



*Society of Academic Anesthesiology Associations*

# *2010 Annual Meeting*

*November 5-7, 2010*

*Mandarin Oriental Hotel*

*Washington, DC*



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AACPD Council Members  
AASPD Council Members

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AACPD Members  
*(Alphabetical by last name)*  
*(Alphabetical by institution)*  
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### **Program Schedule**

#### **Presentations**

Friday  
• AAAC  
• AACPD  
• AASPD  
Saturday  
Sunday

# Program Information

Jointly sponsored by

American Society of  
Anesthesiologists 

and



## Registration Information

The registration fee for the SAAA 2010 Annual Meeting includes the course syllabus, all educational presentations, a continental breakfast, coffee breaks and Saturday reception. Registrations that are either faxed, mailed, or made via the website to the SAAA office must be received by October 1<sup>st</sup>. After October 1<sup>st</sup>, only onsite registrations will be accepted.

## Target Audience

This meeting is designed for anesthesiologists in Chair, Core Program and Subspecialty Program Director positions. Members may invite physician and non-physician guests for whom separate registration rates are available. The program is designed to present and discuss areas of topical interest to attendees in keeping with our collective attempt to improve academic department's structure, function and the educational programs associated with academic learning.

## This meeting will provide:

- Institutional resources to support the educational, research and clinical missions essential to the day to day management of a successful academic anesthesiology department.
- Solutions to challenges in educating the next generation of trainees on issues of interpersonal communication skills, professionalism and systems-based practice.
- Ideas to design new modalities to incentivize their faculty to become best performers in fulfilling the educational and/or research missions of a successful anesthesiology department.

## About This Meeting

Topics for this meeting were selected by various methods. Suggestions for topics were derived from evaluations of the 2009 and other previous Annual Meeting Council members, the membership at large, reviews of the published literature with the highest impact on the anesthesia specialty.

These suggestions were discussed by our authorities in the field of anesthesia education or previous meetings.

The purpose of this Annual Meeting is to educate and share information that will enable academic anesthesia departments to improve management and care.

## CME Accreditation

This activity has been planned and implemented in accordance with the essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American Society of Anesthesiologists and the Society of Academic Anesthesia Associations. The American Society of Anesthesiologists is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Anesthesiologists designates this educational activity for a maximum of 14.75 AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Disclaimer

The information provided at the above CME activities is for continuing medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific patient's medical condition.

## Disclosure

The American Society of Anesthesiologists and the Society of Academic Anesthesia Associations adheres to ACCME Essential Areas, Standards, and Policies regarding industry support of continuing medical education. Disclosure of the planning committee and faculty's commercial relationships will be made known at the activity. Speakers are required to openly disclose and limitations of data and/or any discussion of any offlabel, experimental, or investigational uses of drugs or devices in their presentations.

## Special Needs

The Society of Academic Anesthesia Associations fully complies with the legal requirements of the Americans with Disabilities Act and the rules and regulations thereof. If any attendee in this educational activity is in need of accommodations, please contact SAAA at (847) 825-5586.



# *Future Meetings*



## **SAAA 2011 Annual Meeting**

Grand Hyatt Denver  
November 4-6, 2011  
Denver, Colorado



## **SAAA 2012 Annual Meeting**

Hyatt Regency San Francisco  
November 2-4, 2012  
San Francisco, California



# Program Faculty

**James H. Abernathy III, M.D.**

Associate Professor  
Department of Anesthesia  
Medical University of South Carolina  
Charleston, SC

**Harvey "Chip" Amoe III, J.D., M.P.A.**

Assistant Director-Federal Affairs  
American Society of Anesthesiology  
Washington, DC

**Jeffrey L. Apfelbaum, M.D.**

Professor and Chair  
Department of Anesthesia and Critical Care  
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President, SAAA  
Chicago, IL

**Steven J. Barker, Ph.D., M.D.**

Professor and Head  
Department of Anesthesiology  
University of Arizona College of Medicine  
ASA Delegate, SAAA  
Tucson, AZ

**Gary J. Brenner, M.D., Ph.D.**

Director, MGH Pain Medicine Fellowship  
Assistant Professor  
Harvard Medical School  
Department of Anesthesia and Critical Care  
Massachusetts General Hospital  
Council, AASPD  
AASPD Representative, SAAA  
Boston, MA

**David L. Brown, M.D.**

Chairman, Anesthesiology Institute  
Cleveland Clinic Foundation  
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Houston, TX

**Neal H. Cohen, M.D., M.P.H., M.S.**

Vice Dean, School of Medicine  
Professor of Anesthesia  
Perioperative Care and Medicine  
Director, International Services  
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School of Medicine  
San Francisco, CA

**Robert M. Craft, M.D.**

Professor and Vice-Chairman  
Residency Program Director  
Department of Anesthesiology  
University of Tennessee Medical Center at  
Knoxville  
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Louisville, TN

**Thomas M. Dodds, M.D.**

Chairman  
Department of Anesthesiology  
Dartmouth-Hitchcock Medical Center  
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**Richard P. Dutton, M.D., M.B.A.**

Executive Director  
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**L. Jane Easdown, M.D.**

Assistant Professor of Anesthesiology  
Vanderbilt University Medical Center  
Nashville, TN

**Jane C.K. Fitch, M.D.**

John L. Plewes Professor & Chair  
Department of Anesthesiology  
University of Oklahoma  
Secretary/Treasurer, SAAA  
Secretary, AAAC  
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**Shannon Fox, Ph.D.**

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(AAMC)  
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Associate Professor, Anesthesiology  
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Co-Director, Cardiothoracic Anesthesiology  
Program Director, Adult Cardiothoracic  
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Secretary, AASPD  
Atlanta, GA

**Nancy L. Glass, M.D., M.B.A.**

Professor of Anesthesiology and Pediatrics  
Baylor College of Medicine  
Director, Pediatric Anesthesia Fellowship  
Director, Pediatric Pain Service  
Texas Children's Hospital  
Council, AASPD  
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**Billy Hart**

Senior Accreditation Administrator  
RRCs for Anesthesiology  
Preventive Medicine  
Institutional Review Committee  
ACGME  
Chicago, IL

**Roberta L. Hines, M.D.**

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President ASA  
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Anesthesiology Critical Care Medicine  
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Assistant Professor of Clinical Anesthesiology  
University of Southern California  
Keck School of Medicine  
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**James R. Zaidan, M.D., M.B.A.**

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Emory University School of Medicine  
Council, SAAA, AAAC  
Stone Mountain, GA

# Program Faculty 8]gWcgi fYg

SAAA adheres to ACCME Essential Areas and Policies regarding industry support of continuing medical education. Disclosure of faculty and commercial relationships will be made known at the activity. Speakers are also expected to openly disclose any discussion of off-label, experimental or investigational uses of drugs or devices in their presentations.

## Key

1 Salary	4 Equity Position	7 Consulting Fees
2 Ownership	5 Stock Options	8 Honoraria
3 Royalties	6 Funded Research	9 Other Material Support

## Faculty

Chris Gallagher  
Judith Jurin Semo, Esq.  
Jeffrey H. Silverstein, M.D.  
Robert N. Sladen, M.B., Ch.B.

## Disclosure

2,3  
2  
9  
6

## Notes

Board Stiff Live, Several Publishers  
PLLC  
Aspect Medical, CasMed  
Scios Inc.

SAAA Annual Meeting faculty who made proper disclosure with no financial relationships to disclose:

James H. Abernathy III, M.D.	Billy Hart	Leila Mei Pang, M.D.
Harvey "Chip" Amoe III, J.D., M.P.A.	Roberta L. Hines, M.D.	James P. Rathmell M.D.
Jeffrey L. Apfelbaum, M.D.	Mary Joyce Johnston, RHIA, MJ	Sally R. Raty, M.D.
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Shawn T. Beaman	Catherine M. Kuhn, M.D.	Warren Sandberg, M.D., Ph.D.
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David L. Brown, M.D.	A. Joseph Layon, M.D.	B. Scott Segal, M.D., M.H.C.M.
Sarah A. Bunton, Ph.D.	Mark J. Lema, M.D., Ph.D.	Jack S. Shanewise, M.D.
Neal H. Cohen, M.D., M.P.H., M.S.	Cynthia A. Lien, M.D.	Karen J. Souter, M.B., B.S., M.Sc., F.R.C.A.
Robert M. Craft, M.D.	David A. Lubarsky, M.D., M.B.A.	Robin Stedman, M.D., MPH
Thomas M. Dodds, M.D.	Linda J. Mason, M.D.	Patricia M. Surdyk, PhD
Richard P. Dutton, M.D., M.B.A.	William A. McDade, M.D., Ph.D.	John A. Ulatowski, M.D., Ph.D.
Jane Easdown	J. Thomas McLarney, M.D.	Charles A. Vacanti, M.D.
Jane C.K. Fitch, M.D.	Berend Mets, M.B., Ch.B., Ph.D.	Mark A. Warner, M.D.
Shannon Fox	Edward D. Miller, M.D.	Samuel D. Yanofsky, M.D., M.S.Ed.
Kathryn E Glas, M.D., FASE, M.B.A.	L. Lazarre Ogden, M.D.	James R. Zaidan, M.D., M.B.A.
Nancy L. Glass, M.D., M.B.A.	Jamie S. Padmore	

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Berend Mets, M.B., Ch.B., Ph.D.

**Secretary/Treasurer (2011)**

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**Past President (2010)**

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**AACPD President (2011)**

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**AASPD President (2010)**

Linda J. Mason, M.D.

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James R. Zaidan, M.D., M.B.A.

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Patricia A. Kapur, M.D.

**AACPD Representative**

Joy L. Hawkins, M.D.

**AACPD Representative**

Catherine M. Kuhn, M.D.

**AASPD Representative**

Robert N. Sladen, M.B., Ch.B.

**AASPD Representative**

Gary J. Brenner, M.D., Ph.D.

**ASA Director**

Steven J. Barker, Ph.D., M.D.

**ASA Alternate Director**

Kevin K. Tremper, M.D., Ph.D.

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**President-Elect (2010)**

Berend Mets, M.B., Ph.D.

**Secretary (2011)**

Jane C.K. Fitch, M.D.

**Past President (2010)**

Charles A. Vacanti, M.D.

**Council Members:**

Michael K. Cahalan, M.D.

Patricia A. Kapur, M.D.

John A. Ulatowski, M.D., Ph.D.

James R. Zaidan, M.D.

## 2009-2010 AACPD Council Members

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Theodore J. Sanford Jr., M.D.

**President Elect (2011)**

Catherine M. Kuhn, M.D.

**Secretary (2010)**

Joy Hawkins, M.D.

**Past President**

VACANT

**Council Members:**

Robert M. Craft, M.D.

L. Lazarre Ogden, M.D.

Leila Mei Pang, M.D.

Karen J. Souter, M.B., B.S.

## 2009-2010 AASPD Council Members

**President (2010)**

Linda J. Mason, M.D.

**President-Elect (2010)**

Robert N. Sladen, M.B., Ch.B.

**Secretary (2011)**

Kathryn E. Glas, M.D.

**Past President:**

Vacant

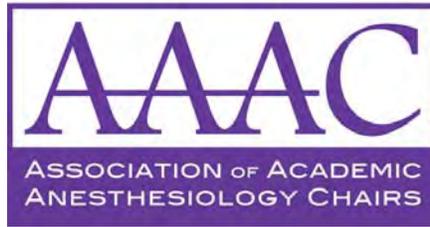
**Council Members:**

Gary J. Brenner, M.D., Ph.D.

Nancy L. Glass, M.D., M.B.A.

Jack S. Shanewise, M.D.

Abraham Joseph Layon, M.D.



**APPLICATION AAAC MEMBERSHIP FOR 2011**

**Departmental Dues Amount: \$675**

**Note each department will pay dues, only once to SAAA, Society of Academic Anesthesia Associations. Applications must be filled out to register for the AAAC if you are a Chair (this form), or AACPD if you are a Program Director (AACPD form).**

Please make check payable to:

*Society of Academic Anesthesiology Associations (SAAA)*

Application and Applicable Payment is requested by June 30, 2011.

Please complete the following contact information:

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Institution: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- Department has paid dues for SAAA this year (formerly SAAC/AAPD)  
 Department has not paid dues for SAAA this year and I have enclosed payment to SAAA.

**PAYMENT INFORMATION:**

**Please provide your billing address should you be paying with a credit card.**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Check (*Make check payable to SAAA*)     VISA     MasterCard     American Express

Credit Card No.: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ CVV Number: \_\_\_\_\_

*The CVV number contains the last three digits of the seven numbers found on the back of your credit card.*

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Fax or mail your order with payment to:

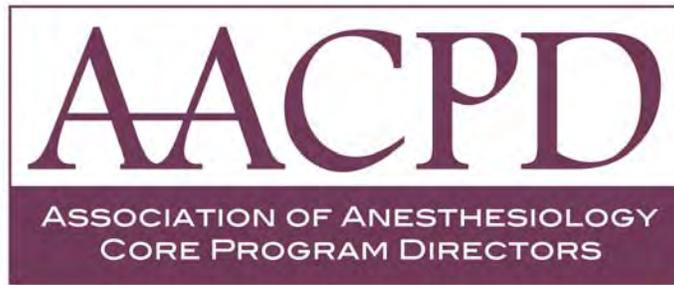
SAAA

520 N. Northwest Highway

Park Ridge, IL 60068-2573

Fax: (847) 825-5658

Telephone: (847) 825-5586



**APPLICATION FOR AACPD MEMBERSHIP FOR 2011**

**Departmental Dues Amount: \$675**

**Note each department will pay dues, only once to SAAA, Society of Academic Anesthesia Associations. Applications must be filled out to register for the AAAC if you are a Chair, Or AACPD (this form) if you are a Program Director.**

Please make check payable to:

*Society of Academic Anesthesiology Associations (SAAA)*

Application and Applicable Payment is requested by June 30, 2011.

Please complete the following contact information:

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Institution: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- MasterCard Department has paid dues for SAAA this year (formerly SAAC/AAPD)
- Department has not paid dues for SAAA this year and I have enclosed payment to SAAA.

**PAYMENT INFORMATION:**

**Please provide your billing address should you be paying with a credit card.**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

- Check (*Make check payable to SAAA*)     VISA     MasterCard     American Express

Credit Card No.: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ CVV Number: \_\_\_\_\_

*The CVV number contains the last three digits of the seven numbers found on the back of your credit card.*

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Fax or mail your order with payment to:

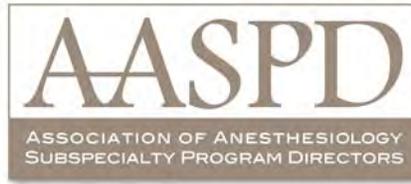
SAAA

520 N. Northwest Highway

Park Ridge, IL 60068-2573

Fax: (847) 825-5658

Telephone: (847) 825-5586



**APPLICATION FOR AASPD MEMBERSHIP FOR 2011**

Please complete the following contact information:

Name: \_\_\_\_\_

<b>ACGME Approved Subspecialty Program – MUST be completed</b>	
<input type="checkbox"/> Pain Medicine	<input type="checkbox"/> Adult Cardiothoracic Anesthesiology
<input type="checkbox"/> Critical Care Medicine	<input type="checkbox"/> Pediatric Anesthesiology

Title: \_\_\_\_\_ Institution: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

<input type="checkbox"/> Anesthesiology Chair to whom you report: _____ <input type="checkbox"/> I do not report to an anesthesiology chair**
--

**PAYMENT INFORMATION\*\***

**Departmental Dues Amount: \$675**

Please make check payable to: *Society of Academic Anesthesiology Associations (SAAA)*

Application and Payment (if required) is received by June 30, 2011.

**Note each integrated department will pay dues, only once to SAAA, Society of Academic Anesthesia Associations. Applications must be filled out to register for the AAAC if you are an academic Chair, or AASPD (this form) if you are a Subspecialty Program Director that does not report to an academic chair.**

**If you do not directly report to an anesthesiology chair, please complete payment information below and provide a dues payment of \$200.**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Check (*Make check payable to SAAA*)       VISA       MasterCard       American Express

Credit Card No.: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ CVV Number: \_\_\_\_\_

*The CVV number contains the last three digits of the seven numbers found on the back of your credit card.*

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Fax or mail your order with payment to:

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### AAAC Members by Name

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Bastien, John L.	Naval Med Ctr Portsmouth
Berrigan, Michael J.	George Washington Univ Hosp
Bittenbinder, Timothy M.	Scott & White Memorial Hosp
Blanck, Thomas J.J.	New York Univ Med Ctr
Bowe, Edwin A.	Univ Kentucky Chandler Med Ctr
Brown, David L.	Cleveland Clinic Foundation
Brown, Morris	Henry Ford Health System
Butterworth, John F.	Indiana Univ Sch of Med
Cahalan, Michael K.	Univ Utah Med Ctr
Cole, Daniel J.	Mayo Clinic Arizona
Cottrell, James E.	Suny Downstate Med Ctr
Delphin, Ellise S.	Albert Einstein/Montefiore
Dodds, Thomas M.	Dartmouth Hitchcock Med Ctr
Dorian, Robert S.	St. Barnabas Med Ctr
Driver, Richard P.	West Virginia Univ Sch of Med
Dunn, Steven M.	Baystate Med Ctr
Ellis, Sheila J.	Univ Nebraska Med Ctr
Enneking, F. Kayser	Univ of Florida Med Ctr
Epps, Jerry L.	Univ of Tennessee- Knoxville
Evers, Alex S.	Washington Univ St. Louis
Fibuch, Eugene E.	Univ Missouri Kansas Clty
Fitch, Jane C.K.	Univ Oklahoma Hth Sci Ctr
Fleisher, Lee A.	Hosp of Univ of Pennsylvania
Glass, Peter S.	Suny at Stony Brook
Goldberg, Michael E.	Cooper Hospital
Grant, James D.	William Beaumont Hospital
Gross, Jeffrey B.	Univ of Connecticut Health Ctr
Grunwald, Zvi	Thomas Jefferson Univ Hosp
Hagberg, Carin A.	Univ of Texas Med Sch, Houston
Harter, Ronald L.	Ohio State Univ Hosp
Haynes, Gary R.	St. Louis Univ Sch of Med
Head, C. Alvin	Medical College of Georgia
Heard, Stephen O.	Univ of Massachusetts Med Sch

<b>Member</b>	<b>Institution</b>
Henthorn, Thomas K.	Univ of Colorado, Denver
Hickey, Paul R.	Harvard Med Sch Childrens Hosp
Hines, Roberta L.	Yale New Haven Med Ctr
Hunter, Christine W.	UMDNJ-Robert W Johnson Med Sch
Hurford, William E.	Univ Cincinnati Med Ctr
Jellish, W. Scott	Loyola Univ Med Ctr
Jones, Keith A.	Univ of Alabama at Birmingham
Kain, Zeev N.	Univ of California, Irvine
Kapur, Patricia	David Geffen Sch of Med UCLA
Kaye, Alan D.	Louisiana St Univ New Orleans
Kim, Young D.	Georgetown Univ Hosp
Kindscher, James D.	Univ of Kansas Med Ctr - K.C.
Kirsch, Jeffrey	Oregon Health & Science Univ
Konstadt, Steven N.	Maimonides Med Ctr
Lema, Mark J.	SUNY at Buffalo
Lewis, Keith P.	Boston Univ Med Ctr
Lubarsky, David A.	Univ of Miami Sch of Med
Lumb, Philip D.	Univ of Southern California
Manecke, Gerard R.	Univ of California, San Diego
Marco, Alan P.	Univ of Toledo Coll of Med
Marrero, Miguel A.	University of Puerto Rico
Marsh, H. Michael	Wayne State Univ
Martin, Robert D.	Loma Linda Univ
Maze, Mervyn	Univ of California, San Fran
McDonald, John S.	LA Cty Harbor, UCLA Med Ctr
McGoldrick, Kathryn E.	New York Med Coll, Westchester
McKay, Robert S.	Univ of Kansas Med Ctr Wichita
Mets, Berend	Penn State Milton S Hershey
Moore, Peter G.	Univ California Med Ctr- Davis
Mychaskiw, George	Drexel Univ Coll of Med
Narr, Brad J.	Mayo Sch of Grad Med Edu
Nearman, Howard S.	Univ Hosp Cleveland-Case Wstrn
Neuman, George G.	St. Vincent's Hosp & Med Ctr
Newman, Mark F.	Duke Univ Med Ctr
Nussmeier, Nancy	SUNY Upstate Med Univ
Pablo, Carmelita S.	Univ of Arkansas for Med Sci
Pearce, Robert A.	Univ Wisconsin Med Sch
Pearl, Ronald G.	Stanford Univ Med Ctr
Pesso, Raymond M.	Nassau Univ Med Ctr
Pollock, Julia E.	Virginia Mason Med Ctr
Prielipp, Richard C.	Univ of Minnesota
Prough, Donald S.	Univ of Texas Med Branch Hosp
Rao, Ashok S.	Louisiana St Univ Hth Sci Ctr
Reeves, Scott	Med Univ of South Carolina
Reeves-Viets, Joseph L.	Univ of Missouri Columbia Hosp
Reich, David L.	Mount Sinai Sch of Med
Rich, George F.	Univ Virginia Health System
Robelen, Gary T.	St Elizabeth's Med Ctr

<b>Member</b>	<b>Institution</b>
Roberts, Kevin W.	Albany Medical Center
Rock, Peter	Univ of Maryland Sch of Med
Rosinia, Frank A.	Tulane Univ Sch of Med
Sandberg, Warren	Vanderbilt Univ Med Ctr
Santos, Alan C.	St Luke's Roosevelt Hospital
Savarese, John J.	New York Pres-Weill Cornell
Schapiro, Howard M.	Fletcher Allen Health Care
Schianodicola, Joseph	New York Methodist Hosp
Schubert, Armin	Ochsner Clinic Foundation
Schwartz, David E.	Univ of Illinois Chicago
Schwinn, Debra A.	Univ of Washington Med Ctr
Segal, B. Scott	Tufts-New England Med Ctr
Shapira, John B.	Naval Med Ctr-San Diego
Sidhu, Tejbir S.	MetroHealth-Case Wstrn Res
Simon, Brett	Beth Israel Deaconess Med Ctr
Spackman, Thomas	Mayo Clinic Florida
Stock, M. Christine	NW Univ Feinberg Sch of Med
Suresh, Maya S.	Baylor College of Medicine
Szpisjak, Dale F.	National Capital Consortium
Tobin, Joseph R.	Wake Forest Univ Sch of Med
Todd, Michael M.	Univ of Iowa Hosp & Clinics
Tremper, Kevin K.	Univ of Michigan Health System
Troianos, Christopher A.	Western Pennsylvania Hosp
Tuman, Kenneth J.	Rush Univ Med Ctr
Ulatowski, John A.	Johns Hopkins Hosp
Vacanti, Charles A.	Brigham & Women's Hosp
Voronov, Gennadiy	John H. Stroger Jr., Hospital
Ward, Denham S.	Strong Mem Hosp, Univ of Roch
Wartier, David	Med College of Wisconsin
Wasnick, John D.	Texas Tech Univ Lubbock
Wender, Ronald H.	Cedars-Sinai Medical Center
Whitten, Charles W.	Univ Texas Southwestern Med Ct
Wiener-Kronish, Jeanine P.	Massachusetts General Hospital
Williams, John P.	Univ of Pittsburgh Med Ctr
Wills, John H.	Univ of New Mexico Sch of Med
Winikoff, Stephen P.	St Joseph's Regional Med Ctr
Wood, Margaret	New York Pres Hosp, Columbia
Zaidan, James R.	Emory Univ Sch of Med
Zanella, John	Univ of Tennessee, Memphis
Zvara, David A.	Univ of North Carolina Hosp

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Member	Institution
Roberts, Kevin W.	Albany Medical Center
Delphin, Ellise S.	Albert Einstein/Montefiore
Suresh, Maya S.	Baylor College of Medicine
Dunn, Steven M.	Baystate Med Ctr
Simon, Brett	Beth Israel Deaconess Med Ctr
Lewis, Keith P.	Boston Univ Med Ctr
Vacanti, Charles A.	Brigham & Women's Hosp
Aronsohn, Judith L.	Brookdale Univ Hosp
Wender, Ronald H.	Cedars-Sinai Medical Center
Brown, David L.	Cleveland Clinic Foundation
Goldberg, Michael E.	Cooper Hospital
Dodds, Thomas M.	Dartmouth Hitchcock Med Ctr
Kapur, Patricia	David Geffen Sch of Med UCLA
Mychaskiw, George	Drexel Univ Coll of Med
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Zaidan, James R.	Emory Univ Sch of Med
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Berrigan, Michael J.	George Washington Univ Hosp
Kim, Young D.	Georgetown Univ Hosp
Hickey, Paul R.	Harvard Med Sch Childrens Hosp
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Butterworth, John F.	Indiana Univ Sch of Med
Voronov, Gennadiy	John H. Stroger Jr., Hospital
Ulatowski, John A.	Johns Hopkins Hosp
McDonald, John S.	LA Cty Harbor, UCLA Med Ctr
Martin, Robert D.	Loma Linda Univ
Rao, Ashok S.	Louisiana St Univ Hth Sci Ctr
Kaye, Alan D.	Louisiana St Univ New Orleans
Jellish, W. Scott	Loyola Univ Med Ctr
Konstadt, Steven N.	Maimonides Med Ctr
Allyn, John W.	Maine Med Ctr
Wiener-Kronish, Jeanine P.	Massachusetts General Hospital
Cole, Daniel J.	Mayo Clinic Arizona
Spackman, Thomas	Mayo Clinic Florida
Narr, Brad J.	Mayo Sch of Grad Med Edu
Wartier, David	Med College of Wisconsin
Reeves, Scott	Med Univ of South Carolina
Head, C. Alvin	Medical College of Georgia
Sidhu, Tejbir S.	MetroHealth-Case Wstrn Res
Reich, David L.	Mount Sinai Sch of Med
Pesso, Raymond M.	Nassau Univ Med Ctr

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Szpisjak, Dale F.	National Capital Consortium
Bastien, John L.	Naval Med Ctr Portsmouth
Shapira, John B.	Naval Med Ctr-San Diego
McGoldrick, Kathryn E.	New York Med Coll, Westchester
Schianodicola, Joseph	New York Methodist Hosp
Wood, Margaret	New York Pres Hosp, Columbia
Savarese, John J.	New York Pres-Weill Cornell
Blanck, Thomas J.J.	New York Univ Med Ctr
Stock, M. Christine	NW Univ Feinberg Sch of Med
Schubert, Armin	Ochsner Clinic Foundation
Harter, Ronald L.	Ohio State Univ Hosp
Kirsch, Jeffrey	Oregon Health & Science Univ
Mets, Berend	Penn State Milton S Hershey
Tuman, Kenneth J.	Rush Univ Med Ctr
Bittenbinder, Timothy M.	Scott & White Memorial Hosp
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Winikoff, Stephen P.	St Joseph's Regional Med Ctr
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Haynes, Gary R.	St. Louis Univ Sch of Med
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Pearl, Ronald G.	Stanford Univ Med Ctr
Ward, Denham S.	Strong Mem Hosp, Univ of Roch
Lema, Mark J.	SUNY at Buffalo
Glass, Peter S.	Suny at Stony Brook
Cottrell, James E.	Suny Downstate Med Ctr
Nussmeier, Nancy	SUNY Upstate Med Univ
Barnette, Rodger E.	Temple Univ Hosp
Badr, Ahmed E.	Texas Tech Univ El Paso
Wasnick, John D.	Texas Tech Univ Lubbock
Grunwald, Zvi	Thomas Jefferson Univ Hosp
Segal, B. Scott	Tufts-New England Med Ctr
Rosinia, Frank A.	Tulane Univ Sch of Med
Hunter, Christine W.	UMDNJ-Robert W Johnson Med Sch
Moore, Peter G.	Univ California Med Ctr- Davis
Hurford, William E.	Univ Cincinnati Med Ctr
Nearman, Howard S.	Univ Hosp Cleveland-Case Wstrn
Bowe, Edwin A.	Univ Kentucky Chandler Med Ctr
Fibuch, Eugene E.	Univ Missouri Kansas Clty
Ellis, Sheila J.	Univ Nebraska Med Ctr
Jones, Keith A.	Univ of Alabama at Birmingham
Barker, Steven J.	Univ of Arizona
Pablo, Carmelita S.	Univ of Arkansas for Med Sci
Kain, Zeev N.	Univ of California, Irvine
Manecke, Gerard R.	Univ of California, San Diego
Maze, Mervyn	Univ of California, San Fran
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Enneking, F. Kayser	Univ of Florida Med Ctr
Schwartz, David E.	Univ of Illinois Chicago
Todd, Michael M.	Univ of Iowa Hosp & Clinics
Kindscher, James D.	Univ of Kansas Med Ctr - K.C.
McKay, Robert S.	Univ of Kansas Med Ctr Wichita
Rock, Peter	Univ of Maryland Sch of Med
Heard, Stephen O.	Univ of Massachusetts Med Sch
Lubarsky, David A.	Univ of Miami Sch of Med
Tremper, Kevin K.	Univ of Michigan Health System
Prielipp, Richard C.	Univ of Minnesota
Allingham, Thomas A.	Univ of Mississippi Med Ctr
Reeves-Viets, Joseph L.	Univ of Missouri Columbia Hosp
Wills, John H.	Univ of New Mexico Sch of Med
Zvara, David A.	Univ of North Carolina Hosp
Williams, John P.	Univ of Pittsburgh Med Ctr
Lumb, Philip D.	Univ of Southern California
Epps, Jerry L.	Univ of Tennessee- Knoxville
Zanella, John	Univ of Tennessee, Memphis
Prough, Donald S.	Univ of Texas Med Branch Hosp
Hagberg, Carin A.	Univ of Texas Med Sch, Houston
Marco, Alan P.	Univ of Toledo Coll of Med
Schwinn, Debra A.	Univ of Washington Med Ctr
Fitch, Jane C.K.	Univ Oklahoma Hth Sci Ctr
Andrews, John Jeffrey	Univ Texas Hth Sci Ctr San An
Whitten, Charles W.	Univ Texas Southwestern Med Ct
Cahalan, Michael K.	Univ Utah Med Ctr
Rich, George F.	Univ Virginia Health System
Pearce, Robert A.	Univ Wisconsin Med Sch
Marrero, Miguel A.	University of Puerto Rico
Sandberg, Warren	Vanderbilt Univ Med Ctr
Arancibia, Carlos U.	Virginia Commonwealth Univ
Pollock, Julia E.	Virginia Mason Med Ctr
Tobin, Joseph R.	Wake Forest Univ Sch of Med
Evers, Alex S.	Washington Univ St. Louis
Marsh, H. Michael	Wayne State Univ
Driver, Richard P.	West Virginia Univ Sch of Med
Troianos, Christopher A.	Western Pennsylvania Hosp
Grant, James D.	William Beaumont Hospital
Hines, Roberta L.	Yale New Haven Med Ctr

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Anderson, Cynthia T.	Univ of California, Irvine
Aronsohn, Judith L.	Brookdale Univ Hosp
Atwater, Benjamin I	Univ of California, San Diego
Azocar, Ruben	Boston Univ Med Ctr
Baker, Keith H.	Massachusetts General Hospital
Beckman, William A.	Naval Med Ctr Portsmouth
Berger, Jeffrey S.	George Washington Univ Hosp
Black, Susan	Univ of Alabama at Birmingham
Calimaran, Arthur L.	Univ of Mississippi Med Ctr
Cary, Christopher W.	Maine Med Ctr
Caswell, Renee E.	Mayo Clinic Arizona
Chetty, Pramod K.	Univ Oklahoma Hth Sci Ctr
Chidiac, Elie J.	Wayne State Univ
Cirella, Vincent N.	UMDNJ-Robert W Johnson Med Sch
Clark, Laura L.	Univ of Louisville Hosp
Connors, Dean F.	St. Louis Univ Sch of Med
Cox, Thomas	Washington Univ St. Louis
Craft, Robert M.	Univ of Tennessee- Knoxville
Davidson, Melissa L.	UMDNJ New Jersey Med Sch
De Ruyter, Marie L.	Mayo Clinic Florida
Dedrick, Daniel F.	Brigham & Women's Hosp
Derdemezi, Jeanette	LA Cty Harbor, UCLA Med Ctr
Driver, Richard P.	West Virginia Univ Sch of Med
Duduch, Eleanor	Univ of Massachusetts Med Sch
Dunn, Steven M.	Baystate Med Ctr
Ebert, Thomas J.	Med College of Wisconsin
Eckert, Jill M.	Penn State Milton S Hershey
Euliano, Tammy Y.	Univ of Florida Med Ctr
Fibuch, Eugene E.	Univ Missouri Kansas City
Finegold, Helene	Western Pennsylvania Hosp
Fitch, Jane C.K.	Univ Oklahoma Hth Sci Ctr
Freese, Kenneth J.	Nassau Univ Med Ctr
Gadsden, Jeff C.	St Luke's Roosevelt Hospital
Gaiser, Robert R.	Hosp of Univ of Pennsylvania
Gallagher, Christopher J.	SUNY at Stony Brook
Green, Michael S.	Drexel Univ Coll of Med
Hall, John K.	Texas Tech Univ Lubbock
Harding, James S.	Univ of New Mexico Sch of Med

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Hawkins, Joy L.	Univ of Colorado, Denver
Helman, James D.	Virginia Mason Med Ctr
Herron, Edwin W.	Louisiana St Univ Hth Sci Ctr
Jacobsen, Wayne K.	Univ of Arizona
Jaffar, Muhammad	univ of Arkansas for Med Sci
Jones, Stephanie B.	Beth Israel Deaconess Med Ctr
Karan, Suzanne B.	Strong Mem Hosp, Univ of Roch
Kaye, Alan D.	Louisiana St Univ New Orleans
Khorasani, Arjang	Advocate Illinois Masonic
Knox, S. Lynn	Univ of Texas Med Branch Hosp
Konia, Mojca R.	Univ of Minnesota
Kranner, Paul W.	Univ Wisconsin Med Sch
Kuhn, Catherine M.	Duke Univ Med Ctr
Landa, Seth E.	St Joseph's Regional Med Ctr
Landrum, Alice L.	Univ of Missouri Columbia Hosp
Lawrence, John P.	Univ Cincinnati Med Ctr
Lema, Mark J.	SUNY at Buffalo
Lewis, Michael C.	Univ of Miami Sch of Med
Long, Timothy R.	Mayo Sch of Grad Med Edu
Lopez, Carlos J.	SUNY Upstate Med Univ
Lujan, Eugenio	Naval Med Ctr-San Diego
Macario, Alex	Stanford Univ Med Ctr
Maloney, Lisabeth L.	Dartmouth Hitchcock Med Ctr
Marco, Alan P.	Univ of Toledo Coll of Med
Mathews, Donald	St. Vincent's Hosp & Med Ctr
Mayer, David C.	Univ of North Carolina Hosp
McAllister, Russell K.	Scott & White Memorial Hosp
McEvoy, Matthew D.	Med Univ of South Carolina
McIlvaine, William	Texas Tech Univ El Paso
McNulty, Stephen E.	Thomas Jefferson Univ Hosp
Metro, David G.	Univ of Pittsburgh Med Ctr
Minhaj, Mohammed M.	Univ of Chicago Hosp
Murray, Amy M.	Loyola Univ Med Ctr
Nagle, Pamela C.	Wake Forest Univ Sch of Med
Nakata, David A.	Indiana Univ Sch of Med
Nasr, Ned F.	John H. Stroger Jr., Hospital
Nemergut, Edward C.	Univ Virginia Health System
Njoku, Mary J.	Univ of Maryland Sch of Med
Norcia, Matthew P.	MetroHealth-Case Wstrn Res
Ogden, L. Lazarre	Univ Utah Med Ctr
Pang, Leila Mei	New York Pres Hosp, Columbia
Pardo, Manuel	Univ of California, San Fran
Patel, Rajesh V.	Univ of Southern California
Philpot, Thomas E.	Emory Univ Sch of Med
Pitera, Richard	St. Barnabas Med Ctr
Primeaux, Paul J.	Tulane Univ Sch of Med
Rabb, Mary F.	Univ of Texas Med Sch, Houston
Rogers, James N.	Univ Texas Hth Sci Ctr San An

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Roth, Andrew H.	Ohio State Univ Hosp
Sandison, Michael R.	Albany Medical Center
Sanford, Theodore J.	Univ of Michigan Health System
Savarese, John J.	New York Pres-Weill Cornell
Schartel, Scott A.	Temple Univ Hosp
Schell, Randall M.	Univ Kentucky Chandler Med Ctr
Scher, Corey S.	Albert Einstein/Montefiore
Schwartz, Jeffrey J.	Yale New Haven Med Ctr
Schwengel, Deborah A.	Johns Hopkins Hosp
Shapiro, Jay H.	Virginia Commonwealth Univ
Shulman, Mark S.	St Elizabeth's Med Ctr
Simonson, Jean A.	Univ Nebraska Med Ctr
Singh, Amrik	Univ California Med Ctr- Davis
Soto, Roy G.	William Beaumont Hospital
Souter, Karen J.	Univ of Washington Med Ctr
Stedman, Robin B.	Ochsner Clinic Foundation
Stier, Gary R.	Loma Linda Univ
Sullivan, John T.	NW Univ Feinberg Sch of Med
Suresh, Maya S.	Baylor College of Medicine
Swide, Christopher E.	Oregon Health & Science Univ
Szeluga, Debra Jean	Univ of Iowa Hosp & Clinics
Szpisjak, Dale F.	National Capital Consortium
Tetzlaff, John E.	Cleveland Clinic Foundation
Tuman, Kenneth J.	Rush Univ Med Ctr
Tyagaraj, Kalpana C.	Maimonides Med Ctr
Unruh, Gregory K.	Univ of Kansas Med Ctr - K.C.
VadeBoncouer, Tim R.	Univ of Illinois Chicago
Waisel, David B.	Harvard Med Sch Childrens Hosp
Wajda, Michael C.	New York Univ Med Ctr
Wall, Russell T.	Georgetown Univ Hosp
Wallace, David A.	Univ Hosp Cleveland-Case Wstrn
Yarmush, Joel M.	New York Methodist Hosp
Yarnell, Ralph W.	Fletcher Allen Health Care
Yumul, Roya	Cedars-Sinai Medical Center

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Khorasani, Arjang	Advocate Illinois Masonic
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Scher, Corey S.	Albert Einstein/Montefiore
Suresh, Maya S.	Baylor College of Medicine
Dunn, Steven M.	Baystate Med Ctr
Jones, Stephanie B.	Beth Israel Deaconess Med Ctr
Azocar, Ruben	Boston Univ Med Ctr
Dedrick, Daniel F.	Brigham & Women's Hosp
Aronsohn, Judith L.	Brookdale Univ Hosp
Yumul, Roya	Cedars-Sinai Medical Center
Tetzlaff, John E.	Cleveland Clinic Foundation
Maloney, Lisabeth L.	Dartmouth Hitchcock Med Ctr
Green, Michael S.	Drexel Univ Coll of Med
Kuhn, Catherine M.	Duke Univ Med Ctr
Philpot, Thomas E.	Emory Univ Sch of Med
Yarnell, Ralph W.	Fletcher Allen Health Care
Berger, Jeffrey S.	George Washington Univ Hosp
Wall, Russell T.	Georgetown Univ Hosp
Waisel, David B.	Harvard Med Sch Childrens Hosp
Alarcon, William H.	Henry Ford Health System
Gaiser, Robert R.	Hosp of Univ of Pennsylvania
Nakata, David A.	Indiana Univ Sch of Med
Nasr, Ned F.	John H. Stroger Jr., Hospital
Schwengel, Deborah A.	Johns Hopkins Hosp
Derdemezi, Jeanette	LA Cty Harbor, UCLA Med Ctr
Stier, Gary R.	Loma Linda Univ
Herron, Edwin W.	Louisiana St Univ Hth Sci Ctr
Kaye, Alan D.	Louisiana St Univ New Orleans
Murray, Amy M.	Loyola Univ Med Ctr
Tyagaraj, Kalpana C.	Maimonides Med Ctr
Cary, Christopher W.	Maine Med Ctr
Baker, Keith H.	Massachusetts General Hospital
Caswell, Renee E.	Mayo Clinic Arizona
De Ruyter, Marie L.	Mayo Clinic Florida
Long, Timothy R.	Mayo Sch of Grad Med Edu
Ebert, Thomas J.	Med College of Wisconsin
McEvoy, Matthew D.	Med Univ of South Carolina
Alleyne, Audrey S.	Medical College of Georgia
Norcia, Matthew P.	MetroHealth-Case Wstrn Res
Freese, Kenneth J.	Nassau Univ Med Ctr
Szpisjak, Dale F.	National Capital Consortium
Beckman, William A.	Naval Med Ctr Portsmouth

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Lujan, Eugenio	Naval Med Ctr-San Diego
Yarmush, Joel M.	New York Methodist Hosp
Pang, Leila Mei	New York Pres Hosp, Columbia
Savarese, John J.	New York Pres-Weill Cornell
Wajda, Michael C.	New York Univ Med Ctr
Sullivan, John T.	NW Univ Feinberg Sch of Med
Stedman, Robin B.	Ochsner Clinic Foundation
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Swide, Christopher E.	Oregon Health & Science Univ
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Tuman, Kenneth J.	Rush Univ Med Ctr
McAllister, Russell K.	Scott & White Memorial Hosp
Shulman, Mark S.	St Elizabeth's Med Ctr
Landa, Seth E.	St Joseph's Regional Med Ctr
Gadsden, Jeff C.	St Luke's Roosevelt Hospital
Pitera, Richard	St. Barnabas Med Ctr
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Mathews, Donald	St. Vincent's Hosp & Med Ctr
Macario, Alex	Stanford Univ Med Ctr
Karan, Suzanne B.	Strong Mem Hosp, Univ of Roch
Lema, Mark J.	SUNY at Buffalo
Gallagher, Christopher J.	SUNY at Stony Brook
Lopez, Carlos J.	SUNY Upstate Med Univ
Schartel, Scott A.	Temple Univ Hosp
McIlvaine, William	Texas Tech Univ El Paso
Hall, John K.	Texas Tech Univ Lubbock
McNulty, Stephen E.	Thomas Jefferson Univ Hosp
Ahmed, Mohammed I.	Tufts-New England Med Ctr
Primeaux, Paul J.	Tulane Univ Sch of Med
Davidson, Melissa L.	UMDNJ New Jersey Med Sch
Cirella, Vincent N.	UMDNJ-Robert W Johnson Med Sch
Singh, Amrik	Univ California Med Ctr- Davis
Lawrence, John P.	Univ Cincinnati Med Ctr
Wallace, David A.	Univ Hosp Cleveland-Case Wstrn
Schell, Randall M.	Univ Kentucky Chandler Med Ctr
Fibuch, Eugene E.	Univ Missouri Kansas City
Simonson, Jean A.	Univ Nebraska Med Ctr
Black, Susan	Univ of Alabama at Birmingham
Jacobsen, Wayne K.	Univ of Arizona
Jaffar, Muhammad	univ of Arkansas for Med Sci
Anderson, Cynthia T.	Univ of California, Irvine
Atwater, Benjamin I	Univ of California, San Diego
Pardo, Manuel	Univ of California, San Fran
Minhaj, Mohammed M.	Univ of Chicago Hosp
Hawkins, Joy L.	Univ of Colorado, Denver
Euliano, Tammy Y.	Univ of Florida Med Ctr
VadeBoncouer, Tim R.	Univ of Illinois Chicago
Szeluga, Debra Jean	Univ of Iowa Hosp & Clinics

<b>Member</b>	<b>Institution</b>
Unruh, Gregory K.	Univ of Kansas Med Ctr - K.C.
Clark, Laura L.	Univ of Louisville Hosp
Njoku, Mary J.	Univ of Maryland Sch of Med
Duduch, Eleanor	Univ of Massachusetts Med Sch
Lewis, Michael C.	Univ of Miami Sch of Med
Sanford, Theodore J.	Univ of Michigan Health System
Konia, Mojca R.	Univ of Minnesota
Calimaran, Arthur L.	Univ of Mississippi Med Ctr
Landrum, Alice L.	Univ of Missouri Columbia Hosp
Harding, James S.	Univ of New Mexico Sch of Med
Mayer, David C.	Univ of North Carolina Hosp
Metro, David G.	Univ of Pittsburgh Med Ctr
Patel, Rajesh V.	Univ of Southern California
Craft, Robert M.	Univ of Tennessee- Knoxville
Knox, S. Lynn	Univ of Texas Med Branch Hosp
Rabb, Mary F.	Univ of Texas Med Sch, Houston
Marco, Alan P.	Univ of Toledo Coll of Med
Souter, Karen J.	Univ of Washington Med Ctr
Chetty, Pramod K.	Univ Oklahoma Hth Sci Ctr
Fitch, Jane C.K.	Univ Oklahoma Hth Sci Ctr
Rogers, James N.	Univ Texas Hth Sci Ctr San An
Ogden, L. Lazarre	Univ Utah Med Ctr
Nemergut, Edward C.	Univ Virginia Health System
Kranner, Paul W.	Univ Wisconsin Med Sch
Algren, John T.	Vanderbilt Univ Med Ctr
Shapiro, Jay H.	Virginia Commonwealth Univ
Helman, James D.	Virginia Mason Med Ctr
Nagle, Pamela C.	Wake Forest Univ Sch of Med
Cox, Thomas	Washington Univ St. Louis
Chidiac, Elie J.	Wayne State Univ
Driver, Richard P.	West Virginia Univ Sch of Med
Finegold, Helene	Western Pennsylvania Hosp
Soto, Roy G.	William Beaumont Hospital
Schwartz, Jeffrey J.	Yale New Haven Med Ctr

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Abernathy, James H.	Med Univ of South Carolina	Adult Cardiothoracic Anes
Adesanya, Adebola O.	Univ Texas Southwestern Med Ct	Critical Care Medicine
Afifi, Sherif M.	NW Univ Feinberg Sch of Med	Critical Care Medicine
Agarwal, Rita	Univ of Colorado, Denver	Pediatric Anesthesiology
Andrews, William R.	Wake Forest Univ Sch of Med	Critical Care Medicine
Anitorescu, Magdalena	Univ of Chicago Hosp	Pain Medicine
Anton, James M.	Baylor College of Medicine	Adult Cardiothoracic Anes
Apostolidou, Ioanna	Univ of Minnesota	Adult Cardiothoracic Anes
Aunspaugh, Jennifer P.	Univ of Arkansas for Med Sci	Pediatric Anesthesiology
Bachman, Catherine R.	Univ of Chicago Hosp	Pediatric Anesthesiology
Bannister, Carolyn F.	Emory Univ Sch of Med	Pediatric Anesthesiology
Beasley, Ralph D.	Dartmouth Hitchcock Med Ctr	Pain Medicine
Bernstein, Wendy K.	Univ of Maryland Sch of Med	Adult Cardiothoracic Anes
Bittner, Edward	Massachusetts General Hospital	Critical Care Medicine
Blau, William S.	Univ of North Carolina Hosp	Pain Medicine
Blum, James M.	Univ of Michigan Health System	Critical Care Medicine
Boddu, Krishna	Univ of Texas Med Sch, Houston	Pain Medicine
Brenner, Gary J.	Massachusetts General Hospital	Pain Medicine
Brock, Charles W.	University of South Florida	Pain Medicine
Caldwell, Matthew D.	Univ of Michigan Health System	Adult Cardiothoracic Anes
Capdeville, Michelle	Cleveland Clinic Foundation	Adult Cardiothoracic Anes
Chaney, Mark A.	Univ of Chicago Hosp	Adult Cardiothoracic Anes
Charchafieh, Jean	Suny Downstate Med Ctr	Critical Care Medicine
Chen, Grace	Oregon Health & Science Univ	Pain Medicien
Cheung, Albert T.	Hosp of Univ of Pennsylvania	Adult Cardiothoracic Anes
Chiravuri, Srinivas	Univ of Michigan Health System	Pain Medicine
Cladis, Franklyn P.	Univ of Pittsburgh Med Ctr	Pediatric Anesthesiology
Cohen, Ira Todd	George Washington Univ Progra	Pediatric Anesthesiology
Cope, Doris K.	Univ of Pittsburgh Med Ctr	Pain Medicine
Culp, William C.	Scott & White Memorial Hosp	Adult Cardiothoracic Anes
Datta, Sukdeb	Vanderbilt Univ Med Ctr	Pain Medicine
Day, Miles R.	Texas Tech Univ Lubbock	Pain Medicine
De Leon-Casasola, Oscar A.	Suny at Buffalo	Pain Medicine
Dimitrova, Galina T.	Ohio State Univ Hosp	Adult Cardiothoracic Anes
Diwan, Sudhir A.	New York Pres-Weill Cornell	Pain Medicine
Dolinski, Sylvia Y.	Med College of Wisconsin	Critical Care Medicine
Doulatram, Gulshan	Univ of Texas Med Branch Hosp	Pain Medicine
Eaton, Michael P.	Strong Mem Hosp, Univ of Roch	Adult Cardiothoracic Anes
Faris, Khaldoun	Univ of Massachusetts Med Sch	Critical Care Medicine
Ferrante, F. Michael	David Geffen Sch of Med UCLA	Pain Medicine
Field, Larry C.	Med Univ of South Carolina	Critical Care Medicine
Fishman, Scott M.	Univ California Med Ctr- Davis	Pain Medicine
Fitzsimons, Michael G.	Massachusetts General Hospital	Adult Cardiothoracic Anes
Fleming, Neal W.	Univ California Med Ctr- Davis	Adult Cardiothoracic Anes
Flick, Randall P.	Mayo Sch of Grad Med Edu	Pediatric Anesthesiology
Fontes, Manuel L.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Furukawa, Louise	Stanford Univ Med Ctr	Pediatric Anesthesiology
Giampetro, David M.	Penn State Milton S Hershey	Pain Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Ginsberg, Steven H	UMDNJ-Robert W Johnson Med Sch	Adult Cardiothoracic Anes
Glas, Kathryn E.	Emory Univ Sch of Med	Adult Cardiothoracic Anes
Glass, Nancy L.	Baylor College of Medicine	Pediatric Anesthesiology
Green, Jeffrey	Virginia Commonwealth Univ	Adult Cardiothoracic Anes
Greilich, Philip E.	Univ Texas Southwestern Med Ct	Adult Cardiothoracic Anes
Haddy, Steven M.	Univ of Southern California	Adult Cardiothoracic Anes
Hall, Steven C.	NW Univ Feinberg Sch of Med	Pediatric Anesthesiology
Halliday, Norman J.	Univ of Miami Sch of Med	Pediatric Anesthesiology
Hammonds, William D.	Medical College of Georgia	Pain Medicine
Hamza, Maged S.	Virginia Commonwealth Univ	Pain Medicine
Hartsell, Theresa L.	Johns Hopkins Hosp	Critical Care Medicine
Hayek, Salim M.	Univ Hosp Cleveland-Case Wstrn	Pain Medicine
Hensley, Frederick A.	Univ of Alabama at Birmingham	Adult Cardiothoracic Anes
Hill, Shanna S.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Hoang, Stephen Q.	Univ Texas Southwestern Med Ct	Pediatric Anesthesiology
Holder, Donna M.	Louisiana St Univ Hth Sci Ctr	Pain Medicine
Ivie, Clarence S.	Fletcher Allen Health Care	Pain Medicine
Iyer, Chandramouli P.	Univ Texas Southwestern Med Ct	Pain Medicine
Jodka, Paul G.	Baystate Med Ctr	Critical Care Medicine
Junker, Christopher D.	George Washington Univ Hosp	Critical Care Medicine
Kabazie, Abraham J.	Western Pennsylvania Hosp	Pain Medicine
Kalra, Aman	Tufts-New England Med Ctr	Pediatric Anesthesiology
Kaplan, Richard F.	Children's National Med Ctr	Pediatric Anesthesiology
Kaynar, Ata Murat	Univ of Pittsburgh Med Ctr	Critical Care Medicine
Kohl, Benjamin A.	Hosp of Univ of Pennsylvania	Critical Care Medicine
Koshkin, Eugene	Univ of New Mexico Sch of Med	Pain Medicine
Koutrouvelis, Aristides	Univ of Texas Med Branch Hosp	Critical Care Medicine
Kroll, Henry R.	Henry Ford Health System	Pain Medicine
Lalwani, Kirk	Oregon Health & Science Univ	Pediatric Anesthesiology
Lamer, Tim J.	Mayo Sch of Grad Med Edu	Pain Medicine
Lammers, Cathleen R.	Univ California Med Ctr- Davis	Pediatric Anesthesiology
Landsman, Ira S.	Vanderbilt Univ Med Ctr	Pediatric Anesthesiology
Layon, Abraham Joseph	Univ of Florida Med Ctr	Critical Care Medicine
Lee, David J.	Univ of California, San Fran	Pain Medicine
Levan, Pierre T.	Loyola Univ Med Ctr	Adult Cardiothoracic Anes
Lindsay, David R.	Duke Univ Med Ctr	Pain Medicine
Lininger, Todd E.	Wayne State Univ	Pain Medicine
Lubenow, Timothy R.	Rush Univ Med Ctr	Pain Medicine
Mackey, Sean C.	Stanford Univ Med Ctr	Pain Medicine
MacKnight, Brenda	Western Pennsylvania Hosp	Adult Cardiothoracic Anes
Mahajan, Aman	David Geffen Sch of Med UCLA	Adult Cardiothoracic Anes
Mahajan, Gagan	Univ California Med Ctr- Davis	Pain Medicine
Mansour, Badie S.	Univ Oklahoma Hth Sci Ctr	Pain Medicine
Martinez-Ruiz, Ricardo	Univ of Miami Sch of Med	Critical Care Medicine
Mason, Linda J.	Loma Linda Univ	Pediatric Anesthesiology
Matuszczak, Maria E.	Univ of Texas Med Sch, Houston	Pediatric Anesthesiology
McKenzie-Brown, Anne M.	Emory Univ Sch of Med	Pain Medicine
McQuitty, Christopher	Univ of Texas Med Branch Hosp	Adult Cardiothoracic Anes
Mihm, Frederick G.	Stanford Univ Med Ctr	Critical Care Medicine
Mitter, Nanhi R.	Johns Hopkins Hosp	Adult Cardiothoracic Anes
Mora Mangano, Christina T.	Stanford Univ Med Ctr	Adult Cardiothoracic Anes
Nader, Nader D.	Suny at Buffalo	Adult Cardiothoracic Anes
Nagi, Peter A.	Univ of Alabama at Birmingham	Pain Medicine
Nedeljkovic, Srdjan S.	Brigham & Women's Hosp	Pain Medicine
Niezgoda, Julie J.	Cleveland Clinic Foundation	Pain Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Njoku, Dolores B.	Johns Hopkins Hosp	Pediatric Anesthesiology
O'Connor, Michael F.	Univ of Chicago Hosp	Critical Care Medicine
Onigkeit, James A.	Mayo Sch of Grad Med Edu	Critical Care Medicine
Osborne, Michael	Mayo Clinic Florida	Pain Medicine
Papadacos, Peter J.	Strong Mem Hosp, Univ of Roch	Critical Care Medicine
Peeters-Asdourian, Christine G.	Beth Israel Deaconess Med Ctr	Pain Medicine
Peng, Yong G.	Univ of Florida Med Ctr	Adult Cardiothoracic Anes
Perret, Danielle	Univ of California, Irvine	Pain Medicine
Pham, Thoha M.	Univ of California, San Fran	Pain Medicine
Phillips, Joyce F.	Univ of New Mexico Sch of Med	Pediatric Anesthesiology
Popovich, Marc	Cleveland Clinic Foundation	Critical Care Medicine
Puskas, Ferenc	Univ of Colorado, Denver	Adult Cardiothoracic Anes
Raghavendra, Meda	Loyola Univ Med Ctr	Pain Medicine
Ramsay, James G.	Emory Univ Sch of Med	Critical Care Medicine
Rassias, Athos J.	Dartmouth Hitchcock Med Ctr	Critical Care Medicine
Reynolds, Paul I.	Univ of Michigan Health System	Pediatric Anesthesiology
Richards, Michael J.	Univ of Washington Med Ctr	Pediatric Anesthesiology
Roberts, Charles A.	Louisiana St Univ Hth Sci Ctr	Pain Medicine
Rosenbaum, Stanley H.	Yale New Haven Med Ctr	Critical Care Medicine
Rosenquist, Richard W.	Univ of Iowa Hosp & Clinics	Pain Medicine
Sarantopoulos, Constantine D.	Univ of Miami Sch of Med	Pain Medicine
Sarge, Todd	Beth Israel Deaconess Med Ctr	Critical Care Medicine
Schrump, Stefanie F.	Nemours Children's Clinic	Pediatric Anesthesiology
Schwartz, Alan Jay	Hosp of Univ of Pennsylvania	Pediatric Anesthesiology
Sciarra, John C.	Univ of Miami Sch of Med	Adult Cardiothoracic Anes
Seshachar, Abhaya M. R.	Univ Oklahoma Hth Sci Ctr	Pediatric Anesthesiology
Shanewise, Jack S.	New York Pres Hosp, Columbia	Adult Cardiothoracic Anes
Shankar, Hariharan	Med College of Wisconsin	Pain Medicine
Sharma, Anshuman	Washington Univ St. Louis	Pediatric Anesthesiology
Sheinbaum, Roy	Univ of Texas Med Sch, Houston	Adult Cardiothoracic Anes
Sherwani, Saadia	NW Univ Feinberg Sch of Med	Adult Cardiothoracic Anes
Shook, Douglas C.	Brigham & Women's Hosp	Adult Cardiothoracic Anes
Shore-Lesserson, Linda J.	Albert Einstein/Montefiore	Adult Cardiothoracic Anes
Sivaraman, Vadivelu	Univ of Maryland Sch of Med	Critical Care Medicine
Sladen, Robert N.	New York Pres Hosp, Columbia	Critical Care Medicine
Stafford-Smith, Mark	Duke Univ Med Ctr	Adult Cardiothoracic Anes
Staudt, Susan	Med College of Wisconsin	Pediatric Anesthesiology
Stone, Marc	Mount Sinai Sch of Med	Adult Cardiothoracic Anes
Sullivan, Erin	Univ of Pittsburgh Med Ctr	Adult Cardiothoracic Anes
Sun, Lena S.	New York Pres Hosp, Columbia	Pediatric Anesthesiology
Sundar, Sugantha	Beth Israel Deaconess Med Ctr	Adult Cardiothoracic Anes
Tassone, Rosalie F.	Univ of Illinois Chicago	Pediatric Anesthesiology
Thomas, Parakulam S.	Suny Upstate Med Univ	Pain Medicine
Thompson, Annemarie	Vanderbilt Univ Med Ctr	Adult Cardiothoracic Anes
Thorborg, Per A.	Oregon Health & Science Univ	Critical Care Medicine
Torres, Maria D.	John H. Stroger Jr., Hospital	Pain Medicine
Trescot, Andrea	Univ of Washington Med Ctr	Pain Medicine
Tripi, Paul A.	Univ Hosp Cleveland-Case Wstrn	Pediatric Anesthesiology
Valley, Robert D.	Univ of North Carolina Hosp	Pediatric Anesthesiology
Venticinque, Steven G.	Univ Texas Hth Sci Ctr San An	Critical Care Medicine
Vorenkamp, Kevin	Univ Virginia Health System	Pain Medicine
Wagner, Dennis L.	Indiana Univ Sch of Med	Pain Medicine
Waisel, David B.	Harvard Med Sch Childrens Hosp	Pediatric Anesthesiology
Walega, David R.	NW Univ Feinberg Sch of Med	Pain Medicine
Walker, Scott G.	Indiana Univ Sch of Med	Pediatric Anesthesiology

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Wallace, Mark S.	Univ of California, San Diego	Pain Medicine
Wang, Dajie	Thomas Jefferson Univ Hosp	Pain Medicine
Warren, Daniel T.	Virginia Mason Med Ctr	Pain Medicine
Watt, Stacey A	SUNY at Buffalo	Pediatric Anesthesiology
Weavind, Liza M.	Vanderbilt Univ Med Ctr	Critical Care Medicine
Weinberger, Michael L.	New York Pres Hosp, Columbia	Pain Medicine
Weldon, B. Craig	Duke Univ Med Ctr	Pediatric Anesthesiology
Wright, Thelma B.	Univ of Maryland Sch of Med	Pain Medicine
Yanofsky, Samuel	Univ of Southern California	Pediatric Anesthesiology
Young, Christopher C.	Duke Univ Med Ctr	Critical Care Medicine
Zaidi, Saleem A.	Univ of Texas Med Sch, Houston	Critical Care Medicine (CVICU)
Zestos, Maria M.	Wayne State Univ	Pediatric Anesthesiology
Zwass, Maurice S.	Univ of California, San Fran	Pediatric Anesthesiology

**AASPD Members by Institution**

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Shore-Lesserson, Linda J.	Albert Einstein/Montefiore	Adult Cardiothoracic Anes
Anton, James M.	Baylor College of Medicine	Adult Cardiothoracic Anes
Glass, Nancy L.	Baylor College of Medicine	Pediatric Anesthesiology
Jodka, Paul G.	Baystate Med Ctr	Critical Care Medicine
Peeters-Asdourian, Christine G.	Beth Israel Deaconess Med Ctr	Pain Medicine
Sarge, Todd	Beth Israel Deaconess Med Ctr	Critical Care Medicine
Sundar, Sugantha	Beth Israel Deaconess Med Ctr	Adult Cardiothoracic Anes
Nedeljkovic, Srdjan S.	Brigham & Women's Hosp	Pain Medicine
Shook, Douglas C.	Brigham & Women's Hosp	Adult Cardiothoracic Anes
Kaplan, Richard F.	Children's National Med Ctr	Pediatric Anesthesiology
Capdeville, Michelle	Cleveland Clinic Foundation	Adult Cardiothoracic Anes
Niezgoda, Julie J.	Cleveland Clinic Foundation	Pain Medicine
Popovich, Marc	Cleveland Clinic Foundation	Critical Care Medicine
Beasley, Ralph D.	Dartmouth Hitchcock Med Ctr	Pain Medicine
Rassias, Athos J.	Dartmouth Hitchcock Med Ctr	Critical Care Medicine
Ferrante, F. Michael	David Geffen Sch of Med UCLA	Pain Medicine
Mahajan, Aman	David Geffen Sch of Med UCLA	Adult Cardiothoracic Anes
Lindsay, David R.	Duke Univ Med Ctr	Pain Medicine
Stafford-Smith, Mark	Duke Univ Med Ctr	Adult Cardiothoracic Anes
Weldon, B. Craig	Duke Univ Med Ctr	Pediatric Anesthesiology
Young, Christopher C.	Duke Univ Med Ctr	Critical Care Medicine
Bannister, Carolyn F.	Emory Univ Sch of Med	Pediatric Anesthesiology
Glas, Kathryn E.	Emory Univ Sch of Med	Adult Cardiothoracic Anes
McKenzie-Brown, Anne M.	Emory Univ Sch of Med	Pain Medicine
Ramsay, James G.	Emory Univ Sch of Med	Critical Care Medicine
Ivie, Clarence S.	Fletcher Allen Health Care	Pain Medicine
Junker, Christopher D.	George Washington Univ Hosp	Critical Care Medicine
Cohen, Ira Todd	George Washington Univ Progra	Pediatric Anesthesiology
Waisel, David B.	Harvard Med Sch Childrens Hosp	Pediatric Anesthesiology
Kroll, Henry R.	Henry Ford Health System	Pain Medicine
Cheung, Albert T.	Hosp of Univ of Pennsylvania	Adult Cardiothoracic Anes
Kohl, Benjamin A.	Hosp of Univ of Pennsylvania	Critical Care Medicine
Schwartz, Alan Jay	Hosp of Univ of Pennsylvania	Pediatric Anesthesiology
Wagner, Dennis L.	Indiana Univ Sch of Med	Pain Medicine
Walker, Scott G.	Indiana Univ Sch of Med	Pediatric Anesthesiology
Torres, Maria D.	John H. Stroger Jr., Hospital	Pain Medicine
Hartsell, Theresa L.	Johns Hopkins Hosp	Critical Care Medicine
Mitter, Nanhi R.	Johns Hopkins Hosp	Adult Cardiothoracic Anes
Njoku, Dolores B.	Johns Hopkins Hosp	Pediatric Anesthesiology
Mason, Linda J.	Loma Linda Univ	Pediatric Anesthesiology
Holder, Donna M.	Louisiana St Univ Hth Sci Ctr	Pain Medicine
Roberts, Charles A.	Louisiana St Univ Hth Sci Ctr	Pain Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Levan, Pierre T.	Loyola Univ Med Ctr	Adult Cardiothoracic Anes
Raghavendra, Meda	Loyola Univ Med Ctr	Pain Medicine
Bittner, Edward	Massachusetts General Hospital	Critical Care Medicine
Brenner, Gary J.	Massachusetts General Hospital	Pain Medicine
Fitzsimons, Michael G.	Massachusetts General Hospital	Adult Cardiothoracic Anes
Osborne, Michael	Mayo Clinic Florida	Pain Medicine
Flick, Randall P.	Mayo Sch of Grad Med Edu	Pediatric Anesthesiology
Lamer, Tim J.	Mayo Sch of Grad Med Edu	Pain Medicine
Onigkeit, James A.	Mayo Sch of Grad Med Edu	Critical Care Medicine
Dolinski, Sylvia Y.	Med College of Wisconsin	Critical Care Medicine
Shankar, Hariharan	Med College of Wisconsin	Pain Medicine
Staudt, Susan	Med College of Wisconsin	Pediatric Anesthesiology
Abernathy, James H.	Med Univ of South Carolina	Adult Cardiothoracic Anes
Field, Larry C.	Med Univ of South Carolina	Critical Care Medicine
Hammonds, William D.	Medical College of Georgia	Pain Medicine
Stone, Marc	Mount Sinai Sch of Med	Adult Cardiothoracic Anes
Schrump, Stefanie F.	Nemours Children's Clinic	Pediatric Anesthesiology
Shanewise, Jack S.	New York Pres Hosp, Columbia	Adult Cardiothoracic Anes
Sladen, Robert N.	New York Pres Hosp, Columbia	Critical Care Medicine
Sun, Lena S.	New York Pres Hosp, Columbia	Pediatric Anesthesiology
Weinberger, Michael L.	New York Pres Hosp, Columbia	Pain Medicine
Diwan, Sudhir A.	New York Pres-Weill Cornell	Pain Medicine
Fontes, Manuel L.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Hill, Shanna S.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Afifi, Sherif M.	NW Univ Feinberg Sch of Med	Critical Care Medicine
Hall, Steven C.	NW Univ Feinberg Sch of Med	Pediatric Anesthesiology
Sherwani, Saadia	NW Univ Feinberg Sch of Med	Adult Cardiothoracic Anes
Walega, David R.	NW Univ Feinberg Sch of Med	Pain Medicine
Dimitrova, Galina T.	Ohio State Univ Hosp	Adult Cardiothoracic Anes
Chen, Grace	Oregon Health & Science Univ	Pain Medicien
Lalwani, Kirk	Oregon Health & Science Univ	Pediatric Anesthesiology
Thorborg, Per A.	Oregon Health & Science Univ	Critical Care Medicine
Giampetro, David M.	Penn State Milton S Hershey	Pain Medicine
Lubenow, Timothy R.	Rush Univ Med Ctr	Pain Medicine
Culp, William C.	Scott & White Memorial Hosp	Adult Cardiothoracic Anes
Furukawa, Louise	Stanford Univ Med Ctr	Pediatric Anesthesiology
Mackey, Sean C.	Stanford Univ Med Ctr	Pain Medicine
Mihm, Frederick G.	Stanford Univ Med Ctr	Critical Care Medicine
Mora Mangano, Christina T.	Stanford Univ Med Ctr	Adult Cardiothoracic Anes
Eaton, Michael P.	Strong Mem Hosp, Univ of Roch	Adult Cardiothoracic Anes
Papadacos, Peter J.	Strong Mem Hosp, Univ of Roch	Critical Care Medicine
De Leon-Casasola, Oscar A.	Suny at Buffalo	Pain Medicine
Nader, Nader D.	Suny at Buffalo	Adult Cardiothoracic Anes
Watt, Stacey A	SUNY at Buffalo	Pediatric Anesthesiology
Charchaflied, Jean	Suny Downstate Med Ctr	Critical Care Medicine
Thomas, Parakulam S.	Suny Upstate Med Univ	Pain Medicine
Day, Miles R.	Texas Tech Univ Lubbock	Pain Medicine
Wang, Dajie	Thomas Jefferson Univ Hosp	Pain Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Kalra, Aman	Tufts-New England Med Ctr	Pediatric Anesthesiology
Ginsberg, Steven H	UMDNJ-Robert W Johnson Med Sch	Adult Cardiothoracic Anes
Fishman, Scott M.	Univ California Med Ctr- Davis	Pain Medicine
Fleming, Neal W.	Univ California Med Ctr- Davis	Adult Cardiothoracic Anes
Lammers, Cathleen R.	Univ California Med Ctr- Davis	Pediatric Anesthesiology
Mahajan, Gagan	Univ California Med Ctr- Davis	Pain Medicine
Hayek, Salim M.	Univ Hosp Cleveland-Case Wstrn	Pain Medicine
Tripi, Paul A.	Univ Hosp Cleveland-Case Wstrn	Pediatric Anesthesiology
Hensley, Frederick A.	Univ of Alabama at Birmingham	Adult Cardiothoracic Anes
Nagi, Peter A.	Univ of Alabama at Birmingham	Pain Medicine
Aunspough, Jennifer P.	Univ of Arkansas for Med Sci	Pediatric Anesthesiology
Perret, Danielle	Univ of California, Irvine	Pain Medicine
Wallace, Mark S.	Univ of California, San Diego	Pain Medicine
Lee, David J.	Univ of California, San Fran	Pain Medicine
Pham, Thoha M.	Univ of California, San Fran	Pain Medicine
Zwass, Maurice S.	Univ of California, San Fran	Pediatric Anesthesiology
Anitescu, Magdalena	Univ of Chicago Hosp	Pain Medicine
Bachman, Catherine R.	Univ of Chicago Hosp	Pediatric Anesthesiology
Chaney, Mark A.	Univ of Chicago Hosp	Adult Cardiothoracic Anes
O'Connor, Michael F.	Univ of Chicago Hosp	Critical Care Medicine
Agarwal, Rita	Univ of Colorado, Denver	Pediatric Anesthesiology
Puskas, Ferenc	Univ of Colorado, Denver	Adult Cardiothoracic Anes
Layon, Abraham Joseph	Univ of Florida Med Ctr	Critical Care Medicine
Peng, Yong G.	Univ of Florida Med Ctr	Adult Cardiothoracic Anes
Tassone, Rosalie F.	Univ of Illinois Chicago	Pediatric Anesthesiology
Rosenquist, Richard W.	Univ of Iowa Hosp & Clinics	Pain Medicine
Bernstein, Wendy K.	Univ of Maryland Sch of Med	Adult Cardiothoracic Anes
Sivaraman, Vadivelu	Univ of Maryland Sch of Med	Critical Care Medicine
Wright, Thelma B.	Univ of Maryland Sch of Med	Pain Medicine
Faris, Khaldoun	Univ of Massachusetts Med Sch	Critical Care Medicine
Halliday, Norman J.	Univ of Miami Sch of Med	Pediatric Anesthesiology
Martinez-Ruiz, Ricardo	Univ of Miami Sch of Med	Critical Care Medicine
Sarantopoulos, Constantine D.	Univ of Miami Sch of Med	Pain Medicine
Sciarra, John C.	Univ of Miami Sch of Med	Adult Cardiothoracic Anes
Blum, James M.	Univ of Michigan Health System	Critical Care Medicine
Caldwell, Matthew D.	Univ of Michigan Health System	Adult Cardiothoracic Anes
Chiravuri, Srinivas	Univ of Michigan Health System	Pain Medicine
Reynolds, Paul I.	Univ of Michigan Health System	Pediatric Anesthesiology
Apostolidou, Ioanna	Univ of Minnesota	Adult Cardiothoracic Anes
Koshkin, Eugene	Univ of New Mexico Sch of Med	Pain Medicine
Phillips, Joyce F.	Univ of New Mexico Sch of Med	Pediatric Anesthesiology
Blau, William S.	Univ of North Carolina Hosp	Pain Medicine
Valley, Robert D.	Univ of North Carolina Hosp	Pediatric Anesthesiology
Cladis, Franklyn P.	Univ of Pittsburgh Med Ctr	Pediatric Anesthesiology
Cope, Doris K.	Univ of Pittsburgh Med Ctr	Pain Medicine
Kaynar, Ata Murat	Univ of Pittsburgh Med Ctr	Critical Care Medicine
Sullivan, Erin	Univ of Pittsburgh Med Ctr	Adult Cardiothoracic Anes
Haddy, Steven M.	Univ of Southern California	Adult Cardiothoracic Anes

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Yanofsky, Samuel	Univ of Southern California	Pediatric Anesthesiology
Doulatram, Gulshan	Univ of Texas Med Branch Hosp	Pain Medicine
Koutrouvelis, Aristides	Univ of Texas Med Branch Hosp	Critical Care Medicine
McQuitty, Christopher	Univ of Texas Med Branch Hosp	Adult Cardiothoracic Anes
Boddu, Krishna	Univ of Texas Med Sch, Houston	Pain Medicine
Matuszczak, Maria E.	Univ of Texas Med Sch, Houston	Pediatric Anesthesiology
Sheinbaum, Roy	Univ of Texas Med Sch, Houston	Adult Cardiothoracic Anes
Zaidi, Saleem A.	Univ of Texas Med Sch, Houston	Critical Care Medicine (CVICU)
Richards, Michael J.	Univ of Washington Med Ctr	Pediatric Anesthesiology
Trescot, Andrea	Univ of Washington Med Ctr	Pain Medicine
Mansour, Badie S.	Univ Oklahoma Hth Sci Ctr	Pain Medicine
Seshachar, Abhaya M. R.	Univ Oklahoma Hth Sci Ctr	Pediatric Anesthesiology
Venticinque, Steven G.	Univ Texas Hth Sci Ctr San An	Critical Care Medicine
Adesanya, Adebola O.	Univ Texas Southwestern Med Ct	Critical Care Medicine
Greilich, Philip E.	Univ Texas Southwestern Med Ct	Adult Cardiothoracic Anes
Hoang, Stephen Q.	Univ Texas Southwestern Med Ct	Pediatric Anesthesiology
Iyer, Chandramouli P.	Univ Texas Southwestern Med Ct	Pain Medicine
Vorenkamp, Kevin	Univ Virginia Health System	Pain Medicine
Brock, Charles W.	University of South Florida	Pain Medicine
Datta, Sukdeb	Vanderbilt Univ Med Ctr	Pain Medicine
Landsman, Ira S.	Vanderbilt Univ Med Ctr	Pediatric Anesthesiology
Thompson, Annemarie	Vanderbilt Univ Med Ctr	Adult Cardiothoracic Anes
Weavind, Liza M.	Vanderbilt Univ Med Ctr	Critical Care Medicine
Green, Jeffrey	Virginia Commonwealth Univ	Adult Cardiothoracic Anes
Hamza, Maged S.	Virginia Commonwealth Univ	Pain Medicine
Warren, Daniel T.	Virginia Mason Med Ctr	Pain Medicine
Andrews, William R.	Wake Forest Univ Sch of Med	Critical Care Medicine
Sharma, Anshuman	Washington Univ St. Louis	Pediatric Anesthesiology
Liningier, Todd E.	Wayne State Univ	Pain Medicine
Zestos, Maria M.	Wayne State Univ	Pediatric Anesthesiology
Kabazie, Abraham J.	Western Pennsylvania Hosp	Pain Medicine
MacKnight, Brenda	Western Pennsylvania Hosp	Adult Cardiothoracic Anes
Rosenbaum, Stanley H.	Yale New Haven Med Ctr	Critical Care Medicine

**AASPD Members by Subspecialty**

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Shore-Lesserson, Linda J.	Albert Einstein/Montefiore	Adult Cardiothoracic Anes
Anton, James M.	Baylor College of Medicine	Adult Cardiothoracic Anes
Sundar, Sugantha	Beth Israel Deaconess Med Ctr	Adult Cardiothoracic Anes
Shook, Douglas C.	Brigham & Women's Hosp	Adult Cardiothoracic Anes
Capdeville, Michelle	Cleveland Clinic Foundation	Adult Cardiothoracic Anes
Mahajan, Aman	David Geffen Sch of Med UCLA	Adult Cardiothoracic Anes
Stafford-Smith, Mark	Duke Univ Med Ctr	Adult Cardiothoracic Anes
Glas, Kathryn E.	Emory Univ Sch of Med	Adult Cardiothoracic Anes
Cheung, Albert T.	Hosp of Univ of Pennsylvania	Adult Cardiothoracic Anes
Mitter, Nanhi R.	Johns Hopkins Hosp	Adult Cardiothoracic Anes
Levan, Pierre T.	Loyola Univ Med Ctr	Adult Cardiothoracic Anes
Fitzsimons, Michael G.	Massachusetts General Hospital	Adult Cardiothoracic Anes
Abernathy, James H.	Med Univ of South Carolina	Adult Cardiothoracic Anes
Stone, Marc	Mount Sinai Sch of Med	Adult Cardiothoracic Anes
Shanewise, Jack S.	New York Pres Hosp, Columbia	Adult Cardiothoracic Anes
Fontes, Manuel L.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Hill, Shanna S.	New York Pres-Weill Cornell	Adult Cardiothoracic Anes
Sherwani, Saadia	NW Univ Feinberg Sch of Med	Adult Cardiothoracic Anes
Dimitrova, Galina T.	Ohio State Univ Hosp	Adult Cardiothoracic Anes
Culp, William C.	Scott & White Memorial Hosp	Adult Cardiothoracic Anes
Mora Mangano, Christina T.	Stanford Univ Med Ctr	Adult Cardiothoracic Anes
Eaton, Michael P.	Strong Mem Hosp, Univ of Roch	Adult Cardiothoracic Anes
Nader, Nader D.	Suny at Buffalo	Adult Cardiothoracic Anes
Ginsberg, Steven H	UMDNJ-Robert W Johnson Med Sch	Adult Cardiothoracic Anes
Fleming, Neal W.	Univ California Med Ctr- Davis	Adult Cardiothoracic Anes
Hensley, Frederick A.	Univ of Alabama at Birmingham	Adult Cardiothoracic Anes
Chaney, Mark A.	Univ of Chicago Hosp	Adult Cardiothoracic Anes
Puskas, Ferenc	Univ of Colorado, Denver	Adult Cardiothoracic Anes
Peng, Yong G.	Univ of Florida Med Ctr	Adult Cardiothoracic Anes
Bernstein, Wendy K.	Univ of Maryland Sch of Med	Adult Cardiothoracic Anes
Sciarra, John C.	Univ of Miami Sch of Med	Adult Cardiothoracic Anes
Caldwell, Matthew D.	Univ of Michigan Health System	Adult Cardiothoracic Anes
Apostolidou, Ioanna	Univ of Minnesota	Adult Cardiothoracic Anes
Sullivan, Erin	Univ of Pittsburgh Med Ctr	Adult Cardiothoracic Anes
Haddy, Steven M.	Univ of Southern California	Adult Cardiothoracic Anes
McQuitty, Christopher	Univ of Texas Med Branch Hosp	Adult Cardiothoracic Anes
Sheinbaum, Roy	Univ of Texas Med Sch, Houston	Adult Cardiothoracic Anes
Greilich, Philip E.	Univ Texas Southwestern Med Ct	Adult Cardiothoracic Anes
Thompson, Annemarie	Vanderbilt Univ Med Ctr	Adult Cardiothoracic Anes
Green, Jeffrey	Virginia Commonwealth Univ	Adult Cardiothoracic Anes
MacKnight, Brenda	Western Pennsylvania Hosp	Adult Cardiothoracic Anes
Jodka, Paul G.	Baystate Med Ctr	Critical Care Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Sarge, Todd	Beth Israel Deaconess Med Ctr	Critical Care Medicine
Popovich, Marc	Cleveland Clinic Foundation	Critical Care Medicine
Rassias, Athos J.	Dartmouth Hitchcock Med Ctr	Critical Care Medicine
Young, Christopher C.	Duke Univ Med Ctr	Critical Care Medicine
Ramsay, James G.	Emory Univ Sch of Med	Critical Care Medicine
Junker, Christopher D.	George Washington Univ Hosp	Critical Care Medicine
Kohl, Benjamin A.	Hosp of Univ of Pennsylvania	Critical Care Medicine
Hartsell, Theresa L.	Johns Hopkins Hosp	Critical Care Medicine
Bittner, Edward	Massachusetts General Hospital	Critical Care Medicine
Onigkeit, James A.	Mayo Sch of Grad Med Edu	Critical Care Medicine
Dolinski, Sylvia Y.	Med College of Wisconsin	Critical Care Medicine
Field, Larry C.	Med Univ of South Carolina	Critical Care Medicine
Sladen, Robert N.	New York Pres Hosp, Columbia	Critical Care Medicine
Affif, Sherif M.	NW Univ Feinberg Sch of Med	Critical Care Medicine
Thorborg, Per A.	Oregon Health & Science Univ	Critical Care Medicine
Mihm, Frederick G.	Stanford Univ Med Ctr	Critical Care Medicine
Papadacos, Peter J.	Strong Mem Hosp, Univ of Roch	Critical Care Medicine
Charchaflied, Jean	Suny Downstate Med Ctr	Critical Care Medicine
O'Connor, Michael F.	Univ of Chicago Hosp	Critical Care Medicine
Layon, Abraham Joseph	Univ of Florida Med Ctr	Critical Care Medicine
Sivaraman, Vadivelu	Univ of Maryland Sch of Med	Critical Care Medicine
Faris, Khaldoun	Univ of Massachusetts Med Sch	Critical Care Medicine
Martinez-Ruiz, Ricardo	Univ of Miami Sch of Med	Critical Care Medicine
Blum, James M.	Univ of Michigan Health System	Critical Care Medicine
Kaynar, Ata Murat	Univ of Pittsburgh Med Ctr	Critical Care Medicine
Koutrouvelis, Aristides	Univ of Texas Med Branch Hosp	Critical Care Medicine
Venticinque, Steven G.	Univ Texas Hth Sci Ctr San An	Critical Care Medicine
Adesanya, Adebola O.	Univ Texas Southwestern Med Ct	Critical Care Medicine
Weavind, Liza M.	Vanderbilt Univ Med Ctr	Critical Care Medicine
Andrews, William R.	Wake Forest Univ Sch of Med	Critical Care Medicine
Rosenbaum, Stanley H.	Yale New Haven Med Ctr	Critical Care Medicine
Zaidi, Saleem A.	Univ of Texas Med Sch, Houston	Critical Care Medicine (CVICU)
Chen, Grace	Oregon Health & Science Univ	Pain Medicien
Peeters-Asdourian, Christine G.	Beth Israel Deaconess Med Ctr	Pain Medicine
Nedeljkovic, Srdjan S.	Brigham & Women's Hosp	Pain Medicine
Niezgoda, Julie J.	Cleveland Clinic Foundation	Pain Medicine
Beasley, Ralph D.	Dartmouth Hitchcock Med Ctr	Pain Medicine
Ferrante, F. Michael	David Geffen Sch of Med UCLA	Pain Medicine
Lindsay, David R.	Duke Univ Med Ctr	Pain Medicine
McKenzie-Brown, Anne M.	Emory Univ Sch of Med	Pain Medicine
Ivie, Clarence S.	Fletcher Allen Health Care	Pain Medicine
Kroll, Henry R.	Henry Ford Health System	Pain Medicine
Wagner, Dennis L.	Indiana Univ Sch of Med	Pain Medicine
Torres, Maria D.	John H. Stroger Jr., Hospital	Pain Medicine
Holder, Donna M.	Louisiana St Univ Hth Sci Ctr	Pain Medicine
Roberts, Charles A.	Louisiana St Univ Hth Sci Ctr	Pain Medicine
Raghavendra, Meda	Loyola Univ Med Ctr	Pain Medicine
Brenner, Gary J.	Massachusetts General Hospital	Pain Medicine

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Osborne, Michael	Mayo Clinic Florida	Pain Medicine
Lamer, Tim J.	Mayo Sch of Grad Med Edu	Pain Medicine
Shankar, Hariharan	Med College of Wisconsin	Pain Medicine
Hammonds, William D.	Medical College of Georgia	Pain Medicine
Weinberger, Michael L.	New York Pres Hosp, Columbia	Pain Medicine
Diwan, Sudhir A.	New York Pres-Weill Cornell	Pain Medicine
Walega, David R.	NW Univ Feinberg Sch of Med	Pain Medicine
Giampetro, David M.	Penn State Milton S Hershey	Pain Medicine
Lubenow, Timothy R.	Rush Univ Med Ctr	Pain Medicine
Mackey, Sean C.	Stanford Univ Med Ctr	Pain Medicine
De Leon-Casasola, Oscar A.	Suny at Buffalo	Pain Medicine
Thomas, Parakulam S.	Suny Upstate Med Univ	Pain Medicine
Day, Miles R.	Texas Tech Univ Lubbock	Pain Medicine
Wang, Dajie	Thomas Jefferson Univ Hosp	Pain Medicine
Fishman, Scott M.	Univ California Med Ctr- Davis	Pain Medicine
Mahajan, Gagan	Univ California Med Ctr- Davis	Pain Medicine
Hayek, Salim M.	Univ Hosp Cleveland-Case Wstrn	Pain Medicine
Nagi, Peter A.	Univ of Alabama at Birmingham	Pain Medicine
Perret, Danielle	Univ of California, Irvine	Pain Medicine
Wallace, Mark S.	Univ of California, San Diego	Pain Medicine
Lee, David J.	Univ of California, San Fran	Pain Medicine
Pham, Thoha M.	Univ of California, San Fran	Pain Medicine
Anitescu, Magdalena	Univ of Chicago Hosp	Pain Medicine
Rosenquist, Richard W.	Univ of Iowa Hosp & Clinics	Pain Medicine
Wright, Thelma B.	Univ of Maryland Sch of Med	Pain Medicine
Sarantopoulos, Constantine D.	Univ of Miami Sch of Med	Pain Medicine
Chiravuri, Srinivas	Univ of Michigan Health System	Pain Medicine
Koshkin, Eugene	Univ of New Mexico Sch of Med	Pain Medicine
Blau, William S.	Univ of North Carolina Hosp	Pain Medicine
Cope, Doris K.	Univ of Pittsburgh Med Ctr	Pain Medicine
Doulatram, Gulshan	Univ of Texas Med Branch Hosp	Pain Medicine
Boddu, Krishna	Univ of Texas Med Sch, Houston	Pain Medicine
Trescot, Andrea	Univ of Washington Med Ctr	Pain Medicine
Mansour, Badie S.	Univ Oklahoma Hth Sci Ctr	Pain Medicine
Iyer, Chandramouli P.	Univ Texas Southwestern Med Ct	Pain Medicine
Vorenkamp, Kevin	Univ Virginia Health System	Pain Medicine
Brock, Charles W.	University of South Florida	Pain Medicine
Datta, Sukdeb	Vanderbilt Univ Med Ctr	Pain Medicine
Hamza, Maged S.	Virginia Commonwealth Univ	Pain Medicine
Warren, Daniel T.	Virginia Mason Med Ctr	Pain Medicine
Lininger, Todd E.	Wayne State Univ	Pain Medicine
Kabazie, Abraham J.	Western Pennsylvania Hosp	Pain Medicine
Glass, Nancy L.	Baylor College of Medicine	Pediatric Anesthesiology
Kaplan, Richard F.	Children's National Med Ctr	Pediatric Anesthesiology
Weldon, B. Craig	Duke Univ Med Ctr	Pediatric Anesthesiology
Bannister, Carolyn F.	Emory Univ Sch of Med	Pediatric Anesthesiology
Cohen, Ira Todd	George Washington Univ Progra	Pediatric Anesthesiology
Waisel, David B.	Harvard Med Sch Childrens Hosp	Pediatric Anesthesiology

<b>Member</b>	<b>Institution</b>	<b>Subspecialty</b>
Schwartz, Alan Jay	Hosp of Univ of Pennsylvania	Pediatric Anesthesiology
Walker, Scott G.	Indiana Univ Sch of Med	Pediatric Anesthesiology
Njoku, Dolores B.	Johns Hopkins Hosp	Pediatric Anesthesiology
Mason, Linda J.	Loma Linda Univ	Pediatric Anesthesiology
Flick, Randall P.	Mayo Sch of Grad Med Edu	Pediatric Anesthesiology
Staudt, Susan	Med College of Wisconsin	Pediatric Anesthesiology
Schrump, Stefanie F.	Nemours Children's Clinic	Pediatric Anesthesiology
Sun, Lena S.	New York Pres Hosp, Columbia	Pediatric Anesthesiology
Hall, Steven C.	NW Univ Feinberg Sch of Med	Pediatric Anesthesiology
Lalwani, Kirk	Oregon Health & Science Univ	Pediatric Anesthesiology
Furukawa, Louise	Stanford Univ Med Ctr	Pediatric Anesthesiology
Watt, Stacey A	SUNY at Buffalo	Pediatric Anesthesiology
Kalra, Aman	Tufts-New England Med Ctr	Pediatric Anesthesiology
Lammers, Cathleen R.	Univ California Med Ctr- Davis	Pediatric Anesthesiology
Tripi, Paul A.	Univ Hosp Cleveland-Case Wstrn	Pediatric Anesthesiology
Aunspaugh, Jennifer P.	Univ of Arkansas for Med Sci	Pediatric Anesthesiology
Zwass, Maurice S.	Univ of California, San Fran	Pediatric Anesthesiology
Bachman, Catherine R.	Univ of Chicago Hosp	Pediatric Anesthesiology
Agarwal, Rita	Univ of Colorado, Denver	Pediatric Anesthesiology
Tassone, Rosalie F.	Univ of Illinois Chicago	Pediatric Anesthesiology
Halliday, Norman J.	Univ of Miami Sch of Med	Pediatric Anesthesiology
Reynolds, Paul I.	Univ of Michigan Health System	Pediatric Anesthesiology
Phillips, Joyce F.	Univ of New Mexico Sch of Med	Pediatric Anesthesiology
Valley, Robert D.	Univ of North Carolina Hosp	Pediatric Anesthesiology
Cladis, Franklyn P.	Univ of Pittsburgh Med Ctr	Pediatric Anesthesiology
Yanofsky, Samuel	Univ of Southern California	Pediatric Anesthesiology
Matuszczak, Maria E.	Univ of Texas Med Sch, Houston	Pediatric Anesthesiology
Richards, Michael J.	Univ of Washington Med Ctr	Pediatric Anesthesiology
Seshachar, Abhaya M. R.	Univ Oklahoma Hth Sci Ctr	Pediatric Anesthesiology
Hoang, Stephen Q.	Univ Texas Southwestern Med Ct	Pediatric Anesthesiology
Landsman, Ira S.	Vanderbilt Univ Med Ctr	Pediatric Anesthesiology
Sharma, Anshuman	Washington Univ St. Louis	Pediatric Anesthesiology
Zestos, Maria M.	Wayne State Univ	Pediatric Anesthesiology

# Concurrent Sessions - Friday, November 5<sup>th</sup>

## AAAC Session

### AAAC New Chair Session

Moderator: Charles A. Vacanti, M.D.

- 9:00 a.m. – 9:25 a.m. **What Did You Expect? What Is Expected of You?**  
Charles A. Vacanti, M.D.
- 9:25 a.m. – 9:45 a.m. **Leadership Primer: Basics You Need to Know**  
Berend Mets, M.B., Ch.B., Ph.D.
- 9:45 a.m. – 10:05 a.m. **Strategies for Negotiating with Deans, Hospital CEOs and Even Surgeons**  
Steven J. Barker, Ph.D., M.D.
- 10:05 a.m. – 10:30 a.m. **Coffee Break and Networking**
- 10:30 a.m. – 10:50 a.m. **What Got You There, Won't Keep You There...Strategies for the First Five Seconds And Five Years as Chair**  
Roberta L. Hines, M.D.
- 10:50 a.m. – 11:10 a.m. **A Dean's Perspective: What A Dean Would Like to See in an Anesthesiology Chair?**  
Edward D. Miller, M.D.
- 11:10 a.m. – 11:50 a.m. **Panel Session: How Their Expectations Have Changed Since Accepting the Position as Chair**  
Steven J. Barker, Ph.D., M.D.; Roberta L. Hines, M.D.; Thomas M. Dodds, M.D.; Warren Sandberg, M.D., Ph.D.; B. Scott Segal, M.D.
- 11:50 a.m. - Noon **Question and Answer Session**

### Afternoon Session

- 1:30 p.m. – 4:30 p.m. **General Session**  
Moderator: Jeffrey L. Apfelbaum, M.D.
- 1:30 p.m. – 1:50 p.m. **Perfect Storm**  
Sachin Kheterpal, M.D.
- 1:50 p.m. – 2:50 p.m. **Future Potential Alternatives to RVU Payment Do We Have to be Different?**
- **RVU's and RBRVS RVU's – End the Confusion!**  
David A. Lubarsky, M.D.
  - **Leadership in Anesthesia – Planning the Future of Our Specialty**  
Mark J. Lema, M.D.
- 2:50 p.m. – 3:00 p.m. **Question and Answer Session**
- 3:00 p.m. - 3:15 p.m. **Coffee Break and Networking**
- 3:15 p.m. – 3:45 p.m. **Addressing the Increasingly Incompetent Anesthesiologist**  
Robert A. Scahill, M.D.
- 3:45 p.m. – 4:15 p.m. **Navigating the Regulatory Landmines**  
Judith Jurin Semo, J.D., Esq.
- 4:15 p.m. – 4:30 p.m. **Question and Answer Session**
- 4:30 p.m. – 6:00 p.m. **AAAC Business Meeting**



# What did you expect, versus what is expected of you as a new chair

Charles A. Vacanti, M.D.

Vandam/Covino Professor of Anaesthesia,

Harvard Medical School

Anesthesiologist-in-Chief, and

Director, Laboratory for Tissue Engineering and  
Regenerative Medicine

Brigham and Women's Hospital

Boston, MA

10/21/10

1

**I had quite naive expectations 16 years ago**

**I thought that I was “expected” to oversee the academic and financial growth and well being of the department with appropriate institutional support.**

**That is, to interact with members of the department.  
(to be the Head Coach and Cheerleader)**

10/21/10

2

I then served as chair of a medium sized academic department (1994-2002 - UMASS), and more recently, as chair of a larger academic anesthesia department 2002- 2010 (BWH)

I could not have been more wrong!

10/21/10

3

### **My “enlightened” expectations**

I report to several bosses whose expectations are:

Don't bring me “issues” related to the Anesthesiology Department or the provision of anesthesiology services.

There is little desire to invest significant funds or resources into the development of an academic anesthesiology department.

**Do** what you want, just don't bother me.

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## The Dean:

The Anesthesiology Department should teach medical students without the provision of resources, and help develop report to the LCME, detailing how much research the Department had done and how publications had resulted from such research.

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## Hospital CEO or President:

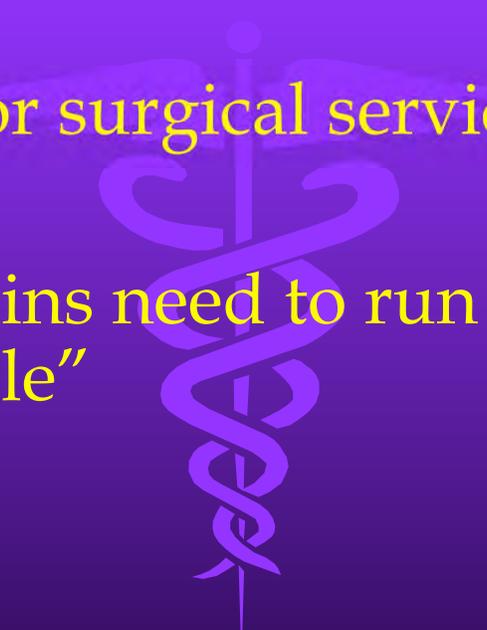
I don't want to hear from, or especially, "about" the Department of Anesthesiology

We have no resources to provide.

Good Luck!!

10/21/10

6

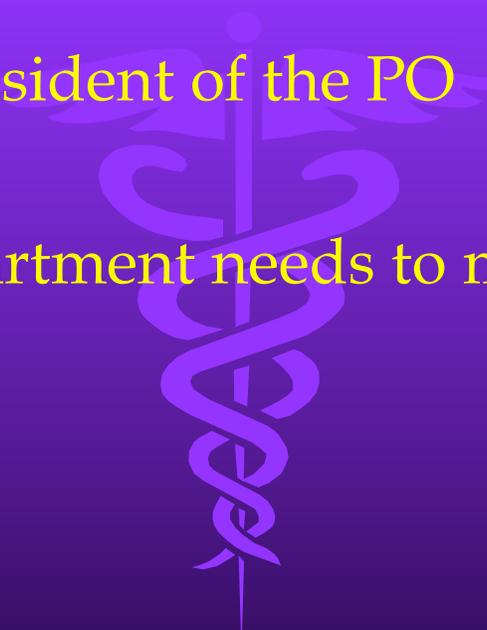


VP for surgical services:

“The trains need to run on schedule”

10/21/10

7



President of the PO

The Department needs to make a margin

10/21/10

8

## Faculty

I need more non clinical time,  
mentoring for academic growth,  
increased benefit time and increased  
compensation.

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## The COO:

I don't want to hear any complaints from  
the surgeons, nursing staff, patients or  
other staff in the hospital related to the  
provision of anesthesiology services.

How many "ditch diggers" will this job take?

10/21/10

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## Residents and fellows

They represent perhaps the most altruistic and now “naive” group of individuals.

They would like to be treated with respect and to receive an excellent education in return for their hard work.

10/21/10

11

Although you are “expected” to do as much as possible with as little support as possible, you can still be quite effective in accomplishing goals

10/21/10

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My single most important piece of advice is to know what is expected of you, “hopefully” before you accept the position.

My second most important piece of advice is to know WHO expects what of you.

My third most important piece of advice is to know WHO’s expectations matter.

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### **Ask yourself the following questions**

How long did your predecessors last?

Why did he/she leave?

What was “expected” versus what was delivered?

What has been the financial status of the department?

What is the relationship with the Dean, CEO?

Are the surgical chairs/chiefs reasonable?

**OK - ARE THEY AT LEAST NOT RETARDED?**

Are you “**expected**” to do something unrealistic?

Do you, the Faculty, Dean and CEO have same expectations?

**DETERMINE WHO HAS THE POWER!**

10/21/10

14

Once you have accepted the reality as outlined above:

Try to interact effectively with people.

The degree of **respect** that you both command and that demonstrate toward others (you can be fair and considerate, and can compromise **without being weak**) is crucial.

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**Expect that the honeymoon  
period will be brief !  
(soon, they will all hate you)**

Cultivate relationships - Listen to everyone's concerns

You are expected to be fair and transparent. Develop a clear compensation plan - (everyone wants to criticize you)

Get rid of the bad apples. Everyone expects it, and you will not be respected until you do so. (utilize the "CRAP" - later)

Make some allies, whom you can trust. SOON!

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## (Cultivate relationships)

Meet regularly and frequently with all of the “stake holders”

Everyone wants “expects” to be reassured!

The CEO, Dean, COO, Head of PO, VP, other Chairs,  
Academic

Administrator, Faculty (Clinical and Research), Residents,  
Staff.

- Most of the surgical chairs want to discuss “turnover time”  
blah, blah, blah, blah

10/21/10

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## (Be Fair)

**Faculty expect that you LISTEN!**

I created 2 Boards.

A. **Administrative Board** – Vice Chairs and some  
program directors (appointed by me)

- They need to be talented, dedicated, respected by faculty,  
and **LOYAL** to chair
- They can take a tremendous burden off of you (Chair), and  
share the responsibility of controversial decisions

B. An entirely elected **Faculty Board**

- <sup>10/21/10</sup>Demonstrates respect, and mechanism for input by faculty<sup>18</sup>

(Get rid of the bad apples)

## CRAPP!

The best committee I ever formed is the:

Committee to **R**apidly **A**ssess **P**rofessionalism, **P**erformance

An effective mechanism to encourage “problem” faculty to move on.

Don't have any sympathy or guilt. They will screw you if given the opportunity . This will discourage unprofessional behavior in others

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Since it is “expected” that you answer to<sub>(o)</sub> many masters

Prioritize your loyalties to the following!

Dean	Faculty	CEO
Faculty	PO President	Faculty
Nurses	Faculty	Surgeons (& other chairs)
Faculty	Residents	Students

**Always choose faculty first!**

(unless presenting to Dean, CEO, PO President or anyone else)

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## Faculty

The faculty “expect” that you are  
(1) fair, and (2) acting in their best interest.

### Be fair:

Develop a uniform, clear, fair compensation plan.  
This is critical for future law suits. (you will be sued)

### Act in their best interest (convey the message that you care!):

Develop mentoring programs  
Establish endowments to provide for activities outside of the  
operating budget (not only endowed professorships, but  
endowments that all faculty can take advantage of)  
Reward/acknowledge superior performance!

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## Faculty

Establish a mechanism for effective input by faculty

Set up Administrative Board (Vice-Chairs/leaders) balanced by  
an elected Faculty Board

Plan a retreat within the first 2 years to learn what faculty  
perceive and what they value. (You have “X” dollars to disperse.  
Let them express their priorities!)

Utilize the advice and the assistance of the other Chairs, and  
your predecessor. Remember they are your colleagues, and can  
be of tremendous help!

(except for the Chair of Orthopedics)

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## Develop innovative programs to reward faculty for their efforts

- incentivize special or extra efforts - weekend call
- faculty development programs
- financial assistance programs - tuition remission, home loan
- junior faculty endowments to support career development

## Act on the advice of the Boards, and follow up on recommendations made at the retreat

Schedule follow up retreats every 3-5 years, to review what has been recommended, implemented, and what still has the potential to be done, as well as explore new ideas

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## In Summary: You are “expected” to do as much as possible with as little support as possible, but you can still be effective:

Treat everyone with **respect** and be **fair**: (show that you **care**)

Command respect from others toward yourself, and members of your department

Acquire **INPUT** from **EVERYONE**, and **ACT** on it!!!

Meet with all of your Bosses (everyone you meet). Learn who has the power.

Let the faculty know that your primary interest is their best interest

Alternatively, negotiate a **golden parachute** up front.

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**GOOD LUCK!**

24

# Leadership Primer: Basics You Need to Know

Berend Mets, M.B., Ch.B., Ph.D.

## Objectives:

- To Define Leadership and Management
- To Understand the Concepts of Teaming and Change management

## Leadership Primer

### Creating the Appropriate Environment

The role of Leadership is to create the appropriate Environment which will allow practitioners to be successful in their individual and collective endeavors.

### Ensuring Optimal Team Functioning

As perioperative care becomes ever more complex a leadership challenge is to develop interdisciplinary teamwork recognizing teams as “a small group of people with complementary skills who are committed to a common purpose, performance goals and approach, for which they hold themselves mutually accountable” (2).

### Dealing with Change

The only constant in today's periop environment is change. To continue to be successful, individuals and anesthesiology groups need to be able to change as individuals, and collectively as a perioperative care group. This is because the external landscape is continually changing (3).

In the following text we will outline the concepts of Leadership and Management from contemporary business literature, and then describe a “framework” within which leadership can occur (5). We will conclude with how Leadership and Management principles can be applied to the Perioperative Setting.

## Definitions of Leadership

- “Leadership is the accomplishment of a goal through the direction of human assistants.” (6)
- “The first responsibility of a leader is to define reality. The last is to say thank-you. In between the two, the leader must become a servant and debtor.” (7)
- Leadership has also been defined as the electricity that runs through an organization.
- “Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles.” (8)

## Relationship of Leadership and Management

Leadership and management are interdependent and both essential to effective functioning. They are complimentary but not the same. “Managers do things right and leaders do the right thing”(9) is oft quoted. In fact managers create order, predictability and stability through planning and budgeting, organizing, staffing, controlling and problem solving. Instead leadership is about coping with and producing constructive change (11), in this process, Leaders are “chief disorganizers” through probing, challenging and finding better ways of doing things (12).

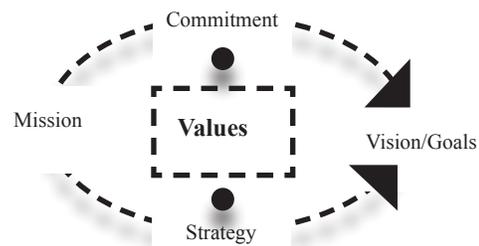
## Attributes of Successful Leaders

Kouzes and Posner have identified the key characteristics that followers seek in their leader (13). In the course of their work, these investigators surveyed more than 75,000 people in 6 continents over a period of more than eleven years and asked; “what do you expect from a leader that you would willingly follow?” The four characteristics most consistently identified by the highest percentage of respondents, were, that they wanted their leaders to be: Honest (88%), forward looking (71%), competent (66%), and inspiring (65%) (13).

### Emotional Intelligence (role modeling)

Some would say that the key leadership competency is that of emotional intelligence. This is because, the Leader's “emotional style” or mood is quite literally contagious (16). This sets the tone for the work environment and culture. Thus the leadership challenge is for leaders to regularly be optimistic, and energized so that through their chosen actions colleagues feel and act in the same way (16). More specifically, Goleman has defined leadership with respect to 6 leadership styles, namely, *visionary*, *coaching*, *affiliative*, *democratic*, *pacesetter* and *commanding*. Leaders use these styles to varying degrees at different times. In a recent survey of Anesthesiology Chairs in the USA, Chairpersons ranked Visionary and Coaching styles as most commonly used, while a Commanding style received the lowest rank order (34).

## Framework for Leadership



A simple way to view the framework within which leadership occurs (17), is according to the adapted schema depicted in above.

Our **Mission** in anesthesia may include clinical care, education, research and possibly community outreach.

**Shared Values** (Figure 1) such as *respect*, *integrity*, *collegiality*, *compassion*, as well as *excellence* are the enduring beliefs that drive decisions and strategy in a department (8).

A key goal is developing a **Vision** for the endeavor based on established values (8). A vision is not something “mystical” but a practical embodiment of a goal, which is both inspiring and sets direction.

**Strategy** are the actions that will be taken to achieve the established vision and goals (21). An example of strategy in an academic department, defines not only what will be done,

but more importantly determines what will not be done. So a department that has the Vision of being number one in National Institutes of Health (NIH) funding would not invest in research endeavors unlikely to result in NIH grant applications.

**Commitment** by an individual is the energy and creativity that people bring to the department to ensure success (20). Leaders cannot command commitment only inspire it. It is built through identifying an individual's passion and through the sharing of accountability and responsibility (13).

### Teaming

(This subject is included for the reader's interest, but will not be addressed in the Leadership Primer Lecture, due to lack of time). The hallmark of a team effort is both individual and mutual accountability and a common commitment to a goal (2). A study of 16 cardiac surgery teams adopting a novel approach to cardiac surgery, the Heartport system, and comprising teams of surgeons, anesthesiologists, nurses and perfusionists has highlighted commonalities in successful teaming (24). This procedure which is complex and involves, TEE monitored endovascular clamping, and minimal surgical incision size, required more interdependence and communication between practitioners than conventional cardiac surgery. An important lesson was that the most successful teams, (measured as the average improvement in procedure duration times) had team leaders who actively managed their teams learning efforts.

While the procedure initially took 3-4 times longer than usual; the pace of improvement differed dramatically from team to team. The authors (24) identified factors that improved team success. Important factors were found to be the selection of a consistent team of members based on competence, willingness to work with others and the willingness to accept ambiguous situations and converse with members of higher status. In addition, framing the challenge as organizational (rather than technical, vide infra) was also important. Finally, creating an environment of psychological safety and allowing "learning in action" sped team performance.

### Change management

Change is difficult. This is so because often what we did in the past works, is comfortable and the need to alter is not clearly apparent. This leads to the quote so often heard as a counter to the wrenching process of change: "If it ain't broke don't fix it". The Center for Creative Leadership has conducted an inventory of the 10 flaws that can result in managerial derailment. The most commonly cited reason for derailment was the inability to adapt (change) and the most common cited success factor in North America was the ability to develop or adapt (26).

#### *Understanding Technical vs. Adaptive Change*

At its essence, it is important to define the Challenge of the required change as a technical or an adaptive challenge. To understand this concept better, think of an individual who has just been diagnosed with coronary artery disease (CAD). A technical solution to this problem would be to schedule him/her for a CABG operation. However an adaptive challenge would be asking the individual to change their behavior to improve the potential outcome from CAD, through a change in eating and smoking habits and through starting an exercise program to compensate for a previous sedentary life style.

#### *Anatomy of a Change Initiative*

The fear of change (Metathesiophobia) is often a result of the fact that the benefits of the change are not clearly established or realized while the loss that change evokes is immediately felt. In addition there will be many who cling to the "old" way of doing

things, while there may few supporting the new initiative because the outcome may not be certain. The leadership challenge lies in defining a compelling vision, setting and creating an urgency (not anxiety) around the change imperative, building a guiding coalition, communicating, addressing obstacles, and celebrating and noting short term wins (8). An adaptation of this universal approach has been recently described in a Curricular Change initiative at UCSF (29) and in moving to Universal Start Times in the Perioperative environment in our own institution (30). The Table below is adapted from the latter work.

### **Table: Ingredients for a Successful Change Initiative**

Development of trust  
Information Sharing  
Shared Values  
Role Modeling Change  
Development of compelling vision  
Creating an urgency.  
Guiding coalition.  
Communication  
Short-term wins: monitor progress.  
Don't declare victory too soon.

### **Parallels in Industry with respect to the Perioperative Setting**

As there is little to no literature on how leadership principles might be applied to the perioperative setting, the aviation industry may serve as an example. This is an industry, (similar to the perioperative arena) that functions in a time pressured, stressful and highly regulated environment where a premium is placed on safety and quality. South West Airlines is a well known example of this industry. While many have filed for bankruptcy (USAir, United, Delta), Southwest Airlines, was considered the best of all airlines in average return on investment capital from 1985-2002 by Michael Porter, and, in a recent US Transport Report Card received the second highest ranking for 2006 (second to Jet Blue) for all categories (31). Among all industries in 2006, *FORTUNE* has listed Southwest Airlines as number five among America's Top Ten most admired corporations and the airline was named to *Business Week's* first ever list of "Customer Service Champs" while being ranked as one of the top 50 Best Places to Launch a Career (32).

The leadership and management practices of this airline have been dissected to evaluate the leadership style of its founding CEO, Herb Kelleher. Herb has created a "culture of *commitment*" practicing as a servant leader with a very distinct customer orientation, both outward (passengers) and inward, to each employee (33). The airline has a clear *vision/mission*, "to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride and Company spirit" (32). Strong core *values*; "maintain principles, while changing practices" (33) and competitive *strategies*; by focusing on a point to point service, using a single plane type (737's) for efficiency.

### **Application of principles to Perioperative Medicine**

It must be clear a cook book recipe for Leadership in Perioperative Medicine cannot be provided as each institution is different. Nevertheless a focus on Key Areas of Concern and Principles of Leadership may be of advantage.

### **Creating the Environment**

Creating an environment for work that is collegial, respectful, equitable, safe (for patient and practitioner), adaptable and goal oriented, is a paramount concern for leadership. In order to create and sustain this environment, leadership does well to consider all participants volunteers. Leaders can and should:

- (1) Be visible and role model the established values.
- (2) Build trust and trustworthiness through transparency and their own actions
- (3) Be ever mindful that their emotional style sets the tone for the environment
- (4) Be goal oriented
- (5) Be prepared to deal with problems, timeously and decisively
- (6) Communicate, communicate, communicate, using all media at their disposal.

### Leadership shared at all levels

The view that there is a single leader at the top from whom all initiatives flow is insufficient to deal with today's complex perioperative environment. Leadership is about relationships (13). Thus, Leadership is created together. To be effective, leadership needs to occur at multiple levels (8). Leadership is an interchangeable phenomenon, "now you lead, now I lead" depending on the circumstance and the particular skill set required.

Leaders can and should:

- (1) Foster leadership at appropriate levels
- (2) Cede responsibility (and accountability) to allow leadership development

### Building interdisciplinary teams

The case studies of 16 cardiac surgical teams illustrates the strength of interdisciplinary team development vs. the "command and control approach".

Leaders can and should:

- (1) Decide where processes can benefit from the development of Teams
- (2) Create an environment of psychological safety, allowing "learning in action" for such team development

### Change management,

Leadership is about managing constructive change. As Mahatma Gandhi said, the Leader should "Be the change you want to see."

Leaders can and should:

- (1) Identify and articulate clearly the need for change and the advantages of the future state
- (2) Establish what Adaptive Change is required and what values may need to be addressed to effect this
- (3) Recognize that change is "loss"
- (4) Set Priorities, re-iterate values, protect and support
- (5) Maintain an urgency while regulating the pressure
- (6) Recognize short term wins
- (7) Don't declare victory, too soon

### Conclusion

The concepts of leadership are universal and can be applied with advantage to the perioperative setting.

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# Strategies for Negotiating with Deans, Hospital CEOs and Even Surgeons

Steven J. Barker, Ph.D., M.D.

## Starting point of any negotiation: What do you each want?

What do you as a new chair want from the dean?

- Money \$\$\$.
- Space.
- People.
- Help with external relationships (e.g., hospital).

What does the dean want from you? *It is very straightforward:*

- The OR's must run on time.
- The OR's must run on time.
- The OR's must run on time.

## COMMUNICATE!

But before you start "communicating," ask yourself:

- What is your dean's style of communication? Options:
  - Frontal assault – direct approach.
  - Indirect – "nuanced" approach.
  - PowerPoint personality?
  - One-on-one, small groups, large groups?

- How does your style interact with his/hers?
  - If the dean is "nuanced" and you are frontal, you might have a problem. *Adapt your style.*

## Basic Rules:

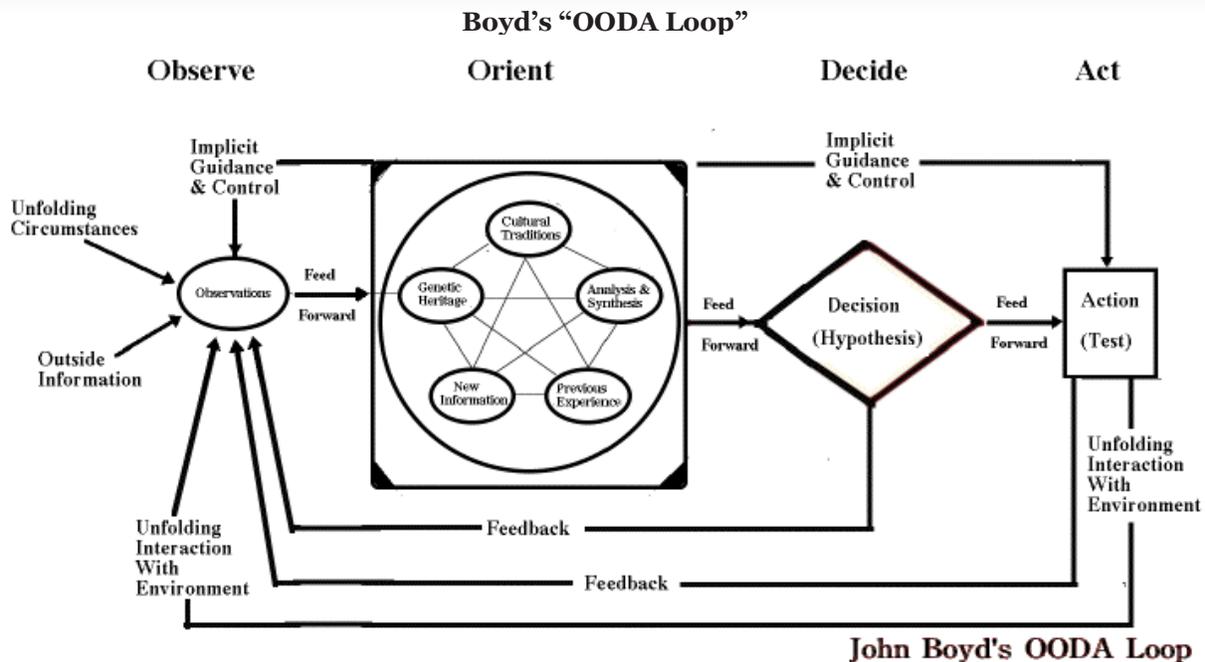
1. "When you have seen one, you have seen one." *Every relationship is unique!*
2. Therefore: listen, adapt, evolve. Be creative, but SAFE. RULE #1: The dean can fire you! When in doubt, see Rule #1.

And that leads us to.....

## The "OODA Loop"

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## How does OODA work with deans?

**OBSERVE:** Listen carefully, watch body language, and get other data when possible.

- In other words: do your homework!
- What is your objective? What is the dean's objective?

## ORIENT:

- Air combat: "what will my enemy do next?" Put yourself in his cockpit.
- What motivates the dean? Why?
- Are their cultural factors? What is his/her background?
- What are his/her options? Which one is best?
- Which brings us to: Compare your "BATNA" with his/hers.

## “BATNA”

### **Best Alternative to Negotiated Agreement**

If negotiations fail:

- What are your best alternatives?
- What are the dean's?

Which party has the Better BATNA?

- This will determine your stance in negotiations.

Do both parties understand the BATNA's?

- If the dean's is better than yours, does he/she know it?  
*If not, keep your mouth shut!*
- If your BATNA is better, make sure the dean knows.

## **OODA, You, and Dean** (cont'd)

**DECIDE:** Based on “OO”, choose best course of action (hypothesis) after considering all alternatives.

### **ACT:**

- Consider possible consequences of action.
  - Some actions could make things worse.
  - Useful actions (Boyd also called them ‘tests’) get you more information as well as help solve problem.
- Do it! But even while doing it, you must.....

**OBSERVE:** the dean's reactions to your action, and start the loop again.

## **Example: OODA/BATNA with dean, hospital, and consultant**

### **Define Your Objective:**

In Boyd's OODA, objective is always the same: *shoot down your enemy*. We must be more specific.

- **OBJECTIVE:** I (hypothetical chair) needed dean to pressure the hospital, so that they would negotiate a service contract with anesthesiology.

### **OBSERVE**

- Dean generally felt that the hospital could do no wrong.
- Hospital self-image (in 2005): Community hospital, no real connection or obligation to COM.
- Hospital CEO did not report to dean.
- No service contract (ever) between hospital and dept, little support.

### **ORIENT**

Dean's objectives of this interaction:

- The OR's should run on time, etc.
- Please go away and don't bother me – especially don't ask me for money.

Dean's perceptions.

- The hospital is almost always right.
- “I don't like people saying: ‘you have my money.’”
- The hospital CEO doesn't report to me anyway.

My BATNA:

- Give it up; continue to pay faculty salaries well below the 50th percentile. Good luck recruiting.
- Find other sources of income?????

Dean's BATNA:

- I go away and quit griping about hospital.
- Anesthesiology ends up short-staffed, and then....
- **THE OR's DON'T RUN ON TIME!!!!**

Does the dean understand both BATNA's?

- In this case, I want to be sure he does.

### **DECIDE**

Alternatives: Considering my own BATNA's (which suck) I must act aggressively.

My BATNA's are weak, but the dean's are even weaker if I can convince him of that last point.

Hypothesis for Action:

- Convince dean of reality of BATNA.
- Convince hospital directly (& through dean) that they will make money on anesth service contract.
- Make both arguments positive rather than as threats.

### **ACT**

Dean & hospital CEO unlikely to take my word on the argument that service contract will make money for them.

So, when you want someone who takes your watch and tells you what time it is, you.....

### **HIRE A CONSULTANT!**

- It's a gamble – they might give back the wrong answer. (That's another lecture.)
- Therefore, I start to OBSERVE the consultant's behavior, history, experience, and then I .....OODA the consultant.

### **OUTCOME**

*purely hypothetical, of course*

Consultant reviewed department, compared with national benchmark data (UHC, SAAC, MGMA).

Consultant recommended anesthesia service contract in the amount of \$4.2 million/yr.

Hospital “objected” strongly.

Contract signed after 9 months of further painful negotiations -- \$2 million. *Not \$4 M, but good start!*

## **OODA-BATNA: Remember it – Use it! Do the OODA-BATNA shuffle!**

- The combination of these tools will serve you well in any negotiations – not just with deans. Even patients!
- Remember the key to the OODA Loop is constant **feedback** and **adaptability**. Don't just “stick to your guns” when the situation changes.

**THE END**



## **Chairmanship:**

*What Got You There Won't Keep You  
There...*

*Strategies for the Second Five Years as  
Chair (and Beyond)*

**Roberta L. Hines, MD**

**Nicholas M. Greene Professor and Chair  
Department of Anesthesiology  
Yale University School of Medicine  
New Haven, CT**

## **Attributes of a Chair**

**(What made you an attractive candidate)**

- Academic accomplishments/record
- Scientific stature
- National reputation
- Innovative ideas / programs
- Playing to the strengths of the Institution(s)
- Interpersonal/communication skills
- Understanding the “business” of anesthesiology

(No you don't need an MBA)

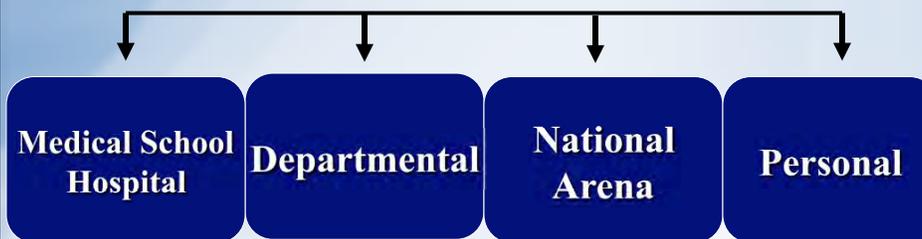
## **Primary Reasons for Non-renewal**

- Not meeting clinical expectations/demands
- Fiscal issues/deficit
- Lack of engagement/institutional visibility
- Vote of non-confidence by faculty
- Education programs in trouble
- Lack of academic productivity/advancement (both at the departmental and personal level)

## **Keys to Continued Success**

Listening Skills  
Communication  
Visibility  
Adaptability  
Relationships  
Introspection

## Develop a Strategy that Play to Your Strengths



## Institutional

Dean ↔ CEO

- Both want solutions not problems
- Make sure department and **you** are seen as adding value
- Understand priorities : They will be different
- Data is your friend : Infrastructure and IT

# Institutional

Dean ↔ CEO

- Be visible (this is more than just “showing up”)
- Participate / be prepared
- Hospital CEO will probably outlast Dean
- Involvement in GME/medical student education
- Extend your sphere of influence as widely as possible
- Understand the “currency” of both Dean and CEO (hospital)

# Institutional

- Develop and foster relationship with all Chairs – not just “surgically” based Chairs
- “Actively Seek Leadership Positions” – Medical Board/ Practice Plan / Medical School
- Be at the table for strategic planning/ discussions (resource allocation)

## Departmental

- Know your faculty : “They want to see you”
- Listen (actively)
- Communicate: stay on message
- Consistency / Transparency
- Articulate a shared vision
- Be inclusive
- Be approachable
- Know how and when to say No

## Departmental

- Provide avenues/opportunity for discussion
- Never underestimate the value of knowing the “outcome” of any meeting
- Surround yourself with people who are smarter than you
- Remember your roots

## Departmental

- Acknowledge what is not working and change it (but don't change for the sake of changing)  
Reaccess your initial vision/mission – Does it need to be refined/revised?
- Remember you have multiple missions

## Departmental

- Take a strategic look at your leadership team
- “Do you have the right people on the bus?” (James Collins) “Good to Great”
- External Review : Opportunity to examine the department, highlight success/accomplishments and determine the need for additional resources

## National Arena

- Identify a group of advisors/trusted friends
- Networking is invaluable
- There are “no secrets” or magic bullets
- “It takes a village”
- Stay engaged and active
- Remember to promote the Department & Faculty before yourself
- You will always be seen as the “Chair” first

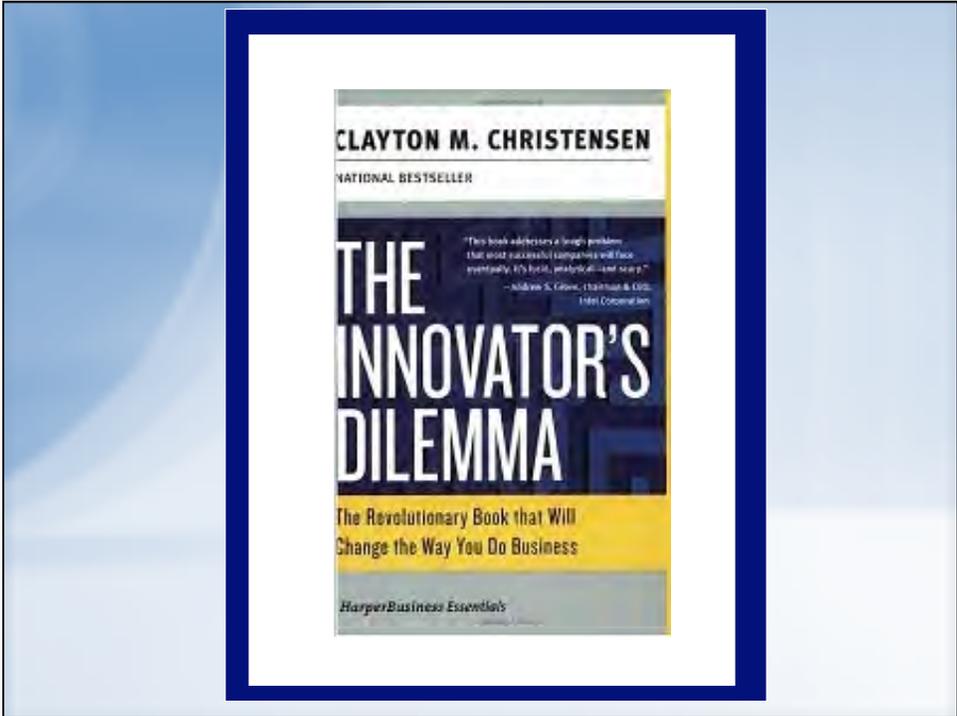
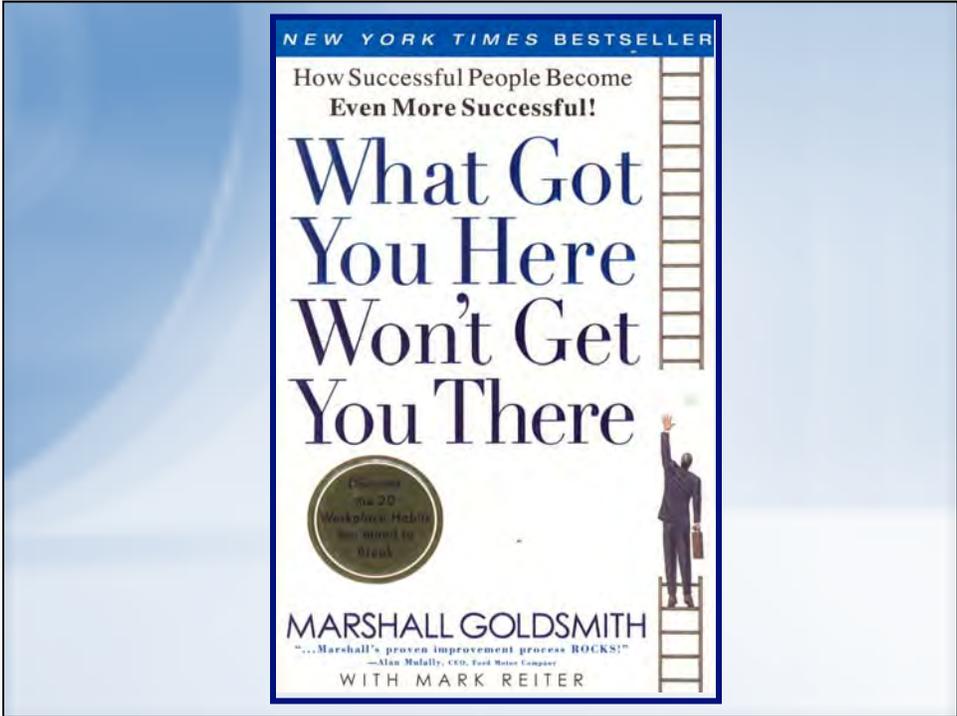
## Personal

- Maintain a sense of humor/humility
- Remember that it is “not your enemies you need worry about”
- Nurture yourself: Live/Work Balance

# Personal

- Identify opportunities for expanding and embellishing your skill sets – personal coach, executive CME activities
- Develop a 3 and 5 year personal strategic plan
- Ask yourself three hard question(s)
  - Do I want to continue (why)?
  - If I could have any job – would this be it?
  - If I wasn't Chair, what would I do?
- Exit strategy : What's next?









## **Panel Session: How Their Expectations Have Changed Since Accepting the Position as Chair**

Steven J. Barker, Ph.D., M.D.; Roberta L. Hines, M.D.;  
Thomas M. Dodds, M.D.; Warren Sandberg, M.D., Ph.D.;  
B. Scott Segal, M.D.

### **Objectives:**

**Thomas Dodds, M.D.**

1. Contrast roles as Vice Chair and Director of Clinical Affairs, Acting Chair and Chair
2. Explore what I did NOT learn from the SAAAA “New Chairs Program”
3. Learning the difference between a manager and a leader:
  - a. How I had to change my focus
  - b. How I had to build a team and learn to delegate
  - c. The importance of who is on your leadership team
  - d. Personal challenges and how I am working through them

### **AAAC New Chair Session: How Their Expectations Have Changed Since Accepting the Position as Chair**

**Warren S. Sandberg, M.D., Ph.D.**

In a nutshell, I will maintain that my expectations have not changed (much) since becoming Chair. Several minor surprises awaited me upon arrival. These were:

#### **Pleasant Surprises**

1. The Department was very well set up with respect to the ‘social contract’ under which members work. There is in place a comprehensive compensation / rewards program which is widely understood and universally implemented. The faculty comprehend and buy into the plan. With it, I have great levers to use to achieve consistently high academic and clinical productivity.

2. Two thirds of the faculty have reportable, tangible academic output, and this has been rising by 5-10% per year for the past four years.
3. There is a robust and functioning program of faculty reviews for academic promotion, coupled with a solid program for rational allocation of academic & career development time.
4. There is in place a program (the B. H. Robbins scholars program) to divert 1 – 2 residents per year into academic medicine. So far, 11 scholars have entered to program, and the “oldest” are garnering FAER grants and applying for K awards. None have left the program, and all are staying as faculty.

#### **Neutral but Comforting:**

Unlikely experiences from prior job proved to be really useful in dealing with personnel challenges. For example, being medical director of the anesthesia techs and biomedical engineers was great prep for all of the HR issues (see below).

#### **Unpleasant Surprises:**

Small messes in personnel world were left to be cleaned up. It's hard to say that this was a surprise (at least the fact of it), and so my expectations have not changed. However, nothing could have prepared me for the specific ways that faculty can find to get into trouble!

## Perfect Storm

Sachin Kheterpal, M.D.; Kevin K. Tremper, Ph.D., M.D.

For the past ten years surveys have been sent to the Chairs of our training departments regarding issues relating to faculty and finances to determine the status of the department with respect to workforce and financial stability. (1,2,3,4,5,6,7) These surveys were submitted by email in August of each year, and resubmitted to non-responders every two weeks for the next 16 weeks. In the fall at the Annual Meeting, the preliminary results are presented although the final survey results are not complete until January. The following describes the preliminary results of the 2009-2010 academic year (11<sup>th</sup> anniversary survey) of the Perfect Storm Report.

First, from the ACGME, the number of projected resident graduates in 2013 is approximately 1600. It therefore appears that we are hovering around 1600 graduates per year. The response rate for this preliminary report is 44%. The usual response rate of the past surveys is approximately 60%. The average department has 54 faculty and a class of 13 residents. Seventy-nine percent have an average of 9 interns. This is an increase over previous years in the number of institutions with internships (Categorical Positions), but a slight decrease in the number of interns per institution. Ninety-six percent of the departments have an average of 31 CRNAs. The average department is covering 52 locations with 54 faculty and a total of 71 providers (CRNAs plus residents) giving an average ratio of 1.4 primary providers per site.

There are approximately 2.7 faculty openings (5%) or approximately 250 positions nationally. This number is down slightly, varying from a high of 3.8 and a low of 2.5. The needed specialties are in the following order (most needed to least needed) Generalists, Pediatrics, Critical Care, Cardiac, Pain, Regional, OB, and Neuro. There are approximately 3.6 open CRNA positions in the 68% of departments with open positions. The faculty's academic time is 14%, which is relatively unchanged over the past six years. The average department's clinical revenue per FTE is \$439,000; research revenue per FTE is \$20,000; and institutional support per FTE is \$156,000 (including CRNA support). The average faculty support minus CRNA

support is \$127,000/FTE. This is a \$6,000/FTE decrease over the previous year. This translates to approximately \$132,000 in departmental (faculty) support per site covered.

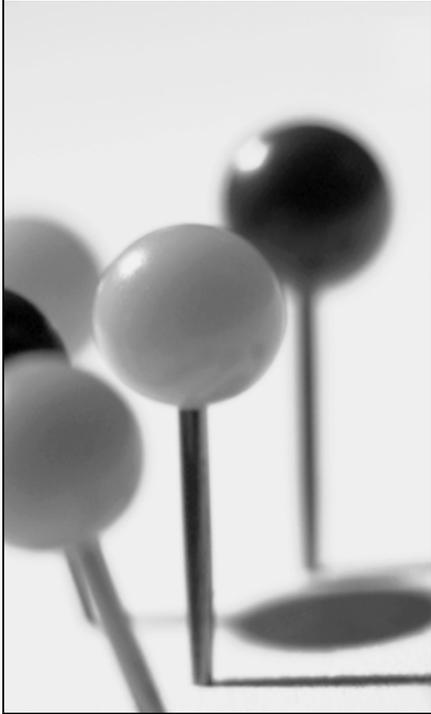
The average department had a margin of \$224,000 or \$4,100/faculty. Only 36% of departments pay additional compensation for subspecialty fellowship training. The average unit charge is \$99.80 (up \$3.75/unit from 2009) and the collections are \$35.82 (up \$2.14 from 2009). The average number of units billed per faculty is 11,100, which is less than previous years. The mean faculty/site is 1.0 and is associated with an average of \$20,300 in research revenue/faculty.

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*KKT:jjm*  
October 6, 2010





## ANESTHESIA RVU's: MUST WE BE DIFFERENT THAN EVERYONE ELSE?

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OF BUSINESS*



## DISCLOSURES

- If we don't change and anesthesia becomes the poor nursing cousin of the medical community, I will lose my nice job
- I wasn't all that .....appreciated.... when I served on the ASA Task Force on Payment Methodology because I said the same things 8 years ago.



## Goals

- Suggest a coherent scheme to move Anesthesia to RBRVS billing
- Pay anesthesiologists more for more complex care
- Provide value for higher levels of certification, not for ability to bill
  - Pre-empt CRNA independent practice by making it not any more profitable than working in the care team
  - Value board certification
- I did not have the resources to calculate the national effect of these changes, but should sane remuneration and the long term economic health of our specialty be held hostage to



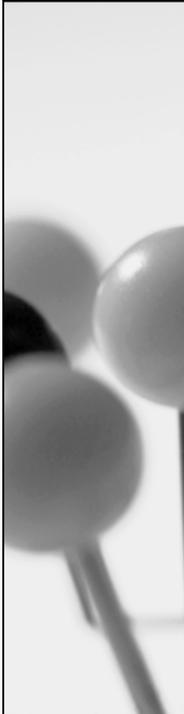
## SIMPLE TRUTHS

- Our payment scheme is different than those of 600,000 other physicians, including similar critical care specialties like intensivists and ER docs



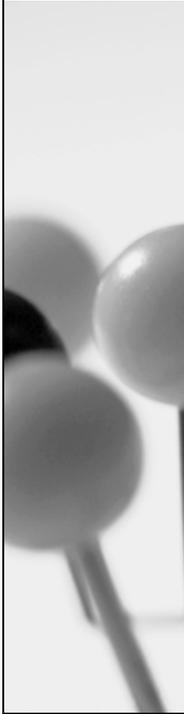
## SIMPLE TRUTHS

- Our payment scheme rewards time primarily
- What about RVU differentials? Well, when you consider a AAA (15u) takes 5-10 times as long as a colonoscopy(5u), base units are insufficient compensation in big cases.
- Any change to this is bad for people who make a ton of money taking care of healthy patients



## SIMPLE TRUTHS

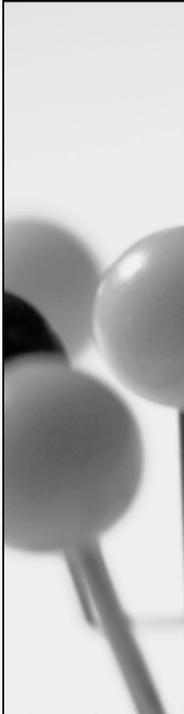
- Our payment scheme rewards time without regard to how hard the work is during the time billed
  - AAA vs colonoscopy



## AAA vs

# COLONOSCOPY

- [lectures ppt\Business Concepts\AAA vs colonoscopy10\\_20.xlsx](#)



## SIMPLE TRUTHS

- Our payment scheme rewards time without regard to who is doing it
  - BECAUSE we don't differentiate the tough cases we MAKE the case for opt-out and CRNA independent practice
    - The army has CRNA's practicing without us, but there usually is a doc to call.....
    - And they do minor cases on healthy people with supposedly limited problems
    - And the army pays the doc to "hang out"



## SIMPLE TRUTHS

- Our payment scheme rewards time without regard to who is doing it
  - BECAUSE the ASA refuses to acknowledge there is a difference between board certified docs and those without certification, it lessens the value of a board certified physician supervising or doing complex cases compared to others



## SIMPLE TRUTHS

- We lose the support of other physicians because they don't understand how we get paid, AND we make a lot of money

# CPT DECISION MAKING

Evaluation and Management (E/M) Services Guidelines

Table 1  
Complexity of Medical Decision Making

Number of Diagnoses or Management Options	Amount and/or Complexity of Data to be Reviewed	Risk of Complications and/or Morbidity or Mortality	Types of Decision Making
minimal	minimal or none	minimal	straightforward
limited	limited	low	low complexity
multiple	moderate	moderate	moderate complexity
extensive	extensive	high	high complexity

## FIVE BY FOUR

### SOLUTIONS

- CPT recognizes five types of presenting problems, which drives illness decision making (page 7, 2010 guide)
  - Minimal
  - Self limited or minor
  - Low severity
  - Moderate severity
  - High severity



## FIVE BY FOUR SOLUTIONS

- CPT recognizes FOUR types of medical decision making (page 10, 2010 guide)
  - Straightforward
  - Low complexity
  - Moderate complexity
  - High complexity



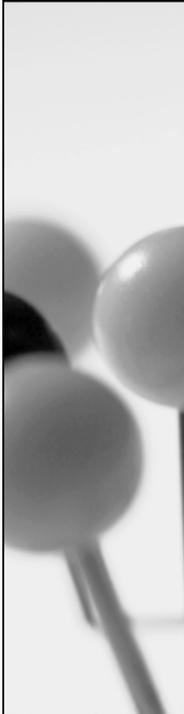
## FIVE BY FOUR SOLUTIONS

- We would mirror this preop (5 presenting types of patients) and intraop (4 levels of complexity of decision making/management)
- “Critical care and other E and M services may be provided to the same patient on the same date by the same physician”



## PT EVALUATION SOLUTIONS

- Ditch the ASA classification for payment reasons. Use it to define complexity.
  - Five presenting classes of patients
    - ASA 1
    - ASA 2
    - ASA 3 or 6
    - Multiple ASA 3 co-morbidities or ASA 4
    - Multiple ASA 3/4 co-morbidities or ASA 5



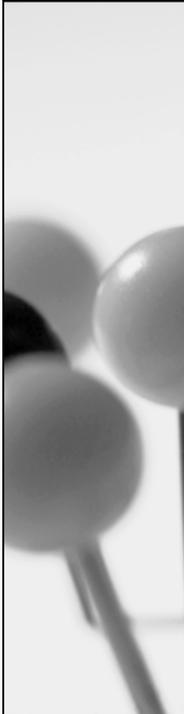
## PT EVALUATION SOLUTIONS

- By definition 99231-99235
  - ASA 1
  - ASA 2
  - ASA 3 or 6
  - ASA multi-3
  - ASA Multi-3/4 or 5
- This more accurately describes the level of thinking we must do and values appropriately higher expertise
- All preops are “new” c/w ER evaluations
- Need to be able to confirm preop



## PACU

- To bill or not to bill, that is the question.
- OF COURSE! It ain't included unless we do nothing (which is usual).
- If we see the patient, we bill for established patient visit with corresponding preop or intraop complexity (higher one if conflicting) with appropriate documentation each time.



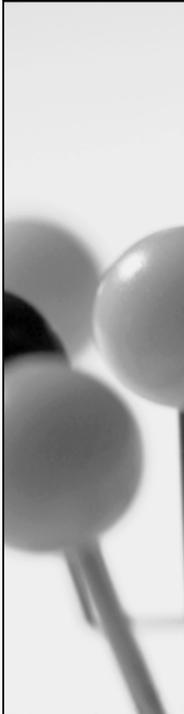
## TIME SOLUTIONS

- Ditch the ASA RVU guide EXCEPT as an indicator of physiologically complex cases
  - Four types –
    - 3-6 units – office face time payment
    - 7-10 units – critical care
    - 10-13 units – critical care
    - > 14 units – pediatric critical care
  - super complex cases requiring 1:1 coverage as pediatric critical care (heart, tx) is forfeit if you cover more than one case



## TIME SOLUTIONS

- “Time reported as critical care is the time spent engaged in work directly related to the individual patient’s care whether that time was spent at the immediate bedside or elsewhere on the floor or unit” - pg 21 CPT 2010
- Less coffee drinking, more thinking



## TIME SOLUTIONS – CRNA’S

- Supervise as many as you want – no limit. Let CRNA’s practice MORE independently with us
- Pay the CRNA’s the same (office face time) whether they are doing independent healthy patients alone or sick patients as part of the care team
- Back-up without direct MD involvement is paid



## Codes to Use and Comparative Values

- [lectures ppt\Business Concepts\SAAAnewRVU.xlsx](#)

AAA vs.

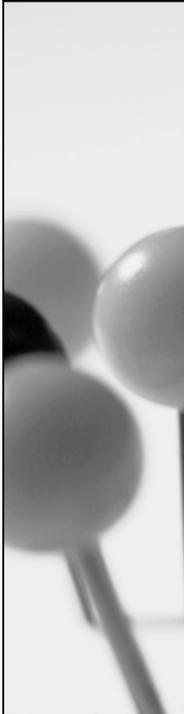
## COLONOSCOPY - NEW

- [lectures ppt\Business Concepts\AAA vs colonoscopy10\\_20.xlsx](#)



## ADDITIONAL FEATURES

- Like critical care, bundled or not as routine there
- Like Emergency medicine –all patients are considered new, and time requirements for E and M codes are not applied
- Like Anesthesia now, CRNA's are reimbursed as part of the care team without inflating value of service to any particular patient (is this right? Isn't a care team more eyes on the patient?)
- Unlike now, I suggest that non-board certified physicians would be paid at CRNA rates



## ADDITIONAL FEATURES

- Every hospital must either have a board certified anesthesiologist in-house/within 30 minutes\*

OR

- Set up telemedical conference capability to board certified anesthesiologist for any patient not ASA 1 or 2 low complexity co-morbidities AND low physiologic complexity\*\*

*\*Exclusion for academic medical centers for faculty foreign physicians determined by the chair to be equivalent; functional pathway for ANY foreign physician or current non-certified doc to become certified*

*\*\* works for ambulatory centers and offices*



# THANK YOU

**Hopefully recognition of complexity of care, economic threat of CRNA independent practice, board certification value, and anesthesia moving to RBRVS common codes all addressed**

# Future Potential Alternatives to RVU Payment

## Do We Have to be Different?:

### RVU's and RBRVS RVU's – End the Confusion!

<u>4 HRS OF Cases</u>	<u>twelve 15' lower endoscopies</u>	<u>72yo for AAA repair</u>
\$/RVU	53	20
Base	60	15
Time	12	16
Addl work		
Art line		\$36
Large bore iv X 2		0
<b>\$ EARNED</b>	<b>3816</b>	<b>656</b>

HCPCS	DESCRIPTION	TOTAL	FACTOR	\$		
99291	Critical care, first hour	6.12	36.0791	\$220.80	\$276.01	Initial time
99292	Critical care, addl 30 min	3.07	36.0791	\$110.76	\$138.45	Subsequent time
99468	Neonate crit care, initial	26.59	36.0791	\$959.34	\$1,199.18	Initial time
99469	Neonate crit care, subsq	10.96	36.0791	\$395.43	\$494.28	Subsequent time
99471	Ped critical care, initial	21.94	36.0791	\$791.58	\$989.47	Initial time
99472	Ped critical care, subsq	11.10	36.0791	\$400.48	\$500.60	Subsequent time
99475	Ped crit care age 2-5, init	15.31	36.0791	\$552.37	\$690.46	Initial time
99476	Ped crit care age 2-5, subsq	9.19	36.0791	\$331.57	\$414.46	Subsequent time
99201	Office/outpatient visit, new	0.73	36.0791	\$26.34	\$32.92	out pt preops?
99202	Office/outpatient visit, new	1.38	36.0791	\$49.79	\$62.24	out pt preops?
99203	Office/outpatient visit, new	2.11	36.0791	\$76.13	\$95.16	out pt preops?
99204	Office/outpatient visit, new	3.60	36.0791	\$129.88	\$162.36	out pt preops?
99205	Office/outpatient visit, new	4.61	36.0791	\$166.32	\$207.91	out pt preops?
99211	Office/outpatient visit, est	0.26	36.0791	\$9.38	\$11.73	amb pacu
99212	Office/outpatient visit, est	0.71	36.0791	\$25.62	\$32.02	amb pacu
99213	Office/outpatient visit, est	1.41	36.0791	\$50.87	\$63.59	amb pacu
99214	Office/outpatient visit, est	2.15	36.0791	\$77.57	\$96.96	amb pacu
99215	Office/outpatient visit, est	3.03	36.0791	\$109.32	\$136.65	amb pacu
99221	Initial hospital care	2.76	36.0791	\$99.58	\$124.47	inpt preop
99222	Initial hospital care	3.76	36.0791	\$135.66	\$169.57	inpt preop
99223	Initial hospital care	5.52	36.0791	\$199.16	\$248.95	inpt preop
99231	Subsequent hospital care	1.08	36.0791	\$38.97	\$48.71	PACU care
99232	Subsequent hospital care	1.97	36.0791	\$71.08	\$88.84	PACU care
99233	Subsequent hospital care	2.82	36.0791	\$101.74	\$127.18	PACU care
99354	Prolonged service, office first 74 minutes	2.52	36.0791	\$90.92	\$113.65	SIMPLE time
99355	Prolonged service, office addl 30 minutes	2.48	36.0791	\$89.48	\$111.85	SIMPLE time
99026	In-hospital on call service	0.00	36.0791	\$-	\$-	
99027	Out-of-hosp on call service	0.00	36.0791	\$-	\$-	
99360	Physician standby services	1.70	36.0791	\$61.33	\$76.67	CRNA cases w/MD "on call"

Notes - 30-74 minute initial time code is minimum per case

30-74 minute initial time code is minimum per case

CRNA fees are always 99354 or 99355 on each case when they are supervised, subtracted from the anesthesia bill

# Future Potential Alternatives to RVU Payment Do We Have to be Different?: Leadership in Anesthesia – Planning the Future of Our Specialty

Mark J. Lema, M.D.

## Introduction

Dramatic, sudden and disruptive changes in the practice of both medicine and anesthesiology over the next decade are inevitable and imminent. Healthcare delivery is likely to be dominated by lesser trained personnel in an effort to improve access to routine care and to reduce rising costs. Patients will receive most of their care in physicians' offices, ambulatory centers or via home-centered care networks. Hospitals will largely become inpatient ICU facilities where surgical and medical care will become fused. Many specialties including surgeons, internists, emergency medicine physicians, hospitalists and anesthesiologists will compete for, and collaborate in patient care. Professional fees and government salaries are in jeopardy of being capped or reduced as minimally invasive surgeries expand. The Centers for Medicare and Medicaid Services (CMS) analyzes the outcomes of the highest paying pain medicine CPT billing codes [such as intradiscal electro thermography (IDET) procedures for the elderly] to determine if payment restrictions should be imposed. Potential significant reductions in payment for anesthesia services as traditional procedures simplify will likely change supervisory ratios beyond 4:1 and even challenge the ability of anesthesiologists to provide solo care.

With all of these abrupt and practice-altering changes apparently going to happen within a short (10 year) time frame, leaders from organized professional societies will become essential to preserve the safe practice of medicine for our patients while defending the appropriate compensation commensurate with our training and skills. Private and academic physicians alike must seek a consensus of which policies will protect both patients and doctors alike, and speak with one professional voice to policymakers. As Benjamin Franklin said to the band of revolutionary colonists, "We must hang together, or we will surely hang alone."

## Clinical Practice Changes

Some health care futurists forecast that 'the future of surgery is medicine'. Clearly, surgical trends in the development of laparoscopic, robotic and gamma knife surgery support this assessment. Thus, expansion of conscious sedation nurses providing moderate to deep sedation will continue as they are popular alternatives for simple procedures, less expensive than CRNAs, AAs or anesthesiologists, and more easily controlled by proceduralists. In some cases, the proceduralists can bill for their services.

External 'assaults' on the delivery of anesthesia will also come from other non- anesthesiologist physicians like proceduralists, hospitalists, intensivists and emergency physicians whose resuscitative skills approach and even equal those of the anesthesiologist. The triad of improved drugs, less invasive procedures and better anesthesia delivery systems are

converting the once complex skills of delivering toxic drugs while continually 'resuscitating' the patient, to a safer routine using better congeners of propofol, simpler intubation techniques and computer assisted delivery pumps that automatically regulate dosing.

Anesthesia coverage for high-risk, medically necessary procedures falls fully within the realm of the anesthesiologist. The future of anesthesia provision of propofol for endoscopy, however, looks bleak. In times where the federal government is in financial crisis, and with a 'reported 35% excess' in health care delivery costs, the federal government will be exploiting cost reduction as a result of passing health care reform and keeping the costs manageable. It will be hard to convince CMS and private payers that only anesthesia providers can safely deliver (and bill for) propofol-like drugs with fospropofol and CAPS (Computer-Assisted Procedural Sedation) on the horizon. Endoscopists are accumulating data in an attempt to show that these techniques are as safe as midazolam and fentanyl when used by conscious sedation nurses, in addition to being faster and less expensive under their care. CMS currently pays over \$64 million just for endoscopy CPT billing codes yearly. It is likely that the continued rise in payouts to anesthesia providers for endoscopy anesthesia will result in CMS restricting and/or reducing payments to compensate for the increased volume, leading to anesthesiologists being given an 'under-funded' mandate to provide this type of care.

## Changes in Payment

Payment restructuring will be necessary as the baby-boomer population ages to make Medicare the predominant payer for health care and anesthesia services. Our Relative Values System (RVS) that pays anesthesiologists for their professional services differs from the Resource Based Relative Value System (RBRVS) used by other medical specialties. Moreover, anesthesiologists are only paid for their 'time-in, time-out' care of the patient and receive no compensation for preoperative and postoperative care. As a result, CMS pays anesthesiologists less than 40% of private payers' fees while the rest of medicine receives over 80% of their customary fees from private insurance. By 2030, anesthesiologists could receive as much as 70% of their payments from CMS – a payment shift that will dramatically drive down salaries, and will result in fewer graduating medical students opting to train in anesthesiology. The ASA Committee on Economies has been proactive by evaluating alternative methods of payments that acknowledge our perioperative services in addition to our expertise in delivering anesthesia for complex cases and medically directing routine anesthesia/sedation for multiple rooms. They will likely look to stratify payments so that 'practice guides payment' when selecting practice styles and not vice-versa. Currently, this analysis is largely a 'disaster preparedness' exercise although uncertainty about the impact of ObamaCare may speed up the timetable for our preparedness. Our current assignment of time and base units in light of dramatic changes in surgical techniques has fostered an atmosphere of

'payment guiding practice'. It's now more lucrative to anesthetize short, simple cases with rapid turnover rates than complex cardiac surgery or long robotic surgeries requiring continued vigilance. As a result, graduating residents are increasingly seeking positions at ambulatory surgery centers instead of continuing to develop their skills in tertiary medical centers while preparing for board certification. The aforementioned challenges to our traditional way of practicing are placing a number of simple procedures (ophthalmology, breast/subcutaneous biopsies endoscopies, cystoscopies, etc.) at risk for no longer requiring the personal delivery of our skills.

### **Academic Anesthesiology**

Curriculum restructuring to emphasize perioperative care, critical care, preoperative assessment, facilities management, and pain medicine will become necessary for future anesthesiologists to compete in the new healthcare paradigm. Traditional resident training that heavily emphasizes operative skills, while essential, is becoming passé. Fewer complex anesthetics appear to be the trend in the provision of health care in the future. Emphasis on prevention, outcome studies demonstrating the futility of certain surgeries with advancing age, the desire to be less/noninvasive when providing internal cures may ultimately reduce the size of our specialty or certainly reduce payment for services as anesthetic techniques concomitantly simplify. Moreover, simpler diagnostic procedures are at risk for becoming 'generic anesthetic applications' monitored by an increasing number of non-anesthesia professionals akin to how PA catheter insertion no longer was in the domain of the cardiologist.

The CMS Teaching Rule bias against anesthesiology has been hurting our training programs. In 1994, there were 162 programs. Today, 130 programs exist with several on probation. Resolving this disparity with the passing of the Congressional bill reinstating full payment when an attending anesthesiologist supervises two operating rooms staffed by residents has been the high point for ASA and academic anesthesiologists over the past year. Correction of this obvious prejudicial government policy will hopefully result in more programs resuming basic research and clinical trials as academic time for faculty becomes more available. The impact, however, has not fully be realized by most training programs.

Regardless of the plight of our academic programs, all anesthesiologists should be engaged in conducting research in clinical outcomes and patient safety. These studies will become increasingly important in demonstrating our superior safety record and value to patients and payers as competition for our medical services from both non-MD providers (CRNAs, sedation nurses) and non-anesthesiology MDs (ICU/ER) intensify.

### **Research – The Key to Our Specialty's Health**

Dr. Jerry Reves, Dean at the Medical University of South Carolina and 2006 ASA Rovenstine Lecturer said; "[Our lackluster research effort] must improve if we wish to sit at the table as peers with our academic colleagues in the halls of academe...for if not, I fear a future where anesthesiology will be viewed merely as a necessary, but only a technical specialty, irrelevant to mainstream medicine".

Somehow, during this upheaval in healthcare, anesthesiology must not forget its core mission of research to improve patient care and safety. Research got us where we are today – a respected specialty – and it will keep us in the limelight if we persevere.

### **The Counter-Argument**

Despite evidence and trends indicating that healthcare changes are imminent, there are several unresolved problems preventing timely implementation of new paradigms. Projected physician shortages across all specialties have become a reality and will quickly enter the crisis phase with the graying of American doctors. These shortages of critical medical personnel will certainly forestall governmental efforts to restructure universal access to healthcare. The result will be both a perpetuation the current 'free market economy' and tier health care into "haves" and "have-nots". Enrolling more Americans into a government system that severely limits physician payments will only frustrate these individuals when they discover that most physicians are not accepting Medicare-type patients into their practices. Supply and demand principles will thus prevail and 'boutique or concierge medical care' will become a more prominent part of the healthcare delivery landscape for those who can afford to pay a few thousand dollars yearly to retain their own private doctor.

To counter this trend, the U.S. government would be forced to spend hundreds of billions of dollars to support Medicare and Medicaid enrollees in order to keep physicians practicing in low income settings, for elderly care, and for medical training centers – a policy that would likely expose the health care bill as a financially destructive entitlement system. Since medical education is mostly a private business across the U.S., the government will need to incent those physicians who commonly accrue \$200,000 in educational debt upon graduation. Medical education will need to be heavily subsidized by the federal government (at a conservative estimated cost of about \$66,000/year per medical student). Alternatively, sizeable loan forgiveness programs (75% of debt) or financial subsidy in the case where loan debt is low will need to be implemented to attract new physicians away from lucrative private practices in order for them to enter a public health service environment.

Finally, the 'silo system of medical practice' will dominate healthcare and as it develops differently in metropolitan as opposed to rural/indigent communities based on a complex mix of resources and available providers. Physicians in short supply will continue to be recruited like sports players, complete with guaranteed incomes, signing bonuses and low/no interest home loans, to more affluent U.S. communities in need of specific services (neurosurgeons, obstetricians, intensivists, etc).

### **Conclusion**

The future over the next ten years may be cloudy and uncertain but some things are crystal clear. Spiraling healthcare costs are crippling this nation's and the world's ability to compete on an ever-flattening global playing field. Furthermore, as the U.S. government faces economic hard times and an increasing Medicare population needing more medical care expands, trimming healthcare costs will be a paramount strategy... and challenge. Any windfall payments that benefit certain physicians will abruptly end as newer drugs, disruptive technologies and health care payers find innovative ways to eliminate or markedly reduce the services of high cost providers.

For physicians, it's better to be part of the solution than part of the problem – even if it means leading healthcare reform by finding more cost-effective therapies, limiting the unnecessary tests and procedures, and cutting our payment losses by smart partnering with private payers and CMS. Future and novel medical practice paradigms should not be viewed as whether our specialty or other medical specialties will survive, but into what anesthesiology will evolve.

Remember that those pioneers of anesthesiology fought to make our specialty a real and recognized medical specialty. Successive generations advanced anesthesia practice so that it is now one of the safest higher risk medical specialties. The torch has been passed on to us to advance our profession, once again. It's our responsibility to lead during the adaptation of anesthesiology through the rapidly changing healthcare landscape that will be more patient-centric, universally accessible, time-efficient, cost-

effective, evidence-based and consumer-driven. Let's not douse the flame in the sand as we drop the torch to exclusively deal just with immediate concerns and out-dated notions that our practices will survive intact and unaltered. Look down the road to see the contour of the course, make the adjustments, and hang on for the ride. We will all benefit if we communicate, collaborate and conceive new ideas.

# Addressing the Increasingly Incompetent Anesthesiologist

Robert S. Lagasse, M.D.

In this session, we will look at the current methods of judging clinical competence, such as licensure and certification, in contrast to the evolving American Board of Anesthesiology (ABA) Maintenance of Certification in Anesthesiology (MOCA). We will delineate the traditional role of peer review in judging clinical competence and its importance in affecting changes in physician behavior. We will also take a critical look at the ability of existing national database registries, such as the National Practitioner Data Bank, to judge clinical competence, and compare this to the mission and vision of the emerging Anesthesia Quality Institute. And finally, we will discuss the taboo areas of declining clinical competence in the aging anesthesiologist. Unlike anesthesiologists-in-training, and anesthesiologist returning to the work force after recovery from substance abuse disorders, remediation may not be an option for the aging anesthesiologists with declining competence. This is particularly concerning to most of us because, through the process of normal aging, all of us will lose the requisite skills to practice safely, if given enough time.<sup>1</sup>

**Licensure & Certification:** The 10th Amendment of the United States Constitution authorizes states, and other licensing jurisdictions, to establish laws and regulations to protect the health, safety and welfare of their citizens. Medicine is a regulated profession because of the potential harm to the public if an incompetent or impaired physician is allowed to practice. To protect the public from incompetent or impaired physicians, state medical boards license physicians, investigate complaints, discipline those who violate the law, conduct physician evaluations, and facilitate rehabilitation of physicians where appropriate. There are currently 70 state medical boards authorized to regulate allopathic and osteopathic physicians.

Obtaining an initial license to practice medicine in the United States is a relatively rigorous process. State medical boards universally ensure that physicians seeking licensure have met predetermined qualifications that include graduation from an approved medical school, postgraduate training of one to three years, background checks of professional behavior with verification by personal references, and passage of a national medical licensing examination. All states currently require applicants to pass the United States Medical Licensing Exam (USMLE), or past equivalent. Although initial medical licensure relies heavily on exams composed of multiple-choice questions, most agree that it is a moderately rigorous process with sufficient state oversight to assure initial physician competence and to provide a measure of valuable public protection.<sup>1a</sup>

Although the achievement of licensure to practice medicine is generally accepted as adequate assurance of initial competence, the processes in place for assessment of continuing competence have raised growing concern among medical professionals, licensing authorities and other interested parties, including the general public. After physicians are initially licensed, they must renew their license to practice medicine every two to three years to

continue their active status. During this renewal process, physicians must demonstrate that they have maintained acceptable standards of professional conduct and medical practice as demonstrated by a review of the National Practitioner Data Bank, the Federation Physician Data Center, and other sources of public information held by the states. In most states, physicians must also show they have participated in a program of continuing medical education and are in good health. This is often satisfied by a declaration by the physician that he or she has completed approximately 40 hours of continuing medical education over the past two years, and has continued in the active practice of medicine with no known physical or mental impediments to that practice. The renewal process does not involve an examination of knowledge, practical demonstration of competence, or peer review of practice.<sup>2b</sup>

The American Board of Anesthesiology (ABA) hopes to fill the gap in assessment of continuing competence with their Maintenance of Certification in Anesthesiology (MOCA) program. MOCA is available to all ABA diplomates, whether or not their initial certification is time-limited. MOCA is a ten-year program, and diplomates with a time-limited certificate must complete the program before their current certification expires in order to maintain their diplomate status. The MOCA program consists of four components including professional standing assessment, lifelong learning and self-assessment, cognitive expertise assessment, and practice performance assessment. This latter component includes quality management in the form of a case evaluation and simulation education at least once during the ten-year cycle. If MOCA evolves from simulation-based education to simulation-based assessment at more frequent intervals, it may offer another means of competency assessment.

**Peer Review:** In 1986, Governor Mario Cuomo of New York State announced his plan to have physician credentials periodically recertified as part of the renewal process for medical licensure. In 1989, the New York State Society of Anesthesiologists (NYSSA) began developing a model program of quality assurance and peer review to meet these evolving requirements for anesthesiologists in New York State. In that same year, the ASA endorsed a peer review model, developed by Vitez,<sup>2,3</sup> that created error profiles for comparison of practitioners. The NYSSA modified this model for the purpose of recertifying and relicensing of anesthesiologists with the belief that standardized peer review was the only appropriate method for identifying patterns of human error in anesthesiologists.<sup>4</sup> They hoped that a standardized peer review model would permit development of a clinical profile containing the performance of all anesthesiologists practicing in the State. Conventional statistical methods would then be used to compare the clinical profiles of individual anesthesiologists with the statewide profile to identify outliers who may need remediation.

The NYSSA model program was never tested in New York State because the recommendations of the New York State Advisory Committee on Physician Recredentialing were never enacted into the state's public health law. If it had, the state would likely have learned that the number of patients treated by an anesthesiologist is unlikely to offer enough statistical power to use rate of human error as a feasible means of judging clinical competence. In a

1 <sup>a</sup> Federation of State Medical Boards <<http://www.fsmb.org/>>

2 <sup>b</sup> Physician Accountability for Physician Competence <<http://innovationlabs.com/summit>>

recent study of 323,879 anesthetics administered at a university practice employing a structured peer review of adverse events, 104 of these adverse events were attributed to human error for a rate of 3.2 per 10,000 anesthetics. With this knowledge in hand, faculty of this university practice were asked what rate of human error by an anesthesiologist would be indicative of the need for remedial training, and suggestive of incompetence. The median human error rates felt to indicate the need for remedial training and suggest incompetence were 10 and 12.5 per 10,000 anesthetics, respectively. Power analysis tells us that, if we were willing to be wrong about 1 out of 100 anesthesiologists judged to be incompetent (alpha error of 0.01) and 1 out of 20 anesthesiologists judged to be competent (beta error of 0.05), then sample sizes of 21,600 anesthetics per anesthesiologist would be required.<sup>3c</sup> Even at these unacceptably high levels of alpha and beta error, an appropriate sample size could require over two decades to collect. Therefore, the concept of utilizing human error rates to judge clinical competence is not feasible. This has implications for all database registries designed for this purpose.

**Closed-claims & the NPDB:** The *Health Care Quality Improvement Act of 1986* led to the establishment of the National Practitioner Data Bank (NPDB), an information clearinghouse designed to collect and release certain information related to the professional competence and conduct of physicians. The establishment of the NPDB was believed to be an important step by the U.S. Government to enhance professional review efforts by making certain information concerning medical malpractice payments and adverse actions publicly available. As noted above, the NPDB lacks the denominator data necessary to determine individual provider error rates to judge clinical competence. But even if individual denominator data was available, malpractice closed claims data is also likely to lack the statistical power necessary to be a feasible measure of clinical competence. For example, in a study of 37,924 anesthetics performed at a university healthcare network between 1992 and 1994, 18 cases involved legal action directed at an anesthesia provider. An anesthesiologist was the sole defendant named in two malpractice claims, only one of which resulted in a \$60,000 award. A single letter of intent also named an anesthesiologist as the sole defendant. In the 15 additional legal actions, an anesthesia provider was named as codefendant in three claims and implicated in 12 letters of intent. The incidence of all legal actions against the anesthesia practitioners in this sample was 4.7 per 10,000 anesthetics, and the single judgment against a practitioner in our sample represents a closed claims incidence of 0.26 per 10,000 anesthetics.<sup>5</sup>

More importantly, there may be no relationship between malpractice litigation and human errors by anesthesiologists. In the sample above that yielded 18 cases involving legal action, there were a total of 229 adverse events that resulted in disabling patient injuries. Of these 229 disabling patient injuries, 13 were considered by peer review to have resulted from human error, or deviations from the standard of care, on the part of the anesthesia provider. The rate of anesthesiologist error leading to disabling patient injuries, therefore, was 3.4 per 10,000 anesthetics. Comparison of legal action and deviations from the standard of care showed the two groups to be statistically unrelated. None of the 13 cases in which a disabling injury was caused by deviations from the standard of care, as determined by peer review, resulted in legal action; and none of the 18 cases involving legal action were felt to be due to human error on the part of the anesthesia provider. Therefore, closed malpractice claims lack both statistical power and face validity as a measure of competence.<sup>5</sup>

**Indicators of Clinical Competence:** Malpractice claims are not the only indicator of clinical competence that may lack validity. A recent systematic review by Haller et al. identified 108 clinical indicators related to anesthesia care, and nearly half of these measures were affected by some surgical or postoperative ward care.<sup>6</sup> Using the definitions of Donabedian,<sup>7</sup> 42% of these indicators were process measures, 57% were outcome measures, and 1% related to structure. All were felt to have some face validity, but validity assessment relied solely on expert opinion 60% of the time. Perhaps more disconcerting, the authors found that only 38% of proscriptive process measures were based on large randomized control trials or systematic reviews.<sup>7</sup>

In 1997, the ASA established the Ad Hoc Committee on Performance Based Credentialing that created Guidelines for Delineation of Clinical Privileges. These guidelines suggest that performance measures, in comparison to benchmarks, should be considered in the delineation of clinical privileges in anesthesiology. Because national benchmarks did not exist, the Ad Hoc Committee on Performance Based Credentialing became the standing Committee on Performance and Outcome Measures (CPOM), in 2001. The first order of business for CPOM was to develop Guidelines for (Performance & Outcomes) Database Management by the American Society of Anesthesiologists that has evolved into Guiding Principles for the Management of Performance Measures by the American Society of Anesthesiologists. In October of 2008, the ASA House of Delegates approved funding for the Anesthesia Quality Institute (AQI) that was chartered in December of the same year. Although established by the ASA, the AQI is a separate organization that intends to become the primary source of information for performance measurement, and subsequent quality improvement, in the clinical practice of anesthesiology. This information will be managed in the National Anesthesia Clinical Outcomes Registry (NACOR). The AQI expects to have 20 anesthesia groups participating in NACOR by the end of 2010. Currently, the bulk of the data being collected is electronic claims data, but the plan for the future is to collect data from automated anesthesia records.<sup>49</sup>

Although an administrative data source will answer questions about case type and case length, it is not suited for judging physician performance. In fact, the validity of administrative data to measure clinical performance, or lend applicability to risk adjustment, has been challenged. Lee et al. demonstrated that administrative data could fail to detect up to 55% of cases of pre-existing renal disease, nearly 65% of previous myocardial infarctions, and 75% of pre-existing cerebrovascular disease.<sup>8</sup> In a more recent study, Romano et al. compared National Surgical Quality Improvement Project (NSQIP) data, which were manually abstracted from medical records, to AHRQ Patient Safety Indicators, which were collected via the administrative ICD-9-CM based system, and found that the latter missed 44% of cases of pulmonary embolus or deep venous thrombosis, 68% of postoperative sepsis, 71% of wound dehiscence, and 80% of the occurrences of postoperative respiratory failure.<sup>9</sup> This lack of validity of administrative data, and the perception that the federal government lacks sufficient concern over assuring validity in hospital comparison data that is currently made public, have made physicians wary of federal involvement in policing the medical profession.

In response, the American Medical Association (AMA) introduced the American Medical Accreditation Program (AMAP), in partnership with state and county medical associations and national medical specialty societies, as a method for physicians to

3 <sup>c</sup> Lagasse R, Akerman M. The Power of Peer Review. A386. ASA Annual Meeting. 2010.

4 <sup>9</sup> Dutton R. *Counterpoint: Out With the Old, In With the New*. ASA Newsletter. 74(5): 18-19, 2010

submit their credentials to multiple health care organizations in a single approved format.<sup>10</sup> In order to satisfy the increasing demand for physician accountability, this standardized credentialing system was to include AMAP-approved physician level performance measures. Although AMAP failed from a business standpoint,<sup>11</sup> it spawned the Physician Consortium for Performance Improvement (PCPI), an amalgam of committees that previously advised AMAP. This physician-led consortium included representatives of the 24 national medical specialty societies comprising the American Board of Medical Specialties (ABMS) and was charged with developing evidence-based clinical performance measures that would enhance quality of patient care and foster accountability. Today, PCPI is comprised of more than 170 national medical specialty societies, state medical societies, the ABMS member boards, Council of Medical Specialty Societies, health care professional organizations, federal agencies, individual members and others interested in improving the quality of patient care and accountability of physicians.

Anesthesiology, as a profession, must embrace the science of performance measurement and overcome the barriers to judging clinical competence. If anesthesiology is going to remain at the forefront of the patient safety movement, judging clinical competence is going to require better quality metrics with improved statistical power and appropriate risk adjustment, genuine peer assessment of valid indicators, and frequent written examination and assessments in simulated clinical environments. Only with valid performance measurement will we be able to develop appropriate remediation of the increasingly incompetent anesthesiologists and identify those instances when remediation is not an option.

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# Navigating the Regulatory Landmines

## SAAA 2010 Annual Meeting

November 5, 2010

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## Overview

- ◆ Prohibitions against discrimination
  - Americans with Disabilities Act
  - Age discrimination
- ◆ CMS regulatory requirements: facilities
  - CMS Interpretive Guidelines
    - ▶ Hospitals
    - ▶ ASCs

## Overview

- ◆ CMS payment issues
  - Recovery audit contractors
- ◆ Patient privacy
  - HIPAA & HITECH breach notification
- ◆ Payment & compensation
  - Gainsharing & quality incentives

## Overview

- ◆ Many other “landmines” beyond scope of this presentation
  - Antitrust
  - Kickbacks (demands from facilities)
  - HIPAA basics
  - Red flags rule

## Bans on Discrimination

- ◆ In dealing with employees – whether senior or junior
  - Must consider potential for the faculty member to claim illegal discrimination
- ◆ Federal law bars discrimination on many grounds
  - Race, color, religion, sex, national origin, disability, genetic information, or age

## Bans on Discrimination

- ◆ All actions covered:
  - Hiring & firing
  - Compensation, assignment, & leave
  - Transfer, promotion, layoff, or recall
  - Recruitment
  - Training
  - Fringe benefits
  - Other terms & conditions

## Americans w/Disabilities Act

- ◆ Prohibits discrimination on basis of disability in employment
- ◆ Protects “qualified individuals with disabilities” -
  - Physical or mental impairment that substantially limits one or more major life activities
  - Record of such an impairment, or
  - Is regarded as having such an impairment

## Age Discrimination

- ◆ ADEA protects individuals who are 40 years of age or older from employment discrimination based on age
  - ADEA permits employers to favor older workers based on age even when doing so adversely affects a younger worker who is 40 or older

## CMS Interpretive Guidelines

- ◆ Clarify requirements of conditions of participation in Medicare program
- ◆ New IGs issued in December 2009
  - Hospitals (updated in May 2010)
  - ASCs
- ◆ Updated provisions regarding Anesthesia Services

## CMS IGs: Hospitals

- ◆ Supervision & immediate availability
  - In discussing supervision of CRNAs/AAs:
    - ▶ Hospitals must establish policies for supervision
      - An anesthesiologist is considered “immediately available” only if he/she is physically located within the same area as the CRNA or AA

## CMS IGs: Hospitals

- ◆ CMS on “same area” - *e.g.*
  - In the same operative/procedural suite, or
  - In the same L&D suite, AND
- ◆ “Not otherwise occupied in a way that prevents him/her from immediately conducting hands-on intervention, if needed

## CMS IGs: Hospitals

- ◆ Preanesthesia evaluation
  - Within 48 hrs prior to any inpatient or outpatient surgery/procedure
  - Six elements listed - similar to ASA stds
    1. Review medical history
    2. Interview, examine patient
    3. Note anesthesia risk
    4. I.D. potential anesthesia problems
    5. Additional evaluation as needed
    6. Develop plan of care

## CMS IGs: Hospitals

### ◆ Postanesthesia evaluation

→ Within 48 hrs after surgery/procedure

→ Seven elements listed

1. Respiratory function
2. CV function
3. Mental status
4. Temperature
5. Pain
6. N&V
7. Postop hydration

Originally, IGs req'd completion prior to discharge of outpatients; this req't deleted in May 2010 update

## CMS IGs: Hospitals

### ◆ Timing of postanesthesia evaluation

→ Except when postop sedation is required:

‣ “The evaluation generally would not be performed immediately at the point of movement” from the OR to the PACU

→ Can occur in the PACU

## CMS IGs: ASCs

- ◆ Similar requirements on
  - Supervision & immediate availability
    - ▶ Physically present in the ASC and
    - ▶ “Prepared to immediately conduct hands-on intervention if needed”
  - Pre-anesthesia evaluation
    - ▶ Is ASC an appropriate setting, given risks associated w/anesthesia
  - Post-anesthesia evaluation pre-discharge

## IGs on Patient Selection

- ◆ From CMS Interpretive Guidelines for ASCs (revised Dec. 2009):
  - (After noting that ASCs should consider whether to accept ASA IV pts . . . )
  - “For many patients classified as ASA PS level III, an ASC may also not be an appropriate setting, depending upon the procedure and anesthesia.”

## CMS Interpretive Guidelines

- ◆ Implications of the IGs for *billing* uncertain
  - They do, however, reflect CMS thinking

## Recovery Audit Contractors

- ◆ Recovery audit contractors (RACs)
  - Paid on a contingency fee basis to identify & recoup Medicare overpayments
    - ▶▶ RACs collect money from providers (that's you)
    - ▶▶ Also identify underpayments

## Recovery Audit Contractors

- ◆ Started with a demonstration program (Medicare Modernization Act of 2003)
  - In CA, FL, & NY (the 3 states w/ highest Medicare expenditure):
    - ▶ Collected > \$1.03 billion in improper payments
    - ▶ Cost (est.): \$0.20 for each \$1 returned to Medicare Trust Fund

## Recovery Audit Contractors

- ◆ *Tax Relief and Health Care Act of 2006* made RAC program permanent
  - Requires expansion of RAC program to all 50 states by 2010
- ◆ Authority to pay RACs on a contingency fee basis
  - From 9% - 12.5%

## RAC Review Process

- ◆ Post payment review
  - Use FI, carrier, MAC Medicare policies (NCDs, LCDs & CMS manuals)
- ◆ Two types of review:
  - Automated (no medical record)
    - Certainty service incorrectly coded or not covered
  - Complex (medical record required)

## RAC Review Process

- ◆ RACs can go back 3 yrs from date claim paid
  - Cannot review claims paid prior to October 1, 2007
- ◆ CMS approves issues for review prior to widespread RAC review
- ◆ Approved issues are posted to RAC websites

## RAC Collection Process

- ◆ RAC issues a demand letter
- ◆ Medicare (via the MAC) recoups by offset unless provider has
  - Submitted a check, or
  - Submitted a valid (& timely) appeal
    - ▶ Must file within 30 days of receipt of the overpayment letter to stop recoupment

## Preparing for RACs

- ◆ Internal review of compliance
- ◆ Review RAC websites for areas of persistent improper payments
  - Also review OIG reports
- ◆ Implement procedures to respond promptly to RAC requests for medical records
  - Make sure RAC has correct address

## Preparing for RACs

- ◆ Keep track of denied claims
  - Correct these previous errors
- ◆ Determine corrective actions needed to ensure compliance & avoid submitting incorrect claims
- ◆ Bottom line: RAC program produces huge returns - compliance more important than ever

## HIPAA & HITECH

- ◆ In past, HIPAA privacy & security enforcement largely focused on obtaining voluntary compliance
  - Through technical assistance
- ◆ HITECH Act (Health Information Technology for Economic and Clinical Health Act)
  - Major changes

## **HITECH Privacy & Security**

- ◆ Establishes mandatory breach reporting for covered entities & their business associates (BAs)
- ◆ Applies most HIPAA privacy & security rules directly to BAs
- ◆ Creates new HIPAA privacy requirements
- ◆ Establishes new civil & criminal penalties for noncompliance
- ◆ Expands enforcement authority to states

## **HITECH Breach Notification**

- ◆ Mandates covered entities & BAs to notify affected individuals, HHS, & media outlets
  - If unsecured PHI is accessed, acquired, or disclosed by or to an unauthorized person
- ◆ Must notify the media if more than 500 individuals of a particular state are affected

## **HITECH Breach Notification**

- ◆ More important than ever to identify where PHI (protected health information) is maintained
  - ➔ Do your Dep't members have PHI on
    - ▶▶ Handheld devices
    - ▶▶ Thumb drives
    - ▶▶ PCs

## **HITECH Compliance**

- ◆ To limit exposure
  - ➔ Limit the types of PHI faculty members may download
  - ➔ Require encryption of all devices
    - ▶▶ Encryption per HHS standards
  - ➔ Retrain staff on HIPAA and HITECH requirements

## **Gainsharing & Quality Incentives**

- ◆ Continued talk of performance-based compensation
  - Including incentive compensation and gainsharing
- ◆ Need to be sensitive to regulation of how these arrangements are structured
  - CMS proposed rule (2008) on incentive compensation not finalized

## **Gainsharing Defined**

**An arrangement under which a hospital gives physicians a share of the reduction of the hospital's cost savings attributable in part to the physicians' efforts**

## Gainsharing Defined

An arrangement under which a hospital gives physicians a share of the reduction of the hospital's cost savings attributable in part to the physicians' efforts

## Concerns

- ◆ CMS & OIG have expressed deep concern
  - ➔ Potential for gainsharing & incentive payment program to have **adverse effect on patient care**

## Concerns

- ◆ May be hard to define the line between
  - A gainsharing or incentive compensation payment, and
  - A payment to induce a physician to reduce or limit items or services furnished to Medicare or Medicaid beneficiaries

## OIG & CMS Views

- ◆ OIG has issued advisory opinions providing guidance on how to structure arrangements
- ◆ In three 2008 rules, CMS addressed concerns with gainsharing & incentive-based compensation
  - CMS issued very detailed proposed rule on the topic - not yet finalized

## Incentive-Based Compensation

- ◆ Given very clear OIG and CMS regulatory concerns with gainsharing and incentive-based compensation
  - ➔ Take OIG and CMS guidance into account in structuring any programs
    - ▶▶ Proper protections to ensure no adverse effect on patient care
    - ▶▶ Notice to patients

## Conclusion

- ◆ As businesses, your Dep'ts must comply with many federal regulations
- ◆ In addition, many different federal agencies regulate health care
- ◆ With technological advances, even more need to protect against abuse
- ◆ Regulation of health care is inevitable
  - ➔ And is likely to increase

# Concurrent Sessions - Friday, November 5<sup>th</sup>

## AACPD Session

### ***New Core Program Director Session***

Moderator: Theodore J. Sanford, M.D.

- 8:30 a.m. – 9:30 a.m.     **So You're the New Program Director: What Are the Issues?**  
Theodore J. Sanford, M.D.
- 9:30 a.m. – 10:15 a.m.   **Coping with Duty Hour Requirements**  
Catherine M. Kuhn, M.D.
- 10:15 a.m. – 10:30 a.m.   **Coffee Break and Networking**
- 10:30 a.m. – 11:30 a.m.   **Current ACGME Projects**  
Leila Mei Pang, M.D.; J. Thomas McLarney; Sally R. Raty, M.D.
- 11:30a.m. – 12:15 p.m.   **Communicating with the RRC**  
Neal H. Cohen, M.D.; Patricia M. Surdyk, Ph.D.

### ***Afternoon Session***

- 1:30 p.m. – 4:30 p.m.     **General Session**  
Moderator: Theodore J. Sanford, M.D.
- 1:30 p.m. – 2:30 p.m.     **Professionalism**  
L. Lazarre Ogden, M.D.
- 2:30 p.m. – 3:30 p.m.     **The Legal Implications of the Failing(ed) Resident**  
Jamie S. Padmore
- 3:30 p.m. – 3:45 p.m.     **Coffee Break and Networking**
- 3:45 p.m. – 4:15 p.m.     **Best Practices**  
Karen J. Souter, M.B.; Robert M. Craft, M.D.
- 4:15 p.m. – 4:30 p.m.     **Question and Answer Session**
- 4:30 p.m. – 6:00 p.m.     **AACPD Business Meeting**



# So You're the New Program Director...

Theodore J. Sanford Jr. M.D.  
The Georgine M. Steude Professor of  
Anesthesia Education  
Core Program Director  
University of Michigan

Note: These are my own opinions and do not represent the University of Michigan or AACPD

## Disclosures

- NONE

## History-SAAC/AAPD

- New Chairs Program (For New Chairs, Aspirant Chairs, and Program Directors)
  - Hospital and Department Finances,
  - How to Deal their boss (Da Dean),
  - Dealing with Faculty and Other Chairs,
  - Dealing with residents.

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## Handbook for New Chairs

- Does not exist
- Most chairs have their own philosophies on how to run a department and residency
- 2003- RRC allow for non-chairs to be the official program directors
- 2008- SACC/AAPD split so that we now have our own...AACPD

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## History- AACPD

- New Program Director Program (for New Program Directors, Aspirant PD, and Program Directors)
- General Characteristics of PD
- Job Description
- The “Handbook”  
How to Deal with their boss (Da Chair)
- Dealing with faculty and residents
- Dealing with GME, ACGME, RRC, NRMP

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## AACPD- Handbook for New Program Directors

- Does not exist!
- Most PDs have their own philosophy on how to run a CORE program
- But there is a structured guideline-RRC requirements

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## Core Program Director-Job Description

- **Not a glamorous job**
  - You are the ultimate SLJO
  - You are the department chair's XO
- **Chairs go out to dinner**
  - Program directors make reservations for the chair
- **Program directors make the chair look good**
  - Or bad
- **You and your chair must be on the same page!**

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## Sidebar- Quick Questions when asked to take the job

1. What happened to the other guy/gal?
2. What do you know about the program you are being asked to run? 3 Year vs. 4 year with interns?
3. Strengths or weaknesses?
4. How much non-clinical time will you have?-Critical!!!
5. Support staff- administrative and other docs- a good admin can run the program

8

## General Characteristics of PD

1. Start as Junior Faculty; express strong interest in the education components of their department.
2. Accept numerous small tasks....writing the tutorial schedules, moderating conferences, mentoring a difficult resident....developing on-line content etc.

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## General Characteristics of PD

3. Serve on various departmental and hospital committees as the Anesthesia Rep etc.
4. You express a great deal of interest in the resident education mission of the department. And you have your own philosophy for what makes for a successful resident training program.

Should not be surprised when asked to run the Core

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## Core Program Directors..

- *“Should- continue in his or her position for a length of time”*
  - This is not a 1-2 year assignment, more like 5 years to understand everything and go through the trauma of a site visit...like JACHO only without lidocaine or KY
  - Remember when you take the reins you inherit years of someone else’s successes, recruits and headaches

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## Demographics of PDs

- Median age 52
- 75% Men
- 66% Professor or Associate Professor
- Median appointment is about 4 years!
- Turn-over is averaging 15-20%/year!
- 20% Time limited certificates

» Data from Timothy Long et al Mayo Clinic

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## Demographics

- 21 New PD appointed since June of 2009
- 17/21 less than 5 years from Primary Certification!
- 22 Chairs still retain title of PD

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## Program Director Hats

Facility Manager	Librarian
Housekeeper	Compliance Officer
Scheduler	Recorder
Administrator	Disciplinarian
Auditor	Recruiter
Good Cop	Bad Cop
H.R. Director	Arbitrator
Soft Shoulder	Publisher
Recovery Monitor	Chief cook/bottle washer

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## Other Attributes of a PD

- Thick Skin
- Humility- not everything you do will be perfect and you will miss quite a few things (some only once though)
- Be realistic- you will not change the world in a day
- Accept suggestions from the residents
- Good communication skills
- Be able to say no
- Be able to ask for help
- Be able to make unpopular changes

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## General Education of the PD

1. Must learn the 2008 RRC Requirements!
2. 2008 RRC Requirements- 7542 words
  - a. Allows for some individual interpretations- but.....
3. Must learn the ACGME-RRC vocabulary-
4. ACGME- feels it necessary to delineate what some words mean
  - a. May not always agree with an RRC's interpretations

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## Anesthesiology RRC 2008 Requirements

The Program*	146	Required*	10
Must*	142	Obtain	10
Not	44	Submit	9
Should*	40	Evaluate	8
Provide	37	Necessary	7
May	32	Minimum	6
Requires*	32	Report	4
PD*	29	Responsible	4
Ensure	17	Substantial	3
Approve	13	Verify	3
Supervision	13	Comply	3
Duty Hours*	11	Shall*	2
Monitor	10	Oversee	1

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\* In the glossary

## MUSTs-Things to consider----

- “The Program Director Must”
  - *Maintain oversight- all rotations, faculty appointments etc*

How are you going to do this?

The Chair usually hires faculty

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## MUSTs- CBY

- CBY
  - FY 09 more PGY 1 matches than PGY2
  - Intern advocate
  - Determine- the sequence of rotations
  - Submit- quarterly reports
  - Review- Duty hours

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## CBY- Musts

- Receive (reports for CBY)- Approve- rotations, local directors etc
- Be Responsible- reviewing
  - From non-Core hospitals:
  - written quarterly reports and a final report at the end of the CBY
- You will need to set up a mechanism for this. Better get a good admin to chase these down- you don't have the time!

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## Education Program

- *Administer and Maintain an educational environment conducive to educating the residents in each of the ACGME competency areas.*
- *Oversee and ensure quality of education*
- *Approve a local director at each participating site who is accountable for resident education- better run this past the Chair*
- *Approve the selection of program faculty as appropriate*

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## Education Program

- *Evaluate program faculty and approve the continued participation of program faculty based on evaluation- this is the chair's job!*
- *Monitor resident supervision at all participating sites*
- *Prepare and submit all information required and requested by the ACGME program information ADS*
  - *ensure that all submitted information is correct and complete*
- *Provide- residents with documented semi-annual reviews of performance with feedback*

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## Duty Hours

- *Implement policies and procedures consistent with the institutional and program requirements for resident duty hours and working environment including moonlighting to that end the PD must*
  - Distribute these policies and procedures to the residents and faculty
  - Monitor resident duty hours according to the sponsoring institutional policies with a frequency sufficient to ensure compliance with ACGME
  - Adjust schedule as necessary to mitigate excessive service demands and/or fatigue- BUT YOU DON'T KNOW until you know!
  - If applicable monitor the demands of at-home call.
- Monitor-duty hours, need for back up support, distribution of cases

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## PD Musts

- **Comply**- with institutional policies
- **Confirm**- that all residents completing the program have met the requirement for the 48 month continuum
- Regularly- **review** the residents clinical experience logs and **verify** their accuracy when transmitted to the RRC
- **Ensure**- that there is a substance abuse policy
- **Ensure**- the means to monitor appropriate distribution of cases among the residents.
- **Require**- residents maintain electronic case logs
- **Document**- faculty involvement in lectures, clinical supervision, and tutorials

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## Faculty- Musts

- There are 9 musts for the 'faculty'. I tell you this because you have to ensure that this is happening in your department, even though it should be the chair's job...when it comes time for the RRC site visit you will be on the hook, so think of yourself as the canary in the mine....someone has to do it.

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## Faculty Musts

1. Ensure a sufficient number of faculty at each site to instruct and supervise
  - a. Devote sufficient time to the educational program... a strong interest in education of residents
2. Faculty must have current certification from the ABA.

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## Faculty Musts

3. *“the number of faculty must be sufficient to provide each resident with adequate supervision, which shall not vary substantially with the time of the day of the week. In the clinical anesthesia setting, faculty members should not direct anesthesia at more than two anesthetizing locations simultaneously.”*

Better be sure on this one, since the RRC electronic PIF specifically asks if this is true....its a yes or no with a space for explaining...but there is no excuse that has been accepted...not even emergency cases that have to go before you can get a second faculty in house.

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## Faculty Musts

4. Current license etc.
5. Qualified non-physician faculty
6. Must **establish** and **maintain** an environment of scholarship and inquiry and research  
Peer reviewed funding, publications, presentations at meetings, national committees
7. All of the above **must** be present in the program
8. **Must** regularly participate in didactics, journal clubs, rounds etc.
9. **Assure** that didactic and clinical teaching faculty is provided by faculty with documented interests in the subspecialty involved

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## Facility Manager

- Ensure adequate resources for resident education
  - Space and equipment
  - Meeting rooms, classrooms
  - Computer support including access to medical information-(We used to call this a library)
- Must provide appropriate on-call rooms that are gender specific– in fact you should have a written policy!

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## Human Resource Specialist

- Resident Recruitment
  - Must comply with institutional requirements
  - Cannot appoint more residents than you are approved for by the RRC
  - (Expected to keep a well stocked residency of happy residents who will speak well of your program during recruiting season)

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# Resident Transfers

- Must **obtain** a written or electronic verification of previous training experiences and a summative competency-based performance evaluation from the transferring program
- **Must check** the NRMP match history- do you know where to look? NRMP R3 system

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NRMP Program Options Page

Main Residency Match: Welcome to NRMP

Theodore J Sanford, Jr MD  
Program Director  
AAMC ID: 10941340

If popup blocker is enabled in your browser, you must disable it in order to use the Directory and other important features of the NRMP R3 System.

Prog Code	Program Description	Director	Reversion	Status	Quota
1293940C0	Anesthesiology	Theodore J Sanford	INITIAL		24
					24

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## Auditor

- Adequate case loads etc.
  - Must verify volume and variety of cases-
  - So you need to determine a way to monitor how cases are distributed.
    - I do this by making out a yearly schedule that assigns subspecialty blocks- where appropriate and have my clinical director do the daily schedules based on my yearly blocks. CA-1s may be harder to schedule.

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## Educator/Publisher

- Common Program v. RRC specific requirements
  - Recent site reviewers have focused mostly on the Institutional Requirements-leaving the electronic PIF to the RRC.
    - Annual survey
    - Duty Hours

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## Educator/Publisher

- Annually distribute the overall educational goals to faculty and residents
- Annually distribute the goals and objectives for each assignment – electronically or written
- Have regularly schedule didactics
  - Keep attendance and a schedule of all didactics

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## Educator/Publisher

### ACGME Core Competencies

RRC has inculcated the Core program specifics with the 6 core competencies

1. Patient Care- delineates the required case experiences including numbers of cases and length of rotations. Changes are inevitable and some programs have trouble with scheduling sequencing
  - a. [Case Logs](#) now moved to Web Based and you must know how to access this to monitor the cases on the Web. How many of you have done this?

Big issue was getting the resident's to change.

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## Educator/Publisher

2. Medical Knowledge- assessment methods...  
AKTs, ITE, Mock Orals, daily evals in ORs.
3. Practice Based-Learning and Improvement-  
How do you do this one?  
I use M and M, Morning report ( with  
documentation of resident participation

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## Educator/Publisher

4. Interpersonal and Communication Skills  
many ways to evaluate, PD needs to decide
5. Professionalism- “you know it when you see  
it”
6. Systems Based Practice- Never heard of this  
until 8 years ago

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## Evaluator

### PD oversees this

1. We use MEDHUB
2. PD **must assure** that residents are evaluated in a timely manner- We use e-mail reminder system
3. Residents **should** be encouraged to evaluate faculty too. This was a focus of site reviews
4. PD provides semi-annual review- If you take the job you need to figure a mechanism for you to do this.
5. Set up a spread sheet, and then figure out how to provide feedback

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## Evaluator

'PD **must** provide a summative evaluation for each resident upon the completion of the program.....

**Verify** that resident has demonstrated ability to practice without supervision!'

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## Program Evaluation

RRC says annual program evaluation.

- a. Survey both residents and faculty
- b. Make changes based on this annual survey  
(My feeling is that you should not wait to do an annual survey to make changes)
- c. Changes must be approved by the teaching faculty! How dumb is this?

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## Compliance Officer

- DUTY HOURS
- Probably not another more contentious issue for the PD, but you will be stuck with this problem

We really do not have much problem with this, but it is the occasional 10 hour rest period or Critical Care 80.5 hours that catches the eye of the site reviewer.

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## New Duty Hours Rules

- PD must review and approve any duty hour/time off submissions that exceed the maximum allowed!
- 16 Hours of duty for interns! OUCH!
- PD need to develop a mechanism for dealing with these new rules!

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## How to Deal with the Chair

Best advice-

Rule One- The Chair always wins

Rule Two- Get over it,

Rule Three- See rule 1

This is not a contest of wills- the bottom line is the residents, and what is good for the program as a whole!

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## How to Deal with Faculty

### 1. You will not win a popularity contest

- a. RRC Guidelines- not open for interpretation by individual faculty
- b. Send them the guidelines
- c. Send them the Core Competencies
- d. Make it easy for them to do the evaluations
- e. Difficult faculty- that's why you have a chairperson

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## How to Deal with Residents

- Chief Resident(s) are crucial
  - Rumor, hearsay, innuendo—bad
- Meet with the chief(s) regularly
  - Quarterly resident meetings
- Listen to what they have to say
- Keep an open door
- Keep an open mind
- Be willing to change!

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# Dealing with GME, ACGME, RRC, NRMP

- **GME-** do their required paperwork on time- always
  - They can make your life good or bad
- **ACGME-** do their paperwork too!
  - Find their website, and visit it often
- **RRC-** Do not try to outguess, they have rules that are for the general population
  - You are not that special!
- **NRMP-** see rule one for the chairs-
  - No sense of humor!

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The screenshot displays the ACGME website in a Microsoft Internet Explorer browser window. The address bar shows the URL: [http://www.acgme.org/acWebsite/nav/Pages/nav\\_PDcoord.asp](http://www.acgme.org/acWebsite/nav/Pages/nav_PDcoord.asp). The page features a navigation menu with the following items: Accreditation Council for Graduate Medical Education, Resident Services, Program Directors & Coordinators, DIOs, Public, and ACGME. A secondary navigation bar includes links for Home, ACGME (History of Terms), Search, Site Map, Application Support, Local, and Contact Us. The main content area is titled "Program Directors & Coordinators" and lists several key documents and resources, including ACGME Bylaws (Revised 9/2009), ACGME Policies and Procedures (Revised 8/2009), ACGME Glossary of Terms (9/2008), ACGME Procedures for Proposed Adverse Actions, ACGME FAQ on master affiliation agreements and program letters of agreements, Program Directors' "Virtual Handbook", Appointment Process for ACGME Review Committee Members (PDF), and Key to Standard Notification Letter (PDF). A "New" section highlights "How to Apply for Accreditation in Seven Easy Steps". Below this, there are sections for Accreditation Data System (Login, Resident Survey), Parker Palmer Award Program (Award Program, Instructions, Application Form, Award Recipients 2007, Award Recipients 2006, Awards Dinner 2007), Resident Case Log System (Login, Handheld Request Form (PDF), HIPAA Compliance Documents, Case Log Information), and Resident Duty Hours Documents (Common Program Requirements (PDF), Complaint Procedures, Duty Hours Language (PDF), Information & Resources). The page number "48" is visible in the bottom right corner of the browser window.

## Resources

- ACGME web site-<http://www.acgme.org/acWebsite/home/home.asp>
- AACPD- (that's us!)
  - <http://www.aapd-saac.org/aacpd.htm>
- ABA- <http://www.theaba.org>
- Weekly updates from ACGME by e-mail

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## Take Home

1. This is not a part time job
2. Get help, a good administrator; assistant PD depending on the size of your program
3. Stay ahead of the paperwork game
  1. Automate anything you can. (site visitor said we had too much paper)
4. HAVE FUN

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- So if you want to be the program director please raise your hand and repeat after me
- Do you promise to
- Monitor, Comply, Assure, Submit, Provide, report, be responsible, evaluate, approve, oversee, obtain, verify, supervise and submit reports
- Until death do you part...
- If so please say

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**‘I Do’**

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#### IV: Possible Strategies and Pro/Con

1. Remove residents from services that violate duty hours regularly (e.g., other services in PGY-1 year)
  - Pro: Can decrease number of duty hours violations for a program.  
Threat of loss of anesthesia work force can hold other services more accountable.
  - Con: Need appropriate and balanced clinical rotations in PGY-1 year.  
Requires appropriate replacement rotation for substitute.  
Creates problems (real and political) for other services.
2. Night float systems
  - Pro: works well for non-continuous services (OR).  
Requires fewer residents to cover services.  
Creates longer stretches without night work (when not on call).
  - Con: For non-OR rotations, often results in very high resident: patient ratio.  
Handovers/report/rounds can compromise "time off".  
Increased number of handovers.  
Loss of continuity/resident ownership of patients.  
Disruption of sleep/wake cycle, especially if shorter duration of night float rotation.  
Six-night duration limit affects OR staffing during weekdays
3. Ordered relief system for residents/delayed return to OR (to meet 8 and 10 hour rule)
  - Pro: Accounts for duty hours issues in decisions about relief.  
Clinical directors highly aware of issues.
  - Con: Requires high degree of focus and attention on schedule/assignments.  
Increased number of handovers with patient safety issues.  
Less predictability of case assignments.  
Possible inability to finish challenging/interesting cases  
Clinically busy periods can compromise other rotations (research, TEE, electives, etc.) used in relief structure.
4. Increase numbers of residents on a particular service
  - Pro: More residents to cover required hours, can relieve duty hours violations.
  - Con: Dilution of case/work experience can be problematic.  
May require lengthening of rotation experience for adequate case volume.  
May limit other educational opportunities by decreasing time on those services.
5. Hire additional work force (faculty or per-diem anesthesiologists, midlevels, CRNAs, AAs)
  - Pro: Less reliance on residents as work force, allows relief for compliance with duty hours and educational activities.  
Part-time non-academic faculty may enjoy the academic work environment.
  - Con: Expensive.  
Burnout of academic faculty if this results in a high % of solo work.

#### 6. Overall concerns

Loss of modeling (with mentorship) of future faculty practice or private practice conditions.  
Confusion about professionalism: dedication to patients vs. compliance with work hours rules, honesty.  
Expense of alternate plans.  
Lack of evidence supporting current or proposed recommendations.

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# AACPD Session

## Current ACGME Projects

Friday, November 5, 2010

Leila Mei Pang, M.D.  
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No disclosures

## Objectives

- After today's session the participant should
  - Understand the aims of the Milestone Initiative
  - Understand the components of the ACGME Learning Portfolio (ALP)
  - Understand the relationship between the Milestone Initiative and the ACGME Learning Portfolio

## Two Current ACGME Projects

- **Milestone Initiative – goals**
  - Define behavioral milestones or progress markers to be demonstrated by residents in each of the six general competency domains for each year of training
  - Provide assurance to the public that graduates are competent/proficient (consistently defined across all programs within a specialty)
- **ACGME Learning Portfolio – goals**
  - Usability as part of a single ACGME log-in system
  - Support the milestone initiative
  - Specialty-specific emphasis

## Milestones

- Milestones should be defined for each competency domain using the Dreyfus Model of Skill Acquisition
- Require semi-annual assessment tools
- Illustrate recommended best practices

## ACGME Learning Portfolio

- Seen as a repository for reporting milestones
- Initially – global evaluation of milestones
- Eventually – series of assessment tools (with multiple input) that map milestone progression
- Reporting at program, national levels
- Will ultimately drive a more streamlined and outcome-focused approach to accreditation

## Elements in ALP

- Case Logs
- Summary Evaluations
- Evidence of Scholarly Activity
- Credentials
- Documentation of Educational Activities
- Exam Results
- Learning Plan
- QA/QI
- Self-Assessment

## Milestone Initiative

J. Thomas McLarney, M.D.

Assistant Professor of Anesthesiology  
University of Kentucky College of Medicine

Co-Chair of the Society for Education in  
Anesthesia Task Force for the Milestone  
Project

## **Communicating with the RRC**

Neal H. Cohen, M.D.; Patricia M. Surdyk, Ph.D.

This discussion will address the most effective ways of working with the RRC and ACGME to evaluate anesthesia training programs, ensure compliance with accreditation requirements and improve the education of residents and fellows. Program directors, chairs, and program coordinators often view the Residency Review Committee and the ACGME with suspicion and even with some amount of trepidation. Drs. Cohen and Surdyk will provide insight into the review process and how the RRC and ACGME are partners with them in assuring the best training possible for the future anesthesiologists of this country.

**Participants will:**

- Recognize who, when, where, why, and how to communicate with the RRC
- Review key elements of ACGME policies and procedures that govern program accreditation
- Associate key elements of the program review process with continuous quality improvement and successful educational outcomes

# Professionalism

L. Lazarre Ogden, M.D.

## **How do you foster professionalism in an anesthesiology residency program?**

An interactive discussion aimed at what we can do as program directors to ensure that we send out, into the workforce, the most professional consultant anesthesiologists we can train.

My discussion will focus on four elements of professionalism, which I have found to be essential in the training of anesthesiologists:

### **Honesty**

### **Commitment**

### **Emotional Maturity**

### **Ethical Competence**

#### **Honesty:**

Case in point: The blatant lie. What do you do when you find out about it?

#### **Commitment:**

Case in point: Resident shows up late for duty, not taking responsibility for action.

Case in point: Gifted resident who lacks commitment to acquisition of knowledge.

#### **Emotional Maturity:**

Case in point: Angry family member of a patient confronts the anesthesia resident.

Case in point: Resident taunts hospital assistant.

#### **Ethical Competence:**

Case in point: Resident preoccupied with internet searches during intraoperative care.

Case in point: Resident posting patient-related information on the internet.





## *Dealing With Problem Residents: Academic & Employment Laws*

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*Assoc. of Anesthesia Core Program  
Directors  
November 5, 2010*

**Jamie S. Padmore, MS**

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## **Outline:**

- Legal Background
- Sources of Law
  - Employment Law
  - Academic Law
- Case Law Review
- Practical Pointers





## Background

- Two schools of thought:
  - ACGME: Residents are Students
  - NLRB: Residents are Employees
- Separately evolving lines of thought.
  - ACGME Regulations & Court Cases.
  - NLRB Decision in the Boston Medical Center Case
- Bottom Line: Residents are BOTH.



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## Why do we care?

- Discharge, Discipline and Due Process . . .
  - Implicates both Academic and Employment Law principles.
  - Academic Law Defines the Minimum Necessary Standards of Due Process
  - Employment Law makes it Complicated.



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## Employment Law Issues

- Discipline, Discharge, Promotion, Failure to Promote = The Heart of Employment Law
- Applicable Employment Law Principles: Employers are free to D-D-P-FP Residents as long as they:
  - Do Not Discriminate
  - Follow Written Policies
  - Comply with Written Contracts



## Academic Legal Requirements

- Schools are free to dismiss, or elect not to promote students, for academic reasons, as long as they assure students:
  - Notice and Opportunity to Cure
  - Careful, reasoned decisions
  - In other words, Due Process



## Legal Requirements for Misconduct Cases

- Misconduct cases are slightly different: Schools do not need to give Residents an Opportunity to repeat Misconduct.
- Instead, Due Process Means: Residents must be given:
  - Notice of the Charges
  - An Opportunity to be Heard
  - A careful and reasonable decision-making process



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## An Opportunity to be Heard

- Not a “hearing”
- Not a “trial”
- Not a “review board”
- No lawyers, testimony, evidence, etc.
- Simply a meeting.
- Perhaps a second meeting with a neutral reviewer.
- So long as it’s a meaningful opportunity.



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## University of Missouri v. Horowitz (1978)

- Female Med Student.
  - Excelled academically
  - Noted for poor bedside manner, slovenly appearance and lack of hygiene in her reviews.
  - School met with her and told her she would not be promoted.
  - She complained that this was unfair.



## Missouri Case Cont'd

- School agreed to allow her one month to rotate with 5 independent clinicians who would evaluate her.
- A month later, the consensus was that she remained deficient in areas of bedside manner, appearance and attitude.



## Missouri Case Cont'd

- School decided to dismiss her.
- She sued claiming
  - 1] religious discrimination and
  - 2] lack of due process.



## Missouri Case Cont'd

- Supreme Court Upheld School's decision:
  - Notice and Opportunity to Cure.
  - Reasonable Academic Decision
  - Court won't intrude on province of Academic Judgment.



## Missouri Case . . .

- Rotational Evaluations gave Notice and Opportunity to Cure.
- Decision not to promote was made
  - At a regular faculty meeting
  - Called for that purpose.
- THUS: Due Process.
- Court: Univ. gave: “far more process than was due. . . .”



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## Univ. of Michigan v. Ewing (1985)

- Ewing was enrolled in a 6 yr. Joint Degree Program for Medical School.
- He became eligible to take NBME Part 1 after completing 4 years, and failed 5 of 7 parts.
- Total score 235. Passing score was 345. 380 for licensure; and 500 was the national mean.
- Based on failure, he was dismissed.



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## Ewing

- Ewing argued that he should have been given the opportunity to retake the exam, and continue the program.
- 32 prior medical students had been allowed to retake the exam – 10 were allowed to take the exam 3 times, and 1 a 4<sup>th</sup> time.
- Ewing was the only student not allowed to retake the exam.



## Ewing

- Ct sided with the University:
  - Faculty Decision was “made conscientiously and with careful deliberation. . . “
  - Despite “routine practice” of re-testing.
  - School properly looked at Ewing’s entire record,
  - And reasonably concluded that he should not be given another chance or continued in the program.



## Ewing

- Ewing's Entire Record:
  - Took 6 years to complete 1<sup>st</sup> 4 years of curriculum.
  - Accumulated 7 incompletes; repeatedly dropped courses; earned consistently low grades; required reduced course loads throughout.
  - NBME test scores were lowest ever at Michigan.



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## Ewing

- Court noted that because decision was a “genuinely academic decision” and reached “in good faith”
  - The Court would show great respect for the faculties’ judgment.
  - Would not question whether Ewing was “similarly situated to” others who were treated better.
  - The individual case was reasonable.



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## Horowitz & Ewing

- Stand for the Principles that so long as a Resident receives:
  - Notice and An Opportunity to Cure; and
  - The Faculty decision is conscientious and deliberate.
- Courts will not second guess the academic decision.



## It Can't Be that Simple

- 
- Can it?



## Some Complications

- ACGME
  - Written Policies
  - Written Contracts.
- Employment Laws
  - Follow your policies
  - Comply with your contracts



## Written Policies and Procedures

- The more we write the worse it gets.
- Policies end up creating far higher standards than the legal standards.
- Policies often do not mesh with day to day decision-making practices.
- Policies require careful training and implementation.



## MCO Case

- 2000 Decision in the Trial Court of Ohio.
- Female New PGY 3 Surgical Resident
  - 3<sup>rd</sup> Rotation of year is Peds at Children's Hospital in Cincinnati.
  - Resident LEFT the Hospital during her shift without approval, and failed to report the next day.
  - Also had complained loudly about having to work extra shifts to cover for absent resident.



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## MCO Case

- At Children's Hospital's request, Program Director at MCO Suspended Resident.
- PD initiated an inquiry, and 2 days later, PD terminated the Resident.
- In the interim, Resident apologized to faculty at Children's, who requested in writing that Resident be reinstated without prejudice.
- PD refused.



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## MCO Case

- R invoked MCO's fair hearing process and requested a review of the PD's decision by the GMEC.
- PD, sitting as the GMEC, met with R and "heard" her case.
  - He allowed her 1 hour to state her case and submit evidence (including a letter from Children's).
  - He upheld his earlier decision.



## MCO Case

- R sued in court seeking an injunction requiring the MCO to reinstate her to the Program and allow her to continue her training.
- The Court **GRANTED** her request for an injunction.



## Other Legally Important Facts:

- During his inquiry, PD learned the following about the Resident:
  - R had started her PGY-1 year at UCLA. There she complained to ACGME of Sexual Harassment, which resulted in termination of at least 1 attending MD from UCLA.
  - At end of year, UCLA did not promote R. She sued, claiming retaliation, and won, but the case was then on appeal.



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## More Info

- R was accepted into a 2d year at University of Texas.
- After 6 months in that Program, she withdrew, claiming she had been further sexually harassed, and retaliated against for her case with UCLA. She received NO CREDIT for this year.
- The following year, R entered and successfully completed her PGY-2 (preliminary) at SUNY-Nassau.



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## More Info

- R had listed UCLA and SUNY-Nassau on her application, but not UT.
- She did not explain the gaps in her training in her application, but DID explain the circumstances to one MD who interviewed her.
- That MD did not report the facts to anyone until PD was conducting his inquiry.



## More Info

During PD's meeting with R, PD never mentioned or inquired about any of these "new facts."

After the "GMEC hearing" with R, PD met with faculty and also learned that "although they hadn't reported it," R had some academic problems during her first 2 rotations as well.

- In Court, the Hospital claimed R was terminated because of her earlier academic problems, as well as her bad attitude, AND her failure to disclose her past training problems.



## Court's Reasons

- The ONLY thing that changed between suspension and termination, was PD becoming aware of her prior history.
- The PD improperly relied on evidence he acquired after his initial decision, and after the Hearing without providing Notice of the Charges to R.
- The PD improperly sat as both the decision-maker and the GMEC, thus defeating the fairness of the “the fair hearing.”
- The PD violated the Hospital’s own policy.



## Court's Reasons

- The Process did not give R Notice of Key Accusations.
- No Actual Opportunity to be Heard.
- The Process was not REASONABLE or careful under the circumstances.
- The Policy was violated by the Hospital.
- THUS, the Court was forced to intervene.



## CAVEAT:

- No doubt, the Hospital attempted to do the right thing in a situation that was spinning fast out of control.
- Lack of understanding of Key rights/ obligations made situation more complicated.
- Training/Policies are Critical to effective management of bad cases.



## My Experience

- Most hospitals look a lot more like MCO than Michigan or Missouri.
- Confusion between Employment Law principles and Academic Law principles.
- Leads to Complex Policies with Hearing Rights, Multiple Appeals.
- Policies do not reflect actual decision-making processes.



## Experience . . .

- They use a multi-party hearing to make employment/ academic decisions.
- They take too long and use too many resources.
- They create a hostile adversarial atmosphere.
- They create substantial risk of liability.



## Back to Basics . . .

- Academic Issues:
  - Natural Educational Process:
    - Notice/Opportunity to Cure.
  - Reasonable Decisionmaking Protocol.
- Misconduct Issues:
  - Notice and Opportunity to be Heard.
  - Reasonable Process for Evaluating.



## Additional Pointers

- Training/Buy-In of decision-makers is key.
- If faculty won't use the process, it will never work.
- Act promptly.



## QUESTIONS?

# The Legal Implications of the Failing(ed) Resident

Jamie S. Padmore

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# Best Practices

Karen J. Souter, M.B.; Robert M. Craft, M.D.;  
Robin Stedman, M.D.

As part of the AACPD program at the SAAA Annual Meeting (Nov. 5-7, 2010) at the Mandarin Oriental Hotel in Washington D.C., we are presenting a session entitled "Strategies for Success: Fulfilling the ACGME Program Requirements". We wanted to find examples of successful and innovative initiatives that program directors have implemented for the fulfillment of the ACGME program requirements, and particularly the more advanced competencies of Professionalism, Interpersonal and Communication Skills, Practice-Based Learning and Systems-Based Practice.

We received a number of submissions describing interesting initiatives. Due to time constraints we were only able to include a couple of these for presentation and discussion however we have included all the submissions in the syllabus to provide information and ideas for program directors. We would like to thank all the program directors and their associates and colleagues who submitted their innovations for their excellent ideas and for sharing them with the group.

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### Anesthesia Evaluation and Planning Rotation

Robert M. Craft, M.D.

#### I. Educational Goals; Program Requirements Fulfilled; and Outcome Measures

This one-month rotation was instituted in the University of Tennessee Medical Center Pre-Anesthesia Clinic in July 2003 in order to prepare resident physicians for the practice of pre-anesthesia evaluation and planning, while also serving as a model for full implementation of the ACGME Outcome Project into our program. The value of this rotation has been clearly established in the minds of both our anesthesiology residents and faculty, as evidenced by the results of annual evaluations and surveys. Hence, our program was pleased that, with the 2008 update of the Anesthesiology Program Requirements, the RC for Anesthesiology now requires this rotation for all residencies, thus validating our decision made five years earlier. Resident responsibilities include pre-anesthesia planning, risk assessment, and chart review as well as participating in patient interview and evaluation. The Pre-Anesthesia Clinic is composed of an interdisciplinary team, including the supervising staff anesthesiologist, the resident, nurses, lab technicians, and clerical staff. The Program Director serves as the rotation director, and one of a cadre of select members of our department is assigned daily as the supervising anesthesiologist. This rotation was chosen as an example of the complete integration of the competencies into the anesthesiology residency program at the time of our last review, because all six competencies are taught and assessed, and a wide spectrum of learning opportunities and assessment methods can be utilized. The rotation was also listed as one of our three Best Practices in our PIF, as well as an example of a learning activity for developing competence

in all elements of systems-based practice and to satisfy the requirement for experiential learning in the identification of system errors. During our last program review, the site visitor made particular mention of our efforts to teach peri-operative medicine, and the resultant 5-year review cycle with commendation for substantial compliance granted by the RC confirmed the success of the rotation.

#### II. ACGME Competencies Taught and Evaluated

**Patient Care** requirements during this rotation include effective interviewing; caring, respectful counseling of patients and families; education of patients and families; and informed perioperative planning. Within anesthesiology training, this rotation demands a unique spectrum of patient care skills (as outlined by the ACGME). These skills and attitudes are learned through daily clinical experience, teaching from faculty anesthesiologists, and performance feedback from faculty members on a case-by-case basis. Competency evaluation by the rotation director incorporates checklist evaluation of global performance, chart stimulated recall, patient surveys and nursing staff surveys.

**Medical Knowledge** required for complete pre-anesthesia evaluation encompasses the breadth of medicine. Application of this knowledge is essential for effective pre-anesthesia planning. This knowledge is acquired through guided independent study, formal didactic lectures, and weekly departmental conferences. Literally the entire departmental education program provides learning opportunity. Besides global evaluation by periodic written examinations (AKT series and ABA in-service), competency in this area is also assessed by chart stimulated recall and record review.

**Practice-Based Learning and Improvement** is readily taught and assessed, as the learning curve for proper preanesthetic evaluation and planning is quite steep. Expectations include improvement of patient care through evaluation of personal practice experience and clinical studies, as well as knowledge of study designs and use of information technology. Learning opportunities include daily clinical teaching and performance feedback from anesthesia faculty, monthly departmental journal club and M&M conferences, ready access to online information, and a reading list of evidence-based articles. Competency in this area is assessed by staff evaluation that utilizes chart stimulated recall, check list evaluation of live performance, and global evaluation of live performance during clinical teaching.

**Interpersonal and Communication Skills** are essential for effective information exchange and successful teaming with patients, families, and health care professionals within the clinic, the medical center, and the larger community. Introduction to these skills occurs during the University of Tennessee Graduate School of Medicine Professional Development Lecture Series. The rotation provides daily opportunities for further development of these skills through clinical experience and performance feedback. Evaluation of this competency incorporates both checklist and global evaluation of live performance as well as nursing and patient surveys.

**Professionalism** is demonstrated through sensitivity to patient diversity and responsiveness to patients' age, gender, culture and disabilities. Professionalism is also manifested by fully carrying out professional responsibilities, and adhering to ethical principles regarding confidentiality of patient information. Evaluation of this competency incorporates checklist and global evaluation of live performance as well as nursing and patient surveys.

**Systems-Based Practice** is uniquely required during this rotation, as the resident must partner with other health care providers throughout the community and understand larger health care system in order to provide pre-anesthetic care of optimal value. The resident learns to practice cost effective, quality healthcare by making decisions regarding further testing and/or consultation required prior to anesthesia. For example, a resident will review the pre-operative evaluation of a patient scheduled for lower limb revascularization who has undergone recent coronary artery angioplasty with insertion of a drug-eluting stent. The resident must coordinate this patient's care by obtaining and reviewing information from other health care systems such as the results of previous cardiac evaluations. Use of the AHA-ACC Cardiac Risk stratification guidelines helps the resident learn to be an advocate for quality care of each patient by determining whether further cardiac evaluation is indicated and cost-effective. The resident must then initiate a risk-benefit discussion with the patient, the surgeon, the cardiologist and the attending anesthesiologist regarding the timing of elective surgery as influenced by the risk of continuing or discontinuing platelet-inhibiting drugs such as Plavix. Since the Pre-Anesthesia Clinic is composed of a supervising staff anesthesiologist, the resident, nurses, lab technicians, and clerical staff, the resident has the benefit of working in an interdisciplinary team daily to enhance patient safety and provide quality care. Furthermore, each resident's interpersonal and communication skills are honed by the need for effective information exchange and successful teaming with the health care professionals within the pre-anesthesia clinic, the medical center, and the community at-large. Competency is assessed by faculty evaluation that reflects chart stimulated recall, checklist and global evaluation of live performance, and clinic nursing staff surveys.

### III. Implementation

The pre-op clinic at the University of Tennessee Medical Center Knoxville has been steadily developed over the past 10 years, beginning with relatively modest manpower and resource utilization. Beginning in 2000 with a departmental need for more organized pre-op evaluation in order to provide improved patient care and day-of-surgery efficiency, the clinic was developed utilizing RN's to complete a pre-op assessment that involved our institution's first effort at electronic documentation. This documentation was initially a simple in-house electronic pre-op form that stimulated further questioning of patients based on positive responses to a system review. In 2008, the pre-op clinic electronic documentation was re-designed using a proprietary template and incorporating Clinical Documentation Integrity terminology, which also provided for integration into the new peri-op EMR in 2010. Initially, nursing assessments were reviewed by faculty anesthesiologists, who determined the need for further testing or consultation pre-operatively. In 2003, the Anesthesia Evaluation and Planning Rotation was initiated within the residency, and this oversight role was transitioned to the resident and supervising faculty. In 2005, consultants for the hospital administration recognized the importance of the pre-op clinic for patient care and institutional efficiency, and the pre-op clinic has since steadily gained space and manpower allocation, with the

resident and faculty supervisor providing medical direction for the team of nurses, lab technicians and clerical support staff.

The resident's myriad responsibilities focus primarily on pre-anesthesia planning, risk assessment, and chart review as opposed to individual patient interview and physical examination. Every pre-operative evaluation is reviewed by the resident, who then coordinates any further work-up, as well as analyzing the results of these different assessments. However, the resident's office within the clinic allows for participation in the initial interview and physical assessment of patients on an as-needed basis, and presence in the clinic assures learning about the logistics and teamwork required for the endeavor to be successful. Residents are assigned to the one month rotation during the second half of the CA1 year or first half of the CA2 year.

As outlined above, multiple tools are used to assess resident performance, including multi-source evaluations by patients and clinic nursing staff, chart-stimulated recall, and focused observation and evaluation by faculty. Recently a feedback mechanism was added to the rotation by way of a notebook kept in the pre-op holding room. During the day-of-surgery review of the pre-op clinic evaluation, if a faculty anesthesiologist finds either exceptional performance or need for improvement with regard to the pre-op resident's preparation of the patient for surgery, feedback is written in the notebook for the resident and faculty to review at an appropriate time.

As a requirement of this rotation, each resident must identify a system problem and perform a root-cause analysis. Thus the resident is expected to determine the basic underlying cause as opposed to merely 'treating the obvious symptoms'. During this exercise and with the aid of his/her staff mentor, the resident is expected to use the Six Sigma approach of repeatedly asking 'Why' a problem occurs. By applying this type of methodology, the resident learns how to identify system errors and to suggest solutions. The results of each root-cause analysis are summarized and presented at our Morbidity and Mortality Conference throughout the academic year. Examples of different root-cause analyses include: Delay in Chart Review of Patients likely Requiring Cardiac Evaluation; Hypokalemia and After-Hours Pre-operative Clinic Evaluation; Peri-operative Pacemaker Management ; Prevention of Erroneous Glucose/Potassium Laboratory Errors; Availability of Cardiac Evaluations in Pre-operative Clinic; and Pre-operative Evaluation of Electrolyte Imbalances. Evaluation of the root-cause analysis and presentation is ACGME competency based using New Innovations. Each resident's mentor provides faculty support and supervision for the entire process. These root-cause analyses have served the dual roles of continual resident education and improvement of the pre-op clinic systems and procedures.

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## Strategies for Success: Fulfilling the ACGME Program Requirements

### The Junior Attending Rotation- A System Based Curriculum for Senior Anesthesiology Residents

L. Jane Easdown, Michael Pilla, John T. Algren

This curriculum for senior residents was initiated in 2004 to improve skills in perioperative leadership. An alumni survey had identified a need to provide instruction on CRNA supervision, case coordination and all other skills necessary to ensure efficiency of a health care facility. The resident, under close supervision of an attending anesthesiologist, functions in a supervisory role in perioperative management either in a hospital surgical unit or outpatient/short stay surgical unit. The emphasis is on quality patient care, safety and effective communications and interpersonal relations with staff. The residents function as junior attending in managing patients, staff and healthcare systems. This rotation focuses on the ACGME competencies professionalism, communication skills and system based practice. Many anesthesia practices in the United States use certified registered nurse anesthetists (CRNAs) to provide anesthesia care to patients in multiple locations. During this one month rotation, the residents gain valuable experience with regards to all aspects of perioperative management. Senior residents are responsible for directing the perioperative care of patients in up to four operating rooms under the guidance of an attending anesthesiologist. Clinical activities include evaluation of each patient and discussion of the plan with attending staff and the nurse anesthetist. Residents should be able to formulate plan of care for multiple anesthetic sites. This should include all aspects of perioperative care including postoperative pain management. In addition to patient care they are also expected to confer with nurse managers to coordinate cases and personnel to improve the efficiency of the unit. The resident will be expected to appropriately utilize personnel to affect safe and efficient perioperative care. The resident on this rotation will develop those skills necessary to perform a supervisory role in this model anesthesia team practice, specifically, an MDA/CRNA team.

At the conclusion of the day, the faculty member and resident review the events of the day and feedback is obtained. This rotation is highly valued by the residents. Success has been measured by favorable rotation evaluations and alumni surveys. With the expansion of clinical sites since 2004, the curriculum has varied as to the faculty and settings in which the residents work. One advantage has been the emergence of dedicated faculty who work and teach exclusively in these outpatient settings. One disadvantage has been the decrease in cases performed personally by senior residents. This decreases case log numbers and has financial considerations.

Improving the resident's understanding of varied types of anesthesia practice is a goal of resident training. We have exposed the senior resident to the responsibility of OR management and CRNA supervision in the multiple location setting. It is expected that this experience will improve the residents understanding of the system based practice and communication skills essential to this setting. It will help in career decisions and prepare them for efficient and safe OR management.

Costabile, S.\* Pilla, M. Easdown, LJ The junior attending rotation- a system based curriculum for senior anesthesiology residents Poster Presentation Washington, DC SEA Spring Meeting 2005 \*resident

## Ochsner Clinic Foundation Anesthesiology Residency Program

Robin Stedman, M.D.

**Educational Goals of the Teaching Strategy:** Preparation of the resident for publication or presentation of original resident research

**Program Requirement to be Fulfilled:** Resident scholarly activity/academic assignment

**Description:** Director of Anesthesiology Research developed and the Department of Anesthesiology supports the OCF Anesthesiology Resident's Continuum of Scholarly Activity. This initiative is supported across all four years of residency training. In fact, the continuum has been presented at all resident recruitment sessions in the last 4 years. This curriculum is overseen by a staff Director of Anesthesiology Research. The Chairman of Anesthesiology and the Residency Program Director support the program through regular meetings to encourage resident progress. All staff are invited to participate as mentors. All residents and staff are invited to research meetings which occur as needed throughout the year. A time table for the curriculum was developed over 4 years ago and is distributed in the Residency Goals and Objectives. A brief summary follows.

**CBYear:** In the second half of the CBY, residents are assigned an elective in anesthesia. At that time, they are presented a copy of Designing Clinical Research by Hulley, et al. to be read by the beginning of the CA1 year. Interns are also required to complete an online CITI Basic Course in the Protection of Human Research Subjects.

**CA1 Year:** Following the orientation and introductory curriculum, research related didactics are introduced (early fall.) These sessions cover research instruments used in scientific investigations, introduction to biostatistics, and instructions for submissions to the IRB. Residents are introduced to staff professional interests via a resident facilitator. In the late fall, the staff Director of Research meets with each resident to assist him/her in developing a research question. Residents are instructed on the principles of the FINER characteristics for research questions (feasible, interesting, novel, ethical and relevant.) In January, residents are asked to select a research template to conduct their research. In the early spring, residents are asked to present their research question at a department research meeting in preparation for submission to the IRB. The IRB submission process is supported by a clinical research assistant. The data collection phase is projected to begin in late spring. Again, data collection is supported by a research assistant. Many department members may be involved in executing the study including other residents, staff, CRNA's and information technology assistants. Staff mentors and the staff Director of Research provide guidance during this phase.

**CA2 Year:** Data is entered into the department statistical program, JMP. A computer in the resident library is dedicated to this purpose. The Director of Research closely monitors this process. Residents are instructed to refer to the text Consolidated Standards of Reporting Trials in preparing their manuscripts. As analyses are completed, residents are encouraged to submit their work as posters or abstracts at relevant medical meetings.

CA3 Year: Residents present their completed projects at an Anesthesiology Department Research Meeting. Residents receive staff input as to the readiness of their work for presentation or publication. At minimum, residents present research at the Gulf Atlantic Anesthesiology Resident Research Conference (GAARRC) or the Annual Ochsner Research Night. A travel stipend is provided to support any resident who is invited to present his/her abstract or poster. Some resident research is submitted for publication.

**Unexpected Pitfalls:** We have experienced several problems with the program. Occasionally the resident will invest a significant amount of front-end work only to find the project to be unexpectedly infeasible. By example, a resident and his mentor received IRB approval for a study to be conducted in collaboration with another discipline. However, the collaborating investigator withdrew from the study after significant groundwork, including IRB approval, had been laid. This type of problem is disheartening given the loss of time invested. To address this, the resident must settle on a less ambitious project such as a survey. Another pitfall has been the low-performing resident who needs a great deal of extra time to concentrate on reading and exam preparation. Such a resident may struggle with clinical performance and by necessity lags in scholarly activity. To address this, a committee including the Program Director, Director of Research, Chairman and members of the Clinical Competency Committee meet to design an academic assignment that both supports the remediation of the resident and satisfies the requirements for an academic assignment. An example of this is a review of literature.

**Outcome:**

The nature of resident scholarly activity at our institution has gradually changed with time. Several years ago, case reports and literature reviews predominated among academic assignments. With time, there has been a shift to works based on analyses of data sought and collected by the residents. In other words, the nature of the work reported has been of discovery more than dissemination. See Table 1. The items marked boldly indicate discovery rather than dissemination.

**Table 1**  
Scholarly Activity

**2008:**

1. Pudendal Neuralgia: A Novel Approach to Treatment in a Patient with Refractory Pain
2. Review of Pharmacological Strategies for Renal Protection after Cardiopulmonary Bypass
3. Percutaneous Discetomies: An Alternative to Open Back Surgery
4. Anesthesia and Prader-Will Syndrome
5. The Influence of Dr. John Adriani on the American Board of Anesthesiology Oral Examination
6. **Survey** of the Louisiana Anesthesiologists Workforce after Katrina and Rita

**2009**

1. Anesthetic management of the Super Super Obese Parturient
2. Aggressive Fluid Hydration in SIRS Sepsis
3. A **randomized study** of ultrasound guidance vs. electrical stimulation for regional anesthesia
4. Obstetrical Anesthesia for patients with spinal dysraphism: Evaluation and technique
5. **Evaluation** of Safety of Handoffs between Anesthesia Care Providers
6. **Comparison** of Extended-Release Epidural Morphine with Femoral Nerve Block to PCEA for Postoperative Pain control in total Knee Arthroplasty
7. **Environmental Tobacco Smoke IS NOT a risk factor for pediatric airway complication in the perioperative setting**

**2010**

1. **Analgesic Efficacy** of Ultrasound Guided Transversus Abdominis Plane Block
2. Case Report of Catastrophic Cardiovascular Collapse during Repair of a Dissecting Thoraco-Abdominal Aortic Aneurysm after Cesarean Delivery in the Obese Patient
3. **Evaluating** Safety of Handoffs between Anesthesia Care Providers, Part II
4. **Intranasal Dexmedetomidine: Preliminary Analysis for Emerging the Delirious Child without Intravenous Access.**
5. Dexmedetomidine: a review of clinical applications (Published in Current Opinion in Anesthesia 2008)
6. **Predictive Value** of the El-Ganzouri Multivariate Risk Index for Difficult Tracheal Intubation using the conventional Miller Laryngoscope Blade and the Glidescope Video Laryngoscope as an Airway Rescue Device
7. Reliability of Patients in retaining Difficult Airway Information
8. An **Analysis** of Orotracheal Intubation in the ICU

# Implementing OR Management and Substaffing Experiences for Anesthesiology Residents

Shawn T. Beaman, M.D.; David G. Metro, M.D.;  
John P. Williams, M.D.

### Educational Goals of the Teaching/Evaluation

**Strategy or Outcome Measure:** We found that despite the breadth and high acuity of clinical experience offered to our residents, there was a paucity of clinical OR management and staffing experience. Therefore, the following interventions were made to allow the residents supervised experience in triaging cases, managing anesthesia provider staffing concerns, and staffing other anesthesia providers. These skills are essential to the everyday effective practice of anesthesiology.

### Program Requirement Fulfilled and/or ACGME competency(s) being taught/evaluated/measured:

Providing clinical OR management and staffing experience serves to fulfill the anesthesiology program requirements of progressively challenging the residents' cognitive skills and providing for increasing resident responsibility in patient management. It also serves to solidify the training to prepare the resident to function as a leader of perioperative care teams. The ACGME competencies of interpersonal and communication skills, professionalism, and systems based practice are also stressed via these experiences.

**Description of how the initiative was implemented (include resident training year(s), time and teaching commitment by faculty, how the initiative was implemented):** Three interventions were made to fulfill our goal.

1. The first takes place in our tertiary care OB suite at UPMC Magee-Women's Hospital. The senior resident (CA-2 or CA-3) on the suite, rather than the attending, now receives all incoming requests for services from the Obstetrical staff and nurses via phone. In consultation with the attending staffing the unit, the resident assigns the other residents, CRNAs, and SRNAs to provide the requested consults and services. Furthermore, the senior resident is charged with staffing all SRNA activity under the supervision of the attending anesthesiologist. This intervention requires attending oversight of the triage and distribution of work to appropriate providers, but has freed the attending from the initial stages of recording requests for obstetrical anesthesia services.
2. The second intervention occurred at our largest teaching site, UPMC Presbyterian Hospital. The senior resident on overnight call now manages the OR in concert with the call attending. Practically, the resident now receives all requests for cases, all PACU calls, triages cases, and chooses appropriate staff for each case. This resident is also responsible for the staffing of all ongoing activities. This intervention also requires close attending supervision and collaboration, but also frees him or her from many clerical duties and phone calls.

3. Finally, to this end, a "charge resident" is appointed at UPMC Montefiore's operating rooms during busy daylight hours. This CA-3 resident replaces a "charge CRNA" and is responsible for managing the hands-on staffing of the operating rooms, triaging cases, and staffing cases with the close supervision of the "charge" anesthesiologist. Again, the teaching commitment lies in the close supervision of the resident in each of these roles.

### Unexpected pitfalls (if any) and how these were

**overcome:** The pitfall of each of these interventions is, as in all clinical education, the resident working without the consultation of the attending. The message to our faculty has been that with a significant effort in orienting our senior residents to these roles, excellent education and a significant reduction in their workload can be eventually achieved.

### Total time the initiative has been in place, and how its success has been measured:

These interventions have been in place for three years. The residents have consistently evaluated these experiences highly on their rotation and chair's evaluations. Residents gain confidence in these settings as they progress through training and have been evaluated by their supervising faculty accordingly.

### Suggestions for implementing the same strategy in

**other programs:** The major cost of implementation of each measure is as follows.

1. OB "Charge" Resident: This intervention simply redefined the role of the senior resident on the OB suite. No cost in staffing was realized as the "charge" resident is still expected to participate in the clinical care ongoing on the unit, just as any "charge" anesthesiologist would. Therefore, no reduction in staffing took place.
2. Call "Charge" Resident: This also simply redefined the residents' role while on call. Prior to this intervention the expectation was the senior resident on call would only be put into an OR to provide hands-on care in the event of a staffing disaster which rarely, if ever, occurred. Residents in this role have maintained their responsibility to respond to level 1 traumas and assist in the preoperative evaluation of patients.
3. Day "Charge" Resident: This intervention is perhaps the costliest in that it has taken the senior resident out of the OR providing "hands-on" care. However, the cost was directly offset by placing the "charge CRNA" that was free from "hands-on" care back into the operating room.

# Multi-System Approach to Improving a Residency

Ó@ã ¢ ] @!ÁGallagher, M.D.

### Educational Goals of the Teaching/Evaluation Strategy or Outcome Measure:

1. Get residents involved in as many academic projects as possible.
2. Expose residents to “the academic life” – traveling to and presenting at meetings.
3. Infuse residents with enthusiasm by “getting their names in print”.
4. Improve the “cycle length” of the program.
5. Improve the board pass rate.

### Program Requirement Fulfilled and/or ACGME competency(s) being taught/evaluated/measured:

1. Academic productivity of the department.
2. Professionalism.
3. Practice-based Learning and Improvement.
4. Interpersonal and Communication Skills.

Description of how the initiative was implemented (include resident training year(s), time and teaching commitment by faculty, how the initiative was implemented):

The initiative was implemented two years ago when I became residency director. The “gear shift” was simple – get the residents involved in every single academic project, no more “attending flying solo” on a poster or a paper or a book chapter. The specific steps were:

1. Create a “poster czar” (Dr Adsumelli at our institution). If I found an interesting case that would lend itself to a “Challenging Medical Case Presentation”, I would contact Dr Adsumelli, who would then “chase the subject all the way to the ground”, making sure the subject came to fruition, became a poster, and got presented.
2. Involved residents in chapter contributions. When I got the contract for “Core Clinical Competencies in Anesthesiology” (Cambridge University Press), I made sure that each case contribution had one faculty member and one resident on it. No “faculty only” cases were accepted.

To improve our board pass rate, hence increase our cycle length (we went from a 2 year cycle to a 3 year cycle under this change), I instituted a series of written and oral board review sessions. This addition of mock exams increased our overall certification rate from below the required 70 percent to above.

### Unexpected pitfalls (if any) and how these were overcome:

The only pitfall we encountered was TOO much success – we had so many residents going to national meetings to present that we ended up short-staffed in the OR’s. A problem resulting from too much of a good thing!

### Total time the initiative has been in place, and how its success has been measured:

All these changes have been in place for 2 years. Success has been measured by:

1. Increase in the program’s cycle length.
2. Improvement in our overall board pass rate.
3. Increase in academic activity
  - a. Numbers of posters presented.
  - b. Numbers of residents as contributing authors in a book

### Suggestions for implementing the same strategy in other programs:

1. Get a “poster czar” like we did, your poster production will soar.
2. When a faculty member gets a book/chapter offer, get residents involved.
3. Hold mock oral board sessions.

# Using the Healthcare Matrix with PGY1s- system Based Practice and Practice Based Learning and Improvement Made Easy

Dr. L. Jane Easdown and John T. Algren

In 2006 the Department of Anesthesiology, Vanderbilt University Medical Center (VUMC) introduced a monthly meeting of the PGY1 class with faculty mentors to assess individual patient care incidents using the Healthcare Matrix. The Matrix is an educational and quality improvement tool developed at VUMC that uses the Institute of Medicine (IOM) Aims for Improvement and the ACGME competencies as a structured analysis of patient care, generating specific points for practice based improvement. Each PGY1 resident is responsible for presenting a case where patient care was faulty and filling in the cells of the Matrix. The group, with faculty mentors, then discusses the case and makes an action plan for improvement. Each subsequent session has follow up on that action plan. This exercise serves as an assessment for all the competencies but especially system-based practice and practice based learning and improvement.

The goal of this initiative was to introduce new house staff to the quality improvement (QI) process and help them navigate the complexities of the hospital system. Although interns are unfamiliar with looking at patient care in the context of system based practice, this tool provides them with a model to learn to be more effective and efficient physicians by focusing on *quality improvement* and the development of new processes in the healthcare system. They have learned how analysis of care of one patient has the potential to improve the care of future patients.

Over 60 PGY1 residents have participated in this process. Early in the intern year, the Matrix analysis is more simplistic, whereas later in the year, the interns demonstrate a deeper understanding of hospital systems and complexity. The Matrix analysis becomes more complex as they understand IOM and ACGME competencies. When surveyed in 2006, 8/13 PGY1 residents could name and describe the IOM aims and ACGME competencies, 13/13 felt these sessions improved their understanding of hospital systems. Several residents and faculty have presented abstracts related to Matrix sessions- at SEA, ACGME and ASA meetings. ( 1-5) In 2009 we published a summary of our experience with the Healthcare Matrix. (6)

Several changes have occurred since 2006 to these popular and well attended sessions. The sessions are now held twice a month. In 2010 we added our critical care fellows as discussants and invited residents from other services who have a special interest in QI. There have been essentially no pitfalls in this process. Although initiated with the leadership of a QI specialist from our Center for Clinical Improvement, when she relocated we were able to continue to use the Matrix in these sessions.

Physicians are called upon to demonstrate mastery of the six core competencies and IOM aims to continually improve their practice. The Healthcare Matrix is a simple tool which enables

one to analyze the care of a patient in one incident and develop quality improvement processes for every future patient. By introducing this skill early in training, we hope to create a system for practice based improvement activities, providing a foundation for subsequent years in training and practice.

1. Easdown, L.J., Quinn, D., Wagner, Algren J. Using the Healthcare Matrix with interns: system based practice and practice based learning and improvement made easy. Poster presentation SEA Spring Meeting Santa Fe, NM June 2007
2. Turner, K\* Easdown, LJ, Quinn, D. Introducing interns to the quality improvement process through the healthcare matrix. Poster presentation, ACGME Educational Conference Dallas, TX. March 2008
3. Turner, K\* Easdown, LJ, Quinn, D. Introducing interns to the quality improvement process through the healthcare matrix. Poster presentation Tennessee Society of Anesthetists Meeting Nashville, TN\_Feb 2008
4. Easdown, LJ, Quinn, D, Reynolds, PQ\*, Lorinc, A\* Using the healthcare matrix with PGY1 residents and medical students to effect change. Poster presentation, SEA Spring Meeting, Miami June 2008.
5. Easdown, LJ, Quinn D, Turner K\*, Algren J. Using the Healthcare Matrix to introduce PGY1 residents to quality improvement. ASA Orlando Oct 2008
6. Reynolds P\*, Quinn D, Easdown LJ, Lorinc A\*, McNaughton C\* Using the Healthcare Matrix with interns and medical students as a tool to effect change Southern Medical Journal 102 (8): 816-822 Aug 2009)

\* Denotes resident

## Patient Healthcare Matrix: Care of Patient with....

AIMS Competencies	SAFE <sup>1</sup> (Overuse, underuse, misuse)	TIMELY <sup>2</sup> (Delay in hrs, days weeks)	EFFECTIVE <sup>3</sup> (Outcomes, Evidence-based care)	EFFICIENT <sup>4</sup> (Waste of resources)	EQUITABLE <sup>5</sup> (Gender, ethnicity, race, SES)	PATIENT-CENTERED <sup>6</sup> (Preference, needs, values)
<b>Assessment of Care</b>						
<b>PATIENT CARE<sup>7</sup></b> (Overall Assessment) Yes/No						
MEDICAL KNOWLEDGE and SKILLS <sup>8</sup> (What must we know?)						
INTERPERSONAL AND COMMUNICATION SKILLS <sup>9</sup> (What must we say?)						
PROFESSIONALISM <sup>10</sup> (How must we behave?)						
SYSTEM-BASED PRACTICE <sup>11</sup> (What is the process? On whom do we depend? Who depends on us?)						
<b>Improvement</b>						
PRACTICE-BASED LEARNING AND IMPROVEMENT <sup>12</sup> (What have we learned? What will we improve?)						

### Information Technology

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<sup>1</sup> Safe: Avoiding injuries to patients from the care that is intended to help them.

<sup>2</sup> Timely: Reducing waits and sometimes harmful delays for both those who receive and those who give care.

<sup>3</sup> Effective: Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).

<sup>4</sup> Efficient: Avoiding waste, including waste of equipment, supplies, ideas, and energy.

<sup>5</sup> Equitable: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic status.

<sup>6</sup> Patient-Centered: Providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions.

<sup>7</sup> Patient care: that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

<sup>8</sup> Medical Knowledge: about established and evolving biomedical, clinical, and cognate sciences (e.g. epidemiological and social-behavioral) and the application of this knowledge to patient care.

<sup>9</sup> Interpersonal and communication skills: that result in effective information exchange and teaming with patients, their families and other health professionals.

<sup>10</sup> Professionalism: as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

<sup>11</sup> System-based practice: as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

<sup>12</sup> Practice-based learning and improvement: that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvement in patient care.

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An Assessment of an Educational  
Intervention on Resident Physician  
Attitudes, Knowledge, and Skills Related  
to Adverse Event Reporting

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## Abstract

**Objective** Reporting and learning from events linked to patient harm and unsafe conditions is critical to improving patient safety. Programs that engage resident physicians in adverse event reporting can enhance patient safety and simultaneously address all 6 Accreditation Council for Graduate Medical Education competencies. Yet fewer than 60% of physicians know how to report adverse events and near misses, and fewer than 40% know what to report. Our study evaluated the effect of an educational intervention on anesthesiology residents' attitudes, knowledge, and skills related to adverse event reporting and the associated follow-up.

**Methods** In a prospective study, anesthesiology residents participated in a training program focused on the importance of reporting methods and on reporting adverse events for patient safety. Quarterly adverse event reports were analyzed retrospectively for 2 years before the intervention and prospectively for 7 quarters after the intervention. Residents also completed a survey, before and 1 year after the intervention, that evaluated their

attitudes, experience, and knowledge regarding adverse event reporting.

**Results** After the intervention, the number of adverse event reports increased from 0 per quarter to almost 30 per quarter. We identified several categories of harm events, near misses, and unsafe conditions, including reports of disruptive providers. Of the harm events associated with invasive procedures, more than half were associated with lack of attending physician supervision. We also observed significant progress in the residents' ability to appropriately file a report, improved attitudes regarding the value of reporting and available emotional support, and a reduction in the perceived impediments to reporting.

**Conclusions** An educational intervention increased the number of adverse event reports submitted by anesthesiology residents, improved their attitudes about the importance of reporting, and produced a source for learning opportunities and process improvements in the delivery of anesthesia care.

## Introduction

The reporting of adverse patient events including near misses and unsafe conditions is essential for patient safety, patient care, improvements in physician-patient communication, and the education of health care workers—all of which contribute to safer systems-based practices. The

Institute of Medicine reported in 1999 that the deaths of up to 100 000 patients per year may be due to preventable adverse events.<sup>1</sup> More than 10 years ago, the authors of the report<sup>1</sup> asked health care organizations to create voluntary reporting systems to improve the understanding of factors that contribute to medical errors. The Joint Commission

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requires the establishment of a reporting system by accredited organizations for adverse events.<sup>2</sup> Despite these mandates and perceived benefits of reporting,<sup>1,2</sup> a survey of physicians in teaching hospitals revealed that only 54.8% of the physicians surveyed knew how to report medical errors and only 39.5% knew what errors to report.<sup>3</sup> In our own institution, fewer than 1% (<30 total reports) of event reports come from the more than 500 resident physicians who rotate through the University of Illinois Medical Center at Chicago (UIMCC). In a questionnaire survey, White et al<sup>4</sup> found that only 31% of interns or residents reported receiving instruction in error disclosure techniques. Kaldjian et al<sup>5</sup> identified factors that may facilitate (eg, responsibility to the patient and profession) or impede (eg, attitude, fears, and anxieties) reporting of adverse events. To investigate whether attitudes toward reporting and reporting skills could be improved through education, a patient safety and medical fallibility curriculum was developed by Madigosky et al.<sup>6</sup> The researchers found that this curriculum improved some attitudes and skills towards error reporting in the short-term, but improvements could not be sustained after 1 year.

Our study is the first of its kind. It pairs an educational training program (intervention) focused on the importance of adverse event reporting with an expectation of reporting as a means of engaging anesthesiology resident physicians in the Accreditation Council for Graduate Medical Education (ACGME) 6 core competencies. The objective was to evaluate attitudes, knowledge, and skills of anesthesiology residents before and after an educational intervention focusing on the medical center's comprehensive response to adverse event reporting and follow-up.

## Methods

Participants in this prospective assessor study included anesthesiology resident physicians in a clinical rotation at UIMCC. The residents were exempt from informed consent since this study was considered an educational practice in error reporting, which is mandatory training for residents. The anesthesiology residents served as their own historical controls. The survey was administered at the residents' scheduled educational conference. The survey questions are found in TABLE 1. To ensure anonymity, anesthesiology residents were assigned a numerical identification, with the key being held by the honest broker. The honest broker was an individual not involved in the study design or proceedings who had access to a list corresponding to individual subject names with their numerical designation. With this system, data per resident could be tracked to compare serial survey results and quantity of reports. The data were maintained in a password-secure database. All data were managed by the honest broker. All data were "deidentified" before release to the independent review panel. The study protocol was reviewed and deemed exempt

by the University of Illinois at Chicago Institutional Review Board.

For the online reporting system, access to the database for data retrieval and analysis was restricted to the Department of Safety and Risk Management. However, for concerns of patient safety and the well-being of residents involved in adverse events, and for the fulfillment of the ACGME-identified competencies, the adverse event reports were reviewed daily by the Department of Safety and Risk Management and the Department of Anesthesiology's residency program director. Confidential support services were provided as part of a departmentally approved "second victim"<sup>7</sup> program, as indicated and identified by the Department of Safety and Risk Management and the program director.

At  $t = 0$ , anesthesiology residents were given a questionnaire survey evaluating individual attitudes, experience, and knowledge regarding adverse event reporting. For this study, questions were aggregated into the following domains: fear and barriers to reporting, institutional support, and the mechanics of reporting. This survey provided a baseline attitude for each subject before the educational intervention. Anesthesiology faculty assisted with the survey administration.

## Educational Intervention

After the survey completion, residents participated in the educational intervention that consisted of an interactive case-based lecture focusing on the importance and mechanics of adverse event reporting. An adverse event reporting expectation was implemented for anesthesiology residents. The residents were also informed that after the report of some selected events they would be engaged in root-cause analysis and performance improvement follow-up efforts. The goals of the program were to improve knowledge, attitudes, and skills related to patient safety and adverse patient events. The educational program was taught in a case-based lecture format with hands-on interaction with the online reporting system. The intervention included the following.

### I. A 90-Minute Educational Program (Including the Following Topics)

- A. The definitions of adverse event, medical error, serious error, minor error, and near miss. Also, the ways in which event reporting addresses all 6 ACGME core competencies<sup>8</sup> were emphasized.
- B. UIMCC's comprehensive response to adverse events in relation to the ACGME core competencies: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.<sup>8</sup>
- C. The mechanics of reporting and responding to adverse events,<sup>9</sup> are as follows:

TABLE 1 | COMPARISON OF PREINTERVENTION AND POSTINTERVENTION SURVEYS

Question Topic	Response <sup>a</sup>	Preintervention <sup>b</sup>	Postintervention <sup>c</sup>
		N (%)	N (%)
I don't report incidents because I am worried about disciplinary action.	Strongly disagree	13 (25.5)	18 (40)
	Disagree	16 (31.4)	16 (35.6)
	Neither agree nor disagree	15 (29.4)	7 (15.6)
	Agree	4 (7.8)	4 (8.9)
	Strongly agree	3 (5.9)	0 (0)
	<b>Total</b>	<b>51 (100)</b>	<b>45 (100)</b>
I don't report incidents because I am worried about litigation.	Strongly disagree	7 (13.7)	14 (31.1)
	Disagree	24 (47.1)	19 (42.2)
	Neither agree nor disagree	10 (19.6)	11 (24.4)
	Agree	8 (15.7)	1 (2.2)
	Strongly agree	2 (3.9)	0 (0)
	<b>Total</b>	<b>51 (100)</b>	<b>45 (100)</b>
I don't report incidents because my colleagues may be unsupportive.	Strongly disagree	10 (19.6)	14 (31.1)
	Disagree	11 (21.6)	19 (42.2)
	Neither agree nor disagree	18 (35.3)	7 (15.6)
	Agree	7 (13.7)	5 (11.1)
	Strongly agree	5 (9.8)	0 (0)
	<b>Total</b>	<b>51 (100)</b>	<b>45 (100)</b>
I don't report incidents because I do not know which incidents should be reported.	Strongly disagree	6 (12)	8 (17.8)
	Disagree	8 (16)	17 (37.8)
	Neither agree nor disagree	11 (22)	10 (22.2)
	Agree	23 (46)	8 (17.8)
	Strongly agree	2 (4)	2 (4.4)
	<b>Total</b>	<b>50 (100)</b>	<b>45 (100)</b>
Near misses should be disclosed to patients.	Strongly disagree	7 (13.7)	1 (2.3)
	Disagree	25 (49)	16 (36.4)
	Neither agree nor disagree	0	0
	Agree	13 (25.5)	16 (36.4)
	Strongly agree	6 (11.8)	11 (25)
	<b>Total</b>	<b>51 (100)</b>	<b>44 (100)</b>
Current systems for reporting patient safety problems by health care providers are adequate.	Strongly disagree	3 (6)	
	Disagree	17 (34)	5 (11.1)
	Neither agree nor disagree	0	0
	Agree	25 (50)	38 (84.4)
	Strongly agree	5 (10)	2 (4.4)
	<b>Total</b>	<b>50 (100)</b>	<b>45 (100)</b>

TABLE 1 | CONTINUED

Question Topic	Response <sup>a</sup>	Preintervention <sup>b</sup>	Postintervention <sup>c</sup>
		N (%)	N (%)
Hospitals and health care organizations adequately support providers in coping with stress.	Strongly disagree	7 (14.3)	2 (4.4)
	Disagree	24 (49)	15 (33.3)
	Neither agree nor disagree	0	0
	Agree	14 (28.6)	27 (60)
	Strongly agree	4 (8.2)	1 (2.2)
	<b>Total</b>	<b>49 (100)</b>	<b>45 (100)</b>

<sup>a</sup> All questions were answered with the following 5-point scale: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; and 5 = strongly agree.

<sup>b</sup> Preintervention: Response to survey before educational intervention and expectation of adverse event reporting.

<sup>c</sup> Postintervention: Response to survey after educational intervention and expectation of adverse event reporting.

1. Reporting: Residents were instructed on the methods of reporting and the process of online reporting. The completed report is sent to the Department of Safety and Risk Management, a report copy is sent to the program director's work list, a portfolio is created for the resident, and the report is entered into a database.
2. Investigation/process improvements: After reporting, the degree of harm is assessed by the Department of Safety and Risk Management. If harm occurred, an investigation ensues, a root-cause analysis is completed, a "second victim" is considered, and bills are held.
3. Communication: The UIMCC Patient Communication Consult Service is a service at UIMCC available 24 hours a day, 7 days a week, to respond to all serious unexpected adverse events linked to patient harm. It involves a multidisciplinary team approach to the rapid investigation of adverse events and assistance in assuring effective and honest communication with patients and families.
4. Apology and remedy: Residents are educated to understand the power of effective, honest communication and apology, when indicated, for patients and providers; to acquire knowledge and skills in the element of "full disclosure"; to develop skills necessary for apology; to understand the impact of "no pay for bad performance"; and to appreciate the financial impact of harm caused by error.

## II. Resident Education Manual

- A. Distributed to residents during educational program.

- B. Included references to the following: National Quality Forum Serious Reportable Adverse Events in Healthcare, The Joint Commission Sentinel Events, and Centers for Medicare and Medicaid Services.
- C. Provided connection to the application of the 6 ACGME core competencies.
- D. Included *Occurrence Reporting Quick Reference Guide*.

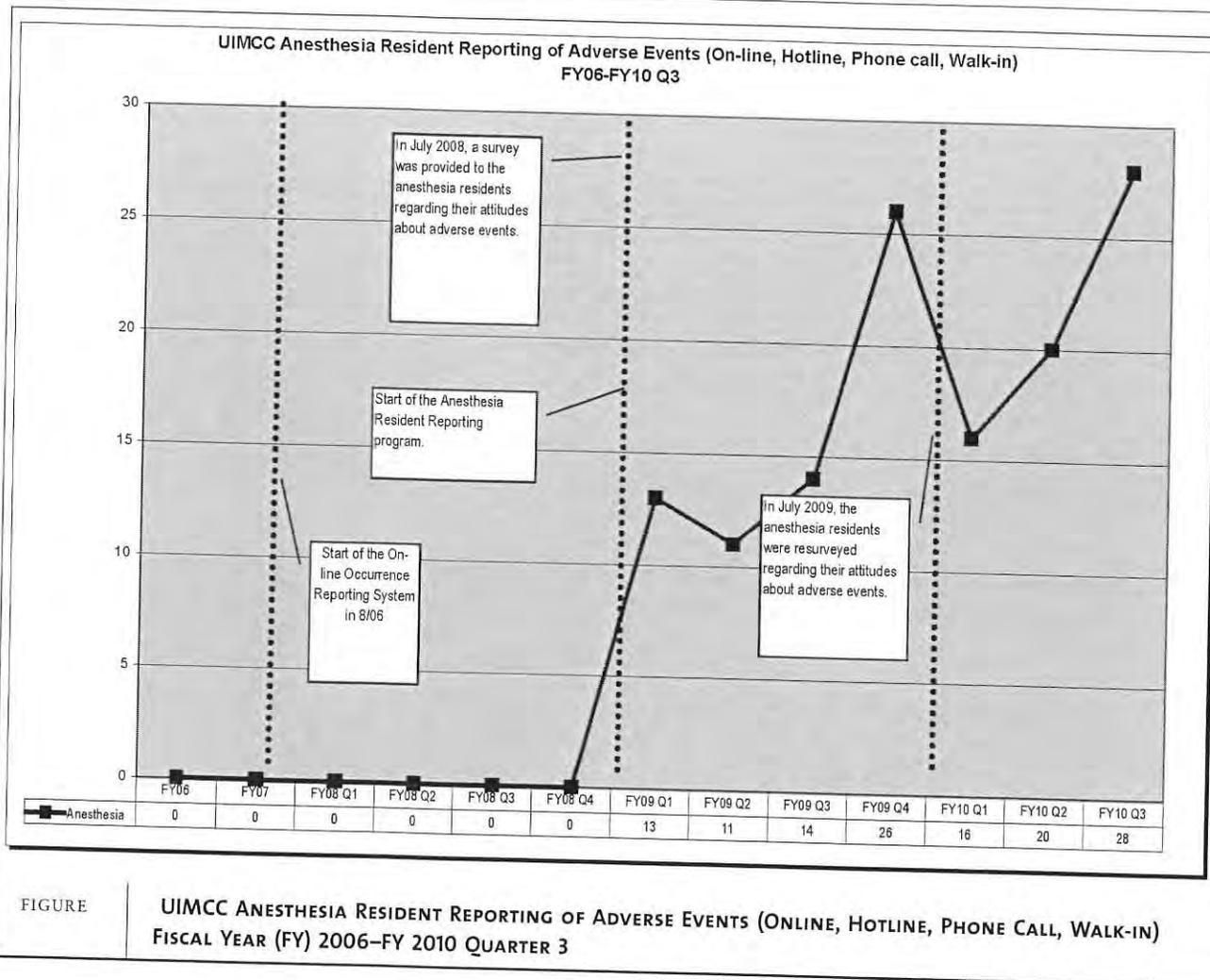
## III. Quarterly Conferences

- A. Reviewed material from educational program.
- B. Provided feedback to anesthesiology resident physicians.
- C. Discussed type and quantity of adverse event reports.
- D. Discussed adverse event-associated process improvements.

## IV. Department of Safety and Risk Management

- A. Provided near-immediate feedback to residents upon receipt of adverse event reports. In high-yield specific situations, residents were engaged in root-cause analyses and the subsequent process improvement efforts. Those process improvements were then communicated to medical staff leadership and University of Illinois Board of Trustees, with subsequent feedback to the resident physicians.
- B. Met regularly with residency program directors to answer clarifying questions and provide educational support.

The aforementioned formal educational lecture program began in July 2008 and was repeated in July 2009 for the



educational benefit of new anesthesiology residents. The additional elements of learning and education discussed above are ongoing and have become an integral part of the formal resident curriculum.

After the education session, all residents were informed that they were expected to report adverse events via the online reporting application or any other methodology while rotating at UIMCC and that these reports would serve as one basis for assessing their progress in the core competencies.

#### Data Collection

Quarterly adverse event reports were analyzed retrospectively for the 2 years before the intervention and then prospectively on a quarterly basis by the independent review panel. Analysis of the adverse event reports by the departmental quality officer and other departmental content experts included an assessment as to whether or not the absence of an attending anesthesiologist played a role in the event. In addition, the category (eg, equipment, medication, procedure related) and degree of harm or potential harm were identified. At  $t = 12$  months, residents responded to the

same survey given at  $t = 0$  month. Survey responses were compared between  $t = 0$  and  $t = 12$  months. The data were compiled by the independent review panel and analyzed.

#### Statistical Analysis

Statistical analysis was performed with Statistical Package for the Social Sciences (SPSS, Chicago, IL), version 15.1. One-way analysis of variance (ANOVA) was used to test the difference between preintervention and postintervention data. Normality assumption was checked for the total scores.

#### Results

Our results demonstrated that a comprehensive educational intervention beyond a single lecture, coupled with an expectation of reporting, increased the number of adverse event reports submitted by anesthesiology resident physicians, improved their attitudes about the importance of reporting, and produced a source for learning opportunities and process improvements in the delivery of anesthesia care.

TABLE 2 | ANESTHESIOLOGY RESIDENT PHYSICIANS' EVENT-REPORTING DATA

Category of Occurrence	No. of Events	Events Associated With Inadequate Supervision
Consent/documentation	3	2
Disruptive provider	7	0
Equipment	7	0
Patient fall	2	0
Laboratory specimen mislabeled	2	0
Medication issues	19	3
Obstetric anesthesia complications	3	0
Delay in treatment/service	8	0
Unplanned extubation	2	0
Patient transport issues	12	0
Treatment/procedure complications (intubation, regional block, central line placement)	17	9
Resident needle-stick injury	2	0

### Anesthesiology Resident Physicians' Attitudes Relating to Adverse Events

Anesthesiology resident physicians' attitudes about error disclosure improved significantly after an educational intervention with an error-reporting requirement. We compared the preintervention and postintervention survey results. There was a statistically significant improvement in resident attitudes regarding the value of error reporting and the available emotional support for error reporting between the preintervention and postintervention surveys.

Furthermore, after the intervention, residents expressed less concern about factors that can impede error reporting. For example, resident worries about disciplinary action, litigation, lack of collegial support, or concerns about what incidents to report decreased (TABLE 1). Furthermore, after the intervention, resident attitudes about the adequacy of the current system for reporting patient safety problems and about the availability of support services for providers coping with stress also improved (TABLE 1).

### Frequency of Adverse Event Reporting by Anesthesiology Resident Physicians

The number of adverse event reports increased from 0 per quarter in the 2 years preintervention to 28 per quarter for the 7 quarters (21 months) postintervention, with no sign or evidence of decay (FIGURE).

### Analysis of Adverse Event Reports by Anesthesiology Resident Physicians

An analysis of the anesthesiology resident physicians' reports showed several categories of harm events, near

misses, and unsafe conditions, including reports of disruptive providers. Of the harm events associated with complications related to procedures (intubation, nerve block, central line placement), 9 of 17 were associated with the inadequate supervision by anesthesiology attending physicians (TABLE 2).

### Discussion

This study showed that a comprehensive educational curriculum focusing on the importance of adverse event reporting, coupled with an expectation of reporting as a means of engaging residents in the 6 ACGME core competencies, increased the number of anesthesiology resident physicians' adverse event disclosures, improved attitudes about medical error disclosure, and produced a sustainable source for potential learning opportunities and process improvements in the delivery of anesthesia care.

Other studies have evaluated an online reporting system<sup>10</sup> as well as an educational curriculum's effect on attitudes toward adverse event reporting.<sup>6</sup> Unlike the study of Madigosky et al,<sup>6</sup> our study of anesthesiology resident physicians also used an online reporting system, coupled with an expectation of reporting as a means of engaging anesthesiology resident physicians in the root-cause analysis and follow-up, thereby increasing the exposure and opportunity for assessment in the 6 ACGME core competencies. All factors in our methodology contributed to the sustained improvement in resident attitude and behavior.

The improvement in attitude toward and increase in frequency of adverse event reporting can be explained by the educational intervention and the decreased expression of concern about factors that impede error reporting. Furthermore, anecdotal resident comments revealed that, in the residents' opinion, adverse event reporting into the online database emphasized a systems-related approach as opposed to a "shame and blame" environment. Several residents commented that they felt "safe" with the reporting methodologies and follow-up. Residents also expressed that they felt empowered by opportunities to make an impact in the care of patients and felt the support of their colleagues, as reflected in their improvement in attitude.

Are these results specific to anesthesiology resident physicians? A study by Jaggi et al<sup>11</sup> revealed that surgical residents were more likely to report adverse events than medical or hospital-based (pathology, anesthesiology, radiology, emergency medicine) residents. In investigating factors affecting error reporting by physicians, Kaldjian et al<sup>3</sup> found that responses from pediatricians were not significantly different from those of physicians in family medicine and internal medicine.

With regard to the specific adverse events reported, 9 of 17 complications related to procedures (intubation, nerve block, central line placement) were associated with inadequate supervision by anesthesiology attending physicians (TABLE 2). In a survey by Jaggi et al,<sup>11</sup> residents reported procedural and medication-related events as the most common adverse events and felt that one of the causes of their most recent error was inadequate supervision. Measures to address the potential systems-level failures identified by our residents underwent root-cause analysis and process and performance improvement identification via UIMCC's comprehensive process for responding to adverse events.

### Limitations

Our study has several limitations. First, residents' answers may have been influenced by social desirability, leading us to overestimate positive attitudes. Since the attitudes that impede error reporting were indeed expressed preintervention, with an improvement in attitude postintervention, we feel the residents' responses were not greatly influenced by perceived desired behaviors. Second, we assumed computer proficiency in the online reporting system. Our training program explained how to report adverse events in the current system; furthermore, the residents reflected their proficiency, as shown by the increase in the quantity of reports during the study period.

Third, we did not confirm whether the adverse event reporting rates were comparable to adverse event data found in patients' medical chart reviews. O'Neil et al<sup>12</sup>

compared resident reports (89) with a medical record review (85) and found that both methods uncovered similar numbers of adverse events; however, the 2 methods converged on the case related to the same patient for only 41 of the cases of error. Perhaps the reviewers were unable to identify events owing to failure of documentation. Also, the residents were more likely to report preventable adverse events and errors of commission than were physician reviewers during medical record review. Therefore, resident reporting may identify adverse events or near misses that other mechanisms may miss. O'Neil et al<sup>12</sup> reported further that the physician reporting mechanism was less costly than the medical chart review.

Residents are our front-line group of future physicians. It is essential that these future attending physicians have appropriate training, mentoring, and support in adverse event reporting. This approach can succeed in residency programs with the visible commitment of the Department of Safety and Risk Management and a nonpunitive approach to adverse event reporting. Furthermore, simulation may play a role in providing residents with an arena in which to practice disclosure activities in a controlled environment.

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# Changing and Succeeding Under Any Condition: Using Strategic Planning to Build, Innovate and Advance Your Training Program

Cynthia T. Anderson, M.D.

### Educational Goals:

Our program was able to go from a struggling 3-year program with a history of two 2-year accreditation cycles to a 5 year accredited 4 year residency. We have been innovative in many areas, including institution of an integrated resident well-being program, use of telecommunication technology & online curriculum to allow "away residents" full participation in the curriculum; integration of simulation into the curriculum; partnership with the Paul Merage School of Business to develop professional training; and a Pickering Grant to develop a "Patient Centered" Curriculum. We have also created new fellowships in the past two years and, most recently, have been approved as a pediatric-anesthesiology training program by the ABA and ABP. I believe the **process** by which we accomplished so much in such a short time (21/2 years) is one that can be adapted to any program to help the program director succeed in achieving, maintaining and advancing their residency programs. The Goals of the presentation would be to outline this process, adapted from the book: [Our Iceberg Is Melting](#) by John Kotter from the Harvard Business School. Specific examples from our Program will be provided for the major steps outlined below:

### Description and Implementation

1. Setting the Stage
  - a. Create a sense of urgency:
  - b. Guiding team established
    - i. Program Director
    - ii. Associate Program Directors
    - iii. Chief Residents
    - iv. Administrative
  - c. We all read the same book: [Our Iceberg is Melting: Changing and Succeeding Under Any Conditions](#) by John Kotter. Department members were also given copies of this book to read for a first Department-wide retreat.
2. Deciding What to Do
  - a. What is the Vision: where did we want to be in 5 years?
  - b. Creation of a Written Roadmap: The Strategic Plan
    - i. Determining the Objectives and Strategic Initiatives as a group through initial faculty and resident meeting
    - ii. Approval process at department-wide retreat of Objectives and Initiatives
3. Making It Happen
  - a. Creating the Action Items – the hard part!
    - i. Delegation to individuals
    - ii. Brainstorming/ looking at what others do

- b. Production of early short-term wins by organizing action items into urgent vs. non-urgent and easy vs. difficult to achieve categories.
  - c. Empowering others
  - d. Communication
    - i. Initiatives and action items become basis for agendas at Education Committee, Resident Meeting, Faculty Meeting, etc.
  - e. Never let up!
    - i. Strategic Plan becomes a "living document"
    - ii. Responsible leadership members present status of each initiative and challenges at open meeting once a quarter
    - iii. Every fourth faculty meeting is a department-wide one where accomplishments are reviewed.
4. End Result
    - a. Culture of accomplishment
    - b. Culture of change – What more can we do to get there?
    - c. Change is good!

### Unexpected Pitfalls:

We did not experience unexpected pitfalls; however, strategic plans often fall apart because there is not a process in place to clearly define the steps that need to occur to reach the desired objectives; review of progress is infrequent and it does not become the over-riding roadmap for determining resources and priorities. This is the difficult part of "strategic planning."

### Time Initiative Has Been In Place and How Success Measured:

The UCI Department of Anesthesiology and Perioperative Care Strategic Plan was developed and approved in 2008. It undergoes review and revision on a quarterly basis. Its success is measured by progress on the major Objectives and Initiatives and utilizes benchmarks such as: Accreditation status/ quality of resident applicants/Educational Program Surveys/ ACGME Resident Survey.

### Suggestions for Implementing the Same Strategy in Other Programs

The presentation outlines the implementation, which would be applicable across different sizes and types of residency programs. Individual programs, by using this process, can set broad goals but reach them through initiatives and action items that are realistic for their institution.

# Assessment of a Standardized VLE (Virtual Learning Environment, aka web-based) Tutorial Program for Anesthesiology Resident performance on the ASA/ABA In-training Examination

J.P. Lawrence, M.D.

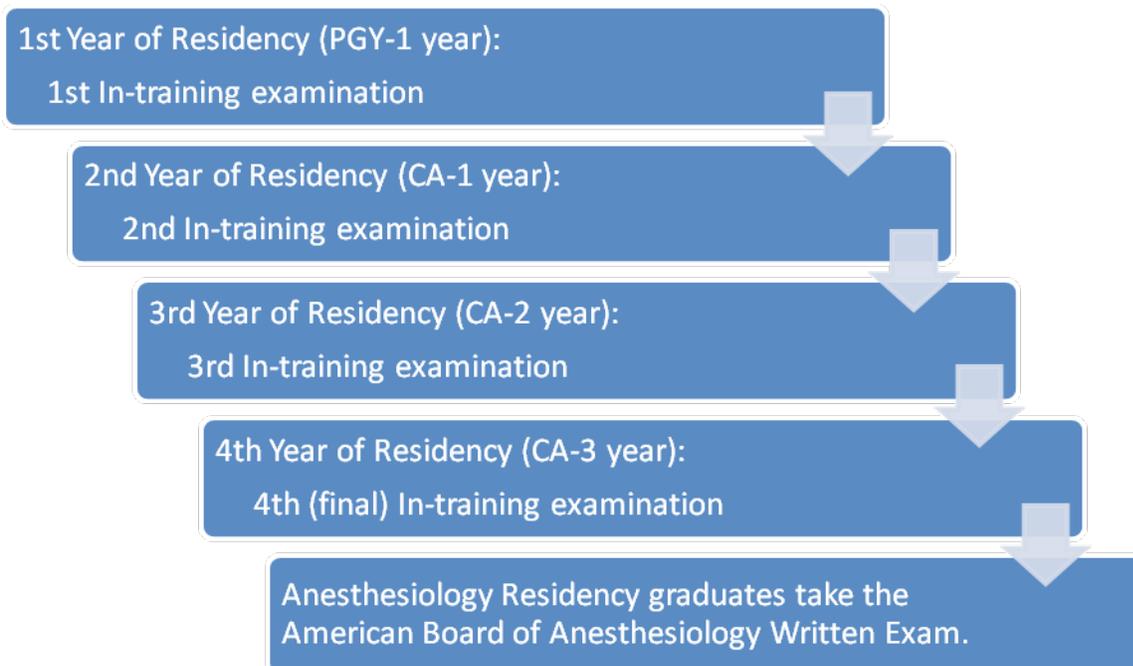
## CHAPTER I The Problem

In-Training Examinations (ITE) are national standardized specialty specific examinations that are administered annually to residents in ACGME-accredited Graduate Medical Education programs to assess medical knowledge. The first ITE was administered in 1964 by the American Board of Neurosurgery to assist program directors with predicting performance on the Board certification examination (Derossis, Da Rosa, Schwartz, Hauge, & Bordage, 2004). Soon after it was introduced, the other medical subspecialties followed with their own exams. In 1975, the first anesthesiology ITE was administered (Rosenthal & Hughes, 2005), and continues to be administered annually to all anesthesiology residents.

The ITE is a vital tool for residency program directors to assess residents' medical knowledge, and identify specific individual

residents who lack sufficient medical knowledge. Program directors, however, struggle with how to optimally use this information to design and structure the curriculum to assist residents in overcoming knowledge deficits. No comprehensive instructional tools (web-based or otherwise) designed to improve anesthesiology resident performance on the anesthesiology ITE have been published.

The anesthesiology residents take the ITE annually (M. Rockoff, 2008). Because the anesthesiology residency is 4 years in length, the anesthesiology program directors have 4 distinct opportunities to not only assess a resident's medical knowledge, but to shape and guide the individual resident's acquisition of this medical knowledge prior to the time he or she is expected to take and pass the written (part 1) examination for the American Board of Anesthesiology Certification Process. The ITE is given near the end of the academic year (1<sup>st</sup> Saturday in March). This provides the program directors the opportunity to use the results of the exam to structure the curriculum for the following year.



According to the Anesthesiology Program Requirements, "The program must provide objective assessments of competence in... medical knowledge...document progressive resident performance improvement" ("ACGME Program Requirements for Graduate

Medical Education," 2008). The problem for the program director is how to optimally design and administer a residency curriculum to not only adhere to the program requirements but also to optimally utilize the information provided by the ITE.

## The Research Hypothesis

The research hypothesis is that completion of an individualized web-based tutorial program will improve resident performance on the standardized ITE. Specific questions that will be addressed are:

1. Does the tutorial program improve the resident performance overall?
2. Which residents receive the most benefit from the tutorial program?
3. Does the tutorial program change the resident's range of performance on the subcategories of the ITE?
4. Are the residents satisfied with the tutorial program?

## The Definition of Terms

Accreditation Council of Graduate Medical Education (ACGME): The ACGME is the organization that accredits and oversees all of the graduate medical education programs. The ACGME, through its network of Residency Review Committees (RRCs), provides all programs with a series of requirements in order to receive approval to operate (Accreditation).

Site Visit: The ACGME, through its network of RRCs, periodically visits each program to verify the content and accuracy of the paperwork (Program information form) submitted to the ACGME.

Program Information Form (PIF): The PIF is the paperwork that the ACGME requires each program to submit at specific times for the purpose of program accreditation.

Anesthesiology In-Training Examination: The Anesthesiology ITE is a standardized examination that is administered jointly by the American Board of Anesthesiology (ABA) and American Society of Anesthesiologists (ASA) annually to the residents (or practicing physicians) as a preparation for the first part of the formal ABA Certification process. This annual examination is given to all anesthesiology residents at the same time (first Saturday of March), and the scores are reported to the program directors, who forward the information to the individual residents. The exam is a 250 item proctored written exam. "Although no questions are repeated on the March ITE and the August ABA Part 1 Exam, examinees may find the list of keywords helpful in preparing for the Part 1 examination, because the scientific content distribution of the two examinations is similar" (M. A. Rockoff, 2009). The score report that is included for each resident provides a raw total score. When the scores are compared to the included norm table, the resident and program director are able to determine the percentile performance of each resident in comparison to their peers at their educational level. Additionally, each resident's performance on the 17 sub-sections is provided. The information that is included for each subsection is the number of items in each category, number that each resident answered correctly, and the number of items that the 50<sup>th</sup>, 75<sup>th</sup> and 90<sup>th</sup> percentiles for their peers answered correctly on each category. The score report contains the keywords or phrases of all of the questions that each individual resident answered incorrectly on the exam.

Keyword: A keyword is a keyword or key phrase that describes the topic of a question that was asked and missed on the ITE by an individual resident.

Keyword list: A list of the keywords that represents the topics of the questions that the resident answered incorrectly on the ITE is provided to each resident as a part of the score report.

American Board of Anesthesiology (ABA) Part 1 examination: ABA Part 1 examination is the written (now computer-based) standardized examination that the anesthesiologists take in the

month of August after graduation from anesthesiology residency. The examination contains 250 items, and the questions are taken from the same question pool as the ITE. The physician must pass this examination before being invited to take Part 2 (Oral exam) (Hall, 2007).

American Board of Anesthesiology (ABA) Part 2 examination: ABA Part 2 examination is the oral examination that the anesthesiologists must pass in order to become board certified. The examination is administered twice a year. Once the physician passes Part 1, they will be invited to either the following spring exam (usually in April, 8 months after passing Part 1), or the fall exam (usually given the following October, 14 months after passing Part 1). If the candidate passes Part 2, they are issued a 10 year time-limited Board Certification in Anesthesiology (Kapur, 2002).

Blackboard®: Blackboard is a third party web-based educational platform that is used by educational institutions to organize and present education programs. The program requires access to the World Wide Web, and the specific structure and organization of each educational program is individualized and specific to that particular program. It requires only a moderate amount of computer experience to learn to utilize, and makes the educational program and materials available 24 hours a day and 7 days a week. Each user is provided with an access username and password that are used to ensure only intended individuals have access to the materials. Within the system there are several tools that facilitate education. The system is able to store and present materials of many different file types (doc, pdf, video, etc.). There is a discussion board that permits the users to post (submit) text for all program participants to see and respond to. There is also an email feature, and the ability to host live web conferencing. All of these features are available and easily tailored to each program's needs.

Resident: A resident is a physician in a post-graduate educational program designed to prepare them for a specific type of medical practice. A surgery resident is preparing to be a surgeon, and an anesthesiology resident is preparing to be an anesthesiologist.

Anesthesiology Resident: An anesthesiology resident is a physician who is enrolled in a program of study designed to prepare a physician to administer anesthetics to patients undergoing surgical operations.

PGY-1 resident (also called an intern): A PGY-1 resident is a physician in the first year of residency following graduation from medical school. During the first year of anesthesiology residency, (often called the internship year) the resident completes a series of clinical assignments designed to expose that person to a wide range of medical patients and problems. The program organizes a series of didactic sessions designed to expose the resident to the foundational knowledge and skills necessary to adequately prepare them to care for all types of patients (young and old, sick and healthy). During the 9<sup>th</sup> month of their academic year (March) they take their first ITE. This provides program directors with a baseline assessment of the entering resident's knowledge of anesthesiology and general medicine as it pertains to anesthesiology.

CA-1 Year: The second year of residency (CA-1 year) consists of introductory experiences in general anesthesiology, perioperative medicine, obstetric anesthesia, and pain management along with the didactic curriculum. It is during the 9<sup>th</sup> month of their academic year (March) that they take their second ITE.

CA-1 Resident: A resident in the second year of an anesthesiology residency (CA-1 year) is called a CA-1 resident.

CA-2 Year: The third year of residency (CA-2 year) provides the residents with an in-depth experience in all of the subspecialties of anesthesiology (pain management, regional anesthesia, cardiac anesthesia, neurosurgical anesthesia, pediatric anesthesia, obstetric anesthesia and critical care medicine) along with the didactic curriculum. During the 9<sup>th</sup> month of their academic year (March), they take their third ITE.

CA-2 Resident: A resident in the third year of an anesthesiology residency (CA-2 year) is called a CA-2 resident.

CA-3 Year: The fourth and final year (CA-3 year) culminates in the final educational experiences in all of the subspecialties of anesthesiology and permits the residents to elect unique educational experiences that will complement their first 3 years of training along with the didactic curriculum. Upon completion of the ACGME accredited anesthesiology residency program, the physician becomes a candidate for American Board of Anesthesiology (ABA) Primary Certification. During the 9<sup>th</sup> month of their academic year (March), they take their fourth and final ITE.

CA-3 Resident: A resident in the fourth year of an anesthesiology residency (CA-3 year) is called a CA-3 resident.

Program Director: A program director is a physician who is the individual responsible for administering the residency program. A program director is a recognized authority in education in the respective field of their residency program.

Program Coordinator: The program coordinator is an administrative assistant who provides the program director with assistance in administering all aspects of the residency program.

Virtual Learning Environment (VLE): "A virtual learning environment (or VLE) is an integrated set of online tools, databases, and managed resources that exist as a coherent system, functioning collectively in support of education. VLEs are increasingly common in all areas of higher education and in medical education in particular." (Dewhurst & Ellaway, 2001)

### **The Assumptions**

It is assumed that all residents in the residency program will participate in the tutorial program, and that the magnitude of work assigned is not burdensome.

It is assumed that they will continue to engage in all of the educational activities that they normally engage in during the course of their residency program.

It is assumed that the residents will receive a consistent amount of feedback from the tutorial program faculty.

It is assumed that the web-based program Blackboard® will not pose a barrier to communication or completion of the assignments.

### **The Limitations**

The study will assess the progress of only those residents who took both the 2009 and 2010 ITE. Those residents for whom the 2010 ITE was the first administration will be excluded from the assessment. Any resident who did not take both exams for any reason will be excluded from the assessment. This study will not compare this cohort of study subjects to ITE participants prior to

2009 because prior to 2009, the ITE was administered on the 2<sup>nd</sup> Saturday of July (M. Rockoff, 2008).

No subject (resident) will be excluded from inclusion and the statistical assessment due to age, gender, race, or duration of residency or medical training.

## **CHAPTER 2 Literature Review**

A 2000 article in the Canadian Journal of Anaesthesiology reported that the ABA-ASA ITE predicted performance on the ABA Part 1 examination (Kearney, Sullivan, & Skakun, 2000). This report summarized the experience of 13 Canadian residency programs with 165 Canadian residents and found that "Residents consistently scoring at higher than the 60<sup>th</sup> percentile have approximately a 90% chance of success on the Royal College of Physicians and Surgeons of Canada certification examinations." (Kearney, et al., 2000). This article is just one of a series of similar reports that describe the association between ITE scores and written board examinations.

Other specialties of medicine have similarly investigated the correlation between a specialty specific ITE and their respective board exams: Internal Medicine (Holmboe & Hawkins, 1998) (Waxman et al., 1994), radiology (Baumgartner & Peterman, 1996, 1998), surgery (Shetler, 1982), family practice (Replogle & Johnson, 2004), obstetrics (Withiam-Leitch & Olawaiye, 2008), and oral maxillofacial surgery (Ellis & Haug, 2000) (although oral maxillofacial surgeons are dentists, not physicians).

Internal Medicine: An article by (Internal Medicine) used the Kolmogorov-Smirnov z test to compare the 2 'sample groups' and "the logistic model as it was applied to the study sample indicated statistically significant prediction of ABIM pass/fail performance from ITE scores" (Rollins, Martindale, Edmond, Manser, & Scheld, 1998). Waxman (also Internal Medicine) evaluated residents according to percentile performance, and found that as the percentile performance on ITE increased from below the 20<sup>th</sup> percentile to the 52<sup>nd</sup> percentile and the positive predictive value increased from 81.2% (below the 20<sup>th</sup> percentile) to 92.8% (52<sup>nd</sup> percentile). The first group (by percentile) to reach 100% passing of ABIM written examination was the group above the 71<sup>st</sup> percentile (Rollins, et al., 1998).

Radiology: "There was high correlation between in-training examination scores and diagnostic (lower correlation for the physics portion) written board examination scores (Year 1-0.53123, Year 2-0.63071, and Year 3-0.65611). There was a trend toward increasing correlation as the resident advanced in training. The strongest correlation was with the resident's average in-training examination score." (Baumgartner & Peterman, 1998)

Surgery: The Shetler article consisted of a single institutional experience (Tripler Army Medical Center) for a surgery residency, and used regression analysis to assess the predictive ability of the ITE to pass the surgery qualifying exam (board exam) (Shetler, 1982). He found "the correlation is highly significant", but there was a significant amount of selection bias in this study because the institution used a 'pyramidal system' by which weaker residents were either dismissed from the program or left voluntarily.

Oral Maxillofacial Surgery: “There was a significant positive correlation between the Oral Maxillofacial Surgery ITE and the ABOMS WQE (American Board of Oral Maxillofacial Surgery Written Qualifying Examination) raw scores for those taking the ABOMS WQE for the first and second time, but not for subsequent attempts.” (Ellis & Haug, 2000)

If we acknowledge that anesthesiology residents who score well on the anesthesiology ITE are likely to pass the anesthesiology written board exam, what factors lead to this association?

Godellas suggested “some important factors that surgical educators can impact within the design and implementation of surgical residency programs. These factors are previous performance, amount of study, amount of sleep, and attendance at educationally valuable conferences.” (Godellas & Huang, 2001).

Strategies aimed at improving ITE performance by requiring resident attendance at lecture have been disappointing. Shetler stated “Participation in key teaching conferences has a positive correlation, although it is disappointingly low, with In-training results.” (Shetler, 1982) Hirvella was disappointed in the ability of a robust lecture program to assist resident performance on the ITE; they found more success with programmed reading. “Our data suggest that a way to do this (improve test performance) is through a program of regular reading in a standard surgical text. It appears to be the individual effort invested by the resident that results in improvement.” (Hirvela & Becker, 1991)

A popularly utilized approach to test preparation is to create a boot-camp or crash-course designed to exert a great deal of effort shortly before the exam to prepare for the exam. Cheng published an article describing the use of an 8 week course immediately before the Emergency Medicine ITE, but the results were disappointing. Of the 16 residents who participated in the course, only 2 showed improvement (Cheng, 2008).

Efforts to utilize a broad range of educational techniques like problem-based learning have similarly yielded some positive influence but lacked profound impact. Itani concluded that “performance on all components of the ABSITE is mostly dependent on individual residents. This individual factor is boosted significantly by self-studying, which can be motivated by instituting a problem-based learning technique within the program.” (Itani, Miller, Church, & McCollum, 1997)

Given the limited success of these traditional instructional strategies, recent interest has focused on e-learning strategies. “E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance.” (Ruiz, Mintzer, & Leipzig, 2006)

There are a number of computer programs and types of software (many utilizing the internet) that have been and are currently used to support medical education. These include word processing programs, slide presentation software, video presentation, and video conferencing. However, these tools fall short of offering a comprehensive integrated environment where students can engage in a diverse range of educational activities consistent with the instructional design strategy of teaching. “Instructional design provides a systematic process for planning instructional events based on a systematic process of applying principles of learning and instruction to plans for instructional systems.” (Chen, 2007)

A novel approach to online education that has been growing in popularity is called a Virtual Learning Environment or VLE. “A

virtual learning environment (or VLE) is an integrated set of online tools, databases, and managed resources that exist as a coherent system, functioning collectively in support of education. VLEs are increasingly common in all areas of higher education and in medical education in particular.” (Dewhurst & Ellaway, 2001)

“The strengths of VLE’s in medical education are the ability to:

- Provide the means for individuals to interact with a course even when geographically or temporally distant from it.
- Support personalized learning experiences.
- Better manage the logistics of the learning process.
- Better manage the administration of the learning process.
- Support and extend the essence of a community of practice.
- Support audit and quality assurance and create a course ‘knowledge base’.
- Provide integration with other systems, either within an institution as part of an MLE (Managed Learning Environment), or beyond the institution as gateways to repositories and collections of third-party resources.” (Dewhurst & Ellaway, 2001)

“A VLE may provide its users with asynchronous discussion boards and synchronous chat rooms. Asynchronous forms of communication depend on messages being entered into the VLE and stored so that they accrue over time allowing communication to take place without requiring simultaneous use of the system.” (Dewhurst & Ellaway, 2001)

The advantage of creating a progressive electronic discussion that grows progressively and asynchronously is particularly important in the medical environment. Residents are challenged with clinical duties and call schedules that start early, last late in the day or the next day, creating intermittent and inconsistent opportunities to focus on knowledge acquisition and growth. Providing a single online location for residents to electronically congregate at their own leisure or availability ensures that the resident is able to create a new thread of knowledge and have faculty assist the resident in growing and expanding their knowledge.

And finally, a VLE may provide the busy anesthesiology resident with the ideal learning environment that ensures that all residents are able to fully participate in the tutorial program but to do so in a way that adapts to their clinical schedule. Anesthesiology residents work an average of 60-70 hours per week on rotating day and night schedules. Each person is on a different schedule and sleep/wake cycle. An online VLE is able to accommodate these schedule variances in a way that regularly scheduled conferences/seminars/workshops are not able to do.

## CHAPTER 3

### Methods

#### Subjects and Setting

This project will be conducted over the internet. The subjects are the Anesthesiology Residents at the University of Cincinnati Anesthesiology Residency Program during the 2009-10 academic year in the CA-1, 2, and 3 classes (Years 2, 3, and 4 of the program, respectively).

Each resident will be given access to the web-based educational platform Blackboard®. All tutorial program activities will be conducted on Blackboard® and the system will be available 24 hours a day, 7 days a week during the tutorial program time frame

(July 2009 to February 2010). All residents in the University of Cincinnati Anesthesiology Residency Programs will participate in the tutorial program. The program can be accessed from any computer terminal with internet access.

**Sampling**

All University of Cincinnati Anesthesiology Residents will participate in the tutorial program. Only residents who will complete both the 2009 and 2010 ITE will be the subject of the statistical analysis.

**The Research Methodology**

This will be a one-shot case study pre-experimental design.

Each resident’s performance on all 17 sub-sections of the ITE taken in the year prior to the tutorial will be individually reviewed and compared to a national standard (75<sup>th</sup> %ile at the CA-3 level). Each resident will receive a tutorial program with individualized keyword assignments on each subsection of the ITE based upon their 2009 performance. If a resident’s performance meets or exceeds the national standard (75<sup>th</sup> %ile at the CA-3 level), they will not receive a keyword assignment in that particular subcategory. If a resident falls 1 question short of the national standard on a particular subcategory, then they will be assigned 1 keyword related to that subcategory. If they are fall 2 questions short of the national standard, they will be assigned 2 keywords. If they are fall 4 questions short of the national standard, they will be assigned 4 keywords, and so on.

A keyword assignment will consist of a summary narrative created by the participant in a word document. This assignment is expected to be a compilation of information that they have obtained after reviewing related online resources, or textbooks. Each summary will be accompanied by 2 example questions that could challenge the learner (or another participant) on the knowledge contained in the summary.

Each participant in the tutorial program is expected to complete the keyword assignments as described above and submit them to the Blackboard discussion board. The learner is free to choose the sources of information however, it is anticipated that at least one source will be the textbooks that have been provided to them.

The residents are expected to post the keyword assignments to Blackboard at the end of each month based upon the schedule listed below (subcategories of the anesthesiology in-training examination). If a resident does not have an assignment in the

categories for that month, then they do not have assigned work for that month.

Each resident will have a private data section (group feature of Blackboard) that will contain an uploaded electronic copy of their ITE score reports and a list of individualized assignments as described above, and a private discussion board. The resident will be required to upload the keyword assignments to either their private discussion board (viewable by the individual student and instructors) or the public discussion board (viewable by all residents and instructors) by the due dates listed below. Those residents that choose to use their private discussion board will only be able to do so for the months of July and August in order to become familiar with the system and acclimatize to the on-line learning environment. After that all completed assignments will be posted on the public discussion board. Residents will encouraged to review and comment on other residents’ keyword assignments.

**Schedule of Assignment Due dates:**

- July 31<sup>st</sup>: Math/Stats/Computers, & Physics/ Monitors/Machine
- August 31<sup>st</sup>: Cardiovascular, & Respiratory
- September 30<sup>th</sup>: Neuro/Neuromuscular, & Pharmacology
- October 31<sup>st</sup>: Anesthesia Procedures/ Techniques/Procedures
- November 30<sup>th</sup>: Endocrine, & Obstetrics, & Pediatrics
- December 31<sup>st</sup>: Anatomy, Regional, Pain
- January 31<sup>st</sup>: Hematology, Renal, Critical Care, & Physiology

The assigned keywords will be posted to the Blackboard® discussion board by the residents; and the faculty (including investigator) will review the assignments and provide feedback on the discussion board. The faculty (and investigator) reviewers will be expected to review the keyword assignments in a timely fashion and provide feedback that critiques their work as well as challenges the learner to extend their knowledge on the subject.

All of the residents will take the 2010 ITE in March 2010.

The study control will be the program residents who took the ITE in July 2007 and 2008 (the date of the exam changed to the first Saturday of March in 2009) (M. Rockoff, 2008).

The Specific Treatment of the Data for each Sub-problem  
*Sub-problem 1 (Does the tutorial program improve the residents’ performance overall)?*

*The data needed to address the sub-problem & Treatment of the data*

<b>Data needed for each subject:</b>	<b>Type of Variable:</b>	<b>Type of Measurement:</b>	<b>Treatment of the data:</b>
2009 & 2010 ITE %ile score (Intervention Group)	Dependent	Continuous, interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis). 2. Students t test comparison to 2010 ITE %ile score (one tailed, paired, 95% confidence interval).
2007 & 2008 ITE %ile score (Control Group)	Dependent	Continuous, interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis) 2. Students t test comparison to 2009 ITE %ile score (one tailed, paired, 95% confidence interval).

*Sub-problem 2 (Which residents receive the most benefit from the tutorial program?)*

*Data needed to address the sub-problem & Treatment of the data*

<b>Data needed for each subject:</b>	<b>Type of Variable:</b>	<b>Type of Measurement:</b>	<b>Treatment of the data:</b>
2009 & 2010 ITE %ile score (Intervention Group)	Dependent	Continuous, Interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis). 2. Compare (to Control Group) the change in performance according to the following subgroups: <ul style="list-style-type: none"> <li>• year in program (1, 2, &amp; 3),</li> <li>• % performance (&lt;30<sup>th</sup> %ile., 30-60<sup>th</sup> %ile, &gt;60<sup>th</sup> %ile).</li> <li>• Time dedicated to each keyword (&lt;15min, &gt;60min.).</li> </ul>
2007 & 2008 ITE %ile score (Control Group)	Dependent	Continuous, interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis). 2. Compare (to Intervention Group) the change in performance according to the following subgroups: <ul style="list-style-type: none"> <li>• year in program (1, 2, &amp; 3),</li> <li>• % performance (&lt;30<sup>th</sup> %ile., 30-60<sup>th</sup> %ile, &gt;60<sup>th</sup> %ile).</li> </ul>

*Sub-problem 3 (Does the tutorial program change the resident's range of performance on the subcategories of the In-training examination?)*

*The data needed to address the sub-problem & Treatment of the data*

<b>Data needed for each subject:</b>	<b>Type of Variable:</b>	<b>Type of Measurement:</b>	<b>Treatment of the data:</b>
Number of subcategories of 2009 & 2010 ITE that fell below the 50 <sup>th</sup> %ile to peers. (Intervention Group)	Discrete, Dependent	Continuous, Interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis). 2. Compare (to Intervention Group) using Students t test comparison (one tailed, paired, 95% confidence interval).
Number of subcategories of 2009 & 2008 ITE that fell below the 50 <sup>th</sup> %ile to peers. (Control Group)	Discrete, Dependent	Continuous, Interval.	1. Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis). 2. Students t test comparison to 2009 ITE %ile score (one tailed, paired, 95% confidence interval).

*Sub-problem 4 (Are the residents satisfied with the tutorial program?)*

*The data needed to address the sub-problem & Treatment of the data*

<b>Data needed for each subject:</b>	<b>Type of Variable:</b>	<b>Type of Measurement:</b>	<b>Treatment of the data:</b>
Satisfaction survey.	Independent	Continuous, Interval.	Summarize data with Descriptive Statistics (mean, sd, skew, & kurtosis).
Satisfaction Survey.	Qualitative comments.	Text.	Summarization of representative comments.

**THE QUALIFICATIONS OF THE RESEARCHER AND ANY ASSISTANTS**

The principle investigator for this project is an Associate Professor of Clinical Anesthesiology at the University of Cincinnati, Department of Anesthesiology. He has extensive experience in the area of resident education and ACGME residency administration. He has completed all course work for the Masters degree in Medical Education (M.Ed.) at the University of Cincinnati and is fully supported by the institution and Department Chair.

The investigator's research mentor is the Department Chair who will assist with review of the proposal, guidance on the statistical treatment of the data, and full review by the IRB. The mentor has extensive research experience and fully supports the investigator.

The investigator has at his disposal a basic scientist who is the Departmental Director of Research and this individual will also serve as a secondary mentor for research design, and statistical methodology.

He does not have an Assistant Investigator.

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# Beyond Apprenticeship: A Novel, Formal Resident Education Program in Anesthesiology

Deborah A. Schwengel, M.D.

### **Educational Goals of the Teaching/Evaluation Strategy or Outcome Measure:**

We describe a novel education program in anesthesiology. Traditional education in anesthesiology has been an apprenticeship model coupled with lectures. Measures of outcomes have included performance on in-service training exams and Board certification exams and assessments by the faculty of the residents' ability to competently deliver anesthesia care. In recent years the credentialing of training programs by the ACGME has become a highly regulated process with requirements to teach the ACGME 6 Core Competencies and expand traditional educational techniques to include some from the ACGME "Toolbox". Concurrently, more attention to the quality of the process of graduate medical education has raised the bar on providing more quality measureable outcomes in resident education. We describe how and why we changed our education program, what we include as core education requirements and how we propose to measure our outcomes.

Two fully protected education days per month for all residents. Residents are subdivided into "colleges" to provide smaller, cohesive, functional, social and educational groups guided by a faculty leader, known as a "college leader". Each college group consists of residents from each of the training years, i.e. CA1, CA2, CA3. Lecture style teaching is discouraged. Reading assignments are given and residents are expected to prepare for the learning sessions.

Protected time was provided to de-stress the educational environment, remove distractions and to help residents focus on the educational goals and objectives. Small group learning is encouraged or specifically designed to be complimentary to the topic. Hands-on learning such as simulation is central to the philosophy of the curriculum. Lectures are challenged as not being conducive to adult learning and retention and were variably attended by our residents. Our residents also felt in the past that overall teaching was inconsistent and that clinical service was valued over education. The past curriculum was traditional and not well defined and it did not formally teach the 6 ACGME competencies - in particular - communication, professionalism and system's-based practice. Teaching did not generally include simulation, workshops and well defined goals and objectives.

### **Program Requirement Fulfilled and/or ACGME competency(s) being taught/evaluated/measured:**

All 6 ACGME core competencies are taught in this curriculum and are taught through simulation, small learning groups, quality improvement projects, varied skills stations, oral and written Board exam practice, journal club and training in ethics, business, communications and conflict resolution. As much as possible,

learning sessions are designed to be interactive. Senior residents are encouraged to actively engage in and complement faculty teaching, develop leadership skills and give professional level public presentations on their academic projects and/or research electives, sponsored by academic faculty.

### **Description of how the initiative was implemented (include resident training year(s), time and teaching commitment by faculty, how the initiative was implemented):**

see strategy section above

### **Unexpected pitfalls (if any) and how these were overcome:**

This program requires significant commitment from the Department, specific to the clinical coverage of residents by MD/CRNA providers on the Colleges/Education days/2/month. Clinical coverage conveys that Academic/Teaching to the residents is a priority in the Department. We knew when starting that the big challenges would be the logistics of freeing up all residents for education on the same day and in addition having enough faculty members to teach on those days. Some days are easier than others.

### **Total time the initiative has been in place, and how its success has been measured:**

This is a new program that has been in place since August 2009. To date, this novel, formal education program has shown an increase in resident satisfaction: residents provide evaluations of every teaching day and teaching session – they indicate that they generally like what and how they are learning. Residents also provide annual program evaluations, annual ACGME surveys and graduating residents have exit interviews with a neutral interviewer who protects the anonymity of responses. Results from the 2010 ACGME survey, program evaluations and exit interviews are much more positive and the program was rewarded with a 5 year reaccreditation cycle by the ACGME. College Leaders and faculty teachers have expressed satisfaction and desire to teach with innovations, adapted for Anesthesiology, from the ACGME toolbox. A result that needs followed up is that some faculty members have expressed a lack of understanding of the new educational needs and Colleges Program, as currently implemented. Faculty development has been designed to address and improve faculty understanding of the new methods.

### **Suggestions for implementing the same strategy in other programs:**

Support from the Department Chair and the Faculty is paramount to success. Once the commitment is made the program is designed. The implementation requires flexibility and the willingness to change and adjust as you go.

# Concurrent Sessions - Friday, November 5<sup>th</sup>

## AASPD Session

### ***Morning Session***

Moderator: Linda J. Mason, M.D.

- 9:00 a.m. – 9:05 a.m.     **Welcome**  
Linda J. Mason, M.D.
- 9:05 a.m. – 9:45 a.m.     **Teaching Professionalism, Communication and Leadership**  
Samuel Yanofsky, M.D.
- 9:45 a.m. – 10:30 a.m.   **Faculty Enhancement – Good to Great**  
Nancy L. Glass, M.D.
- 10:30 a.m. – 10:45 a.m.   **Break**
- 10:45 a.m. – 11:15 am     **Assessing Competency**  
Kathryn E, Glas, M.D.
- 11:15 a.m. – 11:45 a.m.   **Simulators and Fellowship Training**  
James H. Abernathy, M.D.
- 11:45 a.m. – Noon         **Questions and Answers**

### ***Afternoon Session: Common Fellowship Issues***

- 1:30 p.m. – 2:30 p.m.     **Business Meeting and Subspecialty Updates**  
Linda J. Mason, M.D.
- **The Adult Cardiothoracic Perspective**  
Kathryn E, Glas, M.D.
  - **The CCM Perspective**  
Robert N. Sladen, M.D.
  - **The Pain Perspective**  
James P. Rathmell, M.D.
  - **The Pediatric Perspective**  
Nancy L. Glass, M.D.
- 2:30 p.m. – 2:45 p.m.     **SAAA Update to AASPD Members**
- 2:45 p.m. – 3:00 p.m.     **Coffee Break and Networking**
- 3:00 p.m. – 5:00 p.m.     **Program Directors Meeting by Specialty**
- **Pediatric Anesthesiology**  
Nancy L. Glass, M.D.
  - **Adult Cardiothoracic Anesthesiology**  
Jack S. Shanewise, M.D.
  - **Pain Medicine**  
Gary J. Brenner, M.D.
  - **Critical Care Medicine**  
A. Joseph Layon, M.D.

# Simulators and Fellowship Training

James H. Abernathy, M.D.

## Why Simulation

Simulation is an instructional process that substitutes real patient encounters with artificial models, live actors, or virtual reality patients. Through simulation learning activities can be made predictable, consistent, standardized, safe and reproducible<sup>1</sup> Simulation is a tremendous tool for educators as it allows students to practice, take risks and learn, without putting patients in harms way.

Drs Chris Gallagher and Jonathan Tan highlight quite nicely the evidence-based rationale for the use of simulation<sup>2</sup>:

1. "Simulation is a good way to teach without harming patients.
2. Simulation sessions uncover weaknesses. For rare and challenging events, simulation can evaluate and improve performance. Such events include, malignant hyperthermia, cardiac arrest, intraoperative arrhythmias.
3. Simulation is a reliable way to teach. There is a vast amount of data showing that simulation is an effective and critical component to medical teaching. Simulators have been used to teach the basic sciences (mostly physiology), physical examination, procedures and surgical skills, teamwork and situational awareness.

Given duty hour restriction, simulation may be the only alternative for a lack of experience.”

## How Fellow's Learn

Our fellows and other adult learners, process information and new knowledge differently than previous generations. Today, there is less emphasis on classroom and more emphasis on experiential learning. Paul Barach and David Mayer describe today's learners in 7 simple statements<sup>3</sup>:

1. "Learners are not receptacles of knowledge, instead they create learning actively and uniquely;
2. Learning is about creating meaning for each individual by establishing and reworking patterns, relationships and connections;
3. Most Learning occurs implicitly, arising from interactions with complex situational cues from patients, peers and mentors;
4. Direct experience decisively shapes individual understanding – the brain's activity is in direct proportion to engagement with an actively stimulating environment;
5. Learning occurs best in the context of compelling "presenting problems" – when people are confronted with specific, identifiable problems they want to solve that are within their capacity to solve;
6. Learning requires active reflection – high challenges produce major surges in short term neuronal activity; but building lasting cognitive connections requires considerable periods of reflective activity as well;
7. Learning occurs best in cultural contexts that provide enjoyable interaction and substantial personal support; effective learning is social and interactive."

By its very nature, simulation is well suited for today's learners. For each description Drs Barach and Mayer use to describe our fellows and how they receive and process information, simulation

has a clear and direct benefit over more traditional modalities (didactic lectures, text book reading).

## Governing Bodies

The leadership of the ACGME, ASA, and ABA have endorsed the incorporation of simulation into our training programs and our certification process. In 2005 the ACGME published an expansive opinion piece, Simulation and Rehearsal, encouraging the adoption of simulation into training programs.<sup>4</sup> The ACGME specifically highlighted the use of simulation to teach and evaluate communication skills, professionalism, and system-based practices – three of the core competencies that are difficult to teach and measure.

The American Society of Anesthesiologists published a white paper on simulation in 2006 that lays out a plan to create a network of simulation centers across the United States.<sup>5</sup> The simple goal is to provide each ASA member access to high quality simulation education. Many leaders in fellowship education participated in this process. A poll of 1400 anesthesiologists revealed that 82% were interested in participating in simulation-based CME, whereas only 9 said they were uncomfortable or not interested. 89% indicated they would participate in a course if it were conveniently located.

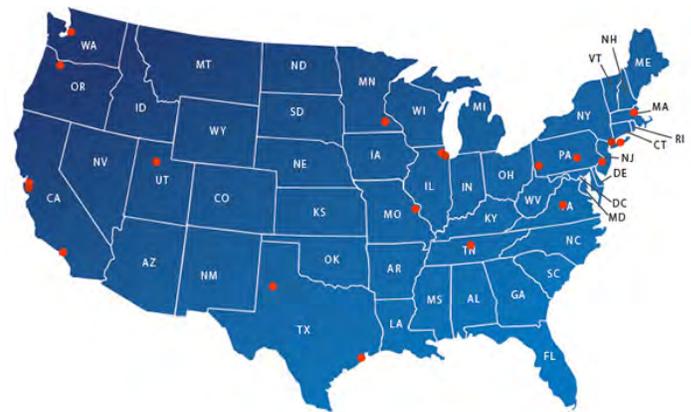


Figure 1. Current number and location of ASA endorsed simulation centers. Each dot represents a simulator.<sup>6</sup>

Maintenance of Certification in Anesthesiology currently requires either case evaluation or simulation for those diplomats certified in 2004 or later. According to Gallagher, its incorporation into MOCA took a circuitous route, from an endorsement by the ACGME to a recommendation from the ABA to the ASA and then back again to the ABA.<sup>2</sup> The ABA declared simulation important enough to incorporate it into the MOCA certification for current and future diplomates. Our current trainees will benefit from simulation experience when they seek certification.

## Diplomates Certified in 2004

Full Year in MOCA Cycle	1	2	3	4	5	6	7	8	9	10
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Part I - Professional Standing (PS)</b>	Maintain unrestricted, unexpired medical license in US or Canada. All licenses held must be unrestricted.									
<b>Part II - Lifelong Learning and Self-Assessment (LLSA)</b>	350 Total Credits, Max 70/year, Min 250 Category 1									
<b>Part III - Cognitive Examination (CE)</b>	Earn LLSA Exam Prerequisite (200 Credits)					Pass Cognitive Examination				
<b>Part IV - Practice Performance Assessment and Improvement (PPAI)</b>					Attestation	Case Evaluation or Simulation Education				

Table 1. MOCA requirements for Diplomates certified in 2004

### Types of Simulators

Simulators range in complexity from simple screen-based video game-type simulations, such as fiberoptic bronchoscope, to partial task trainers that would allow a trainee to practice epidural insertion, to high-fidelity simulators. High-fidelity simulators utilize very realistic materials and equipment to represent the task(s) that the candidate must perform. They use environmental details, both subtle and overt, to create emotion and confusion enhancing the experience of the participant. Well-designed simulation rooms recreate as many pieces of the real environment as possible allowing for the suspension of disbelief.



Figure 2. A simulated operating room at the Medical University of South Carolina. The cabinets are actually wallpaper designed to appear like well-stocked operating room shelves.

These kind of simulators require a lot of financial, space, and personnel resources and are difficult to create de novo. Estimated costs range from \$200,000 to \$1.6 million with \$15,000 in annual maintenance.<sup>7</sup> Recently, Alice Edler and colleagues from Stanford University School of Medicine described the development of the portable "Pediatric Simulation Training and Assessment Program". They designed and built an inexpensive, portable, high-fidelity pediatric simulator for \$40,000. They have run a successful workshop at several pediatric anesthesia conferences with the portable device. Although creating and designing an environment conducive to simulation can be expensive and daunting, Dr Edler has shown us it is possible and successful for relatively little money.<sup>7</sup>

### What and How to Simulate

Essentially any task, skill or idea can be translated into a simulation scenario. Skill based tasks lend themselves well to

simulation and can be the simplest to implement. A recent study compared traditionally taught residents to residents who had simulation incorporated into their training for insertion of central venous lines.<sup>8</sup> Not surprisingly, those who were exposed to simulation demonstrated significant improvement in central line insertion skills. But, this difference deteriorated over time as the non-simulation group gained experience on real patients. The real benefit to task based simulation might be that fellows can practice on simulators not patients.

Simulators are being designed and built for very complicated tasks such as epidural placement. Magill and colleagues have just described a fantastically complicated simulator using pulleys and wires to simulate different resistances as an epidural needle travels through tissue layers.<sup>9</sup> The Heartworks® transesophageal echocardiography simulator includes a life-size upper-body torso, a realistic TEE probe with authentic controls which inserts into the mouth of the mannequin, and monitors that display probe position, cardiac anatomy and the TEE image. Investigators are just beginning to evaluate the impact of this advanced technology on resident and fellow education. I suspect we are at the very beginning of this quickly growing field. It is not hard to imagine highly engineered simulators for almost every task in medicine.

Where simulation has its greatest advantage is in helping us study and perform better in the rare, complicated event. These events are best staged in high-fidelity simulators with realistic environments. Facilitators guide the participants through structured events which have concrete required actions. After the scenario has been completed, the participants are debriefed by the facilitator. A well-orchestrated feedback session satisfies one of the tenets of modern learning - time for active reflection. Debriefing sessions should foremost be learner-centric and conducted in a safe environment.

These scenarios can be complicated and difficult to create – especially for the novice. Fortunately, scenarios are being written and published by our colleagues. Simulation in Healthcare, the journal of the Society for Simulation in Healthcare, publishes case reports/simulation scenarios. These are excellently written and tested scenarios developed by leaders in the field and published for our use. Two recent scenarios published for anesthesia providers are Recognizing and Treating Malignant Hyperthermia<sup>10</sup> and Management of Profound Hypotension Secondary to Spinal Anesthesia: Simulation Case Scenario<sup>11</sup>. These published case scenarios provide all the information you need to recreate this in your education program. Reports cover the ACGME competencies addressed, provide learning objectives, discuss how to prepare the simulator (equipment needed), offer a case stem for the participant, information for the facilitator,

and key elements of the debriefing. If the scenario you wish to use cannot be found, these published reports can serve as an excellent template to create your own.

### Summary

Simulation is a relatively young field that has experienced tremendous growth in the last 10 years. For today's adult learners, simulation may be the best way to impart important information. From skill based learning to teamwork, simulation has found a home in medicine. With the support of the ACGME, ASA and ABA, simulation will continue to mature. Clearly, our patients will be the beneficiaries of this work.

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# Program Schedule - Saturday, November 6<sup>th</sup>

- 7:00 a.m. – 8:00 a.m. **Continental Breakfast**
- 8:00 a.m. – 9:30 a.m. **General Session 1: Diversity - Until It Doesn't Make a Difference Anymore**  
Moderator: James R. Zaidan, M.D.
- 8:00 a.m. – 8:45 a.m. **Problems that We Face**  
*William A. McDade, M.D., Ph.D.*
- 8:45 a.m. – 9:15 a.m. **A Practical Attempt**  
Scott T. Reeves, M.D., M.B.A.
- 9:15 a.m. – 9:30 a.m. **Question and Answer Session**
- 9:30 a.m. – 9:45 a.m. **Coffee Break and Networking**
- 9:45 a.m. – 11:30 a.m. **General Session 2: Addressing Problem Faculty**  
Moderator: Jeffrey L. Apfelbaum, M.D.
- 9:45 a.m. – 10:30 a.m. **Faculty Misconduct and Their Legal Implications**  
Judith Jurin Semo, J.D., Esq.
- 10:30 a.m. – 11:30 a.m. **Pro-Con Debate: Debate on Re-Entry of Illegal Substance Abusing Faculty into the Department**  
John A. Ulatowski, M.D.; Jeffrey H. Silverstein, M.D.
- 11:30 a.m. – 1:00 p.m. **Lunch on your own**
- 1:00 p.m. – 2:30 p.m. **General Session 3: Mock RRC Committee Meeting**  
Neal H. Cohen, M.D.; Patricia M. Surdyk, PhD.; Mary Joyce Johnston, RHIA, MJ; Billy Hart
- 2:30 p.m. – 2:45 p.m. **Coffee Break**
- 2:45 p.m. – 5:15 p.m. **General Session 4: Anesthesia Potpourri**  
Moderator: Jane C.K. Fitch, M.D.
- 2:45 p.m. – 3:15 p.m. **Addressing Quality of Care in Anesthesia Departments**  
Richard P. Dutton, M.D.
- 3:15 p.m. – 4:15 p.m. **ABA Innovative and Alternative Pathway Programs and Proposed Changes ABA Exam Format**  
David L. Brown, M.D.
- 4:15 p.m. – 4:45 p.m. **Faculty Workplace Satisfaction Among Anesthesiologists in Academic Medicine**  
Shannon Fox, Ph.D.
- 4:45 p.m. – 5:00 p.m. **Question and Answer Session**
- 5:00 p.m. – 5:15 p.m. **Update from SAAA Director to ASA**  
Steven J. Barker, Ph.D., M.D.
- 5:15 p.m. – 6:00 p.m. **ASA Update**  
Mark A. Warner, M.D.
- 6:00 p.m. – 7:30 p.m. **Reception**

## **A Practical Attempt**

Scott T. Reeves, M.D., M.B.A.

1. Why Charleston, South Carolina?
2. Dean as Champion
3. Developing a Diversity Plan
4. Medical Students
5. Residents
6. College of Medicine Faculty
7. Department Must Walk the Talk



# Faculty Misconduct: Legal Implications

## SAAA 2010 Annual Meeting

November 6, 2010

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## Overview – Substantive Issues

- ◆ Americans with Disabilities Act
- ◆ Drug testing
- ◆ Hostile work environment issues
- ◆ Billing compliance implications
- ◆ Licensing
- ◆ Post-employment references
- ◆ Liability concerns

## Overview – Process Issues

- ◆ What procedural protections is the faculty member entitled to?
  - By law
    - ▶ Is the institution public or private?
  - By contract
  - By University/Department policies
  - Other sources?

## Procedural Issues

- ◆ Is the faculty member entitled to
  - Notice & cure?
- ◆ Nature of sanction depends upon conduct
  - Is conduct subject to cure?
  - Does conduct endanger patients or others?

## Background Issues

- ◆ Is the misconduct the first offense?
  - Or part of a pattern of misconduct?
    - ▶▶ If the latter, how has the Dep't handled prior incidents?
      - Warning to faculty member?
      - Education/training?
      - Any notice regarding repercussion of subsequent misconduct?

How has the dep't dealt w/ similar issues involving other faculty?

## Americans with Disabilities Act

- ◆ Particularly if conduct pertains to substance abuse, must consider ADA protections
  - ADA: Prohibits discrimination on basis of disability in employment
  - Protects “qualified individuals with disabilities”

## Americans with Disabilities Act

- ◆ “Qualified individuals w/disabilities”
  - Physical or mental impairment that substantially limits one or more major life activities
  - Record of such an impairment, or
  - Is regarded as having such an impairment

## Americans with Disabilities Act

- ◆ History of substance abuse is considered to be a disability
  - Not current illegal or abusive use of drugs or alcohol
- ◆ Employer cannot discriminate against a person w/a *history* of drug addiction, but who is not currently using drugs & who has been rehabilitated

## ADA Dos & Don'ts

- ◆ Can prohibit illegal use of drugs & use of alcohol at workplace
- ◆ Can test for illegal use of drugs\*
- ◆ Can discharge person who currently engages in illegal use of drugs
- ◆ Can require employees who use drugs or alcohol to meet same performance & conduct stds that apply to others

\* More later

## ADA & Drug Users

- ◆ Not protected:
  - Employee who illegally uses drugs
    - ▶ Casual user or addict
- ◆ Employer may uniformly enforce its rules prohibiting employees from illegally using drugs

## ADA & Drug Users

- ◆ ADA protects individuals who:
  - ▶▶ Have been successfully rehabilitated & who are no longer engaged in the illegal use of drugs
  - ▶▶ Are currently in rehab & are no longer engaging in illegal use of drugs
  - ▶▶ Are regarded - erroneously - as illegally using drugs

## ADA & Drug Users

- ◆ Depending upon when a Dep't takes action, can violate the ADA
  - If the faculty member is currently using illegal drugs, can take action without violating the ADA
  - If the Dep't waits, may violate the ADA
- ◆ And, depending upon the sanction imposed
  - May result in wrongful termination

## Drug Testing

- ◆ Do not implement a drug-testing program without first
  - Checking state law
  - Establishing policies consistent w/ state law
    - ▶▶ Notifying Dep't members of policies

## Drug Testing Issues

- ◆ When?
  - Pre-employment vs. during employment
  - What circumstances? Random?
- ◆ What?
  - Screening for what drugs/substances?
- ◆ How?
  - What method? Reliability? Procedures?
- ◆ Who pays?

## Drug Testing Issues

- ◆ If you have a drug testing policy and if permitted under state law
  - ➔ Best to test an employee immediately if any suspicion of drug or alcohol use while at work (or on call)

## Drug Testing Issues

- ◆ In addition to ADA, other legal landmines include
  - ➔ State privacy laws
    - ▶ Be cautious in disclosing the situation beyond a limited circle of those who need to know

## Hostile Work Environment

- ◆ Misconduct may create a hostile work environment
  - Does the misconduct involve abusive conduct directed at others in the Dept'?
  - Does the individual make others uncomfortable?
  - Sexual harassment?
- ◆ Employers must address hostile work environment issues

## Hostile Work Environment

- ◆ What position does the offending faculty member hold?
  - Supervisory?
    - ▶▶ An employer is always liable for harassment by a supervisor on a prohibited basis if it culminates in a “tangible employment action”
      - Significant change in employment status

## Hostile Work Environment

- ◆ If a tangible employment action taken, no defenses can be asserted
- ◆ If no tangible employment action
  - Employer can raise affirmative defense to liability or damages:
    - ▶ Employer exercised reasonable care to prevent/correct promptly harassment, &
    - ▶ Employee failed to take advantage of preventive or corrective opportunities

## Avoiding/Correcting a Hostile Work Environment

- ◆ Employers must establish, publicize, and enforce anti-harassment policies & complaint procedures
  - Prohibition against harassment
  - Protection against retaliation
  - Effective complaint process
  - Confidentiality
  - Effective investigative process
  - Immediate & appropriate corrective action

## Billing Compliance

- ◆ Does the misconduct involve matters pertaining to billing for services?
  - Preanesthesia assessment
  - Medical direction - residents/CRNAs
  - Documentation
    - ▶ Timing of documentation
  - Calculation of time

## Billing Compliance

- ◆ Potential for faculty misconduct to result in submission of false claims
  - Easy to violate False Claims Act
    - ▶ Do not need intentional effort to defraud
    - ▶ Fail to provide each service claimed
- ◆ No defense that legitimate, otherwise reimbursable services were provided

## False Claims Act Exposure

- ◆ Liability (\$\$\$) mounts up fast
  - Not just amount of claim:
    - ▶ Penalties (\$11,000/claim)
    - ▶ Three times the claim amount
    - ▶ Legal fees
- ◆ *E.g.*, single claim for \$400=\$12,200

## Licensing & NPDB Reporting

- ◆ Assuming misconduct is sufficiently serious to warrant suspension or revocation of hospital privileges:
  - How is the misconduct treated?
  - Who takes the action?

## Licensing & NPDB Reporting

- ◆ How is the misconduct treated?
  - As a contractual matter under the Group's contract w/ the Hospital?
  - OR as a Medical Staff matter - action by the Hospital?
- ◆ Who takes the action?
  - The Group - Not reportable to NPDB
  - The Hospital - Reportable to NPDB

## Licensing & NPDB Reporting

- ◆ If the Hospital takes the action, it also may be obligated to report to State Medical Board
  - Implications for the faculty member's license

## Post-Employment References

- ◆ Liability associated with providing references
  - What can you say when you are responding to a reference check?
  - Answer largely depends on state law
    - ▶ Does state law provide immunity?
      - Even so, potential claim that adverse information not given in good faith

## Kadlec v. Lakeview Anesthesia

- ◆ Read the 2008 decision in this case!
- ◆ Anesthesiologist diverted Demerol
- ◆ After confrontation, did not follow agreement & account for withdrawals
- ◆ On-duty practice while impaired
- ◆ Terminated by anesthesia group for cause
- ◆ Group's response to reference request?

## Kadlec v. Lakeview Anesthesia

- ◆ Anesthesiologist 1:
  - Worked w/Dr. for 4 yrs
  - Excellent clinician
  - “Would be an asset to any anesthesia service”
- ◆ Anesthesiologist 2:
  - “Recommended him highly as an anesthesiologist”

## Kadlec v. Lakeview Anesthesia

- ◆ Lakeview Medical’s response:
  - Confirms dates of privileges
- ◆ Then: On-duty use of drugs at Kadlec results in catastrophic injury to patient
- ◆ Judgment: \$8.24 million
- ◆ Kadlec sues Lakeview Medical & Lakeview Anesthesia

## Kadlec v. Lakeview Anesthesia

- ◆ Court: “After choosing to write referral letters, the defendants [Anes. Group] assumed a duty not to make affirmative misrepresentations in the letters”
- ◆ Lakeview Medical: no duty to disclose
  - No liability - letter not misleading
- ◆ Lakeview Anesthesia: Liable
  - Letters were false & misleading

## How Much Can/Must You Say?

- ◆ Under state law, do you have an obligation to disclose the misconduct?
  - If not, substantial risk if you volunteer information
- ◆ Has former employee has executed a broad release?
  - May not immunize Dep't

## Potential Liability

- ◆ If you provide info on the misconduct, former employee may claim:
  - Defamation
  - Invasion of privacy
- ◆ To minimize potential liability, centralize authority for responding to requests for references
  - Small number of people, trained in risks

## Professional Liability Concerns

- ◆ Liability for poor quality of care
  - If the misconduct results in adverse patient outcome, very difficult to defend
- ◆ Liability for misconduct → patient
- ◆ Particularly w/substance abuse, next to impossible to defend
  - Forces settlements in otherwise defensible cases

## Conclusion

- ◆ Deal w/misconduct EARLY on!
- ◆ Consult experienced counsel EARLY on!
- ◆ Understand how state law applies
- ◆ Best defense: Early intervention

# Faculty Misconduct and Their Legal Implications

Judith Jurin Semo, J.D., Esq.

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# **Pro-Con Debate: Debate on Re-Entry of Illegal Substance Abusing Faculty into the Department**

## **Should Anesthesiologists recovering from chemical dependency be allowed to return to the Practice of Anesthesiology?**

**Pro: John A. Ulatowski, M.D.**

Chemical dependency is a disease and should be considered as such including compassion for the patient, physician or otherwise. Organized treatment centers exist with established regimens for acute treatment of chemical dependency, some focused at anesthesiologists. These are more rigorous programs than those for the lay public or even other physician groups. Programs are staffed by multidisciplinary teams of addictionologists, psychiatrists, psychologists, social workers and rehabilitation experts. Inpatient programs are followed by intense aftercare monitoring having mandatory/regular meetings with addiction experts, preventative medication regimens, patient/family support groups, mandatory drug testing, stress/co-morbid disease management, and graded increase/limited practice responsibilities. Physician Health Programs in many states offer additional monitoring, support and education. In these states, outcomes for successful rehabilitation and return to work show improvement over previous experience. Medication control (delivery, administration, reconciliation) programs although not fool-proof can monitor diversion. Random drug testing of the workforce can identify de novo and recurrent users. Education of colleagues in the workforce as to symptoms of recidivism offers an early warning system to relapse.

Physician training represents a tremendous investment personally and by society. This is especially true in the development of specialty trained physicians some of whom are in short supply. Banning return to work is a tremendous cost/waste to society. If successful rehabilitation can be achieved society is better overall. There are many successful returns to productive and happy careers in anesthesiology. Concerns have been raised that chemically dependent physicians present a risk to patients through errors made in patient care while under the influence. They advocate a "one strike you are out policy" so the public can feel more secure. But these absolute policies lead to reduced self reporting of illness out of fear for job loss, resulting in longer cumulative exposure of patients to risk as dependence escalates. Furthermore, analysis of closed claims data shows rare mention of chemical dependency and reports of patient harm have been related to alcohol and tobacco use. So this fear may be overestimated.

Concern is raised of a higher return to chemical dependency in anesthesiology, although recent studies show recidivism rates equal to other physician groups. Studies also suggest a high death rate and death as a presenting sign of return to drug use supporting a "one strike and you are out policy". These data are more convincing for residents who perhaps are under more stress during training and have greatest exposure to controlled substances. This has led some supporters of return to work, to caution against including residents. A recent study demonstrates

a successful screening program in a residency program offering an opportunity for treatment and rehabilitation or re-direction to another specialty/career. These recent programs offer hope and argue that re-entry can be safe in certain subpopulations of the workforce.

There may be legal/disability concerns regarding not allowing individuals to return to work. These will also be discussed in more detail by the panel.

**Con: Jeffrey H. Silverstein, M.D.**

Diverting drugs is illegal, immoral and unethical- once someone has done such a thing, they should be disallowed from re-entry to the practice of medicine. There is lack of faith that they can put patient needs ahead of their own. Because our profession requires a strong societal trust, a hard stance must be taken to self-police our specialty. Chemically dependent physicians will not get the needed support of their colleagues due to skepticism over their ability to recover. Colleagues fear an increased liability for the group.

Anesthesiologists are at greater risk than other physicians and the general public. Our specialty may attract risk takers and even residents who may already be experimenting with drugs. Surveys support that there is insufficient education for our trainees and the workforce. Reports of chemical dependence are on the rise. Exposure to high potency and addicting drugs is an ever present work environment allure to diversion and relapse. Less control on some drugs such as propofol may offer greater opportunity for diversion. Diversion programs are not fool-proof and are hard to maintain. The recidivism rate is very high. Certain individuals have added risk factors predictive of recurrence. Many states and institutions do not have formalized programs of evaluation for and monitoring of re-entry of chemically dependent physicians. Support programs are inconsistent, non-existent, poor, or are voluntary. There are too many factors against a successful recovery.

Recovering and undiscovered users of controlled substances are a risk to themselves and society. The drugs anesthesiologists are exposed to are very potent and therefore carry with them a greater risk of overdose and death. To allow continued exposure of anesthesiologists to a stressful environment and an environment which has a constant source of self-ordered and self-administered medications without nursing intermediary is asking for trouble. There is a high risk of immediate death and there may not be a second chance with return to abuse. Anesthesiologists are well trained doctors and can make the transition to other professions easily. So why take a risk. Patients are also at risk if cared for by an intoxicated anesthesiologist. Drugs of abuse can cause drowsiness and inattention to detail. Mistakes may be made.

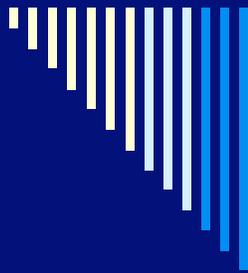
Providing a mechanism for reentry is resource intensive. Most programs suggest allowing the recovering addict substantial time out of the OR, allowing time to reintegrate slowly and perhaps with less call. Small practices do not have the resources to support such activities. Programs for rehabilitation are also not inexpensive. They are often inpatient programs followed by post care monitoring. Institutions and state medical boards that run programs also bare a cost. This is a cost that is excessive and can be avoided by barring return to practice. Given the high risk of exposure to potent drugs, recidivism, death, potential injury to patients and the ongoing cost of monitoring, it makes more sense for an individual to retrain in some specialty other than anesthesiology.

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**SAAA**  
**Anesthesia Potpourri**  
**Saturday, November 6, 2010**

Jane C.K. Fitch, MD  
John L. Plewes Professor & Chair  
University of Oklahoma  
Department of Anesthesiology

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**Quality**

- Addressing Quality of Care in Anesthesia Departments
    - Richard P. Dutton, MD
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## ABA

- **ABA Innovative and Alternative Pathway Programs and Proposed Changes in ABA Exam Format**
    - David L. Brown, MD
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## Faculty Satisfaction

- **Faculty Workplace Satisfaction Among Anesthesiologists in Academic Medicine**
    - Sarah A. Bunton, PhD
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## Q & A

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## ASA

- Update from SAAA Director to ASA
    - Steven J. Barker, PhD, MD
  - ASA Update
    - Mark A. Warner, MD
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# Addressing Quality of Care in Anesthesia Departments

Richard P. Dutton, M.D.

### Quality of Care in Anesthesia Departments

The government has a question for you. The Joint Commission has the same question. Also your hospital quality manager. Your group administrator may have asked it before, in private. And it may have woken you up in the middle of the night.

*The question is: How do you know you're providing good care to your patients?*

In ages past we kept this discussion to ourselves, and the answer was paraphrased from Justice Potter Stewart: "I don't know what quality is, but I know it when I see it." The problem is that nowadays we do know what quality is. At least some people think so. They work for the government. Or the Joint Commission. Or the American Board of Anesthesiology. And they're the ones who are asking the question. And now they expect an answer.

Of course if you're the Chair of a large University Anesthesiology Department then you know all this already and you've taken steps to comply. You have designated a Quality Management Officer (QMO) for your group, to gather the data you need, to analyze it, and to produce the reports that the hospital (and other stakeholders) are asking for. You've figured out how to collect outcome information from your group's practice, including business metrics, quality of care, and efficiency, and you've helped your QMO to put this data to work. You've established robust processes for reviewing individual events, and for learning from them. In short, you've already done all the things that are spelled out in the appended document: "Quality Management in Your Practice." But I've attached it anyway, in case you want to share it with your graduating residents.

So let's talk about the future of quality management, and how you can work with the Anesthesia Quality Institute – my organization – and other ASA resources to take your QM program to the next level. The AQI was chartered in 2009 as a related organization of ASA. AQI's purpose is to foster quality management in anesthesiology nationwide, and the specific task is creation of the National Anesthesia Clinical Outcomes Registry (NACOR). This is a very large database designed to contain case specific details of as many anesthetics as we can capture. NACOR collects data electronically from participating anesthesia practices, based on what data exists in this format. This may include billing records, intraoperative process data (from Anesthesia Information Management Systems), hospital electronic record information, and quality management software. **Participation in NACOR is open to every anesthesia practice in the country – there is no minimum requirement for 'wiredness.'** Participation costs \$500 per anesthesiologist in the group per year, but this is discounted to \$0 for ASA members. AQI participation is thus FREE to groups and departments with 100% ASA membership.

AQI Partner Practices receive a quarterly report from NACOR, consisting of all of the data they have submitted (neatly packaged, if we do say so ourselves), along with national and peer-group benchmarks. We provide our partners with the ability to 'drill

down' in their own data to the specific service, facility or provider level necessary to assess their own practice. Our goal is to provide practices with the tools they need to assess and improve their own work, while simplifying creation of regulatory reports.

Establishing the basic infrastructure for NACOR has been the principle focus of the AQI's first year of operations. The decision was made to house AQI within ASA Headquarters in Chicago, and to host NACOR within ASA's information technology umbrella. As of October 1, approximately 275 practices had expressed interest in NACOR, 40 had completed data sharing contracts, and 20 had submitted at least one set of case data.

AQI Partners include both community and academic practices and range in size from 3 to more than 100 anesthesiologists. Data in NACOR now includes about 2,000 providers, 150 facilities, and more than 400,000 cases. The AQI is capable of receiving anesthesia case data from more than a dozen different healthcare IT platforms (billing software, anesthesia information management systems, quality management programs, and hospital electronic records) and is continuing to work with IT vendors to expand this portfolio.

The AQI issued its first report "Anesthesia in the United States" at the end of 2009, summarizing a variety of data culled from public and ASA sources regarding the state of the profession and its activities. The AQI's second public report, summarizing aggregate activity in NACOR after one quarter of operations, was released in May, and is available on the AQI website: [www.aqihq.org](http://www.aqihq.org). The first practice-specific reports from NACOR were activated on the private side of the website in September, and a second national aggregate report was released at the same time. Although there is much yet to accomplish, the AQI is up and running right now.

Future efforts will include the continued expansion of NACOR—in both volume and scope—and increasing standardization of definitions, especially in the area of patient-focused outcomes. We are also planning for development of a "Near Miss" reporting registry to begin in 2011, and on steadily increasing leverage of NACOR data to develop and promulgate best practices across the profession.

Finally, for the SAAA audience, NACOR represents a steadily expanding data mountain, that will yield any number of academic papers in the years to come. A number of university programs have already signed on, and we are working with the Multicenter Perioperative Outcomes Group to get more. We have already joined with a number of these groups to submit grant proposals for comparative effectiveness research; some projects initiated by the AQI and some by the group. We are looking for more opportunities, and have a lot of present data and future potential. We will need all the analytic help we can get, and look forward to working with the members of the SAAA for years to come.

### Quality Management in Your Practice

The goal of quality management (QM) is to improve efficiency and outcomes. An entire industry has arisen devoted to making this simple concept complex, and to frustrating hard-working anesthesiologists. The purpose of this document is to

provide very basic instructions for creating an anesthesiology QM program. The program will help your group directly, and will incidentally make it easier to meet your hospital's needs for QM data, along with Joint Commission requirements for Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE), and ABA requirements for Maintenance of Certification in Anesthesiology (MOCA).

A detailed review of the history, theory and practice of QM can be found in the Manual for Anesthesia Department Organization and Management (MADOM), written by the ASA Committee for Quality Management and Departmental Administration. It is available at <http://www.asawebapps.org/docs/madomfile.htm>. For those just starting out, here is a simple 8-step plan:

**Step One:** Designate a physician in your group to lead QM efforts. Successful QM programs depend on a physician champion. This individual should recruit others (a committee) to help with data analysis and peer review, and should engage with QM personnel in the facilities you serve. The facility has similar QM obligations to your practice, and may have resources (such as dedicated QM nurses) who can help gather data.

**Step Two:** Establish a list of indicators for your practice. An indicator is any variable that tells you something about your practice, ranging from how many patients die in the OR to how long it takes the hospital to replace a light bulb in the women's locker room. Indicators tell you something about your structure (e.g. how many practitioners, how many ORs), your process (e.g. how many patients get perioperative antibiotics), or your outcomes (e.g. how many patients die) Measuring indicators will enable you to engage in the "quality cycle," which is simple and intuitive:

- Measure what you do
- Make improvements
- Measure again

Appended is the AQI recommended list of indicators. This is only a starting point, and should be adjusted based on what data is most important to your practice.

**Step Three:** Gather data and enter it in a database. There are commercial products available to assist with this process, but many groups have developed their own electronic tools. The ASA provides samples in the MADOM chapter, and the AQI provides all sorts of recommendations and referrals on its website. The purpose of the database is to facilitate analysis and reporting.

**Step Four:** Report overall data to your group and to local stakeholders (such as hospital administration). Three concepts are worth noting. First, some data should be reported as *rates*: occurrences per opportunities (post-dural puncture headaches per total spinals and epidurals attempted). Second, data should be presented over time (monthly or quarterly), and gains value when *trends* can be observed. Third and finally, some data – especially outcomes – are strongly biased by external factors, and should be *risk adjusted* prior to presentation or *benchmarked* to data gathered under similar conditions. As an example of all three concepts, anesthetic mortality in a trauma center (the *rate* of deaths per anesthetic) is presented quarterly (*trended* over time) and either *adjusted* for the patients' severity of injury or *benchmarked* to mortality from other trauma centers.

**Step Five:** Review unusual events. Many complications of anesthesia are rare, and thus not suitable for numeric assessment until numbers get very large. These events should be individually

reviewed and discussed by the QM Physician and Committee. Discussion should focus on what happened and how to prevent it from happening again. The discussion should be documented: Keep notes! When a cluster of events occurs, one response is a 'focused review' by a small group of experts, focused on identifying common systematic factors and potential solutions. This, too, should be documented.

**Step Six:** Make improvements. Sometimes quality can be improved by presentation of data or discussion of cases (i.e. provider education). This is true for many rare but serious events, and is the basis for the traditional "Morbidity and Mortality" conference. It can also be a mechanism for leveraging peer pressure, such as public reporting of compliance with documentation standards. In general, though, most QM activity should be kept 'within the family' and at the level of the practice rather than individual providers. This is because most QM "opportunities" arise from problems with the system rather than with individuals.

Judicious search of the anesthesia literature and the ASA website can reveal guidelines, recommendations and advice for addressing QM issues. Many such documents are listed and summarized in the MADOM.

**Step Seven:** Remeasure, and automate the process. QM becomes easier over time, because trends in accumulating data make it easier to discern true problems from random variation. Increasing experience increases physician confidence in the process, and the openness and utility of event review. One goal of the QM Physician is to embed the process of measurement and reporting in the fabric of the practice in such a way that data capture and analysis becomes automatic and invisible.

**Step Eight:** Participate in the AQI. Contribution of data to the National Anesthesia Clinical Outcomes Registry (NACOR) entitles a practice to receive quarterly benchmarking reports, making it easier to identify areas of good and bad performance. AQI membership is open to any anesthesiology practice in the US. NACOR is populated by continuous passive collection of digitized information from participating groups, ranging from simple billing system information to sophisticated electronic hospital records. In addition to aggregated national data and peer-group benchmarking, participation in the AQI is intended to provide ASA members, practice groups, and healthcare facilities with an easy and effective means to meet regulatory requirements for QM and practice assessment. Information on joining the AQI is available at [www.aqihq.org](http://www.aqihq.org).

## AQI Recommended Indicators (Updated for 2011)

### These are the things you should report:

#### Business Indicators

- Cases done
  - By surgical service
  - By anesthesia type
  - By ASA class
  - By location
- Number of providers
  - By type (Physician, Resident, CRNA, AA, etc.)
  - By subspecialty training or group
- Total minutes billed
  - By surgical service
- Top ten cases done, and average duration

### *Process Indicators*

- On-time starting percentage of first cases
  - By service / facility
- Cancellation rate
  - By cause and preventability
- PQRI measure compliance
  - Prophylactic antibiotic administration
  - Adherence to central line bundle
  - Normothermia in the PACU
- Documentation compliance (% of cases with completed QM records)
  - By location / service / provider
- Number of patient complaints

### *Clinical Outcome Indicators*

- Number of cases completed uneventfully
- Number of each critical event occurring (by location/ service):
  - Death
  - Cardiac arrest
  - Perioperative MI
  - Anaphylaxis
  - Malignant hyperthermia
  - Transfusion reaction
  - New stroke
  - Visual loss
  - Incorrect surgical site
  - Incorrect patient
  - Medication error
  - Unplanned admission
  - Unplanned ICU admission
  - Intraoperative awareness
  - Unplanned difficult airway
  - Unplanned reintubation
  - Dental trauma
  - Perioperative aspiration
  - Vascular access complication
  - Pneumothorax
  - Infection after regional anesthesia
  - Epidural hematoma
  - High spinal
  - Postdural puncture headache
  - Local anesthetic toxicity
  - Peripheral neurologic deficit

### *Patient Experience Indicators*

- Overall patient satisfaction
  - By Service/facility/patient type
- Rate of postoperative nausea and vomiting
- Adequacy of pain management in the PACU
- Patient complaints
  - By Service/facility/patient type

Consensus definitions of critical events can be found on the AQI website: [www.aqihq.org](http://www.aqihq.org) under the tab for "Resources." Look for the document titled "CPOM Registry Data Set." These definitions were developed by the ASA Committee on Performance and Outcome Measurement.

### **Data to Collect**

To assemble the indicators listed above, an anesthesia practice QM program will need to electronically capture the following relatively short list of raw data:

- For each case done:
  - Location (facility)
  - CPT code(s)
  - surgeon
  - anesthesia provider(s)
  - date
  - time (or duration)
  - anesthesia type (general, regional, sedation, combination, etc)
  - ASA class
  - PQRI compliance (yes/no/not applicable for each of three variables)
  - Occurrence of a listed complication (yes/no, and which one)
  - Patient survey data (satisfaction, PONV, pain questions)
- Documentation completed, including QM form (yes/no)
- Number of patient complaints received (obtain this from the facility and the surgeons as well as from your own office mail)

Alliance with the facility QM personnel can help to gather patient satisfaction and complaint data, as well as complications occurring beyond the immediate perioperative period. A number of software programs have been developed to facilitate capturing these data elements, analyzing them, and reporting the indicators listed above. Some of these resources are available in MADOM, while a list of other (proprietary) solutions can be obtained from the AQI website.

# Faculty Workplace Satisfaction Among Anesthesiologists in Academic Medicine

Shannon Fox, Ph.D.

### Objectives

*Following this session, participants will be able to*

1. Recognize the strategic value of creating a workplace environment that will attract, engage, and retain top faculty talent
2. Describe overall levels of satisfaction with academic medical center workplaces among full-time clinical MD faculty
3. List areas of high and low workplace satisfaction among MD anesthesiologists in academic medicine
4. Explain how workplace satisfaction among MD anesthesiologists in academic medicine compares to the satisfaction of MD faculty in other clinical departments

### Summary

Medical school leaders and researchers have focused more attention on job satisfaction, faculty stress and burnout, and the struggle with recruitment and retention as demands on academic medical faculty have risen. In particular, job satisfaction has been of significant interest to the physician and faculty community because of its association with a number of important measures, including quality of patient care,<sup>1,2</sup> career choice,<sup>3</sup> increased organizational performance,<sup>4</sup> and retention.<sup>5,6</sup> Understanding how faculty workplace satisfaction differs by specialty is important and may suggest to departments different strategies to improve satisfaction for their faculty.

For clinical faculty, in particular, several converging factors have impacted faculty roles at US medical schools over the past decade. As the delivery and financing of healthcare has changed, clinical faculty are under increasing pressures to be productive clinically, which often impinges on their ability to participate in other activities like research and teaching,<sup>7</sup> and makes concerns about recruitment and retention even more important. Of the clinical departments in US medical schools, anesthesiology ranked second lowest in its national retention rates, with an average percent retained of 66

(the range in clinical departments spanned from 64 to 85 percent).<sup>8</sup> Given the high financial and human capital costs of faculty turnover,<sup>9-12</sup> it is essential to understand the factors that contribute to the satisfaction of these medical school faculty.

To explore these issues, this presentation describes the overall levels of satisfaction with academic medical center workplaces among full-time clinical MD faculty, highlights areas of high and low workplace satisfaction among MD anesthesiologists in academic medicine, and compares the workplace satisfaction among MD anesthesiologists in academic medicine to the satisfaction of MD faculty in other clinical departments. Data come from a 2009 administration of a medical school faculty job satisfaction survey to a population of 19,001 full-time faculty members at 23 LCME-accredited US medical schools. Of the survey-eligible faculty members, 51 percent participated. The response rate for the clinical MD faculty was 48 percent, and for the subgroup of MD anesthesiology faculty, 46 percent.

Survey results indicate that, overall, almost two-thirds (63 percent) of responding MD faculty in clinical departments were satisfied or very satisfied with their medical schools and almost three-fourths (71 percent) were satisfied with their departments as places to work. As seen in the table below, with regard to satisfaction with their medical school as a whole, MD clinical faculty in dermatology, general pediatrics, and general internal medicine were the most likely to be satisfied or very satisfied. MD clinical faculty in anesthesiology, general surgery, and specialty surgery were the least likely to be satisfied or very satisfied. MD clinical faculty in otolaryngology, dermatology, and family medicine were the most likely to be satisfied or very satisfied with their departments as places to work, whereas faculty in subspecialty medicine (including allergy and cardiology, among others), anesthesiology, and pathology were the least likely to be satisfied or very satisfied. When asked whether they would again choose an academic career, MD clinical faculty in neurology, general internal medicine, and general surgery were the most likely to agree or strongly agree. Faculty in anesthesiology, psychiatry, and radiology were the least likely to agree or strongly agree with this statement.

**M.D. Clinical Faculty Satisfaction with Medical School, Department, and Academic Career\***

	Satisfaction with medical school as a place to work		Satisfaction with department as a place to work		Agreement with choosing an academic career again	
	% satisfied/very satisfied	Department ranking	% satisfied/very satisfied	Department ranking	% satisfied/very satisfied	Department ranking
Anesthesiology	51	17	64	16	77	17
Dermatology	75	1	82	2	81	14
Emergency Medicine	59	14	72	8	82	13
Family Medicine/Practice	70	4	81	3	85	8
Internal Medicine – General	71	3	70	11	91	2
Medicine – Subspecialty	61	11	62	17	87	5
Neurology	68	5	72	7	91	1
OB/GYN	67	7	74	6	83	12
Ophthalmology	60	13	68	12	84	11
Otolaryngology	67	6	92	1	86	7
Pathology	61	12	64	15	84	10
Pediatrics – General	72	2	81	4	88	4
Pediatrics – Subspecialty	65	8	76	5	86	6
Psychiatry	62	9	67	13	80	16
Radiology	61	10	72	9	80	15
Surgery – General	51	16	66	14	90	3
Surgery – Specialty/Other	58	15	71	10	85	9

\*Table modified and reproduced from: *Clinical Faculty Satisfaction with the Academic Medicine Workplace. (2010, June). Washington, DC: Association of American Medical Colleges.*

When examining areas of satisfaction for faculty in anesthesiology departments, in particular, several areas of high faculty satisfaction emerged. For MD faculty in anesthesiology departments, almost three-fourths reported being satisfied or very satisfied with time spent in patient care (75 percent); with how their contributions in patient care are valued by the department chair (74 percent); and with the quality of professional and personal interactions with department colleagues, and their ability to provide high quality of care (each at 72 percent). Findings also revealed several areas of low faculty satisfaction. About one-third of the MD respondents in anesthesiology were satisfied or very satisfied with opportunities to collaborate with faculty in other schools in their university (27 percent) or with other faculty in other departments (36 percent), with the time they spent on research and scholarship (29 percent), and with communication between physicians and senior

administrators in their clinical practice location (36 percent). From these results, it appears that higher areas of satisfaction stem from patient care and client service activities. In contrast, areas of lower satisfaction seem to stem from the institutional environment, including opportunities to collaborate and communication, or lack thereof, from senior administrators.

When comparing responses for MD faculty in anesthesiology departments to MD faculty in all other clinical departments, several significant differences were noted (see table below). MD faculty in anesthesiology departments are more satisfied with things such as their ability to provide high quality care, but are significantly less satisfied than other MD clinical faculty in the pace of their advancement, opportunities for professional development, and some areas of the governance and operations at their school.

## Comparison of M.D. Anesthesiology Faculty to Other MD Clinical Faculty on Various Aspects of Workplace Satisfaction

	MD Anesthesiology faculty	Other MD clinical faculty	sig. <sup>1</sup>
	% satisfied/very satisfied	% satisfied/ very satisfied	
<b>Nature of work</b>			
Time spent on teaching/education	57	70	***
Time spent on research/scholarship	29	41	***
Time spent on patient care/client services	75	69	*
<b>Climate and culture</b>			
Your "fit" in your department	70	73	
The intellectual vitality in your department	57	66	**
<b>Pay and advancement</b>			
Overall compensation	53	50	**
Pace of your advancement at your medical school	41	55	***
Opportunities for professional development at your medical school	43	52	**
<b>Institutional decision-making, governance, &amp; operations</b>			
Dean's priorities for the medical school	41	48	**
Communication from your dept. chair to the faculty about the dept.	56	65	***
<b>Clinical practice</b>			
Ability to provide a high quality of care	72	70	
How well this clinical location functions overall as it relates to patient care	63	61	*
<b>Global satisfaction</b>			
Your department as a place to work	64	71	**
Your medical school as a place to work	51	64	***

<sup>1</sup> \*\*\* =  $p < .001$ ; \*\* =  $p < .01$ ; \* =  $p < .05$

In sum, while clinical faculty are generally satisfied with their schools and departments as places to work, there are several areas for potential improvement in faculty satisfaction, especially within certain specialties. As a shortage of anesthesiologists in this country has led to a mismatch of supply and demand and challenges of recruiting and retaining anesthesiologists to academic medical centers are in the forefront,<sup>13-15</sup> anesthesiology departments may want to consider ways to create environments that maximize faculty vitality and satisfaction.

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# *Program Schedule - Sunday, November 7<sup>th</sup>*

- 7:00 a.m. – 7:30 a.m. **Continental Breakfast**
- 7:30 a.m. – 9:30 a.m. **Residency Program Consultations**
- 7:30 a.m. – 8:00 a.m. **SAAA Business Meeting**
- 8:00 a.m. – 9:00 a.m. **General Session 5: Anesthesiology Advocacy Post-Health Care Reform...  
Now More Than Ever**  
Harvey “Chip” Amoe III, J.D., M.P.A.
- 9:00 a.m. – 9:15 a.m. **Question and Answer Session**
- 9:15 a.m. – 9:30 a.m. **Coffee Break and Networking**
- 9:30 a.m. – 10:30 a.m. **ACGME Anesthesiology RRC Update**  
Neal H. Cohen, M.D.
- 10:30 a.m. – 11:00 a.m. **ABA Update**  
David L. Brown, M.D.
- 11:00 a.m. – 11:30 a.m. **In-Training Exam Update**  
Cynthia A. Lien, M.D.
- 11:30 a.m. – 11:50 a.m. **Question and Answer Session**
- 11:50 a.m. **Adjourn**



# Anesthesiology Advocacy Post-Health Care Reform... Now More than Ever

Chip Amoe, J.D., M.P.A.  
Assistant Director, Federal Affairs

11/07/10

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# Health Care Reform is the New Law of the Land

**H.R. 3590**  
***The Patient Protection and Affordable Care Act (PPACA)***

**H.R. 4872**  
***The Health Care & Education Affordability Reconciliation Act of 2010***



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And despite the recent elections,  
Congress is unlikely to repeal it.



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What ~~did~~ <sup>Didn't</sup> we get with HC reform?

- SGR Fix
- Truth and Transparency
- Rural Access to Anesthesiology Care
  
- On the plus side - No Proliferation of 33% Payment Rates (i.e. no public plan based on Medicare rates)

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## What Did We Get?

- **New Independent Payment Advisory Board (IPAB)**
  - Broad power to impose across-the-board and/or individual cuts by specialty or procedure (starting 1/1/14) – on top of SGR
- **Medicaid expansion to 133 percent FPL**
- **Mandatory and punitive PQRI (1/1/14)**
- **ACOs and bundling coming (2012)**
- **An unprecedented number of regulations**

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## Some Good News for Pain

### **Pain Care Coalition (PCC) Provisions included in Health Reform Bill**

- Authorizes an Institute of Medicine (IoM) Conference on Pain Care
- Expansion of Pain Research through NIH Pain Consortium
- New Program for Education and Training in Pain Care

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## ASA Post-Reform Key Issues “Watch” List

- Health Insurance Reforms
- Independent Payment Advisory Commission (IPAB)
- Medicaid Expansion
- “Non-Discrimination” in Health Care
- Mandatory Physician Quality Report Initiative (PQRI)
- Sustainable Growth Rate (SGR)

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## Others to “Watch”

- Secretary Authorized to Adjust “Mis-valued” Codes
- National Pilot Program on Payment Bundling
- Medicare Shared Saving Program – Accountable Care Organization (ACOs)
- State Demonstration Programs To Evaluate Alternatives To Current Medical Tort Litigation
- “Quality Improvement” Initiatives

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## ASA Post-Enactment Initiatives

- **Looking for Opportunities to Repeal or Revise Onerous Provisions** (*Legislative Repeal of Entire Bill is a Non-Starter under Current Democratic Administration*)
- **SGR**
- **Working with Strong Surgical Coalition**
- **Preparing for Massive Regulatory/ Rulemaking Effort to Implement Law**
- **ASA Member Involvement - Engage 2010**
  - Continued Legislative Engagement
  - Political Engagement - 2010 Elections

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## Health Care Reform Moving Forward: Less of a Legislative Strategy

**"It's fair to say that the next phase is going to be less about legislative action than it is about managing the change that we've brought,"**

White House senior advisor David Axelrod

**"[T]he best arena for Obama to execute his plans may be his own branch of government. That means...more deployment of his ample regulatory powers and the wide-ranging rulemaking authority of his Cabinet members."**

LA Times 10/6/10 [latimes.com/news/nationworld/nation/la-na-obama-staff-strategy-20101007,0,6919242.story](http://latimes.com/news/nationworld/nation/la-na-obama-staff-strategy-20101007,0,6919242.story)

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## For ASA, The Work with the Administration has been Ongoing

- **HHS/AHRQ**

- Comparative Effectiveness Research (CER)
- Liability Reform Demo
- Health Information Technology/EHRs
- OIG “Company Model”

- **CMS**

- Value-based Purchasing
- PQRI
- Interpretive Guidelines
- Teaching Rule implementation



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## Administration Work Cont.

- **FDA**

- SEDASYS® (a bit of a bright spot for now)
- Risk Evaluation and Mitigation Strategies (REMS) for opioids
- New pain treatment options (ACTION initiative)
- Propofol and other Drug Shortages (Big Issue)

- **DEA**

- Propofol Scheduling (Soon)
- eRx Controlled Substances

## But this is just the tip of the iceberg



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## A Tsunami of Regulations Is About to Hit!!!



In the coming years, the following new regulations, impacting anesthesiology, will be required by PPACA

### 2010

- Establish a Patient Centered Outcomes Research Institute as part of the comparative effectiveness initiative
- Establish a Workforce Advisory Committee to develop a national workforce strategy
- Establish a commissioned Regular Corps and a Ready Reserve Corps for service in a time of national emergency
- Begin implementation of National Pain Care Policy Act (IOM, NIH, Education and Training)

### 2011

- Award 5-year demonstration grants to states to develop, implement and evaluate medical liability alternatives
- Create a new Innovation Center within CMS
- Develop a national quality improvement strategy to improve delivery of health care services

2012

- Reduce Medicare payments for preventable hospital readmissions (and a 1% reduction for HACs by 2015)
- Allow providers organized as ACOs to share in the cost savings they achieve for the Medicare program
- Establish a hospital value-based purchasing program and develop plans to implement one for ASCs as well
- Develop a value-based modifier for physicians, phased in by 2015 with a plan submitted to Congress by 2011
- Establish a Medicaid bundled payment demonstration project for hospital and physicians
- Create a Medicaid global payment system demonstration project** to study a global capitated payment structure

A Tsunami of Regulations (Cont.)



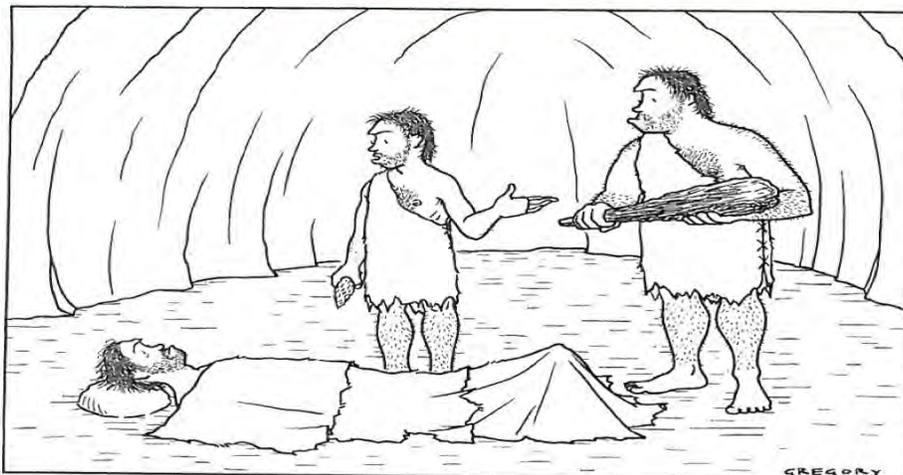
2013

- Establish a national Medicare pilot program to develop and evaluate bundled payment for acute, inpatient and outpatient hospital services, physicians services, and post-acute care services
- Require disclosure of financial relationship between health entities, including hospitals and physicians, and manufacturers of drugs, biologics and supplies

2014

- Create an essential health benefits package that provides a comprehensive set of services
- Permit states the option to create a Basic Health Plan for uninsured individuals between 133-200% of federal poverty
- Establish an Independent Payment Advisory Board (IPAB) to recommend legislative proposals to reduce the growth of Medicare spending if spending exceeds a target growth rate (nominees due earlier)
- Expand Medicaid to include individuals up to 133% of federal poverty
- Impose penalty for non-participation in Physician Quality Reporting Initiative (PQRI)
- Prohibit health plans from discriminating against paraprofessionals in plan participation

Meanwhile, government officials don't really understand your profession,



*"I'll be performing the operation, and this is the anesthesiologist."*

Cartoon Courtesy of The New Yorker

Those implementing the laws have more work than they can handle,



And others are out there trying to take your business or slice of the pie



- Gl's, NAs, Orthos (w/ "company" model)

# So Who Educates Them? AANA?

**NURSE ANESTHESIA • SAFE ANESTHESIA**



Which ones are the anesthesiologists and which are the nurse anesthetists?

**CAN'T TELL?**

It's *just as hard* to tell the difference between their anesthesia education, the way they administer anesthesia, and their safety records.

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# Or Us?

## Is there a physician in the house?

Anesthesiologists are specialized physicians (MD/DOs) who care for patients before, during and after surgery. In many settings, they supervise and direct non-physicians such as anesthesiologist assistants (AAs) and nurse anesthetists (NAs).

Beyond the Operating Room, anesthesiologists treat pain and save lives in critical care units, using their skills and unparalleled medical knowledge to keep patients safe when they need it most.

They have the most advanced education and training of any anesthesia professionals and have alone been recognized by the Institute of Medicine as the leader in patient safety.\*

The American Society of Anesthesiologists supports:

- Ensuring fair payment for anesthesiology services
- Empowering patients with information to make smart health care choices
- Expanding access to high-quality anesthesiology services, especially in rural areas and among underserved communities

\* Institute of Medicine (IOM), (1999). *To err is human: Building a safer health system* (p. 124-125, 142). Washington, DC: National Academy Press.

### Anesthesiologists:

Physicians providing the lifeline of modern medicine.

Jane C.J. Fitch, M.D.  
John L. Powers Professor & Chair  
University of Oklahoma

Anesthesiologist  
Chair, ASA Committee on  
Governmental Affairs  
Former nurse anesthetist



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We always say, you need to have a seat at the table...



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To avoid being on the menu.



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# And we've been doing that



CRNA-PAC \$704,000



AAJPAC \$2.55 M



AHAPAC \$1.9 M



ASAPAC \$1.67 M



AMPAC \$1.37 M



AAOS

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS®  
AMERICAN ASSOCIATION OF ORTHOPAEDIC SURGEONS®

AAOSPAC \$1.63 M



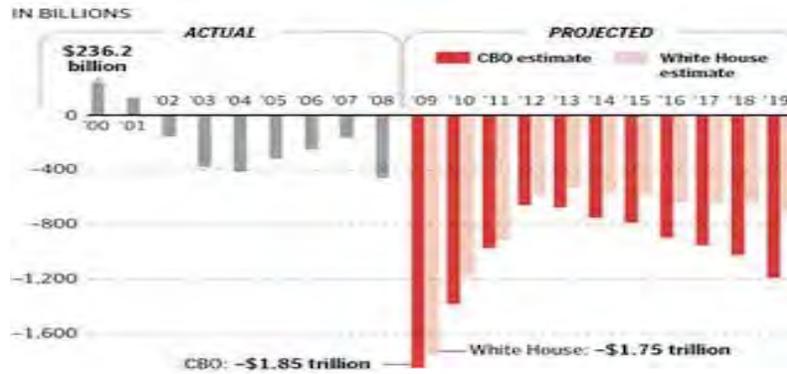
Source: Federal Election Commission filings for 2009

# But in this environment, you now need to bring something to the table.



## Unprecedented Deficits Create More Pressure

- Deficit and a new “Deficit Commission”



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## The Key is to Demonstrate Your \$VALUE\$

- Patient Safety
  - Leaders, Closed Claims Data Project, APSF
  - Can't rest on our laurels, IOM Study 1999
- AQI
- AIMS
- Research
- What can you do that can't?
  - More education means...?



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## Administrative “Buzz” Words/ Initiatives



- **Value-Based Purchasing (VBP)**
  - Cost/Quality = Value
- **Public Reporting (Transparency)**
- **Comparative Effectiveness Research (CER)**
- **Health Care Disparities**
- **Medical Liability Alternatives (Through Quality Improvement)**
- **Hospital Acquired Conditions (HACs/HAIs)**
- **Payment Reform (ACOs and Bundling)**

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## Established Programs

- **Physician Quality Reporting Initiative (PQRI)**
- **Physician Resource Use and Quality Reports (A.K.A. Physician Feedback Program and Value-Based Modifier)**
- **HITECH Act (EHR Incentive Program)**

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# HITECH Act

- **HHS Implementing ARRA legislation with focus on “meaningful use” of HIT**
  - “Hospital-based” physicians are not eligible for incentives, but most anesthesiologists will be eligible
  - The final rules establish certification standards for information exchange, privacy and security, quality reporting, etc.
- **ASA Goal: to support AQL efforts and expand use of AIMS**

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# ASA on HITECH and “Meaningful Use” of EHRs/AIMS

- **The Proposed Rule:**
  - Failed to encourage investment in AIMS
  - Ignored Congressional intent to exclude hospital-based physicians
  - Potentially subjects anesthesiologists to requirements or face payment penalties
- **Letter proposes suggestions for appropriate application to AIMS**

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## Final HITECH and Meaningful Use Rules

- **Released on July 13, 2010**

- CMS did not address ASA concerns
- Long and complex rules (1,000+ pages)
- Only anesthesiologists who provide  $\geq 90\%$  of their covered services in the inpatient or ER setting (POS 21 & 23) will be exempt from meaningful use requirements and future penalties beginning in 2015
- Positive developments:
  - Some exceptions exist that may help
  - Talks between CMS, ONC and ASA have been positive and productive
- ASA is working with member taskforce to determine compliance potential

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## Ongoing Effort to Explain how Anesthesiologists Fit into the HC Reform Puzzle.



## Best Approach is to be Proactive

**Set your course and Advocate for your Vision**



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## Creating the Vision

**In 10-20 years, where do you see your specialty? Your department?**

- What does that look like?

**For example:**

***“Anesthesiologists will be THE leaders in patient safety, quality and efficiency in the perioperative, periprocedural and pain care setting.”***

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## What will it take to get there?

- **More research?**
  - Into what areas?
  - What future challenges will you face?
- **More resources?**
  - EHRs/AIMS in all settings?
  - Quality database?
  - Resource and quality reports?
- **More member/staff involvement and advocacy?**

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## If You Don't Articulate your Vision, It Will be Done for You...and not well.



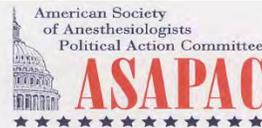
## Now, more than ever, you hold the future of the specialty in your hands

- What will the practice of anesthesia look like post-health care reform?
- We need your academic programs to help define and advocate the vision.



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## Stay Involved



- [www.asahq.org/Washington/grassroots.htm](http://www.asahq.org/Washington/grassroots.htm)
- **Resources for involvement**
  - CapWiz – take action when asked
  - Washington Advocacy Guide
  - Guide to Hosting a Site Visit
  - State Governmental Affairs Handbook

## Other Ways to Stay Up to Date

- **ASAPAC Vital Signs**
- **RSS feed**
- **Facebook**
- **Twitter**
- **YouTube**

## Thank You!

- **Contact information**  
[c.amoe@asawash.org](mailto:c.amoe@asawash.org)  
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