06 4.** just culture for the clinical care supervisor and **03.04.01 2.** just culture for the program manager to required. Time to move 03.03.06 15. safety and risk management training for the clinical care supervisor and 03.04.01 5. safety and risk management training for the program manager to required.

The committee agrees and will change the wording:

03.03.06

4. "Just Culture" or equivalent education ~~(strongly encouraged)~~

03.04.01

2. "Just Culture" or equivalent education ~~(strongly encouraged)~~

5. Safety and risk management training on an annual basis ~~(strongly encouraged)~~

Time to move **03.06.01 5.** a. regarding seated position in ambulance while managing airways from strongly encouraged to required as we don't want our medical providers unbuckling in a moving vehicle.

The committee agrees and will change the wording:

03.06.01 5.

a. ~~In an ambulance it is strongly encouraged that seating be designed in the ambulance~~
Ambulance seating shall be designed so that patient care can be rendered from a seat-belted position. Use of shoulder harnesses on side facing bench seats are discouraged based on peer reviewed studies regarding front end collisions. (See References) (S)

Edit: remove the bold from the number 9. under 03.03.06

Thank you for catching this typo.

Date 05/21/2024 #25

Standard # - Suggested Change and Rationale for Change

03.05.01 2. b, Page 3.18 (and others). The current standard states "Clinical and laboratory continuing education must be developed and documented on an annual basis as pertinent to scope of care to follow." Many programs have moved away from annual clinical rotations and/or HPS and are using actual patient transports to account for clinical rotations. While the program may have written objectives there is no third party to acknowledge the objectives were met or that the patient care was appropriate. (Must be OK if the patient did not deteriorate?) I suggest the committee address and clarify what is acceptable evaluation on annual clinical rotations.

This suggestion is being referred to the CAMTS Education Committee. The Standards Committee believes with clearly defined clinical objectives, documentation completing the objectives for each clinical area on an annual basis, and close quality review may meet this standard.

03.05.01 3. Page 3.18 Competencies - Second sentence currently reads "Where available for the role and patient population(s) transported. a transport-specific certification is strongly encouraged." Suggest changing this to "required".

The committee agrees and the wording will be changed to:

Where available for the role and patient population(s) transported. a transport-specific certification is ~~strongly encouraged~~ **required**.

Date 05/21/2024 #26

Standard # - Suggested Change and Rationale for Change

06.04.03, Item 5: "Ground" used in this context is not standard phraseology and not familiar.

This was an editing error. The word should have been "green".

06.04.03, Item 5: This standard specifies that two pilots working together must have 250 hours in M/M between the two of them. However, single pilot operations have no such requirement. An operator, in this scenario, could elect to exceed the standard by using two pilots in an aircraft certificated for single pilot operations but would have more restrictions than if they were operating the aircraft single pilot. Furthermore, it is very difficult for an SIC to log time in an aircraft certificated for single pilot operations. Recommend changing this standard to only apply to aircraft REQUIRING two pilot operations (predominantly part 25)

The committee agreed to make no changes to the standard.

(Also being reviewed by the Aviation Advisory Committee)

November 2024 update: The Aviation Advisory Committee agrees with this standards and recommends no changes to the Standard.

Date 06/06/2024 #27

Standard # - Suggested Change and Rationale for Change

3.05.01 3. f, g, and h - Make consistent and similar language across RN/Paramedic/RT. C-NPT is required for RNs but recommended for Paramedics and RTs. It should be encouraged for all disciplines, but not required.

The committee agreed to make no change to the standard.

In the following submission (#28), the text in black is the recommendation along with the committee response. The very lengthy rationales were shared with Standards Committee but for brevity they are not listed here.

Date 06/11/2024 #28

Standard # - Suggested Change and Rationale for Change

New Standard: Program administration will demonstrate execution of their duties and responsibilities including addressing major issues within a reasonable time period, following basic problem solving principles, executing sound business decisions, demonstrating financial responsibility, heeding facts, data and expertise, and demonstrating competency, integrity, professionalism, and leadership that supports the quality and safety standards of CAMTS. Program administration will provide adequate resources to effectively operate the program including promoting recruitment and retention

The committee believes that these are primarily human resources issues and are covered under other existing standards. Issues within surveyed program are likely to highlighted in the comments and scores

of the Safety Culture Survey and can then be tied back to an existing Standard. The committee believes no changes to the existing standards are needed.

New Standard: Vehicles will be in service at least 80% of the time.

In-service times cannot be guaranteed and may be impacted by many issues outside the control of the program. This is covered under Standard 01.02.02 on Financial Commitment and should also be included as part of the program's quality management process, especially if vehicle or equipment availability or maintenance is an issue. These are likely to be shown in the Safety Culture Survey results. The committee agrees to no changes in the Standards.

New Standard: There will be written policies addressing hiring and supervision of the communication specialists if these individuals are not employed by the program. If not employed by the program, there will be a direct reporting line of the communications specialist supervisor to the program's senior management. All communications specialist supervisors will have knowledge and experience commensurate to the mission, for example, at minimum a paramedic for critical care and at least two years of experience in medical transport.

The committee agrees this appears to be a program specific issue. There are many configurations of communication centers and staffing. With appropriate training of the communication specialists, programs have shown staffing coverage can be done without requiring clinical certification. The committee agrees to make no changes to the Standards.

04.03.01. 2.b. There are relief personnel with the appropriate training available for periodic breaks. Suggest amending to: There are relief personnel with equivalent training immediately available for periodic breaks, employee emergencies/mid shift vacancies and/or surges in activity from fellow communications specialists, the communication specialist supervisor, or another

The committee believes this is already covered in the communication center and financial commitment standards. The committee agrees to no further changes to the Standards.

The number of management positions must be appropriate to the mission, scope, vehicle configuration, volume and complexity of the program.

The committee believes that these are primarily human resources issues and are covered under other existing standards. Issues within surveyed program are likely to be highlighted in the comments and scores of the Safety Culture Survey and can then be tied back to an existing Standard. The committee believes no changes to the existing standards are needed.

01.06.04 Replace "are encouraged to" with "will" in the standard: "Programs are encouraged to develop a plan for succession and unanticipated extended absence for key positions. The plan should address position vacancies, including when there is no incumbent to provide transition training, as well as unplanned extended temporary absences, designed to preserve the integrity of the program."

The committee believes that these are primarily human resources issues and are covered under other existing standards. Issues within the program are likely to be highlighted in the comments and scores of the

Safety Culture Survey. The committee believes, for the 13th Edition “encourage” is still appropriate and no changes to the existing standards are needed.

01.02.01 Add "including market pay practices" as follows: There must be evidence of financial commitment to the program by the administrative structure including market pay practices and through financial resources that provide excellence in patient care and safety of the transport environment
The standards committee believes this is outside the scope of CAMTS and is primarily an internal human resource issues. No changes to the standards.

03.06.01 8.g. There is a policy to monitor individual nurse/practitioner use of controlled substances to detect/alert management of possible controlled substance diversion.

The committee agrees with this recommendation and believes it is best placed under both initial and annual training for both clinical and management staff. The following changes will be made:

03.03.06 The clinical care supervisor must demonstrate currency in the following or equivalent educational experiences as appropriate to the mission statement and scope of care and/or the clinical care supervisor must have immediate access to personnel with appropriate knowledge and experience as consultants. Education on didactic topics is on an annual basis.

10. Identification and response to actual or suspected medication diversion. (also results in new numbering)

03.04.01 The program manager must demonstrate currency in the following or equivalent educational experiences as appropriate to the mission statement and scope of care. Didactic education initially and on an annual basis must include but not be limited to:

5. Identification and response to actual or suspected medication diversion. (also results in new numbering)

03.05.01

2. Continuing education/staff development must be provided and documented for all full-time and part-time Critical Care and ALS Providers. These must be specific and appropriate for the mission statement and scope of care of the medical transport service.

a. Didactic continuing education must include an annual review of:

- Human factors – Crew Resource Management - AMRM (Air Medical Resource Management) (See References)
- Exposure control
- “Just Culture” or equivalent education – strongly encouraged.

- Safety and risk management training on an annual basis (strongly encouraged)
- Sleep deprivation, sleep inertia, circadian rhythms and recognizing signs of fatigue
- **Identification and response to actual or suspected medication diversion.**
- State EMS rules and regulations regarding surface and air transport
- Stress recognition and management/resilience

.....
Date 06/21/2024 #29

Standard # - Suggested Change and Rationale for Change

03.05.01 (3)(f) page 3.16 - For Specialty Team i.e. Neonatal and High-Risk OB (Our Program has a Perinatal Specialty Team that does High-Risk OB & Neonatal Transports (Team combo OB Flight RN, Neonatal NICU Flight RN, & NICU Flight RT). With the current standard by Jan. 2025 our Specialty RNs would need to have a flight-specific advanced level cert., such as CNPT (or plan in place to have all RNs to get the C-NPT). Currently, all our Specialty RN's have their RNC-OB/RNC-EFM or RNC-NIC. With the current standard, they would be required to get C-NPT ... We feel that the RNC-NIC and RNC-OB/RNC-EFM are more valuable to our RN's than the C-NPT would be... First, the RNC's relates to their specialty patient population for the specialty team, and second, the C-NPT has far fewer eligibility requirements to be able to take the exam than do the specialty RNC's exam's eligibility requirements. Thanks for taking the time to address this!

The committee agreed to make no changes to this standard. The specialty certifications above are great for in-hospital patient care, but do not address patient transport specific content that is an expansion to the hospital role.

.....
Date 06/24/2024 #30

Standard # - Suggested Change and Rationale for Change

01.07.01 to correct an inconsistency - Standard discusses scheduling, individual work shifts, strategies to minimize fatigue, # of shifts/wk and day to night rotations. 1. under this general standard addresses shifts scheduled for more than 12 hours but d. in this section addresses the right to call "Time Out" regardless of shift length. I suggest we move 1.d. to number 1 and relabel criteria for shifts scheduled more than 12 hours as 2 (leaving a, b, c, e and f) and renumber the following entries as necessary.

The committee agrees and will change the wording and numbering.

01.07.01 Scheduling and individual work schedules demonstrate strategies to minimize duty-time fatigue, length of shift, number of shifts per week and day-to-night rotation. (See References for circadian rhythm, Fatigue Risk Management System (FRMS) and other fatigue studies.)

1. ~~d. Medical~~ Personnel must have the right to call “time out” and be granted a reasonable rest period if the team member (or fellow team member) determines that he or she is unfit or unsafe to continue duty, no matter what the shift length. There must be no adverse personnel action or undue pressure to continue in this circumstance.

a. Management must monitor transport volumes and personnel’s use of a “time out” policy.

b. A fatigue-risk management system is utilized.

12. The following criteria must be met for shifts scheduled more than 12 hours.

a. Medical personnel are not required to routinely perform any duties beyond those associated with the transport service.

b. Medical personnel are provided with access to and permission for uninterrupted rest after daily medical personnel duties are met.

c. The physical base of operations includes an appropriate place for uninterrupted rest.

(This will also change the numbering of the remaining section.)

.....
Date 07/25/24/2024 #31

Standard # - Suggested Change and Rationale for Change

Definition of Neonatal Transport: Should take into account corrected gestational age. Recommend consideration of corrected gestational age (<= 44weeks) or <28 days of life if term or post term.

28 days of life on a VLBW or ELBW infant is too soon to opt for transport without neonatal experience and equipment.

This was referred to our AAP and NAAN representatives for comment.

From Robert Holcomb, MD, AAP: “Agree 100%. In Itasca, Dick and I talked a little about this. All too often these EMS services claim to do neonatal transports and yet don’t even have a transport isolette. As we move towards ensuring the true critical care neonatal transports are accomplished by specialty teams, this is a great step in that direction”.

From Tammy Rush, NAAN: “So very important in tracking development especially when born premature. Please consider adding Corrected Gestational Age.”

From Linda Meiner: “ I have always supported this but we had trouble obtaining corrected gestational age on the neonates and little things that showed up in ED's so we started using the following to define a neonatal transport:

The infant is 30 days or less OR if the infant weighs 5kg (or 10lbs) or less OR if the infant is still being cared for in a NICU.

This simplified the question for our callers, most can answer chronological age and weight on the initial requesting call - used this for over 40 years and there is a little grey zone in the upper margins but it works well to match team and patient needs."

We also reached out to the person that submitted the suggestion to ask if they were speaking more toward the team or the use of an isolette. His response: "Actually both. While the isolette is required for temperature stabilization, that is only a small part of the more complex issues presented by premature infants. This is also complicated by the needs of infants with severe BPD, who require ventilator settings far from the norm.

I think that the use of specialty teams for special patients needs to be a national standard, rather than a preference."

The committee believes that the program needs to establish a policy on their criteria for using an isolette and/or specialty team(s). We will add the following wording to 01.04.06:

01.04.06 All patient care resources, including personnel and equipment, necessary to the program's mission must be readily available in the transport vehicle or available to place in the transport vehicle, and they must be operational prior to initiating the mission. This includes resources, personnel, and equipment provided by Specialty Care Providers.

- 1. If within the program's scope of services, the program will have a policy that defines neonatal patients and when an isolette and/or specialty team will be used on transports.**

.....
Date 07/31/24/2024 #32

Standard # - Suggested Change and Rationale for Change

03.01.02 - 3. and 03.01.03 - 3 - Medical Director: Add "Strongly Encourage" EMS Board

Certification for Medical Director requirements.

With increased availability of specialty training in EMS for physicians, this background is increasingly becoming the standard. I would not make it a requirement, but it certainly is something newer medical directors should strive for or have in their background.

The committee agrees and the wording will be changed to:

03.01.02 3. The medical director should be board-certified in emergency medicine. **Board certification in Emergency Medical Services is strongly encouraged.** ~~but~~ If he or she is not, it is strongly recommended that the medical director be board-certified in **critical care**, family medicine, internal medicine, surgery, or pediatrics with demonstrated EMS education or 5 years of experience in emergency medicine.

03.01.02 - 4. Equipment: Add "Strongly Encourage" Video laryngoscope" . The evidence strongly points to VL as the preferred approach when using standard metrics of success (first pass success, lack of hypoxia, time to intubation, etc...). This is especially true in "low frequency intubators" which includes all EMS by definition. I think it will take time for the industry to transition as a whole, so strongly encouraged seems appropriate with this version.

The committee agrees and will make the following change related to ALS equipment:

03.01.02. 4. Equipment – includes all equipment in BLS, plus:

- a. Video laryngoscope (strongly encouraged)**
- b. Ventilation: Ventilators and non-invasive ventilators (CPAP/ Bilevel Positive airway Pressure) with the capability to utilize blended gases**
- c. Cardiac monitoring, pacemaker, and defibrillator**
- d. Non-invasive monitoring (e.g., waveform capnography, pulse-oximetry)**

03.01.03 - 4. Equipment: Add "Video Laryngoscope and blades appropriate for the scope of patient care" as required. See above rationale. CCT teams are typically better resourced and more nimble and should be able to make this transition (and probably should have already)

The committee agrees and will make the following change related to ALS equipment:

03.01.03. 4. Equipment – includes all equipment in BLS and ALS, plus:

- a. Video laryngoscope and blades appropriate for the scope of patient care**
- ab. Ventilation: Multimodality ventilators capable of invasive ventilation (pressure, volume, ventilator appropriate to all age groups transported)**
- bc. Invasive hemodynamic monitoring, central venous pressure, and arterial pressure**

03.01.04 Specialty Care: 4/a: Remove Transcutaneous Ventricular Assist Device. No service carries their own VADs. Management? Yes, but carrying the equipment is not useful or realistic.

The committee agrees and will delete this item:

03.01.04 4. Equipment - Includes all equipment in BLS, ALS, and Critical Care plus: (as appropriate to the scope of care)

~~**a. Transcutaneous ventricular assist devices (e.g. LVAD, BiVAD, RVAD)**~~

ab. Inhaled gases (e.g., nitric oxide, helium oxygen, aerosolized prostacyclin)

bc. Neonatal isolette with heart rate monitoring device and size appropriate ventilator (with blender for adjustable oxygen delivery), thermoregulation control and infusion devices (syringe pumps).

cd. Fetal doppler/fetal heart rate monitoring device (if transporting High Risk Obstetrics – HROB). For long range transports, external cardiotocography monitoring device is required.

03.02.00 - Medical Direction: Same comment about EMS Board Certification

03.02.00 is about the responsibilities of the medical director and does not address specific board certification requirements.

02.03.05 (2) - would add clinical leadership to the make-up of the committee. Risk mitigation strategies and risk tolerance should include consideration of impact to the patient - the one party without a voice in the decisions. Without weighing clinical impact of decisions, the answer would always be to mitigate risk by not leaving base.

The committee agrees to make no changes. Some programs specifically do not include leadership in safety meeting to encourage more staff interaction and input.

05.05.02 and 06.05.02 - change this to "Must have a policy for ..." rather than just a demonstrated practice. This would be consistent with the rest of the standards where we look for both written policy and demonstration of compliance rather than just demonstration of compliance.

The committee agrees and will change the wording in both the RW and FW sections to read:

05.05.02 and 06.05.02 Staffing – **Written operation policy addresses** a single mechanic on duty or on call 24 hours a day must be relieved from duty for a period of at least 24 hours during any seven consecutive days, or the equivalent thereof, within any one calendar month. In addition:

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As of September 1, 2024 with additional comments, as noted, from the Nov. 2024 Aviation Advisory Committee.

Any new submissions received after this date are continued on a new log.

67 comments/suggestions received from 32 people – First Draft



Submitted comments for Standards Changes from the 12th Edition to the 13th Edition Standards

Comments for the SECOND Draft

Comments # 33 - # 65

September 1, 2024 - November 20, 2024

Committee responses are in red.

Comments in Blue are notes/questions/suggestions

Date 09/02/2024 # 33

Standard # - Suggested Change and Rationale for Change

07.01.10, Page 7.2 Suggest change to "A ground service that does not accept or advertise requests for ground transport but is strictly available to transport flight crews and patients in connection to fixed wing transport or when the aircraft is out of service, unable to fly due to weather or when they patient cannot be transported safely in an air ambulance (weight, equipment concerns), is not considered a dedicated ground service and is not required to be included in the accreditation application. However, the following must be present to ensure a safe and appropriate ground transport, flight line and air to ground transfer.

The committee agrees with the changes and will reword the standard as:

A ground service that does not accept or advertise requests for ground transport but is strictly available to transport flight crews **and patients in connection to fixed wing transport or when the aircraft is out of service, unable to fly due to weather or when the patient cannot be transported safely in an air ambulance (weight, equipment concerns)**, is not considered a dedicated ground service and is not required to be included in the accreditation application. However, the following must be present to ensure a safe and appropriate ground transport, flight line and air to ground transfer:

07.01.10 add to 1-7 (unsure of placement within the list) 8. Softpacs and clinical equipment must be secured by an appropriate clamp, strap or other mechanism in the vehicle to prevent movement during a crash or abrupt stop. 9. The program tracks frequency of occasional use of ground ambulance transport as back up when unable to respond or transport with a rotor wing and monitors the safety and utilization of ground services.

The committee agrees to the additions. The new list, following the paragraph above will be reworded as:

1. There is a checklist to verify on board equipment is in working order and oxygen is sufficient for the length of the transport.
2. Stretcher can be secured in a locked position to prevent movement during transport
3. **Supply bags and clinical equipment must be secured by an appropriate clamp, strap, bracket, or other mechanism to prevent movement during a crash or abrupt stop.**
4. Operator uses lights and sirens only when requested by the clinical crew.
5. Operator uses a hands-free communication system. Texting is prohibited while the ambulance is in motion.

6. Ground ambulance EMS license by State or AHJ is provided.
7. EVOC or equivalent training is required initially and at least every two years for vehicle operators.
8. **The program tracks frequency of occasional use of ground ambulance transport as back up when unable to respond or transport with a rotorwing, and monitors the safety and utilization of ground services.**

07.01.10 Consider moving this section to RW and FW sections - mirrored version in each - and remove from Surface section - not needed in this section for Surface providers. For fixed wing we could eliminate the monitoring frequency and utilization but keep safety there is always GR component to FW use.

We will eliminate 07.01.10 and move the following wording to the Preface of the 07.00 SURFACE STANDARD:

“A ground service that does not accept or advertise requests for ground transport but is strictly available to transport flight crews **and patients in connection to fixed wing transport** or when the aircraft is out of service, **unable to fly due to weather or when they patient cannot be transported safely in an air ambulance (weight, equipment concerns)**, is not considered a dedicated ground service and is not required to be included in the accreditation application.”

Then we will add the following wording as a new standard in the Safety section:

02.03.08 Supporting Ground Ambulance

A program owned or contracted ground/surface vehicle that is not advertised or used to accept requests for ground transport, but is strictly available to transport flight crews and patients when the aircraft is out of service, unable to fly due to weather, or when they patient cannot be transported safely in an air ambulance (weight, equipment concerns, or to or from the aircraft), is not considered a dedicated ground service and is not required to be included in the accreditation application. *(We use this wording in the Surface Preface as well.)* However, the following must be present to ensure a safe and appropriate ground transport, flight line, and air to ground transfer.

1. **There is a checklist to verify on board equipment is in working order and oxygen is sufficient for the length of the transport.**
2. **Stretcher can be secured in a locked position to prevent movement during transport**
3. **Supply bags and clinical equipment must be secured by an appropriate clamp, strap, bracket, or other mechanism to prevent movement during a crash or abrupt stop.**
4. **Operator uses lights and sirens only when requested by the clinical crew.**
5. **Operator uses a hands-free communication system. Texting is prohibited while the ambulance is in motion.**
6. **Ground ambulance EMS license by State or AHJ is provided.**
7. **EVOC or equivalent training is required initially and at least every two years for vehicle operators.**
8. **The program tracks all ground ambulance transports and the reason for using the ground vehicle. The safety and utilization of ground ambulance is monitored as part of the program’s quality management system.**

Date 09/03/2024 # 34

Standard # - Suggested Change and Rationale for Change

04.017.00 page 4.5 Request to make the meeting minutes requirement verbiage the same for 01.09.01 and 04.017.00. or to indicate in 04.017.00 to refer to 01.09.01. We had a Customer Communications Center that was "docked" because they did not include the title or role of the meeting attendees which is listed in 01.09.01, but they were only given section 4 to go through and comply with for their Program. Section 04.017.00 referring to meetings is very vague in section 4 and does not address the title or role of the attendee being required.

04.07.00 FORMAL MEETINGS

Formal periodic meetings (separately held or part of the program's staff meetings) are strongly encouraged, for which minutes are kept on file. Minutes will include who is presiding, discussion, and who was present. There are defined methods, such as a communications book or electronic mechanisms, for disseminating minutes and information between meetings

whereas, 04.017.00 does address this:

01.09.00 Meetings and Records

01.09.01 Meetings

1. There are formal, periodic staff meeting for which minutes are kept on file and accessible for reference.
2. All meeting minutes (Staff, Safety, QM, etc.) include the following:
 - a. Date and time of the meeting
 - b. Base identification (if multiple bases)
 - c. Meeting type (Staff, Safety, QM, etc.)
 - d. List of those in attendance by both name and title or function (i.e., Director, RN, EMT P, RRT)
 - e. Name of the person presiding
 - f. Discussions (versus agenda/topic headings)
 - g. Assignments and responsibilities for open issues
 - h. Progress reports on open issues
 - i. Clear identification that an issue has been resolved (loop closure)
3. There are defined methods, such as a staff notebook or electric mechanism, for disseminating information to all staff members between meetings.
4. All meeting minutes (Staff, Safety, QM meetings, etc.) are kept on file and maintained for a minimum of three years.

Examples of evidence to meet compliance: Meeting minutes indicate attendance and representation by all disciplines. Action items, timelines, and areas of responsibility are well documented and demonstrate a flow of information that indicates tracking, trending, and loop closure.

If a Communications Center meeting minutes is required to have the same content as section 01, it should be referenced in section 4 or contain the same verbiage. Thank you for your consideration.

The committee agrees with the suggestions and will change the wording to:

04.07.00 FORMAL MEETINGS

Formal periodic meetings (separately held or part of the program’s staff meetings) are strongly encouraged for which minutes are kept on file. ~~Minutes will include who is presiding, discussion and who was present. Meeting minutes shall follow the standards as outlined in 01.09.01 There are defined methods, such as a communications book or electronic mechanisms, for disseminating minutes and information between meetings.~~

We will also add “Communication Center” in 01.09.01 2., 2.c, and 4. (Staff, Safety, QM, **Communication Center**, etc.)

.....
Date 09/12/2024 # 35

Standard # - Suggested Change and Rationale for Change

Standard 01.08.01, Page 1.12 The current standards (as shown in the 12th Edition) are little changed from previous editions of the Standards. Wellness programs have been shown to be important for employee wellbeing and retention, as well as decreasing employee healthcare utilization. However, despite the importance of these programs, the current standards have very little detail and do not provide program managers, site surveyors, or the Board with concrete examples of what constitutes a good plan. Below are the current standards and a suggestion for strengthening those standards.

Current standards: 01.08.00 PHYSICAL AND PSYCHOLOGICAL/EMOTIONAL WELL-BEING 01.08.01

Physical and psychological/emotional well-being is promoted through:

1. Wellness programs that promote healthy lifestyles (e.g. balanced diet, weight control, no smoking).
2. Resources to promote psychological and emotional well-being such as suicide prevention training, trained peer support team, and employee assistance programs (strongly encouraged).
3. Evidence of an injury prevention program and ergonomic strategies to reduce employee injuries.

Examples of evidence to meet compliance: Personnel are observed following the program’s dress codes and are knowledgeable about policies regarding physical well-being. Pregnancy policies are consistent with current national laws and may address notification to employer requirement, written documentation requirements to continue on duty, and possible alternative duty assignments if team member is restricted from transport duty.

Suggested Standards: 01.08.00 PHYSICAL AND PSYCHOLOGICAL/EMOTIONAL WELL-BEING

01.08.01 Physical and psychological/emotional well-being is promoted through:

1. Wellness programs that promote healthy lifestyles. These programs should include incentives, education, and infrastructure to promote exercise and healthy eating, as well as discouraging tobacco and vaping use.
2. Health and wellness education as part of continuing education programs.
3. Resources to promote psychological and emotional well-being such as suicide prevention training, trained peer support team, and employee assistance programs (strongly encouraged).
4. Evidence of an injury prevention program and ergonomic strategies to reduce employee injuries. Should include regular education and practice.

5. Evidence of a financial commitment to these programs (e.g.: dedicated wellness budget and / or dedicated staff).
6. Evidence of a wellness advisory council

Examples of evidence to meet compliance:

Incentives

- *Gym membership subsidy*
- *Nutrition counseling coverage*
- *Support for fitness evaluation*
- *Subsidy to join exercise clubs (e.g.: running, cycling)*
- *Subsidy to join yoga studios, climbing gyms, etc.*
- *Subsidy to purchase lift tickets*
- *Subsidy to purchase workout clothing and shoes*
- *Insurance discount for being tobacco / nicotine free Education*
- *Stress management*
- *Healthy eating*
- *Men's Health*
- *Women's Health*
- *Dental Health*
- *Heart disease risks*
- *Managing Blood Pressure*
- *Managing cholesterol*
- *Proper lifting techniques*
- *Managing heat stress*
- *Suicide risk recognition and prevention Infrastructure*
- *Providing workout equipment at the base*
- *Providing a dedicated workout area at the base*
- *Providing height-variable workstations for communications specialists*
- *Providing lactation rooms*
- *Access to emotional support animals*
- *Employee assistance program*
- *Peer trainers (physical health)*
- *Peer support (emotional / psychological health) Employee knowledge and participation*
 - *Employees are aware of available programs and knowledgeable on wellness topics*
 - *Participation in wellness activities by >75% of employees*
- *Surveys of employee wellness needs*

The committee agrees with the concept and after lengthy discussion agreed to the following wording changes. "Psychological/emotional well-being" was moved to #1. and the numbering will be adjusted. Those items being struck are now listed as evidence of meeting or exceeding compliance and the suggested "evidence to meet" list has been consolidated and paired down in number.

01.08.01 Physical and psychological/emotional well-being is promoted through:

1. Resources to promote psychological and emotional well-being such as suicide prevention training, trained peer support team, and employee assistance programs (strongly encouraged). (was # 2)

2. Wellness programs that promote healthy lifestyles. ~~(e.g. balanced diet, weight control, no smoking).~~ **(was # 1)**
3. Evidence of an injury prevention program and ergonomic strategies to reduce employee injuries. **Should include regular education and practice.**
4. **Evidence of a multidisciplinary wellness advisory council is encouraged (new)**
The remaining standards are unchanged but will be renumbered:
5. Protective clothing and....
6. Exposure control – dress codes ...
7. Written policies addressing: ...

Examples of evidence to meet or exceed compliance:

- *Programs that support physical activity (gym membership, yoga studios, workout facilities/equipment at bases, running area, etc.)*
- *Programs that support healthy life style (smoking cessation, nutritional counseling, stress management, health risk assessments, etc.)*
- *Staff support and comfort (ergonomic furniture and workstations, lactation room, emotional support animals, peer support, etc.)*
- *Staff education and awareness (availability of employee assistance programs, managing heart health, women’s health, men’s health, etc.)*
- *Personnel are observed following the program’s dress codes and are knowledgeable about policies regarding physical well-being. Pregnancy policies are consistent with current national laws and may address notification to employer requirement, written documentation requirements to continue on duty, and possible alternative duty assignments if team member is restricted from transport duty.*

.....
Date 09/18/2024 # 36

Standard # - Suggested Change and Rationale for Change

01.04.02 The Board of Directors, administrative and management staff are ~~encouraged~~ required to complete an annual conflict-of-interest statement or form, disclosing any actual or potential conflicts. Please define "administrative" staff. This could include a wide array of staff including communication specialists, billing, etc.

The committee agrees additional clarification would be helpful. We will reword the standards as:

01.04.02 The Board of Directors, administrative and management staff, **having financial decision making authority**, are required to complete an annual conflict-of-interest statement or form, disclosing any actual or potential conflicts.

03.01.01.4.a. "The medical director should be board-certified in emergency medicine,. Board certification in Emergency Medical Services is strongly encouraged. but if he or she is not, it is strongly recommended that the medical director be board-certified in family medicine, internal medicine, surgery, or pediatrics with demonstrated EMS education (e.g., NAEMSP medical director course) or 5 years of experience in emergency medicine.

1) I think that may be a typo - is it required or encouraged?

2) Recommend Board certification be based on transport types, i.e. critical care certification is more relevant for many FW services than surgery or emergency medicine.

The committee agrees that has it has been reworked the wording has become more confusing. The new wording will be:

03.01.01 (BLS) 4.a and 03.01.02 (ALS) 3. A

The medical director should be board-certified in emergency or critical care medicine aligned with the mission and scope of the program. For those programs doing scene response, board certification in Emergency Medical Services is strongly encouraged. If not meeting this standard, it is strongly recommended that the medical director be board-certified in family medicine, internal medicine, surgery, or pediatrics with demonstrated EMS education (e.g., NAEMSP medical director course) or 5 years of experience in emergency medicine.

03.02.13 Medical Control On-Line Medical Direction

1. The medical director(s) is actively involved in orienting physicians providing on-line (in-transport) medical direction according to the policies, procedures and patient care protocols of the medical transport service. . Periodic updates will be provided whenever there are changes to the protocols or program policies that may impact patient care.

1.) Has CAMTS considered the increased roles mid-level providers (PA, NP) are taking in medical control? In rural areas especially, the phone may be handed over to a PA but this policy does not allow that.

The committee agrees that the person providing on-line medical direction may not always be a physician. We will change the wording to read:

03.02.13 Medical Control On-Line Medical Direction

1. The medical director(s) is actively involved in orienting physicians **or other advance clinical practice providers (PA, NP)** providing on-line (in-transport) medical direction. **Orientation should be** according to the policies, procedures, and patient care protocols of the medical transport service. **Periodic updates will be provided whenever there are changes to the protocols or program policies that may impact patient care.**

03.05.01..3.g. Current paramedic certifications (such as NRP) strongly encouraged for paramedics who have been employed for more than 2 years and are conducting ALS/BLS transports.

1) Shouldn't current paramedic certifications be required?

The committee agreed to make no changes.

03.05.03.f. FEMA or other Emergency Management classes are provided for scene and disaster response.

1) add "within the United States". These courses are not applicable for scene/disaster responses outside of this country.

The committee agreed to make no changes. While FEMA is within the United States, other Emergency Management classes would apply in Canada and other locations. As with all standards we look at the Authority Having Jurisdiction (AHJ).

03.07.01.7.1. Recommend adding the QuantiFERON-TB Gold test (QFT) as well.

The wording of this standard was changed in the posted first draft of the 13th edition. It appears as below. We will add the QFT as well.

- ~~Provide annual tuberculosis testing (purified protein derivative) especially if conducting international transports and other testing, screenings and vaccinations as consistent with current national guidelines (such as the CDC, AHJ, or WHO). This includes medical personnel, pilots and mechanics. (The CDC or WHO may deem the localized region low risk and annual testing not necessary, but this applies only if the service does not operate or respond outside of the local region)~~

- Programs conducting international transports or operating in localized regions determined at high risk for tuberculosis, must provide annual tuberculosis testing (purified protein derivative or QuantiFERON-TB Gold test (QFT)), as consistent with current and other testing, screening, and vaccinations, and as consistent with current national guidelines (such as the WHO, CDC, AHJ). This includes medical personnel, pilots, and mechanics.

03.03.01 If transport nurses are part of the medical team, they must report to a nurse or physician on clinical issues.

- 1) Recommend expanding this to include mid-level providers as well.

The committee agreed to make no changes. Reporting is often directed by state law (AHJ). PAs are required to report to a physician and nurse practitioners are nurses.

03.03.06.16. Safety and risk management training (strongly encouraged)

- 1) Make required, not encouraged

The committee agrees. We will delete “strongly encouraged” in standards 03.03.06 16. For Clinical Care Supervisor and 03.04.01 5. for Program Manager

03.03.06 16. Safety and risk management training (~~strongly encouraged~~)

03.04.01 5. Safety and risk management training (~~strongly encouraged~~)

.....
Date 09/18/2024 # 37

Standard # - Suggested Change and Rationale for Change

03.05.01.1.c. The transport program will provide a basic outline of initial education that is not limited to, but must include: ...

- 1) Add "if applicable". For instance, long-range and international programs do not utilize EMS Radio Communications or scene management/rescue/extrication.

03.05.02.2.a 1) Add "if applicable" for EMS radio communications.

The committee agreed changes to these standards are not needed. The opening statement for both 03.05.01 and 03.05.02 include the wording “These must be specific and appropriate for the mission statement and scope of care of the medical transport service.” For example, if scene response is not included in the scope of care of the service, utilization of EMS radio, training in scene management and extrication, etc. would not apply.

.....
Date 09/18/2024 # 38

Standard # - Suggested Change and Rationale for Change

I have a few suggestions:

1. We need to specify certain limitations to transferring twins that are based on manufacture specs of the transport incubator. Example: International Biomedical who supports 95% of the transport incubator market has a weight limit of 11 pounds total for it’s voyager transport incubator, and 16 pounds for the NxtGen transport incubator released in the last year. Obviously this has to be taken into consideration.

2. I would advocate that the preference is not to use a single incubator for twins rather each have their own.

3. The terminology used is transport incubator, not isolette.

The committee believes the standards already address the transport of a single patient (unless conjoined twins) in an isolette in AS: 03.06.01 4. e. **The committee agrees to change the term “isolette” to “transport incubator”.** There are 11 places in the Standards where this will be updated. The committee also agrees to add to Standard 03.06.01 19. e:

e. Securing Equipment

- **Isolette Transport incubator:**

- There must be some type of restraining device within the **isolette transport incubator** to protect the infant (under 10 pounds or 4.5 kg) in the event of air turbulence or poor road conditions.
- **Isolette Transport incubator** must be capable of being opened from its secured position in order to provide full access to the infant in the event of complicated airway problems or extrication from the **isolette transport incubator** becomes necessary.
- **The weight of the patient and equipment must not exceed the manufacturer’s specifications.**

Suggestion: 03.06.01 4. e. Strong preference is to have a policy that prohibits dual patient transport inside the same incubator. Exceptions addressed in the policy would be for conjoined twins. If non-conjoined twins must be transported in the same incubator, they must each have a full complement of equipment (to include but not limited to cardio-respiratory monitors, ventilators, IV Pumps) and show no evidence of infection in one or different infections in both. In the event that one twin arrests, there must be mitigation, i.e., additional warming method that can be applied to the non-arresting twin. Use of the single transport incubator for twins must comply with manufacture specs, i.e weight limit not to be exceeded. (RW/FW/S)

The committee agrees with the following changes”

03.06.01 4.e

A policy that prohibits dual patient transport inside the same incubator ~~unless the situation is conjoined twins or twins are transported with full complements of equipment for each and show no evidence of infection in one or different infections in both.~~ Exceptions addressed in the policy would be for conjoined twins. If non-conjoined twins must be transported in the same incubator, they must each have a full complement of equipment (to include but not limited to cardio-respiratory monitors, ventilators, IV Pumps) and show no evidence of infection in one or different infections in both. In the event that one twin arrests, there must be mitigation, i.e., additional warming method that can be applied to the non-arresting twin. **Use of the single transport incubator for twins must comply with manufacture specs, i.e weight limit not to be exceeded. (RW/FW/S)**

Date 09/19/2024 # 39

Standard # - Suggested Change and Rationale for Change

Addition of stress management and health and wellness training for communicators. NENA is recommending 8 hours annually for 911 professionals. I'm not sure our industry has the capacity to add this directly, but I suspect this is something that the professional communicators in this industry should be trained on. I would recommend additionally adding the standard as a recommendation to follow.

NENA-STA-002.2-2022, NENA Standard to Protect the Wellbeing of 9-1-1 Professionals

<https://www.nena.org/general/custom.asp?page=standards#Wellness>

The committee agrees we will add the following as "Examples of evidence to meet compliance;" following 04.03.00 for Communication Specialist initial and annual training:

The National Emergency Number Association (NENA) training NENA-STA-002.2-2022, NENA Standard to Protect the Wellbeing of 9-1-1 Professionals

<https://www.nena.org/general/custom.asp?page=standards#Wellness>

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Date 09/20/2024 # 40

Standard # - Suggested Change and Rationale for Change

03.01.03. The wording here on primary care provider still makes it seem like only an RN (or MD/PA/APRN) can fill this role. So this sets up scenarios where a medic can never do this unless they have the 3 years of time in an ER or ICU as the standards define critical care in only those ways. This is a slap in the face to medics. CAMTS has continued to use language to setup scenarios where a medic with 20+ years of flight experience cannot be the primary care provider when flying with a new flight nurse. If this is not your intent, you need to amend the definition of critical care to include critical care transport time at the very least. Otherwise, this is a insult to the paramedic profession.

The committee agrees that it was never the intent to exclude a paramedic from taking the primary role. In fact, some states specifically require the lead be a paramedic for scene responses. We will eliminate the word "primary". The committee agrees with the following wording change (in addition to those already purposed in the posted draft):

03.01.03.

2. Clinical Crew

a. A minimum of two medical personnel (who are licensed according to state and/or national requirements) who provide direct patient care plus a vehicle operator

- The ~~primary~~ care provider of the clinical crew may be a resident or staff physician, advanced practice nurse, registered nurse, physician assistant or a paramedic. ~~The primary~~ **At least one** care provider must have **three (3) full time equivalent** years of critical care experience. (Critical care experience is defined as ~~no less than 4000 hours~~ experience in an ICU or an emergency department.) In addition, clinicians ~~in the primary care provider role~~ must have pre-hire experience and/or education in the medications and interventions as defined in the program's scope of care and services.
-

Date 09/23/2024 # 41

Standard # - Suggested Change and Rationale for Change

Email to Jan from ARC: Thank you again for the clarifications a few weeks ago about how the Red Cross is referenced and accepted for ACLS (Red Cross ALS) and PALS. When I reached out I stated we were getting ready to release our NALS program (an equivalent to NRP). In the next few weeks I will have a complete Participant's Manual and Instructor's Manual ready for your review.

However, I see that your standards are in the process of being updated for 2025. How can the Red Cross programs (BLS; ALS; PALS; and NALS) be added to the definitions and requirements sections for training formally? Our programs are scientifically equivalent to all of the AHA based programs (all are derived from the ILCOR Consensus on Science with Treatment Recommendations (CoStar)) and should be considered in the same manner as AHA.

The committee has referred this to the Education Committee to be included in the Education and Certification matrix which is posted on the CAMTS website with the other equivalent courses.

.....

Date 09/24/2024 # 42

Standard # - Suggested Change and Rationale for Change

03.01.03 in the proposed 13th Edition addressing the role of "primary care provider" indicates "The primary care provider must have three (3) full-time equivalent than 4000 hours' experience in an ICU or an emergency department.)" This is discriminatory to the paramedic role and could have a significant negative impact on the ability of an experienced paramedic to be considered as a preceptor to a new orienting nurse. While I see the need for standards to prevent a green on-green situation, consideration needs to be given to the role of the paramedic and include critical care flight experience and not limit it specifically to ER or ICU experience.

Please see the response to submission #40 above.

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Date 09/25/2024 # 43

Standard # - Suggested Change and Rationale for Change

New Standard(s).

There are clear training/education standards for the Medical Director, Program Manager, and Clinical Care Supervisor (see, e.g., 03.03.00, 03.04.00, and 03.02.02).

There are no similar guidelines for other supervisors, Directors, or managers. I suggest that for the supervisors/managers in Communications, Ground Operations, Base Managers, Vehicle Maintenance Supervisor, and Chief Pilot/Aviation Site Manager should have parallel training/education requirements as the Medical Director, Program Manager, and Clinical Care Supervisor, including: involvement in Quality and Administrative Processes, Crew Resource Management (AMRM), "Just Culture" education, and additional annual training including stress recognition and management safety and risk management, Incident Command, and fatigue recognition and management. Would make CMTE an "example of exceeding the standard" for each job role.

The committee agrees that the wording should include the same leadership training for all those "holding operational or supervisory" positions. Over the years titles and functions have changes, combined, and even been separated and expanded. The suggestion is to change 03.04.00 PROGRAM MANAGER to PROGRAM MANAGEMENT and list the training required and common for all positions having operational or supervisory responsibilities. Those items under the Medical Director (03.02.00) and Clinical Supervisor (03.03.00) can then be eliminated in those sections, leaving just those items

specific to the Medical Director and Clinical Supervisor. The committee will work to reorganize this section of the Standards and develop a chart outlining the management training.

04.06.00 Post-Transport Debrief The policy requires a debriefing be conducted and that it include Communications. Recommend clarifying that all Operations personnel involved in the transport (vehicle operators, Comms, and clinical staff) participate in the debriefing and that it be memorialized in a paper or electronic record, ideally linked with the program's quality reporting system.

We will take the 04.05.00 Shift Briefings and 04.06.00 Post Transport Briefing out of the Communication Section and move them to standards under 02.03.00 SAFETY MANAGEMENT, since they apply to all disciplines. This will renumber some of the standards. The suggested wording would be:

04.05.00 02.03.07 SHIFT BRIEFINGS

Program policy outlines There are shift briefings conducted at the beginning of each shift to assure continuity between shifts. ~~that include communication personnel.~~ **The policy should outline the time of the briefings and include all disciplines paramount to the safety of the patient, crew, and/or vehicle (clinical staff, pilot/driver, communications, maintenance, etc.).**

04.06.00 02.03.08 POST TRANSPORT DEBRIEF

Program policy outlines A post transport debrief is conducted after each transport. **The debrief that** includes the communication specialist when communication issues are involved, **maintenance when vehicle issues are involved and others as needed. The debriefs are memorialized in a paper or electronic record and linked with the program's quality reporting system**

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Date 09/27/2024 # 44

Standard # - Suggested Change and Rationale for Change

03.01.02 - 3. and 03.01.03 - 3 - Medical Director: The committee agrees and the wording will be changed to: 03.01.02 3. The medical director should be board-certified in emergency medicine. Board certification in Emergency Medical Services is strongly encouraged. If he or she is not, it is strongly recommended that the medical director be board-certified in critical care (pulmonary/critical care or pediatric critical care medicine), internal medicine, surgery, or general pediatrics with demonstrated EMS competency or 5 years of experience in EMS and/or interfacility care.

This is addressed in submission # 35 above.

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Date 10/01/2024 # 45

Standard # - Suggested Change and Rationale for Change

New Standard There should be consistent minimum leadership/managerial training standards for all supervisors, not just the Clinical Supervisor, Medical Director, and Program Manager. Recommend that Operational roles accountable for leading a service line, such as Communications Manager, Ground Operations Manager, Base Manager, and Chief Pilot, and other similar leadership roles defined by role and not necessarily by title, have parallel initial and recurrent education requirements including performance improvement, Human Factors and Crew Resource Management (AMRM), "Just Culture" education, stress recognition and management, exposure control, altitude physiology, and safety and risk management. For all these roles, current certification as a CMTE can be evidence of exceeding the Standard.

This is addressed in the response to submission # 43 above.

New Standard Medical transport is a specialty and leadership staff often rise through the program without significant formal leadership training. At least one member of the program leadership team, defined as the group from the Program Manager through the service line leaders for clinical care, communications, aviation/chief pilot, and ground operations/lead EMT should be currently certified as a CMTE, reflecting current education in the intersection of leadership and the medical transport industry. **As we restructure the management training as listed above we will include: “At least one person holding an operational and/or supervisory position is a Certified Medical Transport Executive (CMTE). CMTE is encouraged for all management staff”.**

02.03.01 This standard requires “formal safety training” for the Safety Officer. Recommend that current certification as an MTSP-C or CSP, reflecting achieving a standard of specialty training in safety be required of the program safety officer within three years of assuming the role.

The committee agrees we will add the following wording:

02.03.01 Safety Management System (SMS) – Management is responsible for development of an effective SMS and training all staff. Both management and staff are responsible for making operations safer.

- 1.** The designated safety director(s)/officer(s) receives formal **medical transport specific** safety related training pertinent to the program’s scope of services. **Certification as a Medical Transport Safety Professional (MTSP-C) is strongly encouraged.**

02.03.08 This standard describes the post-incident accident plan. Recommend that having a program leader who has completed the LIFT program be evidence of exceeding the Standard.

The Committee agrees and will add as “evidence of exceeding the Standard”.

Date 10/08/2024 # 46

Standard # - Suggested Change and Rationale for Change

03.06.01 8.a. "The transport service has a method of assuring that all medications and intravenous fluids are appropriately calculated. Examples of effective methods include the use of drug calculation lists, internet-based programs, and pre-programmed drug delivery systems such as those found in medication pumps..."-Not a vehicle standard, is a clinical standard 9 - same comment

03.06.01 8.a. "...A customizable medication formulary within the IV pump is encouraged." This should move from encouraged to required. It is standard of care in hospitals and greatly decreases rates of medication infusion errors

8. Medications consistent with the service’s scope of care are accessible.

- a.** The transport service has a method of assuring that all medications and intravenous fluids are appropriately calculated. Examples of effective methods include the use of drug calculation lists, internet-based programs and pre-programmed drug delivery systems such as those found in medication pumps. A customizable medication formulary within the IV pump is **required for critical care and specialty care and strongly encouraged for ALS.**
-

Date 10/10/2024 # 47

Standard # - Suggested Change and Rationale for Change

Since a trauma course is required for pediatric specialty teams, I suggest the following change. c. Advanced Trauma Life Support (ATLS) according to the American College of Surgeons, ATLS audit, ATCN for Nurses, Transport Nurse Advanced Trauma Course (TNATC) or Transport Professional Advanced Trauma Course (TPATC) or equivalent (not required for neonatal teams who do not provide **pediatric or adult care**) (See Education Matrix for equivalent criteria)

The committee agrees with the above change.

My thought on this change is that we want the clinical experience to be more than labor and delivery, especially when using HPS for clinical time. Normal labor and delivery is at the ALS level, not Crit Care, and the objectives should reflect this.

2b. Clinical and laboratory continuing education must be developed and documented on an annual basis as pertinent to scope of care to follow. If simulation teaching/learning modalities are used as an adjunct to or substitution for clinical experiences, there must be documentation that the scenarios and objectives are reviewed annually, references are current, and the learning objectives were met. Simulation may include the use of dynamic human patient simulators, standardized patients (trained medical actors), computerized interactive devices, virtual reality, and serious gaming. Examples can be found in references.

- Critical care (adult, pediatric, neonatal)
- Emergency/trauma care
- Invasive procedure labs
- Labor and delivery change **to High Risk OB**

The committee agrees with the above change.

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Date 10/14/2024 # 48

Standard # - Suggested Change and Rationale for Change

I am a flight RN. I am reaching out to clarify how CAMTS interprets prior military service at the ALS and Critical Care level. I have a friend who will be separating from the Airforce next July and is trying to find a job as a critical care paramedic. His applications to Air medical programs are being rejected because he lacks 3 years of "civilian 911" ALS service. However, he has been a National Registry Paramedic since 2019 and has been operating as such with a Special Operations unit as a medical operations manager. He has extensive ALS and Critical Care patient transport experience. When he asks why his military paramedic experience does not meet requirements, he is told it is due to "... CAMTS accreditation requirements...". My program managers share the same explanation. The CAMTS guidelines 03.01.03 Critical Care, Section 2, subsection C specify "If a crewmember is a paramedic, 3 years (minimum of 4000 hours) of ALS experience is required." I cannot find anything that specifically requires "civilian 911" experience. This individual has all of his training records and a detailed record of his direct patient care contact hours. I realize CAMTS provides guidelines with requirements, recommendations, and advisements for programs to achieve accreditation. I feel like misinterpretations of these guidelines might be hindering very knowledgeable and experienced service members from being hired by civilian programs. I would be great if CAMTS was able to help programs develop a pathway for military service members with equivalent experience, education, and certifications to be able to transition more smoothly. I realize this would take time and resources , but for now any insight or advice you can provide is greatly appreciated. Also, I would be very willing to reach out to anyone you can recommend that could provide direction

CAMTS does not specify "civilian 911" ALS service. It is up to the program to define the clinical competency of a potential provider and to fill in the gaps between what is required to meet the program's mission, scope of services and scope of practice. While in the past, military medical training

was believed to be primarily focused on combat related injuries, that is not necessarily the case. Training and experience likely include most patient types and ages. This is being referred to the CAMTS Education Committee for further direction and for comments from several of our Board members currently in the medical branch of the military. Another opportunity to balance the training in the eyes of potential employers is to become either PF-C or CCP-C.

Date 10/24/2024 # 49

Standard # - Suggested Change and Rationale for Change

Dear CAMTS Standards Committee, I hope this letter finds you well. As the Chair of the Safety Management Training Academy (SMTA), I am writing to express our strong support for the inclusion of the SMTA and the Medical Transport Safety Professional Certification (MTSP-C) in the accreditation standards of the Commission for Accreditation of Medical Transport Services (CAMTS). The safety of patients and medical transport personnel is paramount in our field. The SMTA has dedicated itself to advancing safety management principles specifically tailored for the medical transport industry. Our training programs emphasize risk assessment, hazard identification, and the development of effective safety protocols. By integrating the SMTA and MTSP-C into CAMTS standards, we can collectively elevate the quality and safety of medical transport services. Research shows that organizations with robust safety management training experience significantly lower incident rates and improved patient outcomes. The MTSP-C credential, awarded to professionals who demonstrate comprehensive knowledge of safety management, is designed to foster a culture of safety within transport services. Including this certification as part of CAMTS accreditation would ensure that personnel are not only trained in technical skills but also equipped with essential safety management competencies. Furthermore, aligning CAMTS standards with the SMTA and MTSP-C would provide a unified framework for safety practices across the industry. This initiative would not only enhance accreditation credibility but also instill confidence in patients, families, and stakeholders regarding the safety of medical transport services. We would welcome the opportunity to discuss this proposal further and explore how we can work together to enhance safety standards in our industry. Thank you for considering this

Please see the responses in submission # 45 above.

Date 10/17/2024 # 50

Standard # - Suggested Change and Rationale for Change

Addendum A – Education and Certification Matrix

Certifications

A certification must come from a recognized **and accredited** professional **credentialing** body, for example, the Board of Certification ~~of the~~ **for Emergency Nurses Nursing Association (BCEN)** and **is be supported or recommended** by an association who is a member of the CAMTS Board. This assures that the exam has been developed from a focused body of knowledge, has validity and reliability, and is administered in a secure environment. (see page 8 for recommended certification exams).

Additional notes:

- The **Board of Certification for Emergency Nursing (BCEN)** is an independent, nonprofit certification board and is not a part of ENA.

- **AMTS Board member association**, should CAMTS wish to incorporate a reference to ASTNA's position statement(s) re: the CFRN & CTRN, the primary one is here:
 - [Transport Nurse Certification-Updated 2019](#)
 - These other two also speak to certification:
 - *[Critical Care Transport Nurse Safety in the Transport Environment-Updated 2018](#)
 - *[Role of the Registered Nurse in the Out-of-Hospital Environment-Updated 2018](#)
- *Certifying bodies are responsible to ensure their exams are based on a specific/focused body of knowledge and ensure the validity, reliability, security, etc., of their exams.
- *In BCEN's case, for example, the fact that the CFRN, CTRN and CPEN certification programs meet or exceed industry standards for basis in a defined and focused scope of knowledge, and are valid, reliable, secure, etc., is both a function of BCEN's internal standards and processes, and also because each of these certification programs are also **independently accredited** by the Accreditation Board for Specialty Nursing Certification (ABSNC). (To be clear it's each certification program and not the certifying body, that earns accreditation ... aka, the CFRN and CTRN and CPEN certifications are accredited by the ABSNC.)
- *ABSNC accreditation of a certification program is contingent on 18 standards being met

https://absnc.org/sites/absnc/files/docs/2019/overview_of_accreditation_standards_for_examination_based_certification_programs_0.pdf

Also:

Certifications – Examples of Certification Exams and Resources:

All of the listed resources have websites where additional information about the specific examinations, requirements to take the exams, and where the exams are administered.

- **Board of Certification for Emergency Nursing (BCEN)**
 - o **CFRN: Certified Flight Registered Nurse**
 - o **CTRN: Certified Transport Registered Nurse**
 - o CPEN: Certified Pediatric Emergency Nurse
- ~~In conjunction with the Air and Surface Transport Nurses Association~~
 - o ~~CFRN: Certified Flight Registered Nurse~~
 - o ~~CTRN: Certified Transport Registered Nurse~~
- **International Board of Specialty Certification (ISBC)**
 - o FP-C: Certified Flight Paramedic
 - o CCP-C: Certified Critical Care Paramedic
- **National Certification Corporation**
 - o C-NPT: Certified Neonatal Pediatric Transport

.....
Date 10/29/2024 # 51

Standard # - Suggested Change and Rationale for Change

Section 03.01.03 under critical care, 2.a.i. in regards to the primary care provider. "Critical care experience is defined as experience in an ICU, emergency department, critical care ground, or critical

care air medical service. With most medics coming from pre-hospital it would fit this section better to write in where their background comes from. Especially since paramedics can be considered a primary care provider per CAMTS.

See the committee response to submission # 40.

.....
Date 10/30/2024 # 52

Standard # - Suggested Change and Rationale for Change

I believe dispatching has lost its professionalism. Years ago, dispatchers were required to have an EMT certification and that is no longer. While I know it would be a costly change for some, I believe it would be in the best interest to bring that requirement back or something with similar training.

It's a general practice to not question a dispatcher, however, when they are the least trained or have no EMS training at all, bad decisions are made and the people who are educated are not allowed to ask a valid question. With this lack of requirement, dispatchers are uneducated as to what a crew's scope of practice is and dispatch inappropriately.

CAMTS has never had a standard that requires EMTs, they have been encouraged or strongly encouraged for at least ten years. While an EMT does make sense for some programs, for many that are doing scheduled, specialty, and/or interfacility transports, it may not. This is up to the program to determine the staffing based on their mission and scope of services and to assure the communication staff is appropriately trained. The committee agrees to make no change to the standard.

There should be more definitions regarding crew rest. Most agencies agree that it is necessary, but hate anytime it's in acted. Comparing the amount of times different bases in a system call for crew rest, just pits crews against each other. Crew rest needs to be something a crew should be able to ask for without any repercussions. Especially from uneducated dispatchers.

Reach out for type of definitions. What else would you suggest? (Make name and contact information required). Program issues. No change to the standard?

An email was sent to the person submitting this suggestion but with no response.

.....
Date 11/08/2024 # 53

Standard # - Suggested Change and Rationale for Change

Comment on proposed change to section **03.01.03**. While I agree in principle with the idea of creating a standard that would set who could be a "primary" provider, the current proposed verbage seems to alienate the paramedic population. Not all paramedics have ICU or ED work time. Paramedics are hired for their time in busy EMS or 911 systems. There are many skilled flight paramedics who have never worked in an ICU in a hospital, and thus would not qualify per the new wording as a "primary provider" even if they had many more years flying than the RN they were with. It seems a better way to say that would be to add something with "equivalent critical care transport experience" so as to recognize that many of the medics in critical care air transport come up through a different route than the hospital setting.

See the committee response to submission # 40.

.....
Date 11/09/2024 # 54

Standard # - Suggested Change and Rationale for Change

Standard #: **03.01.03** Suggestion for Change: In the proposed definition of "primary care provider," I recommend modifying the experience requirement to include critical care transport experience as equivalent to ICU or emergency department experience.

Suggested language: "The primary care provider must have three (3) full-time equivalent years of critical care experience, defined as at least 4,000 hours in an ICU, emergency department, or equivalent critical care transport experience."

Rationale for Change: This change would recognize the expertise of experienced paramedics who develop critical care skills in the transport setting. The current language risks excluding skilled paramedics and could lead to newly trained nurses being placed in primary provider roles prematurely, potentially impacting team dynamics and patient safety. This addition better aligns with the team-based approach in critical care transport, ensuring that every crew has a seasoned provider to lead decision-making effectively.

See the committee response to submission # 40.

.....

Date 11/09/2024 # 55

Standard # - Suggested Change and Rationale for Change

Exactly the same wording as Item # 54

See the committee response to submission # 40.

.....

Date 11/09/2024 # 56

Standard # - Suggested Change and Rationale for Change

Proposed changed to Section **03.01.03** under critical care definition of "primary provider." I believe it's excellent to attempt to avoid new aka "green" crew members of all clinical backgrounds flying together, especially in these times of such a new and "green" overall base in the healthcare field. That being said I have concerns that programs, especially in rural areas and non hospital based programs, who fly with RN and Paramedic teams will loose out on the ability of new RN's to be supported by seasoned and experienced critical care Paramedics. The change in wording would exclude Paramedics with 3 fell time equivalent years of experience in a transport environment from being eligible as a primary care provider and mentor/preceptor for new RN's simply because they work prehospitally. Please consider adding to the primary care provider definition or eligibility "experience in an ICU, ED or equivalent critical care transport experience." This will marry the spirit of the rule with the actual experience requirements to manage as a primary provider when rapidly evolving decisions and clinical experience are necessary, and afford us a path forward as we rebuild the experience levels in our field. Thank you!

See the committee response to submission # 40.

.....

Date 11/10/2024 # 57

Standard # - Suggested Change and Rationale for Change

Exactly the same wording as Item # 54

See the committee response to submission # 40.

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Date 11/10/2024 # 58

Standard # - Suggested Change and Rationale for Change

Exactly the same wording as Item # 54

See the committee response to submission # 40.

.....

Date 11/10/2024 # 59
Standard # - Suggested Change and Rationale for Change
Exactly the same wording as Item # 54
[See the committee response to submission # 40.](#)

Date 11/10/2024 # 60
Standard # - Suggested Change and Rationale for Change
Exactly the same wording as Item # 54
[See the committee response to submission # 40.](#)

Date 11/10/2024 # 61
Standard # - Suggested Change and Rationale for Change
Exactly the same wording as Item # 54
[See the committee response to submission # 40.](#)

Date 11/10/2024 # 62
Standard # - Suggested Change and Rationale for Change
Exactly the same wording as Item # 54
[See the committee response to submission # 40.](#)

Date 11/10/2024 # 63
Standard # - Suggested Change and Rationale for Change
Exactly the same wording as Item # 54
[See the committee response to submission # 40.](#)

Date 11/19/2024 # 64
Standard # - Suggested Change and Rationale for Change
Proposed change **03.01.03** Requiring a paramedic to have ED or ICU experience is ridiculous! You're going to end up with brand new flight nurses over ruling experienced paramedics. Make it make sense!
[See the committee response to submission # 40.](#)

Date 11/20/2024 # 65
Standard # - Suggested Change and Rationale for Change
The primary care issue. Denominating nurses as the only option as the primary care provider shows a fundamental lack of understanding how HEMS actually works. If your goal was to infuriate half of your constituents, congratulations. You have outdone yourself.
[See the committee response to submission # 40.](#)

As of December 20, 2024
Any new submissions received after this date will be continued on a new log.
50 comments/suggestions received from 33 people – Second draft

*Total comments/suggestion received first and second drafts:
First draft 63 comments/suggestions from 32 people
Second draft 50 comments/suggestion from 33 people

Total of 113 comments/suggestions from 65 people*



**Submitted comments for Standards Changes from the 12th Edition to the 13th Edition
Standards**

Comments for the THIRD Draft

Comments # 66 - # 85

November 24, 2024 to July 1, 2025

Committee responses are in red.

Comments in Blue are notes/questions/suggestions from Dudley

Date 11/23/2024 # 66

Standard # - Suggested Change and Rationale for Change

03.01.03 Rebuttal to Proposed Rule on Clinical Crew Qualifications As a paramedic with significant prehospital experience, I respectfully submit that the proposed rule's exclusion of prehospital critical care experience for paramedics serving as primary care providers is both short-sighted and counterproductive. This oversight undermines the critical role paramedics play in emergency medical services and further widens the gap between paramedic and nursing roles, scope, and wages. Below are several points that support reconsideration of this rule:

1. Paramedics Are Essential to Helicopter EMS Operations Helicopter EMS often involves high-stakes scene calls where advanced critical care is provided in dynamic, uncontrolled environments. These scenarios require a skill set that is beyond the scope of traditional nursing practice, including advanced airway management, trauma care, and extrication procedures. Paramedics are specifically trained for these situations, making them indispensable in such operations.
2. Paramedics Have Been Training and Leading Nurses in EMS It is common practice for experienced paramedics to orient and mentor nurses new to helicopter EMS operations. This reflects the expertise paramedics bring to the flight line and demonstrates their capability to serve as primary care providers in this unique environment. It would be illogical to disqualify paramedics from a role they have been performing, while also tasking them with training less-experienced crew members.
3. A Stronger Case Exists for Dual Paramedics Over Dual Nurses The proposed rule leans toward privileging nursing credentials, but helicopter EMS work often involves complex prehospital interventions better aligned with the paramedic scope of practice. In fact, many systems successfully operate with dual-paramedic crews. These configurations leverage the paramedic skill set and ensure optimal patient care, particularly in states where dual-nurse crews may not even meet regulatory requirements.
4. Prehospital Critical Care Experience Should Be Valued The definition of critical care experience as limited to ICU or emergency department hours is inherently biased toward nursing and hospital-based roles. Paramedics with years of prehospital experience provide care that is equally critical—if not more so—given the austere conditions, limited resources, and immediate decision-making required in the field. To disregard this experience devalues the unique and essential contributions paramedics make to EMS.
5. Many States Mandate a Paramedic on Helicopter Crews Recognizing the limitations of other medical personnel in prehospital settings, many states explicitly require a paramedic to be part of helicopter EMS crews. This further highlights the importance of paramedics in fulfilling the mission of air medical transport and underscores the need to ensure they are eligible for primary care provider roles.

Recommendation: I urge the rulemaking body to amend the proposed qualifications to explicitly include prehospital critical care experience as meeting the critical care requirement for paramedics. Specifically:

- Allow 4,000 hours of prehospital experience involving critical care transport, scene response, or other advanced medical care in uncontrolled environments to qualify for the critical care requirement.
- Recognize the unique expertise paramedics bring to EMS and avoid arbitrary exclusions that favor hospital-based professions. This change would not only address the practical realities of helicopter EMS operations but also help close the unnecessary gap between nursing and paramedic roles, fostering equity in scope, responsibility, and wages.

The comments were received prior to the December 2024 posting of the draft 13th Edition changes and the committee believes this issue was addressed in the response to submission # 40. The changes are included in the posted draft. The committee agreed to make no further changes.

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Date 11/23/2024 # 67

Standard # - Suggested Change and Rationale for Change

03.01.03 - Currently, a critical care team requires the primary care provider to have 3 years of critical care experience (ICU or ED). I believe that CC-Transport also applies (Ground or air) and should be added. ED experience alone does not guarantee exposure to invasive monitoring, useful experience with mechanical ventilation, various medications, etc. If ED experience is acceptable, both 911 ALS experience, CC-IFT, as well as Air Medical (HEMS or Fixed wing) logically would be equivalent.

The comments were received prior to the December 2024 posting of the draft 13th Edition changes and the committee believes this issue was addressed in the response to submission # 40. The changes are included in the posted draft. The committee agreed to make no further changes.

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Date 12/09/2024 # 68

Standard # - Suggested Change and Rationale for Change

02.03.07.2.d - can we further define "appropriately trained inspector" in the section on helmet inspections? Would the requirement imply that the 'designated helmet inspector' be required and not strongly encouraged? Otherwise, would this role be fulfilled by a third party? If so, would this be done on site or off-site? Would that be a realistic expectation of programs? What issue is that currently addressing that is in need of mitigation? Is it anticipated that resources will be made available by AAMS or CAMTS to help meet compliance for this?

We leave the definition of “appropriately trained” up to the program and the helmet manufacturers. The intent of the standard is to assure protection of the flight teams by having someone trained and knowledgeable in inspecting, identifying current or potential issues, and assuring repairs or replacements of helmets and/or parts when necessary. This could be a representative of the manufacturer, a trained third party, or a person or people within the program that have been trained by the manufacturer or a helmet service company. The training can be completed via online training, videos, manufacture’s training materials, or in-person by someone experienced in helmet inspections and repairs (preferable the manufacturer). We expect the majority of inspections can be done on site but the program may wish to send the helmets to the manufacturer or service center. For now, the committee agrees to have this a “strongly encouraged” to allow manufacturers time to develop a training program, if one does not currently exist. As always, all training, and all inspections, should be documented by the program. The committee agreed to make no further changes.

01.06.01.13.c includes verbiage "Sets an Emergency Response Plan (ERP) that includes a Post Accident/Incident Plan (PAIP)..." but then

02.03.08 includes verbiage "A readily accessible post accident/incident plan or Emergency Response Plan must be part..." these don't seem consistent and may cause confusion. Is the requirement that the ERP contains the PAIP or that either is optional? It would seem to me from a crisis communications/emergency management standpoint that it would be optimal for programs to have an cultivate an ERP that includes steps for a PAIP

The committee agrees the wording appears to be somewhat in conflict and will work on clarity. After committee discussion the term “All Hazard Emergency Operation Plan (EOP)” will be used to define the overall plan. Within that, or supplementing the EOP, would be “Emergency Response Plans (ERP)” which would be

specific to situations (fire, bomb threat, etc.) and/or a location (helipad, crews quarters, refueling station, etc.). The ERPs should outline the immediate on-site actions to take for that emergency. A Post Accident/Incident Plan (PAIP) should identify immediate actions and notifications to be taken after the accident or incident (vehicle crash or overdue, major employee injury, etc.) to facilitate recovery including employee and family support. The program may choose to use alternative names and terms for these plans, but the components should all be included somewhere easily accessible by the program staff.

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Date 01/10/2525 # 69

Standard # - Suggested Change and Rationale for Change

Regarding proposed change to clinical crew qualifications in section - **03.01.03** Please consider adding "other critical care transport experience" to the minimum 3 years ICU / ED experience requirement.

Rationale - Flight programs rely heavily on the value and expertise of Paramedics with field experience. The proposed change to ICU / ED experience only for primary care providers would limit programs ability to hire and onboard Paramedics into a primary care provider role. This change may also be interpreted to mean that those Paramedics who do not meet the proposed minimums would be unable to precept new hires, thereby potentially limiting programs abilities to onboard new staff into primary care provider roles.

The committee believes this issue was addressed in response to submission # 40. The changes are included in the posted draft. The committee agreed to make no further changes.

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Date 01/27/2025 # 70

Standard # - Suggested Change and Rationale for Change

03.03.01 under clinical care supervisor states " If transport nurses are part of the medical team, they must report to a nurse or physician on clinical issues". If this is the case, then the same needs to be said for paramedics that they only report to another paramedic or medical direction. A solution may be to break down those programs who do not have an identical scope of practice for RN/Paramedic. Our specific program holds paramedics and RNs to the same standard in terms of training, scope of practice, and degrees. This current CAMTS standard seems to prevent paramedics who are held to the same standards as RNs in their programs, from advancing into supervisory roles.

There is nothing in the Standards that prevents a paramedic or other clinical discipline from advancing to a supervisory role. Standard 03.03.01 addresses what the vast majority of states required under state nursing regulations: "If transport nurses are part of the medical team, they must report to a nurse or physician on clinical issues." (underlined for emphasis). A paramedic can administratively supervisor any other clinical or non-clinical staff, but for clinical issues nurses need to report to another nurse, or a physician, such as the program medical director. The committee agreed to make no further changes.

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Date 02/02/2025 # 71

Standard # - Suggested Change and Rationale for Change

Given the FAA Advisory (Part 135-14B from 3/16/2015), for best practices for HAA, a few proposed Standards (or at least Highly Recommended):

- A Policy exists to use actual weights of crewmembers during weight and balance, that would require up to date weighing and documentation.
- A policy exists to use actual weight of removable medical equipment and should be considered similar to baggage, and counted towards payload. Included in the policy are requirements to update the weight and location as appropriate.
- Aircraft have helicopter approved searchlights meeting the FAA recommended standards- Aircraft have wire strike protection system (if type certificated)
- A policy that mounting structures attached to the aircraft are installed and removed by FAA authorized personnel. Medical equipment attached to such mounting structures are considered carry-on baggage and that medical personnel are adequately trained to securely attach equipment to such mounts.

This submission has been referred to the Aviation Advisory Committee for comments.

In principal the Standards Committee agrees with the suggestions. Pending input from the Aviation Advisory Committee, we will update the wording on Standards 05.01.03 and 06.01.04: *“There is an established written policy to ensure that the pilot is notified of all carry-on baggage and/or equipment **and their actual weight, as well as the weight of all persons on board the aircraft,** for weight and balance consideration (so **that passenger and** carry-on baggage/equipment is weight and placement acceptable).”*

Standard 02.03.07 2. h, already specifies: *“The helicopter must be equipped with a 180 degree controllable searchlight capable of at least 400,000 candle power”* The committee agreed to make no further changes.

We will also add to the list in Standard 02.03.07 2 h, which states: “If not required by the AHJ, it is strongly encouraged to install the following on helicopters (reference NTSB recommendations). (RW)

- **Wire strike protection system (if type certified)**

The committee believes that the installation of any item in an aircraft is already covered in the FARs and therefore the committee agreed to make no further changes.

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Date 02/03/2525 # 72

Standard # - Suggested Change and Rationale for Change

Add a standard:

EMS data compliance management There is a corporate EMS data compliance officer or designated person responsible for ensuring that the service is in compliance with NEMESIS and state reporting of patient care data as well as management of the ePCR system/agency in cooperation with the Quality Management and clinical / operations groups of their agency.

Alternatively: Designation of an EMS data manager or assignment of responsibility to a specific individual or individuals

Move 01.05.03 to this standard: (The program provides timely reporting on requested data to the state(s), or other agencies, in which it responds.)

Qualifications should include critical care transport experience and knowledge of NEMESIS, SNOMED CT, ICD-10 codes, and RxNorm codes.

ePCR software should include the ability to add or modify data elements including external mappings (for example states that whitelist specific primary/secondary impressions codes may need a reporting mapping of an internally used impression to the external agency (eg. Persistent Pulmonary Hypertension to a state used general value of “problems of the newborn”) Procedure codes should have a method attribute or “using device” attribute with the procedure codes (SCTID: 1290622004 | Needle chest decompression for tension pneumothorax (procedure) opposed to SCTID: 182705007 | Tension pneumothorax relief (procedure)). The designated EMS data manager should intentionally introduce themselves to any state data managers for areas they may operate in and ensure 100% data reporting compliance to those states.

The Program should maintain an associate or corporate level in NASEMSO to monitor upcoming changes and proactively address needed documentation changes as well participate in or monitor all NEMESIS Technical Assistance Center Meetings.

Rationale: CCT Data is underreported or misreported in the NEMESIS dataset which reduces an overall ability to conduct ongoing research and eliminates the ability to ensure evidence based care. For example, in the 2022 NEMESIS dataset there were a reported 277 report finger thoracostomies. A review of some programs in the northeast showed that either 3 programs in New England performed a total of 42, meaning we all collectively performed ~18% of all procedures done or they’re under-reported. (ongoing analysis of the dataset for publication, not yet ready but significant).

By having a knowledgeable EMS data manager agencies can ensure that the data being reported is accurate, complete, and actually arrives at the intended endpoint.

The committee agrees with the intent of the submission but believes it goes into too much detail, narrowing flexibility for programs. We will however change Standard 01.05.03, which currently states: “ The program provides timely reporting on requested data to states(s), or other agencies, in which it responds.” To:

01.05.03 The program has a system to support timely and accurate submission/reporting of requested data to states(s), or other agencies, in which it responds.

.....

Date 02/02/2525 # 73

Standard # - Suggested Change and Rationale for Change

02.03.07 Safety and Environment

2. Equipment and Operations Around the Transport Vehicle (for medical configuration see Section 03.06.01).

t. *Specific policy to address the combative patient:*

- *Additional physical and/or chemical restraints must be available and used for combative patients who potentially endanger themselves, the personnel, or the transport vehicle.*

We no longer use, "chemical restraints" and we have written critical elements to address the, "agitated patient".

First, I recommend changing, t., "...combative patient" to, "...agitated/combative patient".

Second, I recommend changing the first bullet to, "Judgment when to use physical restraints, process to apply physical restraints, and specifics regarding the patient monitoring required when using physical restraints."

Third, I recommend a new second bullet, "Judgment when to treat agitation with medication and specifics regarding the patient monitoring required when treating agitation with medication."

The committee agrees with the recommendations and will change the wording to:

t. *Specific policy **and/or medical protocol** to address the **agitated**/combative patient:*

- *~~Additional p-Physical and/or chemical~~ restraints must be available, and used **based on written medical protocols** for combative patients who potentially endanger themselves, the personnel, or the transport vehicle.*
 - **Judgment when to use physical restraints, process to apply physical restraints, and specifics regarding the patient monitoring required when using physical restraints.**
 - **Judgment when to treat agitation with medication and specifics regarding the patient monitoring required when treating agitation with medication.**
 - *A policy must address refusal to transport patients, family members, or others who may be considered a threat to safety of the transport and/or medical transport personnel.*
-

Date 02/04/2025 # 74

Standard # - Suggested Change and Rationale for Change

06.01.02 *Long Range Flight – defined as a flight requiring a planned tech stop on any patient leg, or in excess of 3 hours measured in time, not distance, because of winds, where there are no alternative capabilities for patient care needs or aviation operations.

Remove "where that are no alternative capabilities for patient care needs or aviation operations". The first part of the definition is perfect. By expanding the definition, as long as the plane has a 5-6 fuel hour range, we remove all flights going coast to coast because there are plenty of places to stop en route.

The committee does not see the need to make a change. If there are “plenty of places to stop en route,” and there are “alternative capabilities for patient care needs and aviation operations” then the transport does not meet the definition of “Long Range Flight.” We did reach out to the submitter for additional clarity. The committee agreed to move the definition out of standard and to the definitions.

.....

Date 02/10/2025 # 75

Standard # - Suggested Change and Rationale for Change

01.07.01 (1) The following criteria must be met for shifts scheduled "more than 12 hours." Recommend change from: "The following criteria must be met for shifts scheduled more than 12 hours."

To:

"The following criteria must be met for shifts 12 hours or more."

Reason: Most all shifts are 12 hours (pilot and medical personnel.) Flights that take crew through the 12 hour can extend to 14 hours.

In addition, this provides the needed resources in event that crew member continues through unexpectedly (i.e. call-out or work over) to the 24 hour mark.

This also allows the medical crews at Hospital Based Facilities to be afforded necessary rest facilities if transitioning from a shift in the hospital (i.e. Emergency room) to a Flight Medical Shift. While the regulation currently clarifies the 12 vs 24 hour shifts, it doesn't provide protection for different kind of shifts, just flight.

Fatigue Management

The committee believes the concerns submitted are addressed in other standards like the required use of risk and fatigue assessment tools, the use and monitoring of time-outs, and required pre shift rest. Therefore, the committee agreed to make no further changes.

.....
Date 02/13/2025 # 76

Standard # - Suggested Change and Rationale for Change

06.04.03.5: Possible typo? Was "ground" intended to be "green-on-green"?

The committee thanks the submitter for catching this "typo". We will make the correction.

.....
Date 02/25/2025 # 77

Standard # - Suggested Change and Rationale for Change

01.01.02 - Scope of Service - why do you include the "response time"? Not relevant to scope of service and would remove.

The committee believes, while it may not be relevant for some immediate response emergency and critical care services, it may be very relevant for those that are not immediately responding, such as specialty teams and scheduled transports. The scope of services should clearly let the reader know the capabilities and limitations of the services provided, including any delays in response times. The committee agreed to make no further changes.

01.03.01 #1 - Add reference to ground service vendor similar to aviation requirement. No reason to treat that differently.

01.03.01 1. States "Clear identification pertinent to the aviation authority of the company that is operating the aircraft is on the program's website, in marketing materials (clearly visible and legible as appropriate on the media), and on the aircraft. (RW/FW)"

The committee agrees with the recommendation and will make the following change:

*01.03.01 1. Clear identification pertinent to the aviation authority of the company that is operating the aircraft is on the program's website, in marketing materials (clearly visible and legible as appropriate on the media), and on the aircraft. (RW/FW). **Clear identification pertinent to the operator of a surface vehicle represented as part of the program is on the program's website, in marketing materials (clearly visible and legible as appropriate on the media), and on the surface vehicle. (S)***

02.03.02 SMS are set up to evaluate hazards/risks of a transport operation - but are generally not inclusive of risk to the patient of delaying/not responding to a request. Without including "risk to patient" in a risk assessment, then the answer should always be "no transport" because the other risks are still present without a balancing benefit to the patient. For example, every time we start the engine, there is a fleetingly

small but non-zero risk of a catastrophic engine fire. If there is no risk of patient harm in NOT transporting the patient, organizationally we should not start that engine. Ever. I recognize this is a bigger topic than likely will be addressed with this version renewal but without consideration of the benefit of transport (or conversely, the risk of not transporting), we are not actually fully examining the issue of risk. SMS are generally set up for the perspective of commercial airlines not patient care organizations. It does not mean that you disregard the risks of transport for a given transport request/process only that there should be some recognition that the decision-making impacts a human being who is relying on that service potentially for their life.

As far as accepting or denying a response/transport request, the committee strongly disagrees with this suggested change and believes the risk assessment should be independent of the type, condition, or circumstance of the patient. It should be based solely on the risk of response and transport. The appropriateness of accepting the patient for transport should be addressed through medical direction and utilization management. The committee agreed to make no further changes to Standard 02.03.02. However, the suggestion also addresses risk not necessarily related to transport acceptance, such as selection of medical equipment, training, uniforms, practices, policies, etc. The committee does agree with this, and believes the following wording should be added to the first section of the Standards on *Management and Staffing*.

01.06.01 Management/Policies

01.06.01 There is a well-defined line of authority

New # 6. Management shows evidence of a holistic evaluation of potential risks/benefits, through a management change process, prior to making any significant changes within the program. These risks/benefit evaluations should include considerations on the impact on patients, staff, community, and medical/first-responder environment.

02.03.09 #2.e. - Some handles are rated and may be as secure as any strap. Perhaps "Softpacs and equipment bags are not to be stored with belts that loop through handles unless such handles are appropriately tested and rated to prevent undesired movement in case of sudden acceleration/deceleration. The committee agrees with the recommended change and will re-word the standard. Prove of "appropriately tested and rated" will be up to the manufacturer or other independent tester.

02.03.09 # 2. e

Softpacs and equipment bags are not to be stored with belts that loop through handles ~~(as these handles can easily tear and dislodge)~~ **unless such handles are appropriately tested and rated to prevent undesired movement in case of sudden acceleration/deceleration.**

h. - Move from "strongly encouraged" to "required" all components "if available".

The standard reads: Night vision goggles are required in North America for programs conducting rotorwing night operations and strongly encouraged of other countries."

The standard, at the time this was first written, addressed all countries and it is still difficult for some countries to purchase NVGs. However, this version of the standards now addresses just North America, with other countries being covered by CAMTS Global. We will change the first sentence as stated above to:

02.02.07.# 2 h

Night vision goggles are required ~~in North America~~ for programs conducting rotorwing night operations. ~~and strongly encouraged of other countries.~~

03.02.12 - Remove the requirement that "ensures compliance with federal EMTALA regulation". This is not in the purview of the Medical Director (or the ambulance service as a whole). EMTALA does not reflect on transport, it reflects on Emergency Departments. The service has no knowledge of the the stabilization, resources, capacity, etc... of a given hospital at a given time and therefore cannot be expected to monitor this. The wording of this also colors the very inappropriate perception by agencies that they are responsible for policing this that often lead to delays and disagreements. For example - can a patient go from an inpatient setting to an ER in another hospital (answer is absolutely yes). Not part of transport medicine - remove.

The committee agrees this is not the responsibility of the medical director, but disagrees that this is not the responsibility of the program, particularly for those programs that are hospital based. We will re-word and move this Standard to the first section under Management Policies.

01.06.01 Management/Policies

01.06.01 There is a well-defined line of authority

New # 6. A policy ensures compliance with federal EMTALA regulations. This policy must address bedside-to bedside care for ALS and Critical Care providers to prevent a diminution in level of care. The policy must also address situations where it may not be necessary to proceed from bedside-to-bedside with the patient. These occurrences must be examined or reviewed by the QM process.

04.03.01 - #2a Comms Center Staffing Comms Centers have gotten short-changed as easy areas to cut to save money, to the detriment of the programs and patients they serve. A crew caring for a critically ill, often dynamic patient should have easy access to someone coordinating the logistics for their patient whether it is for a diversion, ensuring adequate resources at a receiving helipad, contacting medical direction, etc... Please consider adding ". Call volume and other required duties are considerations in the number of communication specialists on duty at any one time. At least two concurrent Communication Specialists is highly encouraged as the baseline staffing minimum when more than one vehicle/team is staffed to ensure minimal redundancy and continuity in resource availability.

The committee has reached out to our communication colleagues for recommended staffing minimums or guidelines. They point out it is nearly impossible to do so since no two programs are the same. The committee does agree to make the standards stronger by accepting some of the suggested wording changes. We will change the wording to:

2. a. Call volume and other required duties are considerations in the number of communication specialists on duty at any one time. **At least two concurrent Communication Specialists are strongly encouraged as the baseline staffing minimum when more than one vehicle/team is staffed to ensure minimal redundancy and continuity in resource availability.** Programs must be able to demonstrate how they assign staffing levels, for example, number of communication specialist on duty per shift relevant to the number of vehicles and teams in service.

We will also add the following (new):

02.01.07 6. Communication

f. Quarterly review of the communication center staffing to ensure there is appropriate trained staffing for the program’s scope of services, call/activity volume, time of day, day of week, etc.

04.04.01 The QM process will include a quarterly review of the communication center staffing to ensure there is appropriate trained staffing for the program’s scope of services, call/activity volume, time of day, day of week, etc.

.....
Date 03/07/2025 # 78

Standard # - Suggested Change and Rationale for Change

06.04.03 #3 - ATP rating is required within five years.

Due to changes in the process to acquire an ATP rating, which now requires 10 hours in a simulator, Level C or higher, of an airplane heavier than 40,000 lbs gross take-off weight. In addition it requires 30 hours of ground school.

The aircraft flown in air medical operations are 12,500 lbs or lighter. The ATP rules of today apply to Part 121 airline operations, not Part 135.

A commercial certificate is all that is needed to do Part 135 operations. There is no evidence that would quantify the ATP enhances safety or skills of the pilot. The cost of getting an ATP with training/travel and pay is \$10,000. Our operation currently has 23 pilots with only commercial ratings. As these employees hit the 5 year mark, our investment will be \$230,000. It has become cost prohibitive with no return on investment.

Previously, to get an ATP consisted of a written exam and a checkride with an approved Check Airman in whatever aircraft you were flying. For our operation, once a pilot completes the simulator and ground requirements, they take their checkride in our King Airs with an FAA designated examiner.

My recommendation is to change the standard to be suggested and considered an exceedance, not a requirement. The ATP rating in today's generation has become almost exclusively a Part 121 operation element. I'm happy to discuss further at your convenience. (name given)

This recommendation has been sent to the Aviation Advisory Committee for comments.

.....
Date 03/12/2025 # 79

Standard # - Suggested Change and Rationale for Change

For fatigue-risk assessments, they should be listed as individual fatigue risk assessments. People are more likely to alter their numbers to stay in service if they are doing collective fatigue risk assessments.

Since no specific standard number was submitted, we reach out to the submitter for the standard number and additional clarity. We receive the following back:

It would be 01.07.01 section B.

The above sections are individualized (using the word individual in 01.07.01 and using singular possessive as "team member" and "he or she"). However section B might be better read as "An individualized fatigue risk management system is utilized." As there are a few programs, including my own that are doing a total risk assessment for the entire crew. This makes it difficult to put fatigue mitigation in place as the cumulative fatigue score may be low while an individual's is high.

Thank you,

The committee agreed to make the following addition:

01.07.01

f. A fatigue-risk management system is utilized **that includes assessment of individual staff members and collectively as a team.**

.....
Date 04/08/2025 # 80

Standard # - Suggested Change and Rationale for Change

02.03.01 1. The designated safety director(s)/officer(s) receives formal safety-related training pertinent to the program's scope of services. Suggest removing the word officer here as many medical transport systems use this term "officer" to mean the one regularly scheduled team member who does not provide patient care but accompanies a specialty care transport team (such as NICU) on an air ambulance transport so that the specialty team operates safely during transport. Suggest changing it to safety manager or leader or executive or just leave safety director here, deleting officer.

The committee agrees with the change and will re-word the standard:

02.02.01 1. The designated safety director(s)/officer(s) manager(s) receive formal safety-related training pertinent to the program's scope of service.

.....
Date 04/23/2025 # 81

Standard # - Suggested Change and Rationale for Change

01.08.01 Physical and psychological/emotional well-being is promoted through: 4. Protective clothing and dress code pertinent to: b. Safe operations, which may include the following, unless specified as "required" below: • Boots or sturdy footwear (required).

Rephrase to define "sturdy" better because, during deliberations, one medical transport system was cited for not having "sturdy" footwear in the judgment of the site surveyors which led to disagreement about what is "sturdy".

The committee agrees to offer additional clarity:

01.08.01 4. b

Boots or sturdy footwear (ankle support, closed toes and heels, slip resistance or non-skid soles) (required)

03.02.09 The medical director(s) is actively involved in orienting physicians providing on-line (in transport) medical direction according to the policies, procedures, and patient care protocols of the medical transport service.

Change to, "...The medical director(s) orient physicians providing on-line..." and add a phrase, "and keeps a record of such orientation sessions."

The site surveyors often ask for proof that such an orientation occurred, such as a sign-in sheet with the date and time and the topic of the meeting.

So, clarify this standard to expect that the medical director orients all those that provide on-line medical direction (and you might consider changing, "direction" to, "consult" as some use but personally, I believe medical direction marries nicely with medical director).

The committee agrees with the suggested addition:

03.02.09 The medical director(s) is actively involved in orienting, **and keeping records of orientation sessions**, of the physicians providing on-line (in transport) medical direction according to the policies, procedures, and patient care protocols of the medical transport service.

01.06.03 Policy Manual (electronic or hard copy) is available and familiar to all personnel. 2. Operational policies are reviewed on a biennial basis as verified by dated manager's signature on a cover sheet or on respective policies.

Add, "3. Medical Transport Systems utilizing hospital policies need be reviewed on a triennial basis." During deliberations, we throw out areas of weakness and allow hospital policies to be reviewed every three years, so, state that in the standards.

The committee agrees, to be consistent with the Joint Commission, all policies and procedures should be reviewed at least every three years. (Medical protocols still need to be reviewed at least annually.) The standard will be changed to:

01.06.03 2. Operational policies are reviewed **on a biennial basis at least every three years** as verified by dated manager's signature on a cover sheet or on respective policies.

.....
Date 04/24/2025 # 82 **(Also see # 85 below)**

Standard # - Suggested Change and Rationale for Change

Standard #: 03.05.02, 1.,j. Change to: Accident survival training that is pertinent to the environment/geographic area of the medical service (including water egress training if enroute flights are routinely over large bodies of water and based on the program risk assessment) Pre-flight considerations (uniform, stowage of equipment, location and use of aircraft emergency equipment, etc.) - In-flight & post accident emergency procedures - Emergency egress of crew & passengers - Facilitating rescue

The committee reviewed this submission and submission # 85 together. See the committee response under # 85.

.....
Date 05/06/2025 # 83

Standard # - Suggested Change and Rationale for Change

Adding a standard: CAMTS Standard Proposal Draft: Enhancing Data-Driven Excellence in Medical Transport Proposal: By January 1, 2030, no individual serving as a member of the Board of Directors for a CAMTS-accredited program shall be an employee or affiliate of any hospital system that does not actively share patient outcome data with the accredited transport agency. This data sharing must be accomplished via an automated or semi-automated process, eliminating the reliance on phone-based questioning for routine data acquisition. Supporting Rationale: The Commission on Accreditation of Medical Transport Systems (CAMTS) is founded on the principle of advancing the quality and safety of medical transport services. A cornerstone of this mission is the relentless pursuit of evidence-based practices that optimize patient outcomes. The integration of comprehensive patient outcome data into the National EMS Information

System (NEMESIS) repository is paramount to achieving this goal. Currently, a significant barrier to robust, evidence-based research in medical transport is the inconsistent and often manual process of obtaining patient outcome data from receiving hospital systems. This proposed standard directly addresses this challenge by fostering a collaborative environment where data flows seamlessly and securely between hospital systems and accredited transport agencies. Alignment with CAMTS Goals: * Promoting Evidence-Based Care: The availability of comprehensive outcome data, including patient disposition, effectiveness of interventions, and medication efficacy, is crucial for rigorous research. By linking transport care with hospital outcomes, the NEMESIS repository can become an invaluable resource for identifying best practices, refining treatment protocols, and ultimately improving patient survival and quality of life. This directly supports the CAMTS goal of encouraging and promoting evidence-based medical care. * Enhancing Quality Improvement Initiatives: Accredited programs are committed to continuous quality improvement. Automated or semi-automated data sharing will provide transport services with timely and consistent feedback on patient outcomes, enabling more effective internal review, targeted education, and data-driven adjustments to clinical practice. This proactive approach to quality improvement is a hallmark of CAMTS accreditation. * Fostering System-Wide Collaboration: This standard encourages a stronger, more integrated relationship between transport agencies and hospital systems. By requiring board members to be affiliated with hospitals that embrace data transparency, CAMTS can champion a culture of shared responsibility for patient care across the entire continuum. * Advancing the Profession: The ability to demonstrate the value and efficacy of medical transport through robust data analysis will elevate the standing of the entire profession. This data will be instrumental in advocating for resources, shaping policy, and ensuring the long-term sustainability of high-quality medical transport services. Implementation Considerations: It is understood that the development and implementation of automated or semi-automated data sharing systems require time and resources. The 2030 compliance date provides a reasonable timeframe for both hospital systems and transport agencies to adapt their processes and technologies. CAMTS will endeavor to provide guidance and resources to assist programs in meeting this standard. Furthermore, this standard emphasizes the process of data sharing, allowing for flexibility in the specific technological solutions adopted, provided they eliminate the need for routine phone-based data acquisition. Conclusion: This proposed standard represents a critical step forward in aligning the governance of CAMTS accredited programs with the core mission of advancing patient care through data-driven insights. By ensuring that leadership is connected to hospital systems committed to transparent outcome data sharing, CAMTS will significantly enhance the ability of the medical transport community to contribute to and benefit from the NEMESIS repository, ultimately fostering a new era of evidence-based excellence in patient transport. This, more than anything, is in alignment with the foundational goals of CAMTS accredited organizations.

The committee agrees with the concept of the recommendation; however the members do not believe it is within CAMTS's scope of the standards to dictate who, and who cannot, be on a program's board of directors. The committee also agrees that current software makes in extremely difficult and expensive for some transfer of data . We will, however, strengthen the need to share data in both directions:

01.05.03 ~~The program provides timely reporting on requested data to the state(s), or other agencies, in which it responds.~~ **The program has a system to support timely and accurate submission/reporting of requested data to state(s), or other agencies, in which is responds.**

01.05.04 The program actively participates as an integrated part of the state(s) EMS and trauma system in which it responds. (RW, FW and Surface ALS/BLS) *(in some regions, fixed wing may be the only air transport available)*

01.05.05 Programs are strongly encouraged to report, and keep current, their program information in the Emergency Transport Healthcare and Safety (ETHOS) data base. (<https://ethos.aams.org/>) *(This was added in the last posted draft)*

01.05.06 (new) Programs are strongly encouraged to support bidirectional patient data and outcomes.

- 1. This includes, when requested,**
 - a. from the program to the sending and/or receiving hospital**
 - b. from their affiliated hospital system to an accredited program**
- 2. Data sharing should be accomplished via an automated or semi-automated process, eliminating the reliance on phone-based questions for routine data acquisition.**

.....
Date 05/10/2025 # 84

Standard # - Suggested Change and Rationale for Change

Standard: 03.06.01 Medical Configuration 5. Airway c. Cuff pressure manometer (unless the cuff is filled with saline and not air). (RW/FW) Should we have cuff manometers in the surface ambulances also? - not just about expansion at altitude. Past research shows variation in pressures for field and ref hospital intubations. Correcting cuff pressures (high and low) prevents aspiration and decreases tracheal damage.

The committee agrees and will change the standard to read:

Standard: 03.06.01 Medical Configuration 5. Airway c. Cuff pressure manometer (unless the cuff is filled with saline and not air). (RW/FW/**Surface critical care/specialty care**)

.....

Date 05/14/2025 # 85

Standard # - Suggested Change and Rationale for Change

03.05.02. 1.j. Consider changing "Survival and egress" to "Accident survival" training/techniques/equipment that is pertinent to...

Current technology allows close tracking and monitoring of every air transport. If an in-flight emergency arises - especially one that involves an emergency landing, an operational control center will be aware there is an issue within minutes - maybe seconds. If unable to reach the crew, a PAIP is then activated, and first responders will be directed to the last known location within a very short period of time.

The term "survival training" is often synonymous with "wilderness survival training" - prompting many programs to focus their valuable training time on tasks such as fire starting and shelter building and similar survival skills - in the very unlikely chance a crew is stuck in the wilderness, far away from any assistance. In reality, a number of different rescue and law enforcement agencies will be quickly enlisted to assist in locating the aircraft & crew. The more time that goes by, more people/agencies will get involved. Surviving crewmembers should be focused on helping the responders find them.

Considering this, it makes more sense to focus "accident survival" training on the following areas:

1. Pre-flight preparation to include safety equipment and uniform considerations.
2. In-flight emergency and emergency landing procedures (taken from the previous section) to include in-flight fire and emergency shutdown.
3. Aircraft evacuation procedures (emergency egress - also taken from the previous section)
4. Water egress - for programs with overwater flights
5. Facilitating rescue - to include signaling techniques and use of the emergency locator transmitter - also taken from the previous section.

Evidence to meet or exceed compliance should include hands-on training that has all of the above.

The committee understands the submitters rationale for change however believes this is really a matter of semantics. The submitters rationale is somewhat flawed in that there are many small operators that fly over wildland areas or large water bodies and do not have an OCC. This could result in significant time on the ground or in the water before rescuers arrive following a crash. Weather, terrain, or other factors may also delay or extend response and access time. Survival training would be helpful in these cases. The committee believes the current standard's wording is effective and sufficient and no changes are needed.

As of July 2, 2025

Any new comments will be moved to a new log.

30 comments/suggestions received from 20 people – Third draft

Total comments/suggestion received first and second drafts:

First draft 63 comments/suggestions from 32 people

Second draft 50 comments/suggestion from 33 people

Third draft 30 comments/suggestions from 20 people

Total of 143 comments/suggestions from 85 people



**Submitted comments for Standards Changes from the 12th Edition to the 13th Edition
Standards**

Comments for the FOURTH Draft

Comments # 86 - # 109

July 1, 2025 to January 19, 2026

Committee responses are in red.

NOTE: Numbering may not match prior editions or drafts due to rearrangement of standards.

Date 07/20/2025 # 86

Standard # - Suggested Change and Rationale for Change

03.01.00 Would recommend broadening the acceptable type of ventilatory devices from just BVMs to include other options such as a T-piece resuscitator for neonates as they can be safer for them
The committee agrees that there may be more options for ventilatory devices and programs are free to use other devices as well as carry the BVMs. The committee agreed to make no changes to the standard.

Date 07/23/2025 # 87

Standard # - Suggested Change and Rationale for Change

03.01.03 4. Equipment: We cannot mandate teams have Video Laryngoscopy as other difficult intubation means exist including alternative airways as mentioned in 03.06.01, 13c. I would encourage teams to acquire such technology, but not mandate as a required item. Weighing financial constraints and other limitations against the risk of not having video laryngoscope, does not favor a mandate, in the face of other airway devices available to teams.
The committee believes that video laryngoscopy should be a minimal standard for critical care transport programs who often see the sickest and least stable patients. This does not exclude other airway devices that programs may elect to use, provided the care providers are adequately trained and tested. For ALS services, video laryngoscopy is encouraged but not required.

03.06.01 13f. The new proposal has changes that differ from Standard 12 which reads, "End tidal CO2 continuous waveform monitoring. (A strict clinical monitoring protocol that uses the End Tidal or Cap Color CO2 Detector, and/or ventilator flow loop analysis, if available, is an acceptable alternative for neonates.)" The verbiage above was in fact a big change to the Standards for version 12, that was supported by an extensive literature review and endorsement by the AAP SOTM for which Drs Dick Orr, Robert Holcomb and Stephen H. from the UK, authored. Nothing new in the literature supports a change in this verbiage, and the use of a transcutaneous monitor (TCM) is not consistently accurate, it does not show immediate changes in ventilation so will be delayed showing an unplanned extubation in CO2 past the time of extubation, clinical indicators will be alarming well before the TCM picks up the change, and use of the TCM is not universally supported in a neonate in the transport setting. The new language "End-tidal CO2 continuous waveform

monitoring capabilities available (transcutaneous CO2 monitoring is an acceptable alternative for neonates)" is not acceptable or supported by the current literature or expert opinion.

There was an error in the posted draft of the 13th edition. For this standard, the wording incorrectly showed the 11th edition instead of the 12th Edition. The 12th Edition Standard actually reads:

03.06.01 13. f End-tidal CO2 continuous waveform monitoring. (A strict clinical monitoring protocol that uses the End Tidal or Cap Color CO2 Detector, and/or ventilator flow loop analysis, if available, is an acceptable alternative for neonates.)

There is no new proposed change to this standard and the draft will be corrected to the above wording.

.....

Date 07/23/2025 # 88

Standard # - Suggested Change and Rationale for Change

03.06.01 13f. TCM and Waveform both do not work accurately or functionally on VLBW babies (ie < 1500 gms) in the transport setting, and given the prevalence of non-invasive ventilation in the neonatal population these days, the highest percentage of intubated and ventilated babies will be the VLWB babies.

****this is supporting previous comments submitted to leave the standard alone.****

See the comment in # 87 above. No further changes are proposed.

.....

Date 07/23/2025 # 89

Standard # - Suggested Change and Rationale for Change

"06.02.03 Evidence of adequate security at the base of operations – A means must exist to monitor the aircraft (i.e., through direct visual monitoring or closed-circuit TV), the aircraft must be in a secured location with locked perimeter fencing or hangar available or be located at an airport certificated to operate under AHJ regulations, provided they are equal to or in excess of the United States Federal Regulation 49CFR Part 1542.

" I read this with the following intent: An aircraft must be secured [sic] locked up in a hangar, behind a fence, etc. Additionally, a means to monitor the aircraft visually must exist. It reads this way because of the comma separation.

I believe the actual intent is an either/or statement.

e.g.: The aircraft must be secured (fence, hangar, language) if it is not, then must demonstrate a method of visual observation either directly or via cctv methodology.

"A means" could be whatever I determine it is. As an example. I may determine that my means is that a pilot can open the door to the hangar and peek into the aircraft. I believe what CAMTS wants; is to ensure that we have systems in place, whether by fencing, locks, visual observation or surveillance, depending on what the infrastructure and situation is at the site to demonstrate that the aircraft is secure at all times when not in use. Without clarity in the standard for what you intend when you say "means" it leaves that open for argument, disagreement, and challenge. This standard could be less ambiguous by breaking it into subparts, using clear statement separation (if intended) or otherwise making it clear what CAMTS wants the operation to do.

The intent of the standard is an either/or and the committee agrees the wording should be more specific. The current wording is:

06.02.03 Evidence of adequate security at the base of operations – A means must exist to monitor the aircraft (i.e., through direct visual monitoring or closed circuit TV) or the aircraft must be in a

secured location with locked perimeter fencing or hangar available or be located at an airport certificated to operate under AHJ regulations, provided they are equal to or in excess of the United States Federal Regulation 49CFR Part 1542.

The new wording will be:

06.03.03 Aircraft must be in a secured location with locked perimeter fencing, in a secure hangar, or be located at an airport certificated to operate under AHJ regulations, provided they are equal to or in excess of the United States Federal Regulation 49CFR Part 1542. If the aircraft is not physically secured, there must be a demonstrated method of visual observation, either directly or via closed circuit monitors, alarms, or other surveillance to ensure the aircraft is secure when not in use.

Date 08/07/2025 # 90

Standard # - Suggested Change and Rationale for Change

01.09.01 - From recent board meeting- requested to submit the following:

Need to account for various electronic means of minutes or tracking of information shared at meetings, given the prevalence of technology and AI.

The committee agreed that we need to define “meeting minutes”. The definition below is a merging of several definitions found online. We will add to the definitions:

Meeting Minutes: Meeting minutes are the written, concise formal and official records of what was discussed, decided, and actioned during a meeting, serving as a historical account, a reference for those who couldn't attend, and a tool for accountability and future planning. They typically include the meeting's date and time, attendee list, key discussion points, decisions made, and assigned action items with responsible parties and due dates.

While documentation of meetings can be done electronically through recordings, transcripts, or AI translations, meeting minutes should be a concise summary with the focus on key discussions, actions, responsibilities, and loop closure.

Date 08/09/2025 # 91

Standard # - Suggested Change and Rationale for Change

Should we require critical care units to carry blood or products? If so, which ones?

The committee agrees that critical care units should have readily accessible blood or blood products, however this can be difficult for some programs due to availability of local supply, blood bank rules, and/or requirements established by the authority having jurisdiction (AHJ). The committee agrees to add the following:

03.03.01 16. Blood Products

Critical care programs are strongly encouraged to carry blood and/or blood products as defined within their scope of services, medical director, and AHJ.

- For services who administer blood, there must be a policy addressing:
 - o Determination of when the blood product was released from the Blood Bank.
- Blood must..... (rest of section remains unchanged)
-

Date 08/20/2025 # 92

Standard # - Suggested Change and Rationale for Change

01.06.02-1

At a recent EMS compact meeting, it was reported that the forgery of licenses is rapidly increasing. They suggest that license verification be only allowed at the primary source, such as online license verification. PDF files and cards should not be accepted.

Change the standard to reflect "...license verification at primary source,"

The committee agrees with this recommendation and will change the wording. Number 6 below was proposed and accepted earlier for the 13th edition (highlighted). Bold red text is new.

01.06.02 6. A policy or procedure addresses verification of all new advance certifications and licenses at the primary source. Only those verified may be used within the program's employment.

We will also add a definition of "primary source verification" to the glossary.

Primary Source Verification is the process of confirming a professional's credentials directly with the original issuing source or through their designated process (online).

.....

Follow-up on comments received from the Aviation Advisory in July 16, 2025

From Public Comment # 78

06.04.03 #3 - ATP rating is required within five years.

Due to changes in the process to acquire an ATP rating, which now requires 10 hours in a simulator, Level C or higher, of an airplane heavier than 40,000 lbs gross take-off weight. In addition it requires 30 hours of ground school.

The aircraft flown in air medical operations are 12,500 lbs or lighter. The ATP rules of today apply to Part 121 airline operations, not Part 135.

A commercial certificate is all that is needed to do Part 135 operations. There is no evidence that would quantify the ATP enhances safety or skills of the pilot. The cost of getting an ATP with training/travel and pay is \$10,000. Our operation currently has 23 pilots with only commercial ratings. As these employees hit the 5 year mark, our investment will be \$230,000. It has become cost prohibitive with no return on investment.

Previously, to get an ATP consisted of a written exam and a checkride with an approved Check Airman in whatever aircraft you were flying. For our operation, once a pilot completes the simulator and ground requirements, they take their checkride in our King Airs with an FAA designated examiner.

My recommendation is to change the standard to be suggested and considered an exceedance, not a requirement. The ATP rating in todays generation has become almost exclusively a Part 121 operation element. I'm happy to discuss further at your convenience.

This recommendation was submitted to the Aviation Advisory for comments. Based of their comments the Standards Committee agreed that the wording for the fixed wing ATP standard be the same as the rotorwing ATP standard. It was also pointed out that programs have an alternative pathway now with the Pilot in Command Evaluation Tools. We will change:

06.04.04 3. ~~ATP rating is required within five years of hire~~ certificate and instrument currency is strongly encouraged.

The Standards Committee also received comments from the International Association of Medical Transport Communication Specialists (IAMTCS) on staffing levels for the communication center. The Standards Committee had already made the following changes which appear to align with the IAMTCS staffing ratio. We have referred the new wording back to the IAMTC for further comment.

04.03.01 Staffing

1. Staffing must be commensurate with the mission statement and scope of care of the medical transport services. A well-developed position description for the communication specialist is written.
2. Scheduling and individual work schedules demonstrate strategies to minimize duty time fatigue, length of shift, number of shifts per week and day-to-night rotation.
 - a. Call volume and other required duties are considerations in the number of communication specialists on duty at any one time. **At least two concurrent Communication Specialist are strongly encouraged as the baseline staffing minimum when more than one vehicle/team is staffed to ensure minimal redundancy and continuity in resource availability.** (Programs must be able to demonstrate how they assign staffing levels, for example, number of communication specialists on duty per shift relevant to the number of vehicles and teams in service.)

04.04.01 COMMUNICATION CENTER STAFFING REVIEW

The QM process will include a quarterly review of the communication center staffing to ensure there is appropriate trained staffing for the program's scope of services, call/activity volume, time of day, day of week, etc.

.....
Date 08/25/2025 # 93

Standard # - Suggested Change and Rationale for Change

03.01.03 Critical Care staffing. The current standard specifies that the primary care provider may be a "physician, APRN, RN, PA or paramedic". The standard further requires that the primary care provider must "have 3 years critical care experience". The requirement of relevant experience is entirely appropriate, however the standard as written fails to address the range of experience that paramedics frequently bring to the team. The standard defines "critical care experience" as "experience in an ICU or ED". This fails to account for ground and/or air critical care transport experience of paramedics. Few Emergency Departments and, to my knowledge, no ICUs employ paramedics in their full capacity- no paramedic is likely to have 3 years of relevant experience in an ICU or ED. Work experience in these settings by a paramedic is likely to be of far lesser value when compared to out-of-hospital ALS and critical care transport experience. The next edition of the standards should be revised to properly account for relevant paramedic experience. Proposed wording: "Critical Care Experience is defined as no less than 4000 hours' experience in an ICU or an Emergency Department OR no less than 1500 ALS or Critical Care patient transports as a direct care provider throughout patient contact" 1500 as the threshold number of patient transport is based on 3 years working a typical EMS/paramedic work schedule and conducting at least 4

patient transports per shift in that time. It is specified that these patient contacts must include the clinician acting as a direct care provider throughout patient contact to exclude patient transport events in which the paramedic was primarily the ambulance operator.

The committee believes clinical experiences are different between hospital and patient transport only and agreed to make no further changes.

Also see the committee response to submission # 40:

The committee agrees that it was never the intent to exclude a paramedic from taking the primary role. In fact, some states specifically require the lead to be a paramedic for scene responses. We will eliminate the word “primary”. The committee agrees with the following wording change (in addition to those already proposed in the posted draft):

03.01.03.

2. Clinical Crew

a. A minimum of two medical personnel (who are licensed according to state and/or national requirements) who provide direct patient care plus a vehicle operator

- The **primary** care provider of the clinical crew may be a resident or staff physician, advanced practice nurse, registered nurse, physician assistant, or a paramedic. **The primary At least one** care provider must have **three (3) full time equivalent** years of critical care experience. (Critical care experience is defined as ~~no less than 4000 hours~~ experience in an ICU or an emergency department.) In addition, clinicians **in the primary-care-provider role** must have pre-hire experience and/or education in the medications and interventions as defined in the program’s scope of care and services.

Date 09/02/2025 # 94

Standard # - Suggested Change and Rationale for Change

Per recent research (Exploring the Effectiveness of Fatigue Risk Management Systems Among Flight Nurses) and in comparison of USHST several recommendations for CAMTS standards throughout in regards to FRMS. Despite shift length, cumulative fatigue can ensue and affect people and organizations. Despite urban or rural programs, the need for a better system is present. While it is understood not all programs possess the ability to have all recommendations: most are obtainable. The biggest change needs to be organizational support, leadership support, and resource availability.

FRMS Accreditation Oversight Plan

1. Written Policy Requirements • Every program must submit (and keep current) an FRMS policy with:
 - a. o Cumulative duty/flight hour limits (e.g., max 8 flight/transport hours in 24h, 60 in 7 days)
 - b. o Required minimum rest (≥10 hours) between shifts, with exceptions reviewed
 - o Fatigue “time out”/removal policy and a clear, accessible reporting process
 - o Technological and analytic fatigue monitoring (biomathematical modeling, alertness testing, sleep tracking) ** recognize this may not be feasible for all, but

- o Integrated staff wellness (mental health, peer, and recovery resources)
2. Evidence of Implementation & Review
 - Programs must provide:
 - o Schedules, logs, and cumulative hour summaries for auditor review
 - o Fatigue risk model outputs and alertness test results, with records of mitigation when thresholds exceeded
 - o All “time out”/fatigue reports and documentation of responsive actions
 - o Records of rest area/facility audits, staff training, and anonymous survey results
 3. Quality Improvement & Leadership Engagement
 - Quarterly leadership review of all FRMS activity and fatigue event trends
 - Annual GAP analysis and FRMS Maturity Checklist, with documentation of follow-up actions and closure of improvement items
 - Benchmarking of system and outcomes against peer programs, USHST/FAA guidance, and current research
 4. External Benchmarking & Recertification
 - Participation in periodic (external) benchmarking and data sharing
 - Evidence of policy or operational adaptation in response to new science/standards
 - Full submission of all documentation and audit evidence required for reaccreditation

CROSSWALK: Research, USHST Best practice, CAMTS standard and Action

1. Cumulative time & hour limits: Cumulative hours, not just flight count hours, not per flight Cumulative flight/duty hours, not per flight CAMTS: Written, enforced hour limits in policy & schedule, Audited through schedule/hour logs and model outputs
2. Predictive fatigue risk analytics Biomathematical modeling/alertness tests Use of risk modeling, PVT/alertness testing CAMTS: Analytic tools required for risk assessment Model/test results and rest mitigation audited and trended
3. Non-punitive "time out" process out" authority Guaranteed "time Non-punitive, open, protected reporting and removal CAMTS: Accessible, tracked, and truly non-punitive process Logs/interviews/tracking of all "time out"/fatigue removals
4. Minimum rest enforcement 10+ hours, always enforced, auditable rest rules and Set minimum, rest facilities CAMTS: Auditable rest policy, dedicated rest facility Audit of rosters/facilities and compliance exception handling
5. Continuous improvement GAP analysis, annual review, leader roles Regular hazard review, benchmarking, feedback cycles CAMTS: GAP analysis, leader accountability required Evidence of reviews, action/closure logs, and benchmarking
6. Holistic wellness and engagement Mental health, peer, education, wellness links Wellness, recurrent participators input CAMTS: Holistic wellness in policy, survey for staff trust Verified access; staff utilization and satisfaction tracked
7. Benchmarking and industry alignment Regular benchmarking, policy updating Standard review benchmarking peers/industry CAMTS: Policy must show ongoing alignment Review of benchmarking records and resulting improvement actions

FRMS Maturity Checklist (Annual Submission, Required

1. Policy & Leadership
 - FRMS policy (with hour limits, rest rules, “time out,” and wellness) current and available
 - Leadership documents regular review of FRMS data, trends, and actions
2. Cumulative Hours & Analytics

- Cumulative flight/transport and total duty hours are tracked for every staff member
 - Biomathematical/model outputs used to trigger mandatory rest/crew change
 - Objective alertness or performance tests used after hours/roster trigger
3. Scheduling & Rest Compliance
 - All shift and duty rosters meet stated rest minimums
 - Rest/napping facilities available, accessible, and audited for use
 4. Reporting & Non-Punitive Practice
 - “Time out”/fatigue removals tracked, trends reviewed, absence of retaliation confirmed by staff survey/interview
 - Anonymous reporting and fatigue-related incident investigation routine
 5. Training & Wellness
 - All personnel receive annual training in FRMS, fatigue, and wellness policies
 - Staff have and use access to mental health and wellness program
 6. Feedback, Benchmarking & Improvement
 - Annual GAP analysis completed, policy and practice benchmarked to CAMTS/USHST/peer norms
 - Action plans and improvement items recorded, tracked, and closed out
 7. Continuous Quality Cycle
 - CQI committee/leadership records, lessons learned, and revisions reviewed
 Scoring:
 Level 1–2: Policy present, but practical implementation or staff engagement incomplete.
 Level 3: Policy, hour/risk monitoring, rest, and removals are routine; improvement cycle active.
 Level 4–5: Data-driven, participatory, and proactive—recognized culture of fatigue risk and wellness leadership.

Happy to talk more, present data/suggestions.

The committee agrees that fatigue is a major concern in medical transport and that programs must implement written objective and subjective policies along with an effective Fatigue Risk Management System (FRMS). While many suggested items are already addressed in CAMTS Standards, some proposed additions may be overly prescriptive or burdensome to implement and evaluate. Overly detailed requirements (e.g., exhaustive schedule/log reviews) may exceed the commission’s practical capacity for evaluation and programs’ ability to comply. Nonetheless, certain quality metrics and compliance examples merit consideration for inclusion as “Examples of evidence to meet or exceed compliance”. THIS SUBMISSION IS STILL OPEN AND IS UNDER FURTHER REVIEW.

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Date 09/02/2025 # 95

Standard # - Suggested Change and Rationale for Change

Current: 02.01.07 9. Clinical – The GAMUT (Ground and Air Quality Metrics Transport) May 2021 metrics are in the Addenda. However, for the most current version of the GAMUT metrics go to <http://gamutqi.org/metrics.html>. <https://www.gamutqi.org/GAMUT-Metrics-full.pdf>. Update: Current version published December 2024 at <https://www.gamutqi.org/GAMUTMetrics.pdf>
This is a reference update and no response is needed.

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Date 09/02/2025 # 96

Standard # - Suggested Change and Rationale for Change

03.01.04 c. in our current draft Fetal doppler/fetal heart rate monitoring device (if transporting High Risk Obstetrics – HROB). For long range transports, external cardiotocography monitoring device is required. Asked of me by a few Programs - Can a POC Ultrasound device be used instead of a specific fetal doppler for intermittent fetal monitoring?

This was referred to our pediatric board representatives. Dr. Holcomb responded: “Actually, I agree with the Programs. In fact, POC U/S will probably be superior to Handheld Dopplers or Cont Fetal HR monitors at evaluating the fetal heart rate, especially in the austere environment of transport (ie rotary or on a bumpy road). With a POC U/S, you can visualize the heart beat and in 6 seconds, have a FHR easier than trying to get attached strap leads or a handheld doppler to pick up. A well trained eye can also easily see decels and intervene as able. Last, POC U/S gives you visualize confirmation not auditory, with the later tough again on transport in a helicopter.” Ms Rush added: “ from my limited experience in maternal transport, I would support POC U/S for its visual assessment. I must defer this to more experienced maternal HROB clinicians.” Dr. Holcomb also reached out to others: “I ran #96 by my MFM Lead Consultant for our MFM HROB Specialty Team, and she concurs on our answer re use of POC U/S. So now 3 expert opinions who agree for you.” We will change the wording to:

03.01.04 4. d.

Fetal doppler/fetal heart rate monitoring device (if transporting High Risk Obstetrics – HROB). For long range transports, external cardiotocography monitoring **or Point of Care Ultrasound** device is required.

Date 09/??/2025 # 97

Standard # - Suggested Change and Rationale for Change

The comment form was opened but nothing was submitted.

Date 10/02/2025 # 98

Standard # - Suggested Change and Rationale for Change

I am writing to respectfully recommend a review and revision of Section 6.04.03 – Fixed Wing Pilot, Pilot-In-Command (PIC) Qualifications.

While ensuring pilots are properly qualified is essential, the current minimum flight-hour requirements may inadvertently reduce, not increase safety. By setting thresholds well above industry hiring standards, CAMTS unintentionally narrows the applicant pool to pilots who are often not selected by major airlines or top-tier corporate operators. This creates a paradox: the most capable and competitive pilots, those who meet airline minimums, are quickly hired away by Envoy, SkyWest, NetJets, and ultimately United, American, and Delta. As a result, fixed-wing air ambulance may be perceived as a fallback rather than a first-choice destination, which runs counter to the critical safety culture we all seek to foster.

It is a common misconception that “higher total time equals a better pilot.” In reality, higher-hour pilots may simply represent those who, for various reasons, were not competitive for mainline opportunities. Meanwhile, talented, safety-focused pilots meeting Part 135 hiring standards are being excluded from consideration for air medical roles, despite being well qualified.

I propose aligning CAMTS flight standards with established industry norms, while maintaining a clear emphasis on competency and safety. Specifically:

Jet SIC
1,500 TT
200 cross-country
100 night
75 instrument
50 multi-engine

Jet PIC
2,500 TT 500 in type Prop/Turbo Prop SIC
1,000 TT 200 cross-country
100 night
75 instrument
50 multi-engine (if applicable)

Prop/Turbo Prop PIC
2,000 TT
500 in type

These standards mirror the minimums used by highly reputable carriers and would expand the qualified applicant pool without compromising safety. In fact, aligning with industry benchmarks would encourage stronger candidates to view fixed-wing air ambulance as a competitive and respected career path.

I respectfully urge CAMTS to consider this adjustment so that fixed-wing air ambulance operators can continue attracting competent, professional pilots who bring both skill and commitment to patient transport.

As an alternative to the flight hours in 05.05.03 2. For RW and 06.04.03 1.&2. For FW, a program may develop and submit a Pilot in Command (PIC) Experience Evaluation Tool. The tool should evaluate a pilot's education, training, and experience to determine if that pilot has the necessary background and experience to be a safe and effective PIC taking into consideration the program's operational needs, scope of service, service area airframe type, operational environment, etc. To be considered as an alternative to meeting the Standard, the program must submit a CAMTS Class Two Report of Change along with the Evaluation Tool. Once reviewed by the Aviation Advisory Committee, the effectiveness of the tool must be evaluated as part of the program's quality management process. The tool will be specific to the program; however an example that can be used as a starting point can be found in Addenda C. of the Standards.

The Aviation Standard Committee and the Standards Committee believe the minimum standards should remain the same for the 13th Edition, but encourage operators to develop, submit, and use the alternative pathway if it fits their program.

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Date 10/07/2025 # 99

Standard # - Suggested Change and Rationale for Change

It is recommended that CAMTS revise accreditation standards to require the use of twin-engine aircraft for all night-time rotor-wing medical operations, and to strongly encourage IFR capability and pilot proficiency for night operations.

Rationale for Proposed Change: The goal of this recommendation is to significantly enhance crew and patient safety in air medical transport operations, particularly during higher-risk night flights.

Current CAMTS standards emphasize risk management and safety culture but do not specifically require twin engine aircraft or IFR capabilities for night missions. Given the well-documented increase in risk during low-light and reduced-visibility conditions, these measures are both justified and necessary.

Safety Justification:

1. Engine Redundancy:
 - Twin-engine aircraft provide a critical safety margin in the event of an engine failure, especially at night when forced landings are far more hazardous due to limited visibility and reduced terrain awareness.
 - Dual-engine configurations reduce the likelihood of catastrophic loss of power, allowing pilots to maintain controlled flight and safely divert or land.
2. IFR Capability and Training:
 - Encouraging IFR-equipped aircraft and instrument-rated pilots mitigates risks from inadvertent IMC (Instrument Meteorological Conditions), spatial disorientation, and weather-related accidents, common contributing factors in night HEMS crashes.
 - IFR operations enable safer and more controlled navigation, approach, and landing procedures under adverse weather and low-visibility conditions.
3. Alignment with Industry Best Practices:
 - Many high-performing air medical programs have already voluntarily transitioned to twin engine, IFR-capable fleets.
 - Aligning CAMTS standards with these evolving best practices will promote system-wide consistency, operational resilience, and public confidence.

This was referred to the Aviation Advisory Committee for comments. Because these changes would have such a great impact on the majority of accredited programs, without evidence based research the Standards Committee believes this is too great a change to include in the 13th Edition. As more information becomes available we will look at this for future editions.

It is recommended that CAMTS implement periodic unannounced site visits as part of its ongoing accreditation process. These visits would occur between standard accreditation cycles and serve to ensure that accredited programs maintain compliance with CAMTS standards at all time, not just during scheduled evaluations.

Rationale for Proposed Change: The purpose of this recommendation is to increase accountability, integrity, and credibility within the CAMTS accreditation process. Currently, programs have months or even years to prepare for planned site visits. While this allows for organization and documentation review, it also creates an environment where some programs may temporarily “stage” compliance rather than consistently maintaining it.

As a result, accreditation has, in many cases, become more of a symbolic merit badge rather than a continuous assurance of safety and operational excellence. Instituting unannounced inspections would reinforce CAMTS’s mission to promote genuine, ongoing adherence to best practices rather than selective compliance.

Safety and Accountability Justification:

1. Continuous Compliance:
 - Unannounced visits would ensure that accredited programs uphold standards in daily operations, rather than only during scheduled audits.
 - This promotes a culture of sustained excellence and integrity.
2. Improved Safety Outcomes:

- Regular, surprise audits encourage organizations to maintain accurate, real-time documentation and consistent safety practices—leading to genuine operational readiness and safer patient transport environments.
3. Level Playing Field:
 - Programs that truly live CAMTS standards 24/7 would be distinguished from those that rely on appearance management during scheduled reviews.
 - This restores fairness and gives greater value to accreditation.
 4. Public and Industry Trust:
 - Increased transparency and oversight reassure the public, employees, and healthcare partners that CAMTS-accredited organizations truly meet or exceed the highest safety and quality expectations.

Since this is a suggested procedural change, and not a recommended change in the Standards, this suggestion is being referred to the CAMTS Board for consideration. As we roll out the 13th Edition of the Standards similar and other procedural changes are already being considered by the CAMTS Board and administration.

Implement a financial transparency and sustainability review as part of accreditation.

Rationale: Programs under financial strain often cut corners, delay maintenance, and overextend resources, all while advertising safety through CAMTS accreditation. A financial audit ensures operational integrity isn't compromised by profit motives.

Implementation:

- Require submission of annual operating and maintenance budget summaries.
- Investigate significant changes in staffing, coverage, or aircraft utilization

The committee believes it is outside the scope and expertise of CAMTS to do financial reviews. Since there is such a mix of non-profit, for profit, hospital based, community based, private, public service, etc. a financial audit or statement may not be beneficial and may even steer programs away from applying for accreditation. The committee also believes that there are already Standards that address safety and quality care which is the focus of the accreditation process.

Date 10/27/2025 # 100

Standard # - Suggested Change and Rationale for Change

04.03.02 The IAMTCS is releasing an official position statement (I will send separate to this submission) recommending training for helicopter shopping to be an annual training rather than initial training as this standard currently states.

We recommend adding the following to this standard:

04.03.02 Sec 2, part e: Ongoing annual training on the prevention of the helicopter shopping practice.

The committee agrees with this suggestion. As part of the discussion the committee also noted that the definition of "helicopter shopping" needs to be updated. The following changes will be made:

Add...

04.03.02 Sec 2, part e: Prevention of the medical transport shopping practice.

Change in definition:

Medical Transport Shopping

"A term that refers to the practice of an agency requesting medical transport, by air or ground, from another service when a previous service turned down the request because of weather or other safety factors that would be common for both"

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Date 10/31/2025 # 101

Standard # - Suggested Change and Rationale for Change

Standard: Chapter 1 – Definitions

Suggestion: Include clear definitions for:

Air Ambulance Service: Civilian air transportation of individual patients from a scene or between medical facilities.

Aeromedical Evacuation: Organized air transport of patients from dangerous or resource-limited areas to higher levels of care, often coordinated by government or humanitarian agencies.

Disaster Aeromedical Evacuation: Air evacuation of patients during disasters, following the same safety and medical standards as routine missions.

→ The patient’s point of origin determines the classification:

From a scene = Air Ambulance

From a facility = Aeromedical Evacuation

Rationale: These terms are often used interchangeably worldwide. Clear definitions ensure consistent documentation, training, and communication across all accredited programs.

The committee agrees that the terms are often used interchangeably, by users, providers, and even Authorities Having Jurisdiction (AHJs). Regional differences also exist and the committee believes that making changes to the standards and/or the definitions within the standards for the 13th edition may add confusion by causing conflicts with currently acceptable regional and/or regulatory definitions. No changes to the definitions are recommended.

Standard #: Chapter 2 – Scope of Services

Suggestion: Incorporate a reference indicating that disaster patient evacuations are encompassed within the air medical transport system.

Rationale: Civilian air medical resources frequently assist during disasters under the same CAMTS standards. Including this reference maintains consistency in terminology without introducing additional requirements.

As noted above. No changes to the definitions are recommended.

Chapter 3 – Operations (Dispatch)

Suggestion: Add note:

“The point of patient origin determines mission classification (Scene or Interfacility). Disaster missions follow the same principle.”

Rationale: Implementing a straightforward rule enhances mission reporting, quality assurance, and overall global consistency.

As noted above. No changes to the definitions are recommended.

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Date 10/31/2025 # 102

Standard # - Suggested Change and Rationale for Change

03.05.00 ORIENTATION, TRAINING, AND CONTINUING EDUCATION PROGRAM REQUIREMENTS

3. Competencies

g. Current paramedic certifications...

If the Critical Care team configuration is such that the paramedic is a third provider, such as a Registered Nurse, Respiratory Therapist, and Paramedic where the RN and RT are the primary and

secondary providers, that paramedic is exempt from the requirement of needing an advanced certification.

03.05.00 ORIENTATION, TRAINING, AND CONTINUING EDUCATION PROGRAM REQUIREMENTS

3. Competencies

g. Current paramedic certifications...

If the paramedic is not a primary or secondary provider on critical care calls, that paramedic is not required to maintain an advanced certification.

The committee agrees that this standard is often misunderstood but also that it may apply to other clinical disciplines as well. The committee believes it more appropriately applies under Standard 03.01.03 instead of 03.05.00 and we will add the following wording for clarification:

03.01.03

2. Clinical Crew

a. A minimum of two medical personnel (who are licensed according to state and/or national requirements) who provide direct patient care plus a vehicle operator

- The primary care provider of the clinical crew may be a resident or staff physician, advanced practice nurse, registered nurse, physician assistant, or a paramedic. The primary **At least one** care provider must have **three (3) full time equivalent** years of critical care experience. (Critical care experience is defined as ~~no less than 4000 hours~~² experience in an ICU or an emergency department.) In addition, clinicians ~~in the primary care provider role~~ must have pre-hire experience and/or education in the medications and interventions as defined in the program's scope of care and services.

(Medical personnel that are added to supplement and assist (and not replace) the regular medical staff must be trained to their level of license and/or certification, but are not required to have advanced certifications, unless required by the program or AHJ.)

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Date 11/06/2025 # 103

Standard # - Suggested Change and Rationale for Change

With the increased reporting of aggressive or combative patients being a safety concern I would like to suggest adding this as a highly encouraged item that is reported and tracked. This could be through safety as well as the quality management process. In order to determine if this is really a concern there needs to be more tracking trending of events.

The committee agrees and supports this recommendation. Currently there is no clear and consistent definition of "aggressive" or "combative" however GAMUT is looking to add this as a new metrics with defined definitions. For the 13th Edition of the Standards we will add the following:

02.02.07

Performance metrics, as identified by the program, must be multidisciplinary and reviewed at least quarterly (at a senior executive level). Based on the scope of care of the service, in

addition to those marked “required”, at least **one** performance metric from each the following groups, (with examples) is required to be tracked and trended on an annual basis.

1. Patient safety

- a. Out-of-range cabin temperatures without risk mitigation
- b. Arrest during transport (i.e., CPR)
- c. Two-patient transports (Volume required for Program Information Form, (PIF), CAMTS application)
- d. Single-medical-provider transports
- e. Transports of infectious-disease patients realized during/after transport
- f. Number of Never Events (see References) (required)
- g. Number of aggressive and/or combative patients that resulted in an unscheduled stop in route (precautionary landing), a change in destination, or an injury to staff or the patient.**

and:

02.03.07 2.

t. Specific policy **and/or medical protocols** to address the **agitated/**combative patient

- **Additional Physical and/or chemical** restraints must be available and used for combative patients who potentially endanger themselves, the personnel, or the transport vehicle.

- **Judgement when to use physical restraints, process to apply physical restraints, and specifics regarding the patient monitoring when using physical restraints.**

- **Judgement when to treat agitation with medications and specifics regarding the patient monitoring required when treating agitation with medications.**

• **Reporting and tracking of agitated/combative patient incidents**

- A policy must address refusal to transport patients, family members, or others who may be considered a threat to the safety of the transport and/or medical transport personnel.

A Fatigue Risk Management process should be mandatory for all personnel that are related to transports with particular emphasis on air transport. This means pilots, mechanics, clinicians, communication specialists, and operations control staff. The standard should give better guidance on what the process must include....go way beyond just asking if someone feels rested enough. This is possibly more critical for non-pilots because pilots already have duty time and rest requirements per the regulations so the others are left out on their own.

The committee believes Fatigue Risk Management is already required for all disciplines within the CAMTS Standards. No further changes are required however; we will recommend that more examples be placed in the next edition of the Best Practices Manual.

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Date 11/18/2025 # 104

Standard # - Suggested Change and Rationale for Change

Standard #: **04.09.02**

Existing Standard (to remain unchanged):

04.09.02 Satellite tracking systems are strongly recommended for all aircraft and required for aircraft that do not have a 406 MHz ELT. Initial coordination must be documented and continuous flight/transport following (or initiating and following surface transport) must be monitored and documented and must consist of the following:

Suggested Addition:

It is recommended that communication centers use a Computer-Aided Dispatch (CAD) system with the capability to enable airspace warnings. This feature provides an additional layer of situational awareness and safety for communication specialists by alerting them to restricted, hazardous, or controlled airspace that may impact aircraft operations.

Rationale for Addition:

Airspace warnings within CAD systems significantly enhance operational safety by supporting communication centers in proactive monitoring and risk mitigation. This added capability helps ensure safer coordination, improves real-time decision-making, and supports enhanced compliance with established aviation safety practices.

This suggestion was referred to the Aviation Advisory Committee for guidance and/or suggested wording. The committee agrees that knowing about the airspace warnings is essential for safety, but is unsure if this should be the role of the communication center, the operational control center (OCC), or the pilot.

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Date 11/27/2025 # 105

Standard # - Suggested Change and Rationale for Change

03.06.01 - 13

Advanced airway and ventilatory support equipment:

- a. Laryngoscope and tracheal intubation supplies, including laryngoscope blades, bag-valve-mask, endotracheal cuff pressure manometer (for air transport if cuff is air filled) and oxygen

supplies, including PEEP valves; appropriate for ages and potential needs of patients transported.

I propose expanding "PEEP valves" with an explanation as I find it causes confusion (as a site surveyor and employee of an accredited organisation).

There is the literal "PEEP valve" that can be attached to a bag-valve-mask, but what about an "anaesthetic breathing circuit" - Waters / Mapleson type ... they can be used to give PEEP. Are they acceptable? Should a manometer be available so the amount of PEEP be known?

And for neonates, best practise (as described in ILCOR/NLS/NRP guidelines) is not a "PEEP valve" but a T-piece resuscitator which allows positive pressure ventilation with PEEP. Many types and makes are available (ipuff / neopuff / tom thumb etc)

I feel if these two words were expanded to describe intent, the result would be a better understanding of what compliance looks like, and for neonates, an improvement in the standard of care.

I also suggest that the standards should specify that services transporting ALS neonates need to be able to measure PIP and PEEP when manually ventilating. Compliance would be a T-piece resuscitator, or alternatively a manometer used in conjunction either with a bag-valve-mask (with PEEP valve) or an anesthetic-circuit style ventilation device.

Sample Reference:

"Where possible, use a T-piece resuscitator capable of providing either CPAP or positive pressure ventilation + PEEP when giving ventilatory support, especially in the preterm infant."

European Resuscitation Council Guidelines 2025 Newborn Resuscitation and Support of Transition of Infants at Birth

Hogeveen, Marije et al.

Resuscitation, Volume 215, 110766

03.06.01 18.

Isolette/Incubator (within the scope of the program):

a. Isolette must regulate temperature and oxygen while allowing visibility and easy access to the neonate.

b. There is a capability to mix oxygen with air within the range of 21% to 100%.

Regulating oxygen is not an essential function of an incubator. Supplemental oxygen can be given via a "oxygen low-flow meter" and a set of nasal cannula/ nasal prongs. This is considered more appropriate for transport as it uses less gas and opening the incubator doors does not affect the concentration.

The capability to mix oxygen with air is important for neonates, but not within the incubator. This function should apply to the ventilator which should be able to deliver blended gas. The air source may be either an electric compressor, compressed air in bottles, or a turbine / entrainment function in the ventilator . I suggest point b) be moved to section 13. Blended gas is also recommended for manual ventilation, at a very basic level can be achieved by bag-valve mask.

The committee agrees with the recommendations and will make the following changes:

03.06.01

13. Advanced airway and ventilatory support equipment:

- a. Laryngoscope and tracheal intubation supplies, including laryngoscope blades, bag-valve- mask, endotracheal cuff pressure manometer (for air transport if cuff is air filled) and oxygen supplies, including PEEP valves **or a method to measure delivered PEEP**; appropriate for ages and potential needs of patients transported.
- b. A mechanical ventilator, with CPAP and BiPAP (Bi-Level) capabilities, and circuit appropriate to age and scope of care on-board for critical care transports as pertinent to the scope of care of the medical transport service. **If neonates are within the scope of services of the transport program, the ventilator has the capability to mix oxygen with air within the range of 21% and 100%.**

c-g remain the same.

18. ~~Isolette~~ **Transport** Incubator (within the scope of the program)

a. ~~Isolette~~ **Transport incubators** must regulate temperature ~~and oxygen~~ while allowing visibility and easy access to the neonate.

~~b. There is a capability to mix oxygen with air within the range of 21% to 100%~~

c. Corrected gestational age is an acceptable trigger for use of ~~an isolette~~ **a transport incubator** versus a portable infant transport unit. For example, a 24 week gestation at one month of age may still need consistent servo heat versus a warming pad.

a. Ventilator must be specific to age and size of the patient

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Date 01/14/2026 # 106

Standard # - Suggested Change and Rationale for Change

03.01.03 For rotor wing programs responding to scene calls, at least one provider should be a paramedic, with ALS pre-hospital experience as defined by current CAMTS standards. Rationale: Seasoned paramedics bring valuable pre-hospital experience to HEMS, particularly in scene responses and airway management. However, there is a growing trend in HEMS to simply hire nurses and have them go through a short paramedic program, allowing the company to fly nurse-nurse configuration while still being able to report there is a paramedic on board. I do not believe this concept aligns with the long-standing model in the United States of a nurse/paramedic flight team. The goal is to bring both sets of expertise to the patient, not simply check a box.

The Standards Committee supports the concept of RN/Medic teams, especially for scene calls, but realizes that every program is a little different in that some do very little or no scene calls, some face paramedic shortages in their region, some use other medical disciplines (MD, RT, PA, etc.), and that

each jurisdiction can set its own licensing rules and regulations. The committee believes the CAMTS Standards recognize this by incorporating balancing factors such as quality management and equivalent training. The committee agreed to make no change to this standard.

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Date 01/19/2026 # 107

Standard # - Suggested Change and Rationale for Change

01.04.05 Remove last sentence in #1, This is out of date and now typically utilize the American College of Surgeons - Committee on Trauma Field Triage Guidelines. Can switch to this new reference or just delete altogether since States may have other triage criteria.

The committee agrees that the reference has become outdated since the last edition and that several new sources are now available. We will delete the last sentence, ("~~See References for Centers for Disease Control trauma triage guidelines.~~") and will update the references. *Note: because the references can change frequently we are looking at moving the references from the Standards Addendums to the CAMTS website.*

01.05.06 1. - Include referring EMS agency for prehospital patients, Follow-up and outcomes should be shared when appropriate up and down the care spectrum.

In the posted 3rd draft of the 13th edition the new standard reads as below. The wording underlined will be added.

01.05.06 Programs are strongly encouraged to support bidirectional patient data and outcomes.

1. This includes, when requested,

- a. From the program to the sending and/or receiving hospital and EMS agency**
- b. From their affiliated hospital system to an accredited program**

2. Data sharing should be accomplished via an automated or semi-automated process, eliminating the reliance of phone-based questions for routine data acquisition.

01.07.01 - 9: Include comment "Policy includes management escalation of decision making ,when it occurs, to include senior/executive management and includes documentation of mitigation put in place to decrease excess risk" Perhaps include examples such as" requests are pre-emptively individually reviewed for appropriateness of team by management, decreased shift length, etc..." Programs having a policy to avoid green-on-green are great, but that is only to "avoid" not prohibit and programs still allow two new personnel despite "avoiding".

The committee agrees to add a modified escalation to the existing standard. The standard will now read:

01.07.01 9. For all positions (aviation, clinical, communications, maintenance), a written policy addresses scheduling to avoid new employees working together (Green-on-Green). **Policy includes management escalation of decision making including documentation of mitigation put in place to decrease risk.**

01.09.01 - 3. Include mechanism for ensuring staff review the shared information such as sign in log, electronic assignment, etc... Storing the meeting minutes is all well and good, but not if staff don't access it.

The current standards already require the program to have a process to share and disseminate meeting minutes. It should be up to the management to hold staff accountable for the contents of the meetings and for those not in attendance to obtain the information. Signing a log or receipt does not ensure they actually read the materials. The committee agreed to make no change to this standard.

02.03.09 - i. Move from encouraged to required for high-visibility/chevron marking on ground ambulances.

The committee agreed to leave the standard as strongly encouraged but will update the CAMTS standard to meet the NFPA 1917 Standard which is specific for ambulances. NFPA 1910 is for fire apparatus.

02.03.07

i. Vehicle conspicuity (reflectivity/chevrons, etc.) is strongly encouraged for ground ambulances.

The ambulance is clearly identifiable during the night with reflective striping on all sides of the vehicle. Adherence to the National Fire Protection **Association (NFPA) 1904 1917** Guidelines for Reflective Striping of **Emergency Vehicles Automotive Ambulances** is encouraged but as a minimum must include: (as referenced in: NFPA ~~1904: 15.9.3.1 1917:16.25.1 -6.25.9~~) (S)

- Sides of the ambulance:

- o A retroreflective stripe(s) **or Battenburg markings** shall be affixed to at least ~~50~~ **25** percent of the cab and **75% of the patient compartment body** length on each side.

- o The stripe or combination of stripes shall be a minimum of **4 6** inches (~~400~~ **152**mm) in total width.

- o The **4 6**-inch (~~400~~ **152**mm)-wide stripe or combination of stripes shall be permitted to be interrupted by objects (i.e., receptacles, door handles) provided the full stripe is seen as conspicuous when approaching the vehicle.

- o A graphic design shall be permitted to replace all or part of the required striping materials if the design or combination thereof covers at least the same perimeter length.

- Back of the ambulance:

- o If the NFPA 1904 **1917** Guidelines for Reflective Striping of **Emergency Vehicles Automotive Ambulances** are not followed for the

reflective striping of the rear of the surface vehicle, then at a minimum, the reflective striping must follow the same standards as for the vehicle sides.

- Doors:

- o Any door of the ambulance designed to allow persons to enter or exit the vehicle shall have at least 96 square inches (62,000 square millimeters) of retroreflective materials affixed to the inside of the door.

03.01.01 - 4 and 5: ALS/BLS Medical Director. The Standard (as stated) uses "should" a lot. I think the intent is that "must be Board Certified in EM, or if not then must be FM, IM, Surgery, or Peds with demonstrated EMS Education or >5 yrs of EM Experience..."

The committee agrees that the focus for ALS/BLS Medical Directors should be on EMS and will change the wording in both sections to:

"must be Board Certified in EM, **or EMS**, or if not, then must be FM, IM, Surgery, or Peds with demonstrated EMS Education or >5 yrs of **EM EMS** Experience..." *(initials spelled out)*

But then for the Critical Care level you don't call out any specific qualifications for the medical director. I would say need EM or Critical Care Board Certification for Critical Care level. EMS Board Cert strongly encouraged for scene response. The Specialty Care level has the narrowed scope Medical Director certifications (i.e., Pediatric, Neonatal) not for the general "Critical Care level"

Because of the diversity of programs, scopes of care, and scopes of service, the committee agreed to make no changes to these standards.

Targetted temperature management is not really a thing anymore and would remove it.

The committee agrees and will delete ..

03.01.03 6. - Critical Care Interventions

~~**f. Targetted temperature management (i.e., therapeutic hypothermia) (in ALS)**~~

Also would argue that Critical Care service should have inhaled pulmonary vasodilators (Nitric or Inhaled Epoprostenol) as well as blood products.

Blood products are already addressed in the standards and the committee agrees that the use of inhaled pulmonary vasodilators are still under study. For now, their use is up to the program medical director, but these may be considered for a future edition of the standards. The committee agreed to make no changes to the standards at this time.

Also I would remove the equipment list at this level since States mandate what a BLS or ALS ambulance must carry (not true always for CC/SCT). Though would include "highly encourage" for video laryngoscope since most states don;t comment on that.

By definition states or other government agencies establish regulations as a minimum base line and the CAMTS Standards may exceed those in some areas. The committee agrees that the equipment lists for each level of care should remain in the standards because BLS and ALS equipment is part of the critical care and specialty care equipment list. The standards in this section, as written, build on

themselves for the escalating levels of care. As for the video laryngoscopes, the draft 13th edition does highly encourage them.

Date 01/27/2026 # 108 (This had not yet been reviewed by the Standards Committee)

Standard # - Suggested Change and Rationale for Change

GLOBAL STANDARDS 2nd edition 07.02.07

The ambulance must be able to fully perform at ambient temperatures - 30 C to + 50 C degrees. This is a huge range! Vehicles optimised for one end will not work well at the other end. where in the world sees such a swing in temperatures? Also, this range exceeds European standards for road ambulances and I am unable to identify a test facility that could be used to verify such a range. I recommend that standard be amended to specify that vehicle must fully function in range of anticipated local climate.

Date 01/27/2026 # 109 (#108 moved to next log)

Standard # - Suggested Change and Rationale for Change

02.02.00 - Suggest making the entire Utilization Management section "strongly encouraged" instead of required. This was very necessary before we had rules and regulations. UM is now primarily driven by state mandates, insurance reimbursements, and/or guidelines established by national medical organizations.

The committee agrees and will make the following wording changes:

02.02.00 UTILIZATION MANAGEMENT (UM)

~~Management ensures a~~ An appropriate utilization management process, through trending and tracking requests, **is strongly encouraged**. There is evidence of feedback to the requesting agents and feedback from the patients' receiving facilities. Utilization review may be prospective, concurrent, or retrospective.

02.02.01 The following ~~are~~ **may be** included in the Utilization Management program:

(Rest remains the same.)

02.02.02 A structured, periodic review of transports **and written report is encouraged** (to determine transport appropriateness or that the mode of transport enhances medical outcome, safety or cost effectiveness over other modes of transport) **performed at least semiannually and resulting in a written report.**

(Rest remains the same.)

As of February 6, 2026

As of July 2, 2025

Any new comments will be moved to a new log.

42 comments/suggestions received from 33 people – Fourth draft

Total comments/suggestion received each draft:

First draft 63 comments/suggestions from 32 people

Second draft 50 comments/suggestion from 33 people

Third draft 30 comments/suggestions from 20 people

Fourth draft 42 comments/suggestion from 24

Total of 185 comments/suggestions from 109 people