

Air Medical Physician Association

951 E. Montana Vista Lane, Salt Lake City, Utah 84124

June 2018

Mission Statement

The Air Medical Physician Association is an international organization committed to patient-focused, quality critical care transport medicine by promoting excellence in medical direction, research, education, safety, leadership and collaboration.

Call for Nominations

Any MD/DO member of AMPA who can demonstrate active involvement in air medical transport may make a nomination for themselves or another active AMPA member for the offices open to election for the fall of 2018. The following must be submitted to the AMPA office **no later than July 16, 2018.**

- **Letter of Intent** indicating your ability and willingness to serve as a Board of Trustees members for a two year term, and
- **Personal Statement**, which will be distributed to the voting membership with the ballot. **MAXIMUM** of one typed page, single-spaced, describing your qualifications for, and commitment to, serving on the AMPA Board of Trustees.
- **Copy of current CV**
- **Requirements:** **Active** involvement in air medical transport. Candidates **MUST** be available to attend two Board meetings, and six conference calls per year. **Please do not seek office if you are not able to participate.**



Positions Available

President-Elect

Two-year term

Secretary-Treasurer

Two-year term

Three

Board Member-at-Large

Two-year term

Send your Letter of Intent, Personal Statement and CV electronically to AMPA Nomination Committee c/o Pat Petersen, ppeter1111@aol.com.

Please contact either Lauri Bolton (Lauri.Bolton@hhchealth.org) or Pat Petersen if you have any questions. This is a great opportunity to become involved with AMPA and help to shape the future of air medical transport for physicians.



AMPA President's Message

Your AMPA membership helps make many things possible. One of my favorites is getting to meet and spend time with other members, learning and collaborating. I look forward to seeing all of you at our fall conferences, the Core Curriculum and the second Air Medical Physician Symposium.

AMPA membership also makes other wonderful things possible. Production of Principles And Direction Of Air Medical Transport, the research seed grant, reduced fees for conferences such as AMPS, CCTMC, AMTC, and the Core Curriculum, the Air Medical journal, and being a stakeholder in national committees and workgroups.

AMPA has always been sensitive to the cost of membership, and for years we have been able to continue to produce these programs without increasing annual dues. Recently however it has become apparent that the increasing cost of these activities and decreasing revenue is forcing AMPA to make tough decisions to help maintain the long-term sustainability of our organization.

This spring the Board of Directors made the difficult decision to approve a modest increase in dues and registration fees for our activities. We are also committed to find efficiencies in our operations to provide the same content at a reduced cost. We are hopeful that this two-tiered approach will help us provide all of the current and future benefits of AMPA now and for years to come.

As always, I appreciate your support and look forward to seeing all of you in October.

Lauri Bolton,
AMPA President



AMPA Distinguished Physician

The Distinguished Physician Award was established in 1993 to recognize a physician who has significantly contributed to the Air Medicine profession and to recognize lifetime achievement and service to the Air Medical community. The AMPA Board of Trustees will select the award recipient from nominations of AMPA members submitted by the membership in writing to the AMPA office by August 10, 2018.

The Award carries with it travel reimbursement to the 2018 AMPA General Membership Meeting in Phoenix, Arizona and one night's lodging at the Sheraton Phoenix Hotel.

Past AMPA Distinguished Physicians

Alex Jablonowski, MD - '93
Henry C. Bock, MD - '94
Nicholas Benson, MD - '95
Lenworth Jacobs, MD - '96
Norman Snow, MD - '97
Frank Thomas, MD '98
William Rutherford, MD - '99
Ira J. Blumen, MD - '00
Richard Orr, MD - '01
David J. Dries, MD - '02
Kenneth Williams, MD - '03
D. Gregory Powell, MD - '04
Robert E. Falcone, MD - '05
Catherine Carrubba, MD - '06
Stephen H. Thomas, MD - '07
Kenneth Robinson, MD - '08
Eric R. Swanson, MD - '09
Michael W. Brunko, MD - '10
Laurie Romig, MD - '11

Richard Orr, MD - '12
Jack B. Davidoff, MD - '13
Daniel G. Hankins, MD - '14
Russell D. MacDonald, MD - '15
No candidate - '16
Michael Abernethy, MD - '17

Current AMPA Board of Trustee Members
are not eligible



Medical Director of the Year

**It is time for nominations for AMPA's
Medical Director of the Year**

In 2000, the Air Medical Physician Association instituted a new annual award in addition to the yearly Distinguished Physician Award. In contrast to the Distinguished Physician Award, which is intended to recognize lifetime achievement and service to AMPA and the air medical community, the Medical Director of the Year is intended to recognize that physician who has made outstanding contributions to his or her own program.

For that reason, AMPA asks that nominations for this award of recognition come from individual programs. We would like to hear from the flight crews, administrators, and/or program staff about the outstanding contributions of their medical director.

The nominee should be an AMPA member and have shown exceptional personal involvement in the program. We are looking for those that are considered an invaluable part of the team's success and whose contributions to medical direction, education, quality care, outreach, safety, and team morale to be part of the essential fabric of the program...in short, a leader.

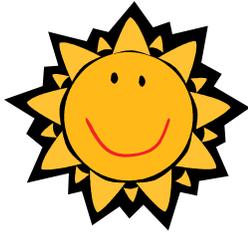
Nominations should be in the form of a one-page letter, which outlines qualities for which

the medical director should be recognized. Nominations should be made electronically to Pat Petersen at the AMPA office to ppeter1111@aol.com by **August 10, 2018**.

The Medical Director of the Year will be announced at the AMPA General Membership meeting in Phoenix. Current AMPA Board members are not eligible for the award.

Past Medical Directors of the Year:

- 2000 **Jeff Hillesland, MD** - Gundersen Lutheran MedLink AIR
- 2001 **Eric R. Swanson, MD** - University of Utah AirMed
- 2002 **Jack B. Davidoff, MD** - Mercy Flight Central
- 2003 **James G. Leker, MD** - Baptist Life Flight
- 2004 **Mark E. Maertins, MD** - AIRLIFE Denver
- 2005 **Andrew C. Hawk, MD** - Care Flight Air & Mobile
- 2006 **Charles Sheppard, MD** - St. John's Life Line
- 2007 - **David Meurer, MD** - Shandscair
- 2008 - **Douglas Floccare, MD** - MIEMSS
- 2009 - **Thomas Scaggs, MD** - Carle Foundation Life Flight
- 2010 - **Howard Werman, MD** - MedFlight of Ohio
- 2011 - **Peter Meyer, MD** - Air Link at Regional West
- 2012 - **Norm Dinerman, MD** - Life Flight of Maine
- 2013 - **Ira J. Blumen, MD** - University of Chicago Aeromedical Network (UCAN)
- 2014 - **Michael Brunko, MD** - Flight for Life Colorado
- 2015 - **Suzanne K. Wedel, MD** - Boston Med Flight
- 2016 - **Catherine Carrubba, MD** - Aeromed - Tampa General Hospital
- 2017 - **R. J. Frascone, MD** - Life Link III



SAVE the DATE for AMPS 2018!!

This year's Air Medical Physician Symposium will be held on Sunday, October 21st in Phoenix.

We will again use the "Wisdom of the Crowd" approach, with short, concise presentations of a topic followed by group discussion to share information and ideas.

Topics will include:

- Early pharmacologic and ventilatory management of the not-yet-resuscitated patient.
- Defining airway success for our crews, and then confirming what really happened.
- Ultrasound, videolaryngoscopes, and mechanical CPR devices: Are they making a difference?
- The latest evidence for and against the use of whole blood and blood components.
- Transition training for new crewmembers.
- Our role in impacting the flight safety of our programs.
- Dealing with billing denials.

All should find helpful information to bring back and put to use in their home programs. We hope to see you there!!!

Medical Director Core Curriculum Medical Director Forum

AMPA's Medical Director Core Curriculum is going through some changes. We are currently in the process of reviewing all of our content and creating a program that will provide you with the most up-to-date introduction to medical direction of critical care transport services. The first thing you might notice is that the lecture times will be shorter. Without compromising the breadth of information, the lecture times have been reduced to 20-minute sessions.

