

# Section on Critical Care Newsletter

American Academy  
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Copyright © 2010 American Academy of Pediatrics  
Section on Critical Care

Summer 2010

## In This Issue

Chair's Report	1
Pediatric Critical Care Scientist Development Program	2
Fellowship Program Directors' Committee	2
Distinguished Career Award	2
Critical Care eNewsletter	3
SOCC Educational Program Schedule	4
Upcoming CME Events	8
Welcome to New Members	8
AAP Grand Rounds—Critical Care	8
WFPICCS Report	9
PREP-ICU 3rd Year	10
Drug Update	11
ACGME-Pediatric Review Committee Update	14
SOCC Executive Committee 2009-2010	14

*This is a newsletter of the Section on Critical Care of the American Academy of Pediatrics. The opinions expressed herein do not necessarily reflect the opinions of the American Academy of Pediatrics.*

### Editor

Mary Lieh-Lai, MD, FAAP  
mliehlai@med.wayne.edu

### Staff

Sue Tellez, Manager  
stellez@aap.org

### Newsletter Designer

Ruth Podjasek  
rpodjasek@aap.org

## Chair's Report — Donald D Vernon, MD, FAAP



**Donald D Vernon**

Dear PCCM Colleagues:

The past year has been a good one, and an interesting one for the Section on Critical Care (SOCC). The membership of the SOCC Executive Committee has remained unchanged, with both Dr Mary Lieh-Lai and me being re-elected; we both ran unopposed which probably improved our chances of winning. A few months ago, an online survey of the SOCC membership was conducted to better understand the members' perception of the SOCC and the AAP in general, and to learn how the SOCC might better address the desires of its membership. Respondents were almost all attending physicians (90%), most of whom (70%) had been in practice 10 years or more. The majority worked in a medical surgical PICU (80%) rather than a pediatric cardiac ICU (20%). A bit more than half (55%) worked in an academic medical center although the numbers here were incomplete. Almost all (>90%) were members of the Society of Critical Care Medicine (SCCM) as well as the AAP. The aspects of AAP/SOCC membership thought to be most beneficial were provision of a voice within the AAP, and the SOCC newsletter.

Last fall's SOCC program at the AAP National Conference and Exhibition (NCE) in Washington, DC, was exceptionally good, as we celebrated the 25<sup>th</sup> anniversary of the founding of the Section on Critical Care. We were able to recognize, and hear from, some of the real giants of our field, including several people who helped create our specialty. A 25<sup>th</sup> Anniversary Booklet outlining the history and accomplishments of the SOCC over the past quarter century was created by SOCC Executive Committee member Dr Ed Conway, and is still available in PDF form on the Section website. If you missed the meeting, be sure to download the booklet as it is an entertaining look at the last quarter-century of pediatric critical care. In

addition, there were a large number of research presentations at the Section Program that were of extraordinarily high quality.

The SOCC program at the upcoming NCE in San Francisco also promises to be excellent. Dr John Straumanis has done his usual terrific job in creating the educational program. It begins with a half-day of research presentations, followed by an afternoon focusing on education in the pediatric intensive care unit. The next day, the SOCC is jointly sponsoring sessions on resuscitation controversies and the American Heart Association Guidelines for 2010, working with the Sections on Cardiology, Emergency Medicine, and Hospital Medicine. It promises to be an interesting and entertaining 1½ day program, and I encourage all SOCC members to attend.

Another recent activity of the SOCC was the creation of a webinar on Critical Care Coding, presented by several senior members of the SOCC as well as other experts in the area. The webinar provided information on the new pediatric critical care codes as well as other more general information in the area of billing and coding. The webinar took place June 30, but content has been made available on the Section website for SOCC members.

I would like to repeat the plea I made last year, and ask you as SOCC members to consider increasing your involvement in the Section, as it has much to offer its members. For instance, the quality of the SOCC educational programs at the NCE has been consistently excellent, and promises to be so again this year; unfortunately, attendance by SOCC members has been light, with less than half of survey respondents attending even one NCE in the past 5 years. It is a great place for junior investigators to present their research, and I suggest that you urge your

*Continued on p. 2*

**See the Section on Critical Care  
NCE Educational Program  
beginning on p 4**

## The Pediatric Critical Care Scientist Development Program (PCCSDP)

The Pediatric Critical Care Scientist Development Program (PCCSDP) is a K12 program funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). The program began in 2004, and is entering its seventh year of funding. There have been 19 PCCSDP Scholars since the program began, and of these 19, ten have obtained independent K08 or K23 NIH grants.

The program has two components. The first component, Phase I, is generally 2 years in length, and provides K-type funding to the Scholar's institution. The second component, Phase II, is the remainder of a five year total period, and is generally funded either by the institution or by the Scholar's own K award. It is a requirement for admission to the program that the institution makes a commitment to protect the Scholar for research development for the entire five year period.

One of the benefits of applying for the PCCSDP is participation in the annual research retreat, which will be held November 4 to 7, 2010, in Deer Valley, Utah. Applicant interviews are conducted during this retreat, so attendance at this retreat is mandatory for applicants. In addition to the interview process, applicants devote time listening to Scholar scientific presentations and discussions of scientific mentorship and faculty development. Please mark these dates on your calendar!

We anticipate having three to five available positions for funding beginning January 2011. The application deadline for the program

is October 1, 2010. Applications are submitted in the current NIH K award format, and instructions are available on the NIH website. The entire application should be submitted to Dr J. Michael Dean, the PCCSDP program director, at the University of Utah. Applications should be submitted electronically by email directly to Dr Dean at [mike.dean@hsc.utah.edu](mailto:mike.dean@hsc.utah.edu) and a hard copy should also be mailed. Detailed current instructions for the application procedure, including the mailing address, will be available at the website: [www.pccsdp.org](http://www.pccsdp.org) after June 1, 2010.

Questions about the PCCSDP should be directed to Dr Dean at the previously mentioned email address, with the subject heading "PCCSDP Applicant." This subject heading avoids the dreaded Dr Dean spam machine and will assure a prompt response. Dr Dean does not participate in the selection of Scholars and can provide advice and feedback throughout the application process.

### SOCC Distinguished Career Award 2010



M. Michele Moss, MD is Professor and Vice Chairman in the Department of Pediatrics at the University of Arkansas for Medical Sciences. She is a pediatric intensivist and cardiologist at Arkansas Children's Hospital. She received her MD from the University of Texas Southwestern Medical School. She completed her Pediatric residency at The

Children's Hospital of Alabama and her Pediatric Critical Care and Cardiology fellowships at Yale School of Medicine. She is a fellow in the American Academy of Pediatrics, American College of Cardiology and the American College of Critical Care Medicine. She has served as Chair of the AAP Section on Critical Care and as Chair of the SCCM Section on Pediatrics. She currently serves on the AAP Section on Transport Medicine Executive Committee and is the Chancellor of the ACCM.

