

# 2010 ANNUAL MEETING

ASSOCIATION OF PEDIATRIC  
PROGRAM DIRECTORS

*Beginning our Celebration of*

**25** *years of*  
AP PD Educational  
PD Excellence!

INNOVATIONS IN PEDIATRIC EDUCATION:  
EVIDENCE AND EXPERIENCE

APRIL 15-18, 2010  
CHICAGO, IL

HILTON CHICAGO  
720 SOUTH MICHIGAN AVENUE

\*THIS ACTIVITY HAS BEEN APPROVED FOR AMA CATEGORY 1 CREDIT™

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# SCHEDULE-AT-A-GLANCE

THURSDAY, APRIL 15	FRIDAY, APRIL 16	SATURDAY, APRIL 17	SUNDAY, APRIL 18
7:30am Registration Begins	8:00 – 9:00am Breakfast and Platform Presentations of best posters	7:00 – 8:20am Regional breakfasts	6:30 – 8:00am Continental Breakfast
8:00am – 4:00pm Board Meeting	9:00 – 11:15am Task Force Meetings	8:30am – 4:00pm Coordinators' Session	7:00 – 8:00am IPE: Navigating the Next Round: FAQ & Lessons Learned
8:00am – 5:00pm <b>Registration Closed</b> Forum for Chief Residents	Coordinators' Session	8:30 – 10:30am Workshop Session I for Physicians	8:00 – 10:00am Workshop Session III for Everyone
9:00am – 12:30pm Forum for Directors of Small Programs/Affiliate Chairs	11:15 – 11:30am Break	10:30 – 11:00am Break	10:15am – 12:15pm Workshop Session IV for Everyone
11:00am – 4:00pm Coordinators' TAGME Exam (prior registration necessary)	11:30am – 12:00pm APPD Presidential Address	11:00am – 1:00pm Workshop Session II for Physicians	12:45 – 1:45pm Working Lunch Session: Action Points & Next Steps from Plenary
12:45 – 3:45pm Faculty Development Pre- Conference Workshop ( <b>Registration Closed</b> separate registration required)	12:00 – 12:30pm APPD Award Presentations	1:00 – 2:30pm Lunch on Own	
4:00 – 6:00pm Grassroots Forum for Program Directors	12:30 – 2:00pm Lunch on Own	2:30 – 4:30pm Mentoring Session for Physicians	
Grassroots Forum for Fellowship Directors	Council of Task Force Chairs (CoTFC) Luncheon	4:30 – 6:00pm Poster Session	
Grassroots Forum for Associate Program Directors	Council of Regional Chairs (CoRC) Luncheon	6:00 – 6:30pm LEARN Session	
Coordinators' Assembly	2:00 – 3:00pm Invited Presentation Evidence and Reason: Applying these Principles to US Medical Education <i>Susan Skochelak, MD, MPH, Vice President for Medical Education, American Medical Association (AMA)</i>		
6:00 – 7:00pm Wine and Cheese Reception <i>Start the celebration of 25 years!!</i>	3:00 – 4:30pm Plenary Session		
	4:30 – 5:30pm Interactive Panel Discussion (with Plenary speakers)		
	5:30 – 6:00pm Building National eFolio Connectivity		
	6:00 – 6:30pm LEARN Session		
	6:30pm Coordinators' Social (separate arrangements)		

# WELCOME TO CHICAGO!

The APPD 2010 Annual Meeting represents the first free-standing APPD meeting in our twenty-five year history and we are excited about our innovative program!

This year, we are adding a new twist on our Mentorship Program with the introduction of a structured Peer-Mentoring option. We have also borrowed novel forums experienced in our recent combined meeting with COMSEP. These include a platform session for the top educational research projects and more integrated Task Force activities. To highlight best practices, we have invited presentations of novel curriculum and posters outlining processes that address the integration of resident trainees into quality initiatives. In addition, resident driven, education focused quality improvement projects will be presented as part of our research posters.

It is always a pleasure to welcome first time attendees to the APPD Annual Meeting and this year we have a significant number. We urge you to look for their "First Timer" ribbons (white with blue lettering) so that you may "show them the ropes" and help ensure that their first experience is a pleasant and successful one.

Our sincere hope is that you will share the good ideas that you brought with you to this forum and take away many more. This is your chance to learn and network. Please take advantage of every opportunity!

## APPD ANNUAL REPORT

Want to learn more about the APPD? The APPD 2010 Annual Report has just been completed and is available at [www.appd.org/PDFs/2009AnnualReport.pdf](http://www.appd.org/PDFs/2009AnnualReport.pdf)

Valuable details included in the Annual Report are as follows:

- a message from the APPD President
- leadership listings and contact information
- reports from regions, task forces, and ad hoc committees
- information from our different member groups (fellowship directors, associate directors, coordinators, etc.)
- award information and special project updates
- highlights from our interactions with liaison organizations
- APPD financial information

## CONTINUING EDUCATION CREDIT

### Physicians

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 Institute for the Advancement of Human Behavior (IAHB) and The Association of Pediatric Program Directors (APPD). IAHB is accredited by the ACCME to provide continuing medical education for physicians.