Possible topics for the Medical Director Core Curriculum: Part II are

- Quality management / crew education, skills maintenance, evaluation
- Education of the referring physician, residents, medical students
- Financial considerations including medical director's roll in reimbursement and denial management
- Medical director liability issues and coverage needs
- Airway and ventilation management / challenges / issues in the HEMS environment
- PIAP/ AMRM
- Flight physician models and roles (aside from medical direction)
- Role of medical director in public relations, politics, and public education
- Involvement of the medical director in hiring / firing (employment/HR issues)

Plans to attend on Saturday, October 20, 2018 in Phoenix.

Watch www.ampa.org for program details as well as on-line registration!





RESEARCH SEED GRANT

An increasing number of young physicians are experiencing difficulty finding the resources and support to do research. Consequently, fewer physicians are choosing careers in research, which is a terrible loss to medicine. Subsequently, there are fewer individuals providing meaningful scientific contributions specific to the air medical/critical care transport communities.

To address this trend, AMPA has established the *Air Medical Physician Seed Grant Research Program* in 2011 to encourage medical students, resident physicians, and fellows to enter the research field. The program provides a \$2,500 (US dollar) grant to help the successful applicant conduct a basic science, applied, or clinical research project. These funds will round out new project budgets, rather than sustain current initiatives, and will favor research in air medical, prehospital, or critical care transport.

In our seventh year, we received several very competitive grant applications and the following has received award monies for 2018:

"Pre-Hospital Focused Assessment with Sonography for Trauma (FAST) and Time to the Operating Room (OR)"

Hani I. Kuttub, MD - Principal Investigator;
Ira Blumen, MD - Advisor/AMPA Member -
University of Chicago Medical Center,
Emergency Medicine

CONGRATULATIONS
to Drs. Kuttub and Blumen!



AMPA International Members

Dear AMPA colleagues

It is about a year since I last wrote to you asking for your feedback on AMPA membership. Since then I have been elected an AMPA Board Member and I wanted to start pushing forward the agenda of our international members.

Reviewing the feedback that I did receive, the most consistent feature was the cost of membership in the context of the benefits that accrue to an international member of a traditionally US based professional organisation. Having taken that to the Board, I am pleased to report that the fees have been significantly reduced to \$200. This reduction has been achieved while maintaining the existing benefits, including subscription to the AMJ and I am grateful to AMPA for making this important concession as we look to build our international membership.

Other features of the feedback included creating some mechanism for networking and the sharing of ideas and good practice. The concept of a regular virtual forum was floated as many of us have difficulty attending meetings together. I would like to move this forward and will communicate soon with a proposal for a Webex meeting with a mix of discussion forum and educational content. Please share your ideas

with me.

In addition I will be working with Pat Petersen to provide some international content in the newsletter. Pat has suggested an article focusing on an international air medical service. Please can I have a volunteer to showcase their service? An article of 500 words with a picture or two should suffice. We would also like to add international events and conferences to the calendar. Please let me know any relevant content for this section.

Finally, I am attending AMTC in Phoenix this October. Are any of you going to be joining me? It would be great to get together for an AMPA International Members meal and we could even invite our North American colleagues for a drink after!

Please feel free to communicate with me directly about any issues or ideas you have relating to AMPA. I look forward to connecting with you soon.

Best wishes

Steve

.....
Dr Stephen Hancock
Transport Consultant (Paediatric Lead)
GMC No. 3588435

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www.embrace.sch.nhs.uk



Yorkshire & Humber Infant & Children's Transport Service

Fully accredited by the Commission on
Accreditation of Medical Transport Systems
www.camts.org www.camtseu.org for ground, fixed
wing and rotary wing.

At the April 2018 AMPA Board of Trustees, two position statements were submitted for review and approval by the Board.

1. Out of Hospital Blood Product Administration and Air Medical Considerations.

2. Ultrasound in the Air Medical Environment,

Both of the statement were approved by the Board and are now submitted to the AMPA membership for a 30-day comment period. The Position Statements are **attached** to this newsletter. Please respond with any comments/concerns no later than August 2, 2018 to Pat at ppeter1111@aol.com.

Thank you!



Welcome to new AMPA Members!

January, 2018

Clouser, Ryan - Jericho, Vermont
Hartsell, Floyd - Boeme, Texas
Rogan, Christopher - Landenberg, PA

February, 2018

Rebecca, Werth - Sugar Grove, Illinois

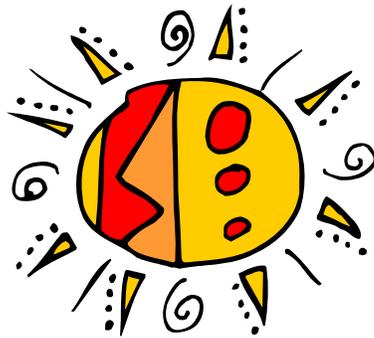
March, 2018

Brown, Seth - Johnson City, Tennessee
Mainprize, David - Calgary, Alberta, Canada
Mandt, Maria - Littleton, Colorado

May, 2018

Aydin, Ani - New Haven, Connecticut
Elder, Jeffrey - Metairie, Louisiana
McBeth, Michael - Milton, Florida

NEW POSITION STATEMENTS



2019 CCTMC

April 15-17, 2019
Hotel Albuquerque at Old Town
Albuquerque, New Mexico

Mark your calendars and plan to attend. We are going to the Land of Enchantment! Better yet make it a priority to put together a lecture and submit a topic (or several!) to this conference! "Call for Speakers" will be open until **August 31, 2018** and can be downloaded at www.ampa.org

The focus of the CCTMC is clinical and designed to address issues pertinent to the prehospital and emergency care of the critically ill and injured patient. Adult and pediatric as well as neonate and obstetrical care discussions are welcome. Presentation of case studies, or topics geared to enhance the professional image of the healthcare professional are also popular. Please only advanced or intermediate topics. Lecture length has been trimmed to 30 minutes, including QA.

Tips:

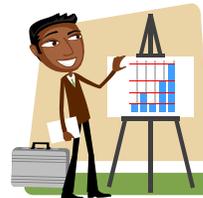
- Make your lecture transport specific
- Include critical care ground
- Don't underestimate the knowledge base of the audience - intermediate or advanced topics only please
- Include new or innovative practices/technologies
- Include pharmacology
- Include pathophysiology
- We love research!
- Participants want to hear cutting-edge, state-of-the-art information

Submit as many topics as you would like to offer to:

2019 CCTMC
Attn: Pat Petersen
Ppeter1111@aol.com

NO LATER THAN August 31, 2018

Compensation for presenting at CCTMC is a \$100 honorarium per lecture and complimentary registration to the conference



2018 CCTMC

Scientific Forum Winners

1st Place:

Administration of Prehospital Cefazolin in Trauma Patients. K. Collopy, BA, FP-C, CMTE; M. Pickford; L Zimmerman, PharmD; W Powers, IV, MD, FACS. New Hanover Regional Medical Center, Wilmington, North Carolina.

- Recipient of Outstanding Research Award sponsored by AMPA, ASTNA and IAFCCP
- \$100 cash prize
- Complimentary registration to 2019 CCTMC

2nd Place:

Feasibility of obtaining in-flight evaluation of endotracheal tube placement with ultrasound during helicopter transport.

Benjamin Nicholson, MD (a), Michael Vitto, DO, MS (b), Amir Louka, MD (b), Harinder Dhindsa, MD, MPH (b), Katie Rodman, MSN, ACNP-BC (c), Jay Lovelady, RN, MSN, NRP (c), Kathy Baker, RN, PhD (b).

Affiliation Listing:

(a) Department of Emergency Medicine, Boston Medical Center, Massachusetts; (b) Department of Emergency Medicine, Virginia Commonwealth University, Richmond; (c) VCU Health Emergency Aviation, Richmond, Virginia.

- \$100 cash prize
- Complimentary registration to 2019 CCTMC

3rd Place:

Vital Sign Patterns Before Shock-Related Cardiopulmonary Arrest. Jessica Davis, DO

(a); Jared Johns, DO (a); David Olvera, EMT-P (b); Allen Wolfe, RN (b); Alin Gragossian, DO (c); Eliana Vaezazizi, BS (d); Edward Pillar, DO (a); Daniel Davis, MD (a, b, e).