*Congratulations to Dr Michele Moss!*

### Fellowship Program Directors' Committee

We will soon start our second year of using ERAS for fellowship program applications. The candidates can upload their applications as of July 1, and the programs can access the files in mid-July. This year the match list is due 11/17/2010 and Match Day is 12/1/2010. In its first year, the vast majority of programs used ERAS, but it is too early to describe any trends with respect to its effect on the pool of applicants to specific programs. As in past years, about ¾ of positions filled in the match.

The Fellowship Program Directors are investigating a plan to create an on-line repository of goals and objectives and curriculum design resources. This project may grow to include other relevant materials such as evaluation tools.

Another project in the early stages of discussion centers on creating a research committee within the group of program directors to advance scholarship in medical education research. We have had some lively discussions, and creative solutions have been recommended in response to the recently released proposed new work hour rules by the ACGME.

Finally, the Pediatric Section of SCCM has also created a Fellows' committee. This group will work very closely with the Program Directors' group to develop new initiatives aimed at improving fellow education.

Denise Goodman, MD  
Chair, PCCM Fellowship Program Directors Committee

### Chair's Report *Continued from p. 1*

junior faculty, fellows, residents, and even nurses, to consider this venue. In addition, AAP in general provides a voice for pediatric subspecialists that is especially needed now, with the uncertainty of health care reform hard upon us. And, as noted in the recent AAP email message to members, the AAP can point to a number of accomplishments that directly benefit subspecialists. These include being instrumental in ensuring new Medicaid funding so that Medicaid reimbursement might approach parity with Medicare levels, and in inserting subspecialist education loan repayment provisions into the health reform law. Please consider engaging with the SOCC and the AAP.

Have a great summer. Looking forward to seeing you all in San Francisco in October!

DV



## Critical Care eNewsletter Highlights—July 1, 2010

### ACGME Proposes Revised Guidelines for Resident Work Hours

The Accreditation Council for Graduate Medical Education (ACGME) is proposing new standards for residents, calling for 16-hour shifts and more oversight of less-experienced physicians.

The draft regulations aim to promote patient safety and reduce medical errors by enhancing work conditions for sometimes sleep-deprived junior physicians. Residents in their second year and beyond may still work 24 hours, and 80-hour maximum work weeks would remain for all hospital residents. All residents and their supervisors would be required to explain their roles to patients and note that supervisors are ultimately in charge of their care.

The ACGME last updated its rules for resident work hours in 2003 when it limited shifts to 30 hours, required that one day in seven be free from all educational and clinical responsibilities, and required a 10-hour break between all daily duty periods and after being on call in the hospital.

Public comment on the proposal will be accepted until August 9, 2010. The new standards will go into effect in July 2011, at which point ACGME representatives will visit teaching hospitals to make sure they are complying.

### Less Sedation Shortens ICU, Hospital Length of Stay

A lighter touch with sedation in critically ill patients can translate into a host of benefits, according to the results of a new quality improvement project at Johns Hopkins University that involved reducing the medication dosages in their medical intensive care unit (MICU).

The project included 57 patients with acute respiratory failure who were admitted to the 16-bed MICU from February to August 2007. MICU length of stay (LOS) was reduced by 2.1 days, while hospital LOS was reduced by 3.1 days. Compared with the same four-month period in the previous year, this represented a 30% reduction in MICU LOS and an 18% reduction in hospital LOS. Patients also were kept more awake, enabling caregivers to provide more rehabilitation treatments, which led to increased mobility among patients.

The reduction "has permitted our MICU to admit 20% more patients during the four-month QI period compared with the prior year," noted lead author and Society of Critical Care Medicine member Dale M. Needham, MD, PhD. "It appears that we have a win-win situation -- improved patient outcomes with reduced LOS, not to mention the ability to handle more critically ill patients."

*Pharmacy Practice News* highlights how the John Hopkins team achieved this success.

## WEBINAR ARCHIVE

Duration 90 min.  
Presented 06/30/2010

### Pediatric Critical Care Coding & Billing 2010

[http://www.aap.org/moc/ppa/Critical-Care-Webinar/open\\_me.htm](http://www.aap.org/moc/ppa/Critical-Care-Webinar/open_me.htm)

**Speakers:** Donald Vernon, MD, FAAP  
Stephanie Storgion, MD, FAAP  
M. Michele Moss, MD, FAAP  
Andrada Pop, CPC  
Linda Walsh, MAB

#### Program Outline:

- CPT Coding Basics - Idea to Inception
- Coding & Documentation in Pediatric Critical Care
- What's New, Bundled & Unbundled Codes, Required Documentation
- Special Procedure & Other Codes (ECMO, Transport, Ultrasound, CRRT, Sedation, Consultation, Advanced Practice Nursing)
- Real World Examples

This webinar is targeted to intensivists, hospitalists, nurses, and other health care professionals involved in the care of critically ill and injured children. Stay tuned for a Q&A document featuring questions asked during the webinar which will be posted to the SOCC website in the coming weeks. The webinar agenda (<http://www.aap.org/sections/critcare/WebinarAgenda.pdf>), speaker bios (<http://www.aap.org/sections/critcare/WebinarBios.pdf>), PowerPoint presentations (<https://comp11.eventcenterlive.com/cfm/ec/register/reg.cfm?BID=1&RegID=FF893E4E>) and other handouts are now available on the archived site link above.

## SCCM RICU: picucourse



The PICU course at [www.sccm.org](http://www.sccm.org) continues to be expanded and upgraded. There are currently 41 presentations on various core and supplemental pediatric ICU topics. Many of the core topics have voice-over narration to allow participants to use the presentations as they were intended by the author.

In addition, trainees that are registered through a training program can utilize the self-assessment post-test to gauge their understanding of the material. These post-test questions are also in the process of being upgraded.

Anyone interested in revising online content please contact Jeff Clark ([jclark@med.wayne.edu](mailto:jclark@med.wayne.edu)) or Kate Potter ([katherine.potter@louisville.edu](mailto:katherine.potter@louisville.edu)).

The PICU course material can be accessed through the SCCM website under the "LearnICU" tab or at:

[http://www.learnicu.org/Clinical\\_Practice/Fundamentals/RICU/Pages/default.aspx](http://www.learnicu.org/Clinical_Practice/Fundamentals/RICU/Pages/default.aspx)



# CHILDREN'S HEALTH CLIMBING TO NEW HEIGHTS

American Academy  
of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN®

OCTOBER 2-5, 2010 | SAN FRANCISCO, CA | THE MOSCONE CENTER

*Walk Among the Giants of Pediatrics*

## AAP Section on Critical Care (SOCC) H-Program Schedule October 3-4, 2010 (Sunday/Monday) AAP National Conference & Exhibition San Francisco, California

**SUNDAY, OCTOBER 3, 2010**  
**8:00 AM – 6:00 PM (H2016)**

### Section on Critical Care Scientific Abstract, Educational Program & Reception

The morning session will include presentation of scientific research abstracts, posters, professor walk rounds, and audience discussion of important topics in pediatric critical care. The afternoon session will examine the changes affecting the education of residents and fellows such as impact of duty hours in the PICU and use of simulation, as well as teach non-clinical skills for improving the educational process, and will include a panel discussion. The program will conclude with presentation of the SOCC Distinguished Career Award and a reception for Section members to include a business meeting, presentation of abstract awards – physician, nursing, and in-training – as well as plenty of time to meet faculty and network with colleagues.