### AMA PRA Statement

IAHB designates this educational activity for a maximum of 25.5 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## SESSIONS FOR COORDINATORS

This year, there are three stand-alone sessions blocked out for coordinators. These include Thursday afternoon's "Coordinators' Assembly" and a "Coordinators' Session" on both Friday and Saturday. These sessions have been blocked and shaded in the program to assist in locating them. In addition to these sessions, Coordinators should note that they are encouraged to attend the afternoon sessions on Friday and all Sunday sessions along with physicians. Workshops of general interest to coordinators are being offered during Sunday's Workshop Session III and Workshop Session IV.

## APPD LEADERSHIP

President - Susan Guralnick, MD (2008-2010)

President-Elect - Ann Burke, MD (2008-2010)

Secretary-Treasurer - Joseph Gilhooly, MD (2007-2010)

Past-President - Robert McGregor, MD (2008-2010)

Executive Director - Laura Degnon, CAE

### Board of Directors

Debra Boyer, MD (2008-2011)

Grace Caputo, MD, MPH (2008-2011)

Lynn Garfunkel, MD (2009-2012)

Patricia Hicks, MD (2007-2010)

Dena Hofkosh, MD (2007-2010)

Jerry Rushton, MD, MPH (2008-2012)

### Coordinators Executive Committee

Lorrayne Garcia, C-TAGME, Co-Chair (2007-2010)

Marlene Keawe, MBA, Co-Chair (2007-2010)

Jaime Bruse, C-TAGME (2009-2012)

Avis Grainger, C-TAGME (2009-2012)

Deb Parsons, C-TAGME (2008-2011)

Elizabeth Sanchez-Rocca, C-TAGME (2008-2011)

### 2010 Annual Meeting Program Committee

Robert McGregor, MD, Chair

Jim Bale, MD

Susan Bostwick, MD

Ann Burke, MD

Susan Guralnick, MD

Marc Majure, MD

Heather McPhillips, MD

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Erin Stucky, MD

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Brian Youth, MD

Clifton Yu, MD

### Nominating Committee

Robert McGregor, MD, Chair

Joel Forman, MD (2009-2011)

Heather McPhillips, MD (2008-2010)



# 2010 ANNUAL MEETING APRIL 15 - 18 ~ CHICAGO, IL

## INNOVATIONS IN PEDIATRIC EDUCATION: EVIDENCE AND EXPERIENCE

### APPD MEETING SCHEDULE

#### THURSDAY, APRIL 15

7:30am Registration Begins  
**8th St South, Lobby Level**

8:00am – 5:00pm **Registration Closed** Forum for Chief Residents  
**Buckingham, Lobby Level**

*John Mahan, MD, Professor of Pediatrics, Ohio State University School of Medicine, Nationwide Children's Hospital; Edwin L. Zalneraitis, MD, Professor of Pediatrics and Neurology, Pediatric Residency Program Director, Assistant Dean for Clinical Education, University of Connecticut SOM and Connecticut Children's Medical Center; Christine Skurkis, MD, Assistant Professor of Pediatrics, Associate Pediatric Residency Program Director, University of Connecticut SOM and Connecticut Children's Medical Center; Maureen Leffler, DO, Fellow Pediatric Rheumatology, Dupont Children's Hospital; Melissa Held, MD, Assistant Professor of Pediatrics, Associate Pediatric Residency Program Director, University of Connecticut SOM and Connecticut Children's Medical Center*

This will be an interactive forum bringing together rising Chief Residents, finishing Chief Residents and Program Directors. It will be in workshop format where practical exercises will be held, followed by sharing the outcomes. The topics will be selected based on a pre-forum survey of those enrolled for the forum. There will be four 2-hour sessions. Past years' topics have included: planning the Chief Resident year, considering the Chief Resident experience, leadership skills, teaching a skill, teaching a group, teaching in the busy clinical setting, evaluation, feedback, and conflict resolution. (This session will include a boxed lunch, provided by APPD.)

9:00am – 12:30pm Forum for Directors of Small Programs/Affiliate Chairs  
**Lake Michigan, 8th Floor**

Discussion at this session will follow important presentations from and about the RRC in Pediatrics, the Milestone Project, Pregnancy and Family Leave Issues in Small Programs, Availability of Adolescent Medicine in Small Programs, and an AAP Update. Co-Chairs: Marcia Hutchinson, MD, Medical Center of Central Georgia; Henry Schaeffer, MD, Maimonides Medical Center; Surendra Varma, MD, Texas Tech University/Health Science Center (Lubbock)

1. Welcome & Introductions
2. Update from RRC – Steve Ludwig & Jerry Vasiliadis
3. Pregnancy & Family Leave Issues in Small Programs – Marcia Hutchinson
4. Availability of Adolescent Medicine Experience in Small Programs – Surendra Varma
5. Milestones Project – Carol Carraccio
6. AAP Update – Henry Schaffer
7. International Health Electives – Surendra Varma
8. Other