Affiliation Listing: (a) Arrowhead Regional Medical Center, Department of Emergency Medicine, Colton, California; (b) Air Methods Corporation, Greenwood Village, Colorado; (c) Drexel University, Department of Emergency Medicine, Philadelphia, Pennsylvania; (d) University of California at San Diego, (e) California University of Science and Medicine, San Bernardino, California.

- \$100 cash prize

Please plan now to submit your original research to CCTMC! Submission details will be provided in January, 2019.



THANK YOU! JOB WELL DONE!

The 2018 CCTMC presented April 9-11 San Antonio, Texas was another stellar conference! Over 350 health care professionals, and exhibitors participated coming from all over the United States and Canada.

Plan on making this conference mandatory event for ALL flight paramedics from the PA Army National Guard.

The vibe is pure and good, pure as

the driven snow.

Cutting edge topics by nation's top critical care providers

Best CCTM conference aside from SMACC.

The conference was extremely educational and I will be able to take away a bunch of useful information. Thank you so much for everything.

Relevant topics current to practice; the anatomy lab is an amazing experience to apply skills hands-on.

Always a very great learning conference - always come away with some things to take back and implement in practice.

It is most likely the best conference I've ever attended.

It rocks! Quality and variety of education.

As always the best conference for critical care transport available!

Thank you to [AMPA members](#) who presented at **Critical Care Procedural Anatomy Program, Ultrasound Workshop and the 2018 Critical Care Transport Medicine Conference**

Faizan H. Arshad, MD

Brendan Berry, MD

Lauri Bolton, MD

Steven Bott, MD

Robert Chaplin, MD

Damon Darsey, MD

Jack B. Davidoff, MD

William C. Ferguson, MD

Christopher Fullagar, MD

Cynthia Griffin, DO

Gravis Gullet, MD

William Hinckley, MD

Michael Jasumback, MD

Michael J. Lauria, MD

Marie J. Mandt, MD

P.S. Martin, MD

Matthew Roginski, MD

Louis Scrattish, MD

Charles W. Sheppard, MD

Frank Tift, MD

Eric Vaughan, MD

Stephen Wheeler, MD

In addition to amazing speakers at CCTMC, we appreciate the support of our [exhibitors](#). This year they included:

ASTNA

AirMed International

Air Evac Lifeteam
 Air Methods Corporation
 Air Force Recruiting Service
 Board of Certificate for Emergency Nursing
 CSI Behring
 emsCharts, Inc.
 First Responder Network Authority
 Hamilton Medical, Inc.
 imageTrend, Inc.
 IAFCPP
 International Biomedical
 International Board of Specialty Certification
 KARL STORZ Endoscopy-America, Inc.
 Laerdal Medical
 LifeBlanket
 Moore Medical
 Ninth Brain
 Physio Control
 Quality in Flow (QinFlow)
 Quick Medical Claims
 Teleflex Medical
 Terason
 University of Maryland, Baltimore County -
 Department of EMS
 Vidant Health
 Vyair Medical
 ZOLL Medical Corporation



CAMTS Report
June 2018
Michael W. Brunko, M.D.
AMPA Representative to the CAMTS Board

The CAMTS Board has met 6 times since last summer with the 10th Edition Standards as the current basis for CAMTS accreditation. The 11th edition draft standards are under review and the 2nd draft are available on the CAMTS website for review and comment. The Board has been reviewing programs with delineations of Medical Mission Types of Care: BLS, ALS, Emergency Critical Care, Intensive Care and Specialty Care designations. As mentioned in the past, Intensive Care is not currently being accredited but, in my opinion, it is evident which programs meet the criteria regarding scope of care, crew training and capabilities to truly care for the most critical patients out of hospital.

The CAMTS Board physician members representing AMPA, ACEP, ACS, AAP and

ACCT have been reviewing several clinical guidelines for all programs applying for initial and reaccreditation. The purpose of the review is to attempt to objectify whether medical directors are updating their clinical guidelines on a regular basis using evidence based standards that are accepted at the current time. I am sure most you reading this have received "feedback" in regard to your protocols and have personally experienced the critical elements that the clinicians on the Board feel are important. Interestingly, we have found that when a program is lacking in up-to-date guidelines in the protocols we review, many of the program's other protocols are lacking in timely review. Several new clinical guidelines are being added to the critical element review soon.

Also, in attempt to aid in your future reviews as a Medical Director, be aware that it is a CAMTS standard that the Medical Director attend staff meetings, show evidence of being involved in administrative decisions of the programs and participate in the hiring process and continuing education of crew members. These issues seem to be some of the most cited deficiencies for medical directors.

As always, feel free to contact me with any questions, recommendations that you feel would be of benefit or interest to the CAMTS Board.



Brought to you by AAMS, AMPA,
ASTNA, IAFP, NAACS, NEMSPA
October 22-23, 2018
Phoenix, Arizona

AMPA activities at AMTC:

- Board of Trustee Meeting - Friday, October 19, 2018 - Sheraton Phoenix Hotel
- Medical Director Core Curriculum: Part II - Saturday, October 19, 2018 - Sheraton Phoenix Hotel
- Air Medical Physician Symposium - Sunday, October 20, 2019 - Sheraton Phoenix Hotel

The annual AMTC provides up-to-date information on the latest techniques and innovative approaches to air medical practice from community experts while giving attendees lots of opportunities to earn continuing educational credits



Visit the AMPA Exhibit at AMTC!
 You can buy AMPA merchandise; renew your membership; purchase a deeply discounted, conference special print version of *Principles and Direction of Air Medical Transport, 2nd Edition*; and meet your AMPA Board of Trustees.



Entrance Survey

Medical Director Core Curriculum/ Air
 Medical Physician Symposium
October 14-15, 2017
 Fort Worth, Texas

An entrance survey is conducted annually at the Medical Director Core Curriculum/ Air Medical Director Symposium to determine how AMPA conferences should be structured, and capture trends in member needs for education. The goal is to improve a participant's ability to provide and improve medical direction and oversight of clinical care in the medical transport environment. The results are

summarized as follows and give you a "snapshot" of those who participated:

71 Responses

What is your age?

20-30 = 3
 31-40 = 14
 41-50 = 31
 Over 50 = 23

How did you hear about AMPA?

17 Colleague
 7 Website
 6 Residency/Fellowship
 Other: AMJ, AMTC Exhibit, Employer, Mailing, CAMTS, CCTMC, PS Martin, Bill Hinckley, Jack Davidoff, Dave Thomson

Are you an AMPA member?

65 Yes 5 No

How long have you been an AMPA member?

40 1-5 Years
 5 6-10 Years
 8 11-15 Years
 2 16-20 Years
 7 21 + Years

Will you renew your AMPA membership?

61 Yes 1 No

What country do you reside?

USA = 59
 Canada = 4
 Australia = 1
 Finland = 1

Are you a medical director?

57 Yes 10 No

If so, how long have you been a medical director?

26 1-5 Years
 11 6-10 Years
 6 11-15 Years
 7 16-20 Years
 8 21 + Years

How much time do you spend on medical direction or on air medical transport activities?

18 1-10 %
 15 11-20%
 10 21-30%
 20 Over 31%

What is your specialty?

- 54 Emergency/EMS
- 6 Critical Care
- 5 Peds Critical Care
- 4 Anesthesia
- 3 Neonates
- 1 Pediatrics
- 1 General Surgery

Is your transport service CAMTS or EURAMI certified? 51 Yes 15 No

Rank the following conference motivation factors to the degree of importance to you.

- Topics Covered (46)
- CME Provided (28)
- Location of Meeting (23)

What was other motivation to attend this conference?

- 7 Networking
- 3 Job requirement
- 3 AMTC
- 3 Completing Core
- Other: Training, AMPA, Skills to move program forward, Nice people, Pat, Professional development

Who paid for you to attend this preconference?

- 19 Self
- 17 Program
- 16 Hospital
- 3 CME account
- 3 University
- 1 AMTC Speaker

Have you attended an AMPA preconference before? 52 Yes 15 No

If yes, what have you learned that you have incorporated into your practice?

- Various QI initiatives - GAMUT.
- Medical director concepts.
- Safety initiatives, crew/interpersonal management.
- Mostly it has encouraged me to implement things that were already in process.
- Multiple items through the years.
- Too numerous to list.
- Yes, many things.
- Not really. The scope of our AirOps is very narrow, but knowledge base is good.
- QA procedures.

Protocols are updated routinely with best practices from AMPA, as well as evidence based care.

A lot over the years.

Summation of multiple ideas.

Crew safety initiatives.

Curriculum is relevant to daily director practice.

Big push to improve documentation standards to include the "why" as well as what happened.

You betcha. Hundreds of examples.

Patient safety.

It's always a great forum to share ideas and innovations.

Assisted with local protocol revision.

Has what you have incorporated had any effect on program effectiveness or patient outcome?

Improved performance and quality

Critical care techniques

Improved process and medical practices.

Too many to list.

National diversion program.

More accountability and desire for learning

Patient care in the plane.

We've had fewer patients lose ground clinically while en route.

Will you attend all parts of the Core Curriculum? 64 Yes 6 No

Are you staying in the city to attend the AMTC?

51 Yes 18 No

Only reason to attend was AMPA meetings

Would you attend these AMPA conferences if

they were not presented in conjunction with

AMTC? 55 Yes 4 No

6 Maybe*

*It's easier to get time off to them when combined

Would you benefit from a Medical Director Certification?

49 Yes 16 No

Please rank these conferences in order of value or benefit to you:

1. Medical Director Core Curriculum
2. Air Medical Physician Symposium
3. AMTC
4. AIRMED Congress
5. CCTMC



Calendar of Events

October 1-4, 2018

ACEP Scientific Assembly
San Diego, California
www.acep.org

October 19, 2018

AMPA Board Meeting
Phoenix, Arizona

October 20, 2018

Medical Director Core Curriculum: Part II
Phoenix, Arizona

October 21, 2018

2nd Annual AMPS Conference
Phoenix, Arizona

October 22-24, 2018

Air Medical Transport Conference (AMTC)
Phoenix, Arizona

November 2-6, 2018

AAP National Conference & Exhibition
Orlando, Florida

January 7-12, 2019

NAEMSP Annual Meeting
Austin, Texas
www.naemsp.org

April 12-14, 2019

AMPA Board of Trustees - Strategic Planning
Santa Fe, New Mexico

April 14, 2019

CCTMC Critical Care Procedural Anatomy Program
Albuquerque, New Mexico

April 15-17, 2019

Critical Care Transport Medicine Conference
Albuquerque, New Mexico

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Ultrasound in the Air Medical Environment

Position Statement of the Air Medical Physician Association

Approved by the AMPA Board of Trustees, April 7, 2018

Background

The utility of ultrasound in the emergency medicine setting is well established. Ultrasound has proven to be effective and critical to improving bedside diagnosis, monitoring of a patient's response to treatment, and in improving the safety of procedures. With improvements in size, portability, and cost, there is increasing interest in utilizing ultrasound in the prehospital environment.¹ The Air Medical Physician Association believes that prehospital ultrasound use requires programs to provide adequate training, a robust quality assurance program, and safeguards to ensure that ultrasound use does not delay transport. Ultrasound use when clinically indicated is paramount.

Training

Prehospital ultrasound use is a relatively new procedure and has not traditionally been taught during paramedic or nursing school. As a result, the majority of practicing air medical providers have not had formal training in its use. Therefore, programs utilizing ultrasound must ensure that providers participate in a formal initial training program. Such program should include both a didactic and practical component.

Initial didactic training should at a minimum discuss the following:

1. *Identify the function of basic controls of the ultrasound machine*
2. *Discuss the basic physics principles of ultrasound*
3. *Demonstrate how to optimize ultrasound images*
4. *Describe normal ultrasound anatomy*
5. *Describe common pathological ultrasound anatomy*
6. *Discuss basic ultrasound artifacts and their use*
7. *Describe the expectations of ultrasound imaging during patient care encounters.*

Initial practical training should at a minimum involve the following:

1. Procedural skills utilizing an ultrasound standardized patient, task-trainer, and/or phantom prior to live human attempts.
2. Image acquisition and interpretation of studies involving ultrasound standardized patients and scanning on live humans where normal and abnormal scanning anatomy can be found.

Quality Assurance / Quality Improvement

As with Emergency Ultrasound (EUS), ultrasound use by critical care transport personnel should have a thorough and sufficient quality assurance (QA) and quality improvement (QI) plan.² The QA/ QI process is an essential component for integration of ultrasound into prehospital care.

Air Medical Physician Association

Programs integrating the use of ultrasound in patient care should concurrently develop a thorough QA/ QI process. The American College of Emergency Physicians Emergency Ultrasound Imaging Criteria Compendium can be utilized to guide the QA/ QI process.³

In agreement with the ACEPs Ultrasound Program Management, the QI process should attempt to achieve the following:

1. Ability to obtain and capture images or clips for review
2. Critical care pre-hospital personnel must document relevant findings/interpretation for each study/ procedure
3. Images are to be reviewed by a medical director, ultrasound QA expert, or providers who are appropriately qualified and experienced in EUS
4. Feedback should be provided to the prehospital personnel on technical skills as well as clinical interpretations
5. Feedback should be reviewed by all parties in a timely manner.
6. All data, images, and clips including documentation and feedback should be securely stored for additional review
7. Creation of processes for communication with the patient, providers, and receiving facilities after identifying missed or incidental findings

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Out of Hospital Blood Product Administration and Air Medical Considerations

Position Statement of the Air Medical Physician Association

Approved by the AMPA Board of Trustees, April 7, 2018

BACKGROUND

Numerous studies have demonstrated the benefit to patient survival of prehospital blood product administration.¹⁻⁸ In order to be safely and effectively implemented, programs must develop protocols and procedures specific to the implementation for storage and administration of the blood products. The most appropriate blood product will vary with the indication for transfusion.¹⁻⁸ Paramount to a protocol of blood product transfusion is protocols related to hemorrhage control.

PROTOCOL OF BLOOD PRODUCT ADMINISTRATION

Air medical programs must develop protocols for blood product administration which include:

1. Indications for blood product administration for medical and trauma patients
2. Contraindications to blood product administration
3. Procedure for blood product administration
4. Amount of blood product to be transfused and endpoints of blood product resuscitation
5. Documentation requirements related to blood product administration
6. Potential transfusions reactions and treatments related to these reactions (hemolytic reactions, circulatory overload, transfusion related acute lung injury)

7. Communication with receiving center of prehospital blood product administration

Air medical programs must develop policies related to blood product storage and transport to include:

1. Insulated storage method
2. Appropriate storage labeling
3. Initial validation of cooler's ability to maintain required temperature
4. Yearly validation of storage cooler ability to maintain temperature
5. Temperature monitoring
 - a. Recommended continuous wireless electronic monitoring with measurement every minute with connection to monitoring station
 - b. Minimum monitoring requirement of every 4 hours
6. Temperature control
 - a. $\leq 6^{\circ}\text{C}$ (42°F) refrigeration
 - b. $\leq 10^{\circ}\text{C}$ (50°F) during transport
 - c. Method for discarding units if above temperature control
7. Documentation of compliance with blood product storage temperature control

Air medical programs must develop protocol(s) for the type of blood product to be carried with consideration to:

1. All blood products
 - a. Mechanism for exchanging blood product units with the issuing blood bank when nearing expiration date

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2. Packed red blood cells (PRBC)
 - a. Preferred O-negative
 - b. Method of notifying receiving center if female of child-bearing age receives O-positive transfusion
 - c. Shelf-life: 42 days from date of donation
3. Fresh frozen plasma (FFP)
 - a. Must be utilized within 5 days once thawed
 - b. One time thaw permitted
 - c. Shelf-life of one year while frozen
4. Liquid plasma
 - a. Shelf-life of 28 days (never frozen)
 - b. Slightly less clotting factors with increasing shelf-time
5. Whole blood
 - a. Shelf-life of 10 days
 - b. Limited by platelet activity
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