### SECTION ON CRITICAL CARE SCIENTIFIC ABSTRACT PRESENTATION SESSION

8:00 – 8:15 am **Introduction:** *John Straumanis, MD, FAAP*

8:15 – 9:30 am **Abstract Session I**

- 8:15 am #11772 **Kristina Deeter, MD, FAAP**  
How a Little Sedation Protocol Can Have a Big Impact On a Pediatric Intensive Care Unit
- 8:30 am #11489 **H. J. Ladd, MD**  
Neutrophil Aldose Reductase Expression in Pediatric Acute Lung Injury and Acute Respiratory Distress Syndrome
- 8:45 am #10923 **Richard B. Mink, MD, FAAP**  
Reliability and Validity of Measurement Instruments to Assess Pediatric Resident Airway Skills
- 9:00 am #10393 **M. Hossein Tcharmtchi, MD, FAAP**  
Impact of Duty Hour Limits On Attending Physicians; Effects of Accreditation Council for Graduate Medical Education Duty Hour Limits On Intensive Care Unit Attending Physician Fatigue, Work Hours, Self-Reported Errors, and Patient Safety
- 9:15 am #10656 **Treva C. Ingram, MD**  
Position 16 Polymorphisms in the ADRB2 Gene in Hospitalized Pediatric Patients

*Continued on p. 5*

9:30 – 10:30 am **Poster Walk Rounds & Coffee Break**

**NOTE: Posters should be set up between 7-8am on Sunday, October 3 and removed by 6 pm the same day. Any poster materials left in the room at the conclusion of the SOCC program on Sunday will be discarded.**

- #9900 **William van Beever, DO**  
Palliative Balloon Dilatation of Cor Triatriatum in An Adolescent Athlete
- #9419 **Sonal R. Chandratre, MD**  
Variations in Management of Diabetic Ketoacidosis Amongst Pediatricians and Sub-Specialists in United States
- #9750 **Chur Chin**  
Gold Nanoparticle-Choline Complexes Can Block Nicotinic Acetylcholine Receptors
- #9866 **Ulka Kothari, MBBS**  
Hypertonic Saline for Cerebral Edema in Diabetic Ketoacidosis
- #10878 **J. Caplow**  
Non-Invasive Assessment of Changes in Cardiac Output in Ambulatory Infants Hospitalized with Bronchiolitis
- #10927 **Adalberto Torres Jr, MD, MS, FAAP**  
Prolonged Administration of Dexmedetomidine in Infants After Cardiac Surgery
- #10123 **K. Sarah Hoehn, MD, FAAP**  
Despite Less Trust and More Mistrust, African American Parents in the PICU Report No Differences in Satisfaction with Communication
- #11503 **Ruifang Xu, MD**  
Highly Successful Bedside Transpyloric Feeding Tube Placement by Nursing Staff in the Pediatric Intensive Care Patients
- #11559 **Jonathan Byrnes, MD, FAAP**  
Hemolysis Is Increased In Cardiac Extracorporeal Life Support With Roller-Head Pumps As Compared to Centrifugal Pumps

10:30 – 12:00 pm **Abstract Session II**

- 10:30 am #9175 **Sheila J. Hanson, MD, MS, FAAP**  
Incidence and Risk Factors for Venous Thromboembolism in Critically Ill Children with Cardiac Disease
- 10:45 am #11718 **Barry Markovitz, MD, MPH, FAAP**  
Severity-Adjusted Mortality and PICU Volume: Role of Reason for Admission
- 11:00 am #11650 **Mayer Sagy, MD, FCCM, FCCP, FAAP**  
Utilizing a Pediatric Disaster Coalition to Develop Guidelines for Increasing the Overall Pediatric Critical Care Surge Capacity of a Large City
- 11:15 am #9397 **Duraisamy Balaguru, MBBS, MD**  
Normal Values of Regional Oxygen Saturation Indices (rSO<sub>2</sub>) Using near Infra-Red Spectroscopy in Ambulatory Setting

*Continued on p. 6*

- 11:30 am #11062 **Marilyn M. Kioko, MD**  
Using High-Fidelity Simulation to Assess the Efficacy of the Broselow-Luten Software in the Resuscitation of Critically-Ill Pediatric Patients
- 11:45 am #9109 **Maria Marchenko, MD, FAAP**  
The Effect of Sevoflurane Exposure On RSV Infection in Mice

**SUNDAY, OCTOBER 3, 2010**  
**1:00 PM – 6:00 PM (H2016)**

**SECTION ON CRITICAL CARE EDUCATIONAL SESSION**

**"Education in the PICU: Teaching the Next Generation"**

- 1:00 – 1:10 pm **Introduction**  
*John Straumanis, MD, FAAP*
- 1:10 – 2:00 pm **Duty Hours: Do we have time to teach?**  
*Mary Lieh-Lai, MD, FAAP*
- 2:00 – 2:50 pm **Simulation: Is it the answer?**  
*Louis P. Halamek, MD, FAAP*
- 2:50 – 3:10 pm **Coffee Break**
- 3:10 – 4:00 pm **Professionalism: How do we teach it?**  
*Richard Mink, MD, FAAP*
- 4:00 – 4:30 pm **Panel Discussion**
- 4:30 – 5:00 pm **Presentation of Distinguished Career Award 2010**  
*Recipient: M. Michele Moss, MD, FAAP*
- 5:00 – 6:00 pm **SOCC Reception, Business Meeting and Awards Ceremony**  
**— Best Abstract, Best Nursing Abstract, In-Training Abstract —**

**MONDAY, OCTOBER 4, 2010**  
**8:30 AM – 12:00 PM (H3024)**

**Joint Section on Critical Care, Cardiology and Cardiovascular Surgery, Emergency Medicine, and Hospital Medicine Program: Resuscitation Controversies 2010**

This is a multi-section joint program designed to update cardiologists, intensivists, hospitalists, pediatricians, and emergency medicine physicians on important new clinical recommendations from the American Heart Association (AHA) on cardiopulmonary resuscitation (CPR). Topics to be included are the physiology of CPR, use of hypothermia, controversies of vasopressin versus epinephrine, goal directed therapy in shock, and CPR in children with congenital heart disease. The rationale of changes in the AHA Pediatric Advance Life Support to these topics will be discussed including the evidence based grading used to evaluate the literature.

*Continued on p. 7*

## JOINT SECTION ON CRITICAL CARE, CARDIOLOGY, EMERGENCY & HOSPITAL MEDICINE EDUCATIONAL SESSION

### "Resuscitation Controversies 2010: American Heart Association Guideline Revisions for 2010"

- 8:30 – 8:35 am      **Introduction**  
*John Straumanis, MD, FAAP*
- 8:35 – 9:05 am      **The Physiology of CPR: How does it work?**  
*Marc D. Berg, MD, FAAP*

## MONDAY, OCTOBER 4, 2010

### 8:30 AM – 12:00 AM (H3024)

## JOINT SECTION ON CRITICAL CARE, CARDIOLOGY, EMERGENCY & HOSPITAL MEDICINE EDUCATIONAL SESSION CONTINUED

- 9:05 – 9:40 am      **Hypothermia: To chill out or not?**  
*Ericka Fink, MD, FAAP*
- 9:40 – 10:15 am      **Ventilation and CPR: Do we go straight to "C"?**  
*Marc D. Berg, MD, FAAP*
- 10:15 – 10:30 am      **Coffee Break**
- 10:30 – 11:05 am      **Goal Directed Therapy for Resuscitation: Where's the end zone?**  
*Todd Kilbaugh, MD, FAAP*
- 11:05 – 11:40 am      **Resuscitation in Congenital Heart Disease: Is it different if they are supposed to be blue?**  
*Brad Marino, MD, FAAP*
- 11:40 – 12:00 pm      **Panel Discussion**  
*All speakers*

### *Other AAP Section on Critical Care Sponsored Sessions*

## SATURDAY, OCTOBER 2, 2010

### 8:30 AM – 9:15 AM (F1047)

**Saving Lives: The Early Recognition of the Critically Ill Child**  
*James Hanson, MD, FAAP*

This session will open with a scenario of a critically ill child in an office waiting room or exam room. Early signs and symptoms of critical illness will be discussed, including identification by personnel (office staff, nurse, etc) not used to seeing critically ill children. Office preparedness for emergencies and critical illness will also be addressed.

---

**Register NOW for the AAP National Conference & Exhibition at [www.aap.org/nce](http://www.aap.org/nce).**

**View sessions by topic at <http://www.aapexperience.org/2010/downloads/sessions.pdf>.**

## Upcoming CME Events

### **Pediatric Fundamental Critical Care Support Course**

July 21-22, 2010 - Minneapolis, Minnesota

[http://www.sccm.org/FCCS\\_and\\_Training\\_Courses/PFCCS/Pages/SponsoredCourse.aspx](http://www.sccm.org/FCCS_and_Training_Courses/PFCCS/Pages/SponsoredCourse.aspx)

### **Pediatric Hospital Medicine 2010**

July 22-25, 2010 • Minneapolis, Minnesota

<http://phm2010.aap.org/>

### **SCCM Fundamentals of Critical Care Ultrasound**

July 25-26, 2010 • Chicago, Illinois

<http://www.sccm.org/Conferences/Topics/Ultrasound/Pages/default.aspx>

### **SCCM Multiprofessional Critical Care Board Review Courses-Adult and Pediatric**

July 27-31, 2010 • Chicago, Illinois

[http://www.sccm.org/Conferences/Topics/Board\\_Preparation\\_and\\_Review/Pages/default.aspx](http://www.sccm.org/Conferences/Topics/Board_Preparation_and_Review/Pages/default.aspx)

### **SCCM Pharmacotherapy in Critical Illness**

September 16-17, 2010 • Las Vegas, Nevada

<http://www.sccm.org/Conferences/Topics/Pharmacotherapy/Pages/default.aspx>

### **AAP Section on Critical Care**

**Scientific & Educational Program**

**October 3-4, 2010**

**San Francisco, CA**

<http://www.aap.org/sections/critcare/SOCC2010nce.doc>

### **AAP National Conference & Exhibition**

October 2-5, 2010

San Francisco, CA

<http://www.aapexperience.org/>

### **Optimizing Mechanical Ventilation in 2010**

October 8-10, 2010 - St. Paul, Minnesota

<http://mechanicalventilationconferencecmn.com/>

### **SCCM 40th Critical Care Congress**

January 15-19, 2011

San Diego, CA

[http://www.sccm.org/Annual\\_Congress/Program/Pages/default.aspx](http://www.sccm.org/Annual_Congress/Program/Pages/default.aspx)

## **AAP GRAND ROUNDS Critical Care July 2009-July 2010**

Michele Munkwitz

**Dexmedetomidine vs Midazolam in Critically Ill Patients: a Randomized Controlled Trial**

AAP Grand Rounds, Jul 2009; 22: 7.

Kate Benton

**Antivenom Therapy of Scorpion Stings in Children**

AAP Grand Rounds, Aug 2009; 22: 18.

Luke Zabrocki and Gitte Y. Larsen

**Preventing Ventilator-Associated Pneumonia**

AAP Grand Rounds, Aug 2009; 22: 21.

Tara J. Lemoine

**The Nose Knows: Toxic Shock and Rhinosinusitis**

AAP Grand Rounds, Sep 2009; 22: 26.

Susan L. Bratton

**Characteristics of Pediatric Cardiac Arrest Differ by Setting**

AAP Grand Rounds, Nov 2009; 22: 56.

Laura M. Ibsen

**Continuous Levalbuterol and Albuterol Comparable**

AAP Grand Rounds, Dec 2009; 22: 61.

Susan L. Bratton

**Antithrombotic Therapy for Ischemic Stroke in Childhood**

AAP Grand Rounds, Feb 2010; 23: 21.

Kristine Pleacher

**Factors Influencing Decisions to Withdraw Life Support**

AAP Grand Rounds, Mar 2010; 23: 32.

Jared W. Henricksen

**Comparison of RBC Transfusion Strategies Following Cardiac Surgery**

AAP Grand Rounds, May 2010; 23: 58.

Tara Lemoine

**Normal Saline to Prevent Hyponatremia Following Surgery**

AAP Grand Rounds, Jun 2010; 23: 71.

## **Welcome to the Section on Critical Care**

***New Members!!***  
**July 2009-June 2010**



Natasha Afonso  
Mohammed Albitar  
Robert Alisharan  
Jubilee Barton  
Tellen Bennett  
Carla Cangemi  
Ranjit Chima  
Badie Clark  
Kristina Deeter  
Lesley Doughty  
Sheryl Falkos  
Julie Fitzgerald  
Cristina Gavrilita  
Clara Giambruno  
K Hoehn  
Robert Kahoud  
Mary King  
Downing Lu  
Maria Marchenko

Mary Mazel  
Mara Nitu  
Benjamin Olsson  
Toni Petrillo-Albarano  
Melissa Porter  
Michael Ruppe  
Yvonne Rutherford  
Rebecca Smith  
Jennifer Snow  
Erika Stalets  
Almas Syed  
Vandana Thapar  
Erin Trakas  
Sally Watson  
Gerald Williams  
Stephanie Zia



### Congress

The World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS) continue to plan for its next world congress that will be held in March 2011 in Sydney, Australia. I would advise those who are interested to log on to [www.wfpiccs.org](http://www.wfpiccs.org) to get full details regarding this meeting. This promises to be an exciting congress, one of the first to be held in Australia and will build on its successes in Geneva. It will blend the talents of those working in the developed world with those in the developing world to enrich the scientific and social program. We expect a very comprehensive program and a vigorous exchange of ideas and fellowship.

### Relevance

Within the last few years, the World Federation executive has grappled with the issue as to our relevance in different parts of the world. With a society of this reach, it is important to recognize that there are regional differences in expectations and needs and indeed we can all learn from each other. To this end, WFPICCS has crafted its agenda which has been published in *Pediatric Critical Care Medicine* (Kissoon N, Argent A, Devictor D, Madden MA, Singhi S, van der Voort E, Latour JM). World Federation of Pediatric Intensive and Critical Care Societies – Its global agenda. *Pediatr Crit Care Med*. 2009 Sep;10(5):597-600.

#### ABSTRACT

The WFPICCS is an international body that brings together international expertise, experience, and influence to improve the outcomes of children suffering from life-threatening illness and injury. Its mission is educational, scientific, and charitable in nature. WFPICCS is committed to a global environment, in which all children have access to intensive and critical care of the highest standard. It exists to find ways of improving the care of critically ill children throughout the world, and making that knowledge available to those who care for such children. In an ideal world all children should have access to state of the art critical care services, this is unlikely to happen anytime soon. Faced with this reality, the member societies of the WFPICCS will strive to develop the best model and provide the best care for critically ill and injured children worldwide. The challenge is to find the appropriate role that we need to (and can effectively) play in decreasing both unnecessary death and suffering for children. Clearly, we cannot achieve these goals on our own, hence WFPICCS visualizes close cooperation and collaboration with other agencies offering care to critically ill or injured children such as the World Health Organization, *World Federation of Societies of Intensive and Critical Care Medicine*, *International Pediatric Associations*, and regional organizations and programs to achieve our objectives. We feel that this document, while imperfect, is a good starting point and hope that it will stimulate more discussion to guide the agenda of the federation for years to come.

### Growth

Besides the increased visibility of WFPICCS via the Federation's journal *Pediatric Critical Care Medicine*, the WFPICCS newslet-

ter, regional educational meetings, and the world congresses, the federation is expanding rapidly with new member societies. Last year the Federation welcomed two new members: the Turkish Society of Pediatric Emergency and Intensive Care Medicine and the Egyptian Society of Pediatric Intensive Care. Meanwhile the Federation consists of 28 societies representing over 25,000 pediatric critical care physicians, nurses and allied health professionals.

### Challenges

There are extreme differences across the between the resources available to children with life threatening illness or injury (or who need major elective surgery), and those differences demand creative and targeted responses. In some of the least developed countries of the world pediatric intensive care is simply not possible (with annual per capita health care expenditure often <\$10) – basic critical care services with inexpensive interventions such as early antibiotics, fluid resuscitation and oxygen therapy are entirely relevant here. In some of the most economically developed countries there are virtually no limits on the resources available to critically ill children, indeed there are concerns expressed that too much is being done, and that some interventions are possibly not in the best interests of the children and their families. In between those extremes is a rapidly growing number of countries where basic child health concerns have been effectively addressed; where under-5 mortality is now < 30 / 1000 live births, or even <20, and there are probably adequate health care resources available for pediatric critical care. There is clearly a strong case for developing pediatric critical care services in those countries, but the published data from intensive care in these settings is sometimes depressing reading. In addition there are countries such as India, where under-5 mortality is very high in some areas (and attention should be focused on primary health care), and low in other areas (where very sophisticated pediatric critical care services are available), suggesting that a complex approach to critical care services may be appropriate.

In many ways the challenges for the countries that are developing critical care services for children are not too dissimilar to those experienced in countries such as the USA some 1 to 2 decades ago. There is a high incidence of malnutrition and infectious disease. There are inadequate resources to provide intensive care for all the children who might benefit from intensive care. There are a limited number of healthcare professionals with PICU related skills. Thus there is a real need to focus on: what are realistic goals for the services; which patients will benefit from PICU admission and how should appropriate admission criteria be developed and implemented? There is a very real danger of burnout and exhaustion for pediatric critical care personnel in these settings and there is a constant dilemma of how to balance the needs of children with the resources available (how do you get the maximum number of children through the system while sustaining the viability of the system). There are real budget constraints and decisions need to be made regarding which interventions are really effective and which aren't. The issue of quality assurance is also challenging. In situations of limited resources, there is even greater need to eliminate problems such as nosocomial infection (which, at the very least, can prolong ICU stay) which reduce the availability of scarce resources. However when the number of patients requiring admis-

*Continued on p. 10*

sion exceeds the available resources there may be a conflict between the quality of care (that can be provided within the resource constraints) and the number of children who can receive the available care. There is a deep need to evaluate the economic, ethical and practical aspects of how this can be resolved reasonably.

The personnel constraints are considerable in poorer countries. The attraction of well-resourced, comfortable, well-paid jobs in secure environments is considerable. The sense that "we're doing inferior work that is not the cutting edge stuff we would like to do" can be very real for young medical graduates in developing countries and sadly they flock to the rich countries. So how do we give them a sense that they are doing real work, that is really effective for children, that is as intellectually demanding and challenging, etc., in their own native environments? To do that we need humble physicians and nurses who are prepared to "stand and watch," "hold and support," and mentor young people in very challenging conditions.

### Activities

The World Federation can only succeed if there is vigorous participation from its societies and their members. To this end we have partnered with the Global Sepsis Alliance to further our campaign against sepsis in children globally and with inFACT to further collaborative research. We would like to encourage those who are interested in participating in many of WFPICCS programs to contact the American Academy and the Society of Critical Care Medicine World Federation of Pediatric Intensive Care board members (Dr. V. Nadkarni and Maureen Madden).

In response to the obvious disparities in pediatric critical care service between the developed and developing countries, a sister PICU program has been set up to share knowledge, material, and support. Several PICUs are involved and have developed innovative initiatives to collect financial support. A beacon of inspiration is the Medical Surgical ICU of the Children's Hospital Boston, USA. Their projects "Can for Care", collecting and recycling soda cans/bottles, and "Hair for Care" where male staff members grew a moustache or beard made it possible to provide the staff of the PICU at the National Pediatric Hospital in Cambodia a computer, printer, and a camera. In addition, exchange programs were established and via online communication written and video material of the care of intubated infants and children were completed. Another group of PICU professionals at the KK Woman's and Children's Hospital in Singapore has ongoing exchange programs within the Asian region. WFPICCS also provides individual support to individual professionals. An excellent example is the online communication and exchange of material between a nurse and physician in Mauritius, assigned to start a PICU, and several PICU leaders in Canada, The Netherlands and Australia.

WFPICCS activities planned for the next few years are many and entail crafting guidelines in educational programs that could be relevant to resource limited environments, the participation in the global sepsis initiative which is also anchored at [www.wfpiccs.org](http://www.wfpiccs.org) and informing the agenda for the World Federation for years to come. We as usual invite vigorous debate and look forward to working with members from this society and the American Academy of Pediatrics.

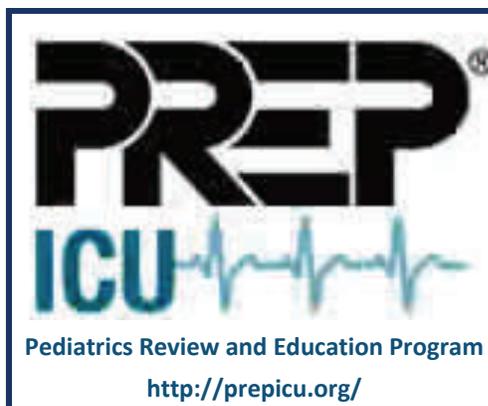
## PREP-ICU Marks Third Year of Publication

2010 marks the third publication year for PREP-ICU. PREP-ICU is the life-long learning and self-assessment program in Critical Care published by the American Academy of Pediatrics. The AAP developed PREP-ICU to fill the educational need created by the American Board of Pediatrics' Maintenance of Certification (MOC) requirements, which include life-long learning and self-assessment as well as periodic closed-book examinations. Like all PREP self-assessment products, PREP-ICU uses case-based questions followed by five potential answers. As one would do in a recertification exam, the learner chooses the answer (s)he feels to be most correct. An educational critique reveals which answer is best and why that is the case. The less correct answers are analyzed as well, giving a comprehensive discussion of the content of the case. PREP-ICU boasts the strict editorial quality control that characterizes all AAP PREP products. The PREP-ICU editorial board includes editors, department chairs, and accomplished authors in Pediatric Critical Care. Sample cases, questions, and critiques may be viewed at [www.prepicu.aap.org](http://www.prepicu.aap.org).

Pediatric intensivists, emergency physicians, hospitalists, and surgeons will find material in PREP-ICU to advance their life-long learning. For U.S. pediatric intensivists, PREP-ICU can also fulfill requirements for MOC. Every 5 years, candidates for MOC must accumulate 100 points from self-assessment activities or performance in practice. Each year subscription to PREP-ICU earns 20 points, and up to 60 of the 100 needed points can come from PREP-ICU or other approved self-assessment courses. Additionally, PREP-ICU subscribers earn 24 AMA PRA Category I credits (TM) yearly. A one year subscription costs \$159.00 for members of the Critical Care Section. Currently, over 400 U.S. pediatric intensivists are subscribed. Subscribers can confirm that PREP-ICU offers outstanding quality and value for pediatric intensivists in general and members of the Critical Care Section in particular.

### Editorial Board

Jeremy Garrett, Editor  
Otwell (Tim) Timmons, Editor  
Richard (Tad) Fiser, Editor  
Dana Braner, Multimedia Editor  
Tom Brogan  
Edward Conway  
Brad Fuhrman  
Denise Goodman  
James Hanson  
Mary Lieh-Lai  
Monica Relvas  
Robert Tamburro  
Ann Thompson



**Common Pitfalls When Conducting a Root Cause Analysis (RCA):  
Institute for Safe Medication Practices (ISMP) Newsletters**

ISMP reviewed many RCA's related to medication events and noted the same pitfalls – an understandable situation given the fact that there is a lack of well-designed curricula for this activity. Pitfalls include:

1. **Skipping the chronology:** lack of a description of the sequence of events documented by flowcharts and/or narratives that describe what happened. Having this in place helps define the problems that have to be addressed; the contributory factors and underlying events. This step is usually skipped because of time constraints.
2. **Reliance on policies and procedures:** While policies and procedures are important, it is just as important to know what the "real-life" situation is as this helps determine the reliability of processes that are in place and what people do to cut corners to get the work done. A RCA should address the following:
  - What happened?
  - What normally happens?
  - What do policies/procedures require?
  - Why did it happen?
  - How was the organization managing the risk before it happened?
3. **Failure to conduct at-risk behavior investigation:** there is a need to determine what lead to the at-risk behavior – such as why someone cut corners, or why was there a breach of policy or why someone did not follow a procedure.
4. **Failure to identify deep-seated latent failures:** RCA's do not dig deep enough to uncover deep system-based causes of failures. Examples of questions include:
  - Was critical information about the patient missing or unknown? weight, height, allergies
  - Were there problems in the physical environment or staffing patterns?
  - Was written or verbal information miscommunicated or not communicated?
5. **Failure to carry out the action plan and measure success:** critical interventions to avoid the problem are not implemented, or were implemented but abandoned because the plan was not doable.
6. **Focus too narrow or too broad:** corrective actions are not implemented system-wide.
7. **Unjust punitive action:** this is mostly due to hindsight bias and an unfair outcome-based justice system in healthcare where the patient's outcome usually dictates the punishment.

Preventing Errors when Administering Drugs via an Enteral Feeding Tube:

1. Make sure that the routes are compatible. Not all drugs formulated for administration by mouth can be safely given through a feeding tube. The physical and chemical properties of the drug may be different. An example is Accupril which contains the excipient magnesium carbonate. Crushing the tablet and dis-

- solving it in water allows the magnesium to increase the pH of the solution rendering drug into a poorly-absorbed metabolite.
2. **Improper absorption:** drug absorption depends on the ability of the drug to pass through the intestinal mucosa. The distal tip of the feeding tube may not be in the portion of the GI tract that provides maximal absorption for a particular drug. For example, warfarin is absorbed high in the small bowel; or oral iron that is dissolved in the stomach and absorbed in the duodenum – both drugs may not be absorbed if the feeding tube is in the jejunum.
  3. **Improper preparation:** Sublingual, enteric-coated and extended release medications should not be crushed for administration. Crushing these drugs destroys the protective coating and the crushed tablets can clog feeding tubes. Crushing drugs such as Tracleer or Bosentan capsules can expose nurses to powder that can cause serious birth defects.
  4. **Improper administration techniques:** crushing multiple medications and mixing them and administering them at the same time can lead to incompatibility issues.

Safe Practice: organizations should establish an interdisciplinary group that works together to establish protocols for enteral drug administration.

**I. MEDICATION ERRORS**

1. **Propofol:** A nurse carried out an order to give a 6-year old 5 mg of propofol after the child became agitated after extubation. The vial of propofol (Diprivan) had a pharmacy label covering the mg/mL strength, leaving only the propofol 1% visible. The nurse based the calculation on this and gave the child 5 mL of the solution or 50 mg instead of the 5 mg that was ordered. The child's breathing had to be supported for 7 minutes before she recovered.
2. **Vincristine (again!):** An adult female patient with CNS lymphoma was receiving regular intravenous infusions of vincristine along with intracerebroventricular methotrexate through an Ommaya reservoir. Both vincristine and methotrexate were infused into the Ommaya reservoir. On day 3, she started developing symptoms that progressed rapidly to paralysis, autonomic dysfunction, respiratory failure, coma and death 2 weeks later.
3. **Another child dies from a heparin error.** A child with gastroschisis underwent transplantation of the small bowel, pancreas and liver. She did well and was discharged home, only to return a week later with a viral illness and infection that resulted in renal failure. She was placed on dialysis and an intravenous infusion of heparin was started. During the heparin infusion, she received a large overdose that resulted in intracranial hemorrhage and subsequent brain death.

The error resulted from an infusion pump setting error with the wrong dose of heparin infused for 5 hours. The pump was a "smart" pump with a full drug library that was not being utilized at the time. It is also unclear if a double-check mechanism was utilized.

*Continued on p. 12*

Safety points:

- Heparin is a high-alert medication.
- Failed double-checks happen when:
  - The check does not occur independently.
  - The process is informal and lacks the highest regard for the substantial responsibility the checker takes on.
  - Both the initiating person and the checker fall victim to the same external conditions that cause the error.
  - Distractions in the environment reduce attention to detail.

Common Risks with Heparin	Key Improvements with Heparin
Using "U" for units on orders, labels, computer screens or MARs	Do not use error-prone abbreviations (like U)
Failing to use commas when expressing large doses (1000, 10000)	Use commas appropriately for doses that exceed 999 units
Using potentially confusing symbols in protocols, nomograms, orders (<, >)	Spell out "greater than" and "less than" on protocols, nomograms and orders Employ computerized prescriber order entry order sets
Using stated, estimated, or unverified weights to calculate heparin doses	Obtain actual measure weight in kg of patient or ideal body weight to determine heparin doses
Failing to obtain baseline lab tests, verify lab values, or act on abnormal lab values before prescribing, dispensing and administering heparin	Obtain baseline lab tests before prescribing heparin Make coagulation lab test results available in 2 hours or less Verbally report critical values to the professional caregiver Evaluate latest lab results before prescribing, dispensing, or administering therapeutic doses of heparin Establish protocols for standard (before procedures) and rapid (emergency) reversal of anticoagulation
Miscalculating the dose or infusion rate	Use weight-based heparin infusion chart or dosing nomograms
Programming infusion pump incorrectly Miscalculating the volume of heparin to be added to TPN or neonatal solutions	Employ strategically placed independent double checks before dispensing all IV heparin Employ smart pumps AND utilize drug library settings

Common Risks with Heparin	Key Improvements with Heparin
Preparing heparin infusions incorrectly Failing to use commercially available premixed solutions Mix-ups between different solutions	Use only commercially prepared, premixed IV heparin solutions Standardize to one or two concentrations for all therapeutic IV heparin infusions Require pharmacy to dispense all inpatient heparin and verify orders for therapeutic use before removal from ADCs
Mix-ups between pharmacy prepared or commercially available bags that look alike Mix-ups between heparin prefilled syringes and look-alike prefilled syringes Mix-ups between vials of heparin, insulin and normal saline Mix-ups between 1,000 units/500 mL heparin bags (adult arterial line) and 25,000 units/500 mL bags Confusing the unit/mL strength as the full dose in vials	Safely select, procure, and store heparin away from other drugs with look-alike names or packaging Use tall man letters on labels, order screens, and computerized MARs to differential HeSpan and HEPa-rin Dispense heparin flush solutions from the pharmacy in the exact concentration required for the patient population and/or parenteral device in use Apply auxiliary labels for diluted/concentrated preparations Use only saline flushes (not heparin flushes) for peripheral venous access catheters (reflect this in order sets) Restrict access to multiple concentrations in both the pharmacy and patient care units Employ bar code scanning technology
Unrecognized concurrent administration of more than one heparin-type product (eg: unfractionated heparin and low molecular heparin)	Provide a copy of ED or cath lab orders to the pharmacy for admitted patients to monitor use of all anticoagulants Enable duplicate therapy computer alerts for heparin products Provide reminders on protocols to avoid concurrent use of heparin products or discontinue other anticoagulants as appropriate Review all medications administered during handoffs
Forgetting to set the proper dose or volume limit when administering a bolus dose from an infusion bag; forgetting to reset the pump after the bolus dose	Administer bolus doses from pharmacy-prepared syringes Use IV pumps to administer continuous and bolus doses from the same container only when a bolus dose can be programmed with limits on total dose and minimum infusions time, and pump automatically converts to continuous infusion rate after bolus is given
Forgetting to resume a heparin infusion	Forgetting to resume a heparin infusion



*Continued on p. 13*

Common Risks with Heparin	Key Improvements with Heparin
Failing to detect, quickly treat, and document heparin-induced thrombocytopenia (HIT)	Use a protocol/order set for HIT evaluation and treatment Develop a process to ensure prominent documentation of HIT on the patient's record
Using the wrong protocol or drug nomogram for the patient's condition	Develop and follow standard, weight-based heparin protocols for each indicated use of a heparin infusion; label protocols prominently by indication to promote correct selection Conduct prospective failure mode of protocols
Other risks associated with preventable adverse drug events with heparin	Establish inpatient clinical pharmacy anticoagulation services Use subcutaneous low molecular weight heparin when appropriate as an alternative to heparin

From ISMP Medication Safety Alert, Vol 17, issue 7: April 8, 2010

4. Neuromuscular blocker mix-up in the pharmacy: mini-bags were prepared with vecuronium instead of the intended drug valproate sodium injection. Both medications were close to one another in the pharmacy, both had red caps and were almost the same size. Fortunately the patient was able to ring the call button when difficulty of breathing developed. However, the mistake was not picked up as the patient's symptoms were attributed to her neurologic disease. The second mini-bag also containing vecuronium was hung with the same symptoms occurring. A pharmacist finally noticed the error when gathering vials to prepare the next doses of valproate and noticed the difference in the vials.
5. Why double-checking is important:
  - Double-checks identify a higher rate of errors.
  - 93 – 97% of mistakes are identified during an independent double check.
  - It is hard to find your own mistakes.
  - Double-checks work best when conducted independently.
  - Double checks should be limited to high alert medications, very complex processes, and high-risk patient populations.
  - Learn from captured errors.

## II. Warnings

### Epinephrine: Risk for serious or fatal medication error

(From the American Society of Health-System Pharmacists and the ISMP)

Epinephrine emergency syringes 1 mg/10 mL (0.1 mg/mL) are on backorder from the sole manufacturer of the product. Although injectable epinephrine is still available in 1 mg/ml in 1 mL ampuls or vials, 1 mg/mL in 30 mL vials, and 1 mg/10 mL emergency

syringes with intracardiac needles – these products are not safe alternatives for the following reasons:

1. The 3.5 inch needle of the syringes for intracardiac use is not removable and is not compatible with needleless tubing systems. Attempting to remove the needle may result in injury.
2. Epinephrine is sensitive to light, air and pH and therefore cannot be pre-compounded.
3. Dose miscalculations may occur when there is a misunderstanding or lack of knowledge regarding the difference between 1:1,000 (1 mg/mL) and 1:10,000 (0.1 mg/mL) strengths. Fatal overdoses have occurred with these miscalculations.
4. The 30 mL vial more easily facilitates an accidental overdose by providing enough volume of drug to allow 10-fold overdoses.

### Recommendations:

1. The information regarding the shortage and recommended substitute products should be communicated to all areas that epinephrine emergency syringes are used.
2. Conserve current supplies of epinephrine emergency syringes for code boxes and emergency responders.
3. Do not stock multiple-dose 30-mL vials of injectable epinephrine 1 mg/mL in code boxes. They look very familiar to 30-mL vials of topical epinephrine that may also be stocked in code boxes or used in the OR.
4. Place auxiliary labels on intracardiac epinephrine that warn against intravenous and endotracheal use and caution practitioners about the danger of injury with attempted removal of the fixed needle. If not labeled for intracardiac use only, include this information as well.
5. If using 1 mg/mL ampuls or vials in lieu of emergency syringes, package the vial, diluent, and syringe label in a clear plastic bag prominently labeled with the drug name and strength. Include instructions on preparing a dilution equivalent to a prefilled 1 mg/mL emergency syringe (i.e., epinephrine 1 mg – dilute in 9 mL of sodium chloride 0.9%0).
6. If substituting ampuls or vials labeled as 1:1,000, provide a chart for converting doses in milligrams to mL along with instructions for preparing a dilution in code carts, and post the charts in areas where epinephrine is frequently used.

## III. Recalls

The FDA has notified healthcare professionals and consumers that Baxter has been ordered to recall and destroy all of its **Colleague Pumps** because Baxter was not able to address multiple safety issues with these pumps within the required time frame.

## IV. Interesting Article

Dennen P, Douglas IS and Anderson R: Acute Kidney Injury in the Intensive Care Unit: An update and primer for the intensivist. Concise Definitive Review, Sevransky JE, Section Editor. Crit Care Med, 2010; 38 (1): 261-275.

## ACGME-Pediatric Residency Review Committee Update

(Excerpted from the Pediatric RRC Newsletter and [www.acgme.org](http://www.acgme.org))

- I. The most awaited development: New Proposed Duty Hours was released on June 23, 2010. Responses to the ACGME can be made for up to 45 days from the release date. While there are multiple important changes in the program requirements, several are noted here:
    - a. A more specific requirement to provide trainees with education on fatigue and sleep deprivation.
    - b. Supervision: while this used to be stated in one line, the section has been significantly expanded to include the specifics regarding the responsibilities of the supervisor; and types of supervision and oversight for trainees at different levels.
    - c. Duty Hours:  
Maximum of 80 hours per week averaged over 4 weeks – this includes time spent moonlighting.
      - PGY-1 residents cannot moonlight
      - 1 day free of duty every week when averaged over 4 weeks
      - Maximum continuous duty of 16 hours for PGY-1 residents
      - PGY-2 and higher: maximum 24 hours of continuous duty with additional 4 hours for transition
      - Napping is encouraged between 10:00 PM and 8:00 AM when on call
      - A trainee may, in very unusual circumstances, stay beyond the hours listed above but the reasons for doing so must be documented (e.g., staying to take care of a critically-ill patient with whom the trainee has established a strong relationship)
      - The time off in between shifts is dependent on the level of training: 10 hours for PGY-1, and 8 hours for higher level trainees. After a 24-hour call, there must be 14 hours off
        - Night float: not more than 6 consecutive shifts
        - Night calls: no more than every 3<sup>rd</sup> night (no averaging)
- For the full document, go to [www.acgme.org](http://www.acgme.org)
- II. The Milestones Project under the leadership of Dr Carol Carraccio continues. The project is an initiative spearheaded by the ACGME and the ABP to further define the ACGME competencies in the context of the specialty and to set standards for performance over the course of residency/fellowship education.
  - III. The RRC expects programs to use multiple methods AND evaluators to assess the abilities of fellows with the competencies. Programs who only use one type of evaluation (global evaluations are most common) have received a citation from the RRC.  
  
The RRC also notes that more and more programs are using proprietary patient satisfaction surveys to assess the fellows' abilities with the competencies. Programs who use only this type of instrument to evaluate their trainees have been cited by the RRC as well.
  - IV. A new format is in place for citations:
    - a. Citation heading: summary of issue being cited
    - b. Program requirement reference
    - c. Program requirement
    - d. Citation
    - e. Source of citation (PIF, SV report if an adverse action is proposed, board reference)
  - V. Tips: Virtual Program Director Handbook  
<http://www.acgme.org/acWebsite/home/PDVirtualHandbook.asp>

## SOCC Executive Committee 2010-2011

**Donald D Vernon MD FAAP**

*Chairperson*

**Alice Dee Ackerman MD FAAP**

*Immediate Past Chairperson*

**Edward E Conway Jr MD FAAP**

**Mary W Lieh-Lai MD FAAP**

*Newsletter Editor*

**Richard B Mink MD FAAP**

**Vicki L Montgomery MD FAAP**

*Liaison, Society of Critical Care Medicine (SCCM)*

**Richard A Salerno MD MS FAAP**

*Liaison, Committee on Hospital Care*

**Luke A Zabrocki MD FAAP**

**Susan Tellez**

*Manager, Staff*

**Debbie J Brinker RN**

*Liaison, American Association of Critical-Care Nurses (AACCN)*

**Susan M Fuchs MD FAAP & Milton Tenenbein MD FAAP**

*Liaisons, AAP National Conference & Exhibition Planning Group*

**Niranjan Kissoon MD FAAP**

*Liaison, World Federation of Pediatric Intensive & Critical Care Societies (WFPICCS)*

**Michele Moss MD FAAP**

*Liaison, AAP Section on Transport Medicine*

**Ann R Stark MD FAAP**

*Liaison, AAP Section Forum Management Committee*

**John P Straumanis MD FAAP**

*Program Chairperson; Abstract Chairperson*