12:45 – 3:45pm **Registration Closed** Faculty Development Pre-Conference Workshop  
(separate registration required)  
**Williford B, 3rd Floor**

TeamSTEPSTM Application to Pediatric Residents and Fellows: A Workshop for Program Directors and Coordinators to Improve Education in Communication and Teamwork  
*Heidi B. King, MS, FACHE, Deputy Director, DoD Patient Safety Program; Director, Patient Safety Solutions Center, Office of the Assistant Secretary of Defense for Health Affairs; TRICARE Management Activity, Office of the Chief Medical Officer, Falls Church, VA; John S. Webster, MD, MBA, President, Webster Healthcare Consulting, Inc; TeamSTEPSS Consultant, La Mesa, CA; Theodore C. Sectish, MD, Program Director and Associate Professor, Children's Hospital Boston, Boston Combined Residency Program, Boston, MA*

Communication and other teamwork skills are essential to the safe delivery of quality healthcare yet difficult to integrate into training programs and resident education. TeamSTEPSTM (Team Strategies and Tools to Enhance Performance and Patient Safety) is an evidence-based program and toolkit placed in the public domain and available for implementation by program directors. The workshop will briefly describe the national roll out of TeamSTEPSTM, co-sponsored by the Agency for Healthcare Research and Quality (ARHQ) and the Department of Defense (DoD). The focus will be on selected tools and strategies most applicable and important for physicians in training and faculty members to integrate into practice on behalf of quality and safety, while also fulfilling key ACGME requirements for education in systems based practice, practice-based learning and improvement, and interpersonal and communication skills. The interactive presentation will address sign-outs and handoffs, structured communication, methods for increasing accuracy, problems of hierarchy, physician-nurse communication, clinical leadership, and other tools, strategies, teamwork behaviors, and principles. This abbreviated and fast-paced course will give program directors and administrators suggestions for implementation and resources for further exploration of TeamSTEPSTM.

4:00 – 6:00pm

### Grassroots Forum for Program Directors

#### **Williford A, 3rd Floor**

This relatively unstructured part of the meeting is designed for the membership to raise their concerns or questions which they want to vet or bring to the APPD Board for further attention. *Hot Topics* of interest and importance will be addressed at this lively session, divided into small group break-outs based on survey results and facilitated by Drs. Cindy Ferrell, Diane Kittredge and Robert Vinci.

### Grassroots Forum for Fellowship Directors

#### **5H, 5th Floor**

The forum for subspecialty program directors will be an open discussion of hot topics raised by the participants. Potential topics might include, new duty hour rules, program accreditation, improving fellow scholarship, faculty development, and use of ERAS and the match. Facilitation will be by subspecialists on the APPD Board.

### Grassroots Forum for Associate Program Directors

#### **Lake Michigan, 8th Floor**

The Forum for Associate Program Directors will review timely and important topics of interest to the APPD and will discuss organizational and career development needs specific to our group. Additionally, new associate program directors will find this session informative as an introduction to the organization. We hope to build upon four years of successful meetings and invite you to bring your ideas to this energetic group session. Leaders: Drs. Marsha Anderson, Aditee Narayan, and Nancy Spector.

### Coordinators' Assembly

#### **Williford C, 3rd Floor**

4:00-4:45

#### Coordinators' Mixer

*Deb Parsons, C-TAGME, Indiana University School of Medicine and Jaime Bruse, C-TAGME, University of Utah*

#### Introduction to APPD

*Marlene Keawe, University of Hawaii and Lorraine Garcia, C-TAGME, Mount Sinai School of Medicine*

#### C-TAGME Update

*Kathy Miller, C-TAGME, Johns Hopkins University*

4:45-5:30

#### Mentoring Workshop

*Elizabeth Sanchez-Rocca, C-TAGME, Brookdale University Hospital Medical Center, Avis Grainger, C-TAGME, Carolina Medical Center, and Aimee Page, Our Lady of the Lake in Baton Rouge*

This session will begin with a brief overview of the APPD Coordinators' Mentoring Program, followed by an actual example, shared by a mentor and mentee, about what happened when an experienced program coordinator from a well-established program helped a new coordinator and brand new program set up their system. Discussion will include what worked, what didn't work, and the outcome of recruitment for the new coordinator.

5:30-6:00

Professionalism Update

*Marlene Keawe, University of Hawaii; Dawn M. Barata, University of Florida College of Medicine – Jacksonville*

Program Coordinators are often at the forefront of resident and faculty interactions. A display of appropriate professionalism on the part of the Coordinator helps to maintain a high level of respect. Certain competencies were developed during an interaction session at the APPD Fall 2009 meeting, which will be brought before the entire APPD Coordinators' section for further refining. A finalized description will then be posted on the APPD website, Coordinators' section.

6:00 – 7:00pm

Wine and Cheese Reception

**Grand Ballroom, 2nd Floor**

*Start the celebration of 25 years!!*

FRIDAY, APRIL 16

7:30am

Registration

**8th St South, Lobby**

7:30 – 9:00am

Breakfast and Platform Presentations of best research posters

**Continental A/B/C, Lobby Level**

***Breakfast will be served in the meeting room starting at 7:30 am. This should give everyone attending the session the opportunity to visit the buffet and be seated prior to the session beginning at 8:00 am. Please be prompt.***

Platform Presentation 1

VALIDATION OF AN EVIDENCE-BASED MEDICINE (EBM) CRITICALLY APPRAISED TOPIC

*Hans B. Kersten, MD, St. Christopher's Hospital for Children, Philadelphia, PA, Erin Giudice, MD, University of Maryland, Baltimore, MD, John G. Frohna, MD, MPH, University of Wisconsin, Madison, WI*

Background: ACGME requirements for residency and fellowship training mandate the teaching and evaluation of competence in evidence-based medicine (EBM). Many residency programs now require an EBM project, such as the creation and presentation of a Critically Appraised Topic (CAT) to demonstrate these skills. However, there are few validated tools available to assess EBM skills among residents, and there is no known valid and reliable tool to assess residents' ability to develop and present an EBM CAT. Specific Aim: To assess the validity and reliability of a new assessment tool, the EBM CAT Presentation Evaluation Tool (EBM C-PET). Methods: Four institutions involved in this project developed a single evaluation tool to assess both a written CAT and the verbal presentation of this CAT. Residents at the four institutions complete an EBM project, which includes the creation of a CAT and its presentation to their peers and faculty members. The EBM CAT presentations were videotaped and the written CAT summaries copied for evaluation by three EBM experts at the involved institutions. The data was analyzed for the psychometric properties of the instrument and the inter-rater reliability. This multi-institutional project was funded by the APPD as a Special Project. Results: 35 EBM CAT summaries and presentations have been collected by the four institutions. The instrument was pilot tested and adjustments were made to the rating scale; it was reviewed by educational experts for face validity. Preliminary results indicate 42%-100% agreement among two raters across the 14 items. The highest levels of agreement were for items related to key steps in the EBM process: identifying a clinical question, performing a high-quality search, and critically appraising the evidence using specific criteria. Lower levels of agreement were found for items related to teaching skills. Conclusions: The EBM C-PET can be a valuable tool for residency and fellowship programs. It can significantly contribute to the field of pediatric graduate medical education by providing a much needed validated tool to document competence in Evidence-Based Medicine.

Platform Presentation 2

EDUCATIONAL IMPLICATIONS and SLEEP AND FATIGUE IMPLICATIONS OF THE 2008 PROPOSED WORK HOUR REGULATIONS: PILOT STUDIES

*Katherine A. Auger, MD (co-principal investigator), Kira R. Sieplinga, MD (co-principal investigator), Jeffrey M. Simmons, MD, MSc, Javier A. Gonzalez del Rey, MD, MEd, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*

Background: In 2008, the Institute of Medicine published recommendations for resident duty hour rules intended to enhance sleep, safety, and resident supervision. There is no data that addresses the feasibility of implementing the new rules or their effects on residents' education, sleep and fatigue. Objectives: Investigate the feasibility of implementing a schedule that complies with the proposed 2008 work hour rules. Determine how the schedule impacts resident education, patient continuity, sleep, fatigue, and well being. Methods: Over one month, we prospectively studied eleven interns rotating concurrently on two general pediatric inpatient teams at a large children's hospital. Intervention team interns worked a schedule that complied with the 2008 proposed work hours. Control team interns worked a traditional schedule that complied with the 2003 work hour rules.



Interns recorded daily sleep and work hours. We administered surveys to interns and attendings that assessed impressions of education, patient care, professionalism, and continuity, as well as fatigue, well being, and perceived patient safety. Sleep time was analyzed using a generalized linear model correcting for within subject variability. First survey responses were analyzed using Fischer's exact test. Then we dichotomized survey responses based on baseline data from the entire intern class. Given the small sample size, this pilot study was not powered to find many effects. Results: 100% of interns in the control group and 40% of interns in the intervention group rated their patient continuity as very good or excellent. 67% of control interns compared to 20% of intervention interns rated the quality and amount of education as very good or excellent. 75% of control group attendings compared to 0% of intervention group attendings rated the quality and amount of education as very good or excellent. Only the attendings' report of the amount of education reached statistical significance (p=0.03). Per twenty-four hour period, interns working the traditional schedule averaged 7.5 hours of sleep and interns working the intervention schedule averaged 7.8 hours of sleep (p=0.65). 0% of control interns reported their average fatigue level as very low or low compared to 40% of intervention interns. Ironically, 33% of interns in the control group rated their work-life balance as very poor or poor compared to 80% in the intervention group. 33% of attendings reported control group residents were never or not very likely to make mistakes due to fatigue compared to 75% in the intervention group. No difference reached statistical significance, possibly related to small sample size. Conclusion: It may be feasible to implement the proposed work hour regulations. However, without significant restructuring of our education models, resident education may be negatively affected. Further trials and quality improvement projects should be pursued prior to widespread implementation of the new recommendations to learn what works best to balance educational outcomes. While total sleep time may not be affected, further analysis may reveal a difference in sleep pattern due to the new rules. Larger studies would likely uncover statistical differences in perceptions of fatigue and well being. Despite less fatigue, work-life balance was worse, potentially related to an unanticipated increase in work load intensity.

Platform Presentation 3

RELIABILITY AND VALIDITY OF A NEW MULTISOURCE FEEDBACK EVALUATION TOOL (PEDS360) FOR RESIDENTS

*Su-Ting T. Li, MD, MPH, University of California Davis, Sacramento, CA, Jamal Abedi, PhD, University of California Davis, Davis, CA, Daniel C. West, MD, University of California, San Francisco, San Francisco, CA*

**BACKGROUND:** While multisource feedback evaluations (MSF) may be one of the best ways to evaluate a resident's professionalism (Prof) and interpersonal and communication skills (ICS), the validity and reliability of MSF in pediatric residents is unknown. **METHODS:** We developed a new pediatric-specific patient family, health care professional(HCP), and peer evaluation tool(Peds360) and evaluated 36 residents over 1 year. Construct validity was determined using structural equation modeling (EQS) for 3 domains: Prof, ICS, and patient care (PC). Reliability was assessed using a generalizability study to identify sources of variance and a decision-study to estimate the number of evaluations from each source required to achieve G-coefficients of 0.8. **RESULTS:** Construct validity was high for the Peds360 (patient [Cronbach's alpha = 0.87], HCP [0.90], peer [0.92]). Differences in resident performance accounted for 49% of total-score variance for peer evaluations, but only 1-7% for patient and HCP evaluations. For peer and HCP evaluations, there were large resident-occasion (R-O)(16-20%) and R-O-domain (14-30%) interaction effects. For patient and HCP evaluations, there were large domain effects (62-79%). Sub-analysis of each domain separately improved reliability with patient and HCP evaluations demonstrating large R-O(18-40%) and R-O-question (54-68%) interaction effects. We determined that 440 patient evaluations, 15 HCP evaluations, and 3 peer evaluations are needed for adequate reliability. Patient evaluations were the least reliable with >1000 evaluations needed to evaluate Prof and PC domains and 180 evaluations needed to evaluate ICS. **CONCLUSIONS:** Construct validity of Peds360 was high. The reduced reliability of Prof and PC reflect the complexity of those domains. HCP and peer evaluations were reliable requiring a feasible number of evaluations. Patient evaluations were unreliable, except in the ICS domain, but even then require large numbers of evaluations. Reliability varies greatly depending on the source and domain assessed, which has critically important implications when using MSF.

9:00 – 11:00am

Task Force Meetings (open to all interested attendees)

Curriculum

**Williford C, 3rd Floor**

Chair: Susan Bostwick, MD, New York Presbyterian-Weill Cornell

Vice-Chair: Karin Hillenbrand, East Carolina University, North Carolina

9:00 Welcome and Introductions

9:05 Collaborative Projects

Public Health Curriculum (with AAP) – Alice Kuo

Subinternship Curriculum (with COMSEP)- Susan Bostwick

Resident as Teacher (with AAP and APA)- Barrett Fromme

Online AAP courses (with AAP) – John Mahan

Share Warehouse—Ann Burke

9:45 Curriculum working groups

Medical Home—Adittee Narayan

Night Float Curriculum—Becky Blackenburg, Cindy Ferrell,

Nicole Black

International Health—Rebecca Swan

QI Projects – Lynn Garfunkel, Raj Donthi

10:40 Wrap up:report out from working groups  
Next steps for Curriculum Task Force  
11:00 Adjourn

Evaluation **Boulevards A/B, 2nd Floor**  
Faculty Development **Williford B, 3rd Floor**  
Learning Technology **Williford A, 3rd Floor**  
Research **PDR #2, 3rd Floor**

9:00 – 11:15am

**Coordinators Session**

9:00-9:15

Overview of Task Forces (prior to separate meetings)  
**Waldorf, 3rd Floor**

9:15-10:00

Coordinators' Task Force Meetings (open to all interested attendees)  
Management/Supervision **Grand Tradition, Lobby Level**  
Professional Development **Waldorf, 3rd Floor**  
Tools **Buckinghams, Lobby Level**

10:00-11:15

Workshop  
**Waldorf, 3rd Floor**

Increasing Resident Compliance with Carrots Instead of Sticks  
*Tiffany Nemetz and Gretchen Jones, University of Massachusetts*

As non-clinical, required, resident responsibilities continue to increase, coordinators are faced with the task of monitoring and improving resident compliance while also maintaining positive, open relationships with trainees. Frequently, coordinators are faced with the choice of “the carrot” or “the stick” in an attempt to increase required activity compliance. While punitive measures are at times tempting because they frequently result in at least temporarily increased compliance, they can also alienate the trainees from the residency program leadership, result in decreased job satisfaction, and adversely affect program morale as a whole.

Program leadership at the University of Massachusetts have worked collaboratively and creatively to develop systems that enable residents to become more empowered in terms of tracking tasks and completion, that streamline and reduce tasks and the process of completion, and that strive to foster and maintain positive, supportive, encouraging relationship between residents and program leadership.

This workshop will identify common, non-clinical, required trainee tasks that typically have poor compliance rates. The coordinators will share their practical and concrete approaches to addressing and increasing compliance, many of which can be adopted by any program. Before the conclusion of the workshop, it is hoped that other coordinators will also volunteer to openly share “carrots” or other positive approaches used by their leadership that could be applied to other programs.

11:15 – 11:30am

Break and Exhibits  
**Continental Foyer, Lobby Level**

11:30am – 12:00pm

APPD Presidential Address  
**Continental A/B/C, Lobby Level**  
*Susan Guralnick, MD, APPD President, Director of GME and DIO, Winthrop University Hospital, Mineola, NY*

12:00 – 12:30pm

APPD Award Presentations (Holm, Tunnessen, and Berkowitz Awards)  
**Continental A/B/C, Lobby Level**

12:30 – 2:00pm

Lunch on Own  
Council of Task Force Chairs (CoTFC) Luncheon  
**4A, 4th Floor**  
Council of Regional Chairs (CoRC) Luncheon  
**PDR #2, 3rd Floor**

2:00 – 3:00pm

Invited Presentation

**Continental A/B/C, Lobby Level**

Evidence and Reason: Applying these Principles to US Medical Education

*Susan Skochelak, MD, MPH, Vice President for Medical Education, American Medical Association (AMA)*



3:00 – 4:30pm

Plenary Session

**Continental A/B/C, Lobby Level**

Includes updates from the organizations listed below

- 3:00 - 3:10 Association of Pediatric Program Directors (APPD) – *Susan Guralnick, MD*
- 3:10 - 3:15 APPD LEARN – *Hilary Haftel, MD*
- 3:15 - 3:20 APPD Special Projects – *Dena Hofkosh, MD*
- 3:20 - 3:25 APPD Coordinators Section – *Lorrayne Garcia, C-TAGME and Marlene Keawe*
- 3:25 - 3:30 Residency Review Committee (RRC) – *Stephen Ludwig, MD*
- 3:30 - 3:40 American Board of Pediatrics (ABP) – *Lee Currin*
- 3:40 - 3:45 Federation of Pediatric Organizations (FOPO) – *Theodore C. Sectish, MD*
- 3:45 - 3:50 Initiative for Innovation in Pediatric Education (IPE) – *Carol Carraccio, MD*
- 3:50 - 3:55 American Academy of Pediatrics (AAP) – *Scott Bradbury*
- 3:55 - 4:00 AAP Section on Medical Students, Residents and Fellowship Trainees (SOMSRFT) – *Joshua Smith, MD*
  
- 4:00 - 4:05 Council on Medical Student Education in Pediatrics (COMSEP) – *Jerold C. Woodhead, MD*
  
- 4:05 - 4:10 Council of Pediatric Subspecialties (CoPS) – *James Bale, MD*
- 4:10 - 4:15 TAGME Certification – *Kathy Miller, C-TAGME*
- 4:15 - 4:20 APPD Financial Update – *Joe Gilhooly, MD*
- 4:20 - 4:30 Recognize Outgoing Leaders/Welcome New Leadership – *Susan Guralnick, MD, Robert McGregor, MD and Ann Burke, MD*

4:30 – 5:30pm

Interactive Panel Discussion with Plenary Presenters

**Continental A/B/C, Lobby Level**

5:30 – 6:00pm

Building National eFolio Connectivity: Supporting Both Local Portfolios and Transportability Across the Continuum

**Boulevards, 2nd Floor**

Eight medical schools are engaged in an eFolio pilot with the AAMC, FSMB and NBME, to build technical specifications that promote interoperability of data across disparate medical school and residency portfolio systems. This would allow learners to assemble and view their data confidentially for private learning purposes, and with their express authorization to report out selected portions for regulatory purposes (e.g. licensure, certification, privileging). This session will briefly discuss the status quo of this pilot, and seek input to guide its possible future trajectory.

6:00 – 6:30pm

LEARN Session

**Continental A/B/C, Lobby Level**

Please join the new Director of the APPD Longitudinal Educational Assessment Research Network (LEARN), Hilary Haftel, for a brief informational and strategic planning session to launch LEARN's first collaborative project. Based on feedback from a member survey prior to the meeting, an initial project will be highlighted, potential leaders and collaborators identified, and first steps implemented. (NOTE: This session will be offered twice for your convenience, both Friday and Saturday from 6:00-6:30 pm.)

6:30pm

Coordinators' Social

*Please join your fellow coordinators for dinner at a nearby restaurant.*

**SATURDAY, APRIL 17**

7:00am Registration Begins  
**3rd Floor Foyer**

7:00 – 8:20am Regional breakfasts

Mid-America **Lake Huron, 8th Floor**  
West PA, OH, WV, KY, IN, MI (Hilary Haftel, MD, Abdulla Ghori, MD and Jean Ashley)

Mid-Atlantic **Boulevard C, 2nd Floor**  
South NJ, East PA, DE, MD, Wash DC (Paul Bellino, MD, Nancy Spector, MD, and Stephen Schraith)

Midwest **Lake Michigan, 8th Floor**  
IL, WI, MN, IA, MO, KS, NE, OK (James Nocton, MD, Keith Mann, MD and Tara Shirley)

New England **Grand Traditions, Lobby Level**  
ME, NH, MA, CT, VT, RI (Edwin Zalneraitis, MD and Vanessa Goodwin)

New York/New Jersey **Lake Ontario, 8th Floor**  
NY, Northern NJ (Joel Forman, MD and Beth Woolf)

Southeast **Buckinghams, Lobby Level**  
VA, NC, SC, GA, FL, AL, MS, LA, AR, TN (Karen Ariemma and Mark Bugnitz, MD)

Southwest **Normandie, 2nd Floor**  
TX, AZ (Judy Behnke and William Dirksen, MD)

Western **Lake Erie, 8th Floor**  
CA, NV, OR, WA, HI, CO, NM, UT (Adam Rosenberg and Kathy Morten)

8:30am – 4:00pm **Coordinators Session**  
**Waldorf, 3rd Floor**

8:30 - 8:40 Welcome

8:40 - 10:00 **WORKSHOP**  
Leadership 101 for Coordinators  
*Jeri Whiten, C-TAGME, West Virginia University / Charleston*  
Residency coordinators must have the tools (knowledge, skills and abilities/ attitudes) to assume a leadership role in their program, at the institutional-level, and at the regional and national level. This presentation will explore the basic qualities of leadership, ways to foster teamwork and motivate others. We will also discuss methods for “thinking outside the box,” a quality essential to the success of the program coordinator.

10:00 - 11:15 **WORKSHOP**  
Adjusting Program Needs to the Current Financial Climate  
*Rosemary Munson, C-TAGME, Maine Medical Center and Jeri Whitten, C-TAGME, West Virginia University / Charleston*  
The current financial environment has created an atmosphere where the majority of programs must either cut back or curtail altogether many of their standard practices. This presentation will provide results of a survey conducted with input from all pediatric coordinators who are members of APPD, with comparison information from surgical coordinators. In addition, through interactive discussion, we hope to offer innovation and “best practices” to programs experiencing budget shortfalls or cuts.

11:15 - 12:00 **Networking: Ups & Downs of Navigating the Internet**  
*Moderators: Deb Parsons, C-TAGME, Indiana University School of Medicine and Jaime Bruse, C-TAGME, University of Utah*

12:00 - 1:30	Lunch on Own
1:30 - 2:15	Accreditation Council for Graduate Medical Education (ACGME) <i>Rebecca Miller, SVP, Applications and Data Analysis, ACGME</i>
2:15 - 3:00	Electronic Residency Application Service (ERAS) <i>Angelique Johnson, Senior Specialist, ERAS Communications &amp; Administrative Services / AAMC</i>
3:00 - 3:45	American Board of Pediatrics (ABP) <i>Lee Currin, Director, Credentialing and Examination Administration, ABP</i>
3:45 - 4:00	American Academy of Pediatrics (AAP) <i>Charlette Nunnery, Manager, E-Learning Content and Doris Santos, Member Services Resident Specialist</i>

8:30 – 10:30am **Workshop Session I for Physicians**

Workshop 1

**Joliet, 3rd Floor**

**BEYOND SIMULATION SCENARIOS: HOW DO TEACHERS ASSESS LEARNER PERFORMANCE IN SIMULATED EXERCISES?**

*Sharon Calaman, MD, Nancy Spector, MD, Robert McGregor, MD, St. Christopher's Hospital for Children, Philadelphia, PA, Glenn Stryjewski, MD, AI DuPont Hospital for Children, Wilmington, DE, Clifton Yu, MD, National Capital Consortium Pediatric Residency, Washington, DC, Joseph Lopreiato, MD, National Capital Area Medical Simulation Center, Bethesda, MD*

1. List three tools used to assess performance in simulation exercises 2. Complete assessments in simulated exercise and analyze for a score 3. Modify existing tools for use in their home institution 4. Describe good practices in delivering debriefing sessions and feedback 5. Conduct an evaluation and feedback session after a simulated exercise with learners in the workshop

With work hour limitations and changes in the hospital learning environment, the use of simulation methodologies has grown as a means to teach competencies in several areas including Communication, Patient Care, integration of Medical Knowledge, and Professionalism and Teamwork. Simulation programs can be structured to allow learners to receive feedback on their performance and repeat the learning situation to allow mastery (Practice Based Learning and Improvement). The key to effective usage of such methodologies lies in the evaluation of the exercise and the debriefing afterwards. The evaluation is driven by the learning objectives and the learners involved. Debriefing allows learners to take what they have experienced in the simulated exercise, reflect on it and put it into a context that makes sense to them. In this workshop we will briefly review the simulation methodologies available: human patient simulators, task trainers and standardized patients. A group of expert facilitators from multiple institutions will demonstrate examples of assessment tools and debriefing methods used in each of these simulation learning exercises. Participants will participate in hands on demonstrations with these as they score actual simulated sessions within this workshop. We will discuss challenges in evaluating the team vs. the individuals and collaborate on ways to modify evaluation tools to meet the needs of an educator's own curriculum. We will discuss the principles of how to debrief after a learning exercise. Participants will develop models of implementation in their own institutions and will be provided with a collection of evaluation tools, debriefing guidelines and readings to take back to their own institutions.

Workshop 2

**Boulevard A/B, 2nd Floor**

**A PRACTICAL APPROACH TO ASSESSING THE DIFFICULT LEARNER**

*Mark Vining, MD, University of Massachusetts, Worcester, MA, Angela Beeler, MD, University of Massachusetts, Webster, MA*

Difficult learners are a challenge to teach in the clinical setting. A learner is "difficult" if s/he does not improve despite feedback. Preceptors need tools to assess the nature of the problem, i.e., to do a needs assessment as to whether the learner's behaviors are due to external factors, factors in the residency or medical school program, cognitive problems, or affective issues. In this workshop, we will share the approach to assessing the difficult learner developed by the UMass Center for Academic Achievement over the last 15 years. This practical approach, the Learning Review of Systems, can be used by generalist and sub-specialty faculty to improve medical student and resident performance in a variety of settings. Workshop methods will include: 1) Interactive lecture: Using cases from our experience, we will outline an approach to the assessment of problem learners in a clinical setting, introducing assessment tools; 2) Small group role-play: Participants will use case-vignettes to practice using the tools; 3) Interactive lecture: Time will be spent discussing how to bring ideas from this workshop to faculty at your home institution.

Workshop 3

**Williford C, 3rd Floor**

**A PRECARIOUS EXCHANGE OF CRITICAL INFORMATION: PATIENT SIGN-OUT, SITUATIONAL AWARENESS, AND HOW TO IMPROVE BOTH**

*Linda A. Waggoner-Fountain, MD, Stephen M. Borowitz, MD, University of Virginia, Charlottesville, VA*

With existing ACGME limits on resident work hours, and new IOM duty hour recommendations likely to further limit resident

- work hours, the number of patient-care hand-offs between resident physicians will increase. The transfer of patient care from
- one physician to another physician (sign-out) is a critical skill that is typically not taught in a formal manner. The goals of this
- workshop are to provide attendees with an understanding of the state of the art of physician sign-out, why physician sign-out
- is an important lifetime skill that should be taught and evaluated, and methods that trainees can be taught to perform effective
- and concise patient sign out. There are a variety of ways to perform and teach patient sign out, but regardless of what methods
- are used, effective two way communication is a critical component. The concept of co-orientation with regards to patient care
- exchange will be introduced. Trainees must be taught not only what medical information they must exchange but also how to
- evaluate and communicate the clinical situation at hand, and assure that at the end of the exchange all involved have a shared
- sense of the clinical situation. After an introduction of background information from fields outside medicine and the data
- available from medicine, attendees will break into small groups to identify the critical elements of sign-out and optimal sign-out
- situations & venues. Next attendees will analyze audiotapes of resident sign-out and accompanying sign-out written materials.
- Participants will role play scripted sign-outs based on actual recorded patient sign-outs to emphasize key components of sign-
- out. The group will then review concepts of emotional intelligence and situational awareness. With this additional information,
- attendees will devise their own sign-out based on given patient information with evaluation of these sign-outs by peers.
- Attendees will leave the workshop with practical educational tools related to teaching patient sign-out to residents.

#### Workshop 4

**Williford B, 3rd Floor**

#### TEACHING MEDICAL LEARNERS HOW TO “THINK”: COGNITIVE STRATEGIES TO REDUCE DIAGNOSTIC ERRORS

*Satid Thammasitboon, MD, MHPE, West Virginia University, Morgantown, WV, Geeta Singhal, MD*

The common approach to reduce diagnostic errors has been limited to the health care delivery system and not physicians who make clinical judgments. Clinical judgment is often taught via a hidden curriculum through clinical training in an apprenticeship format between novices and experts. Experts attain proficiency in making valid judgments from life-long experiences, and use a blend of intuition (rapid, unconscious thinking) and metacognition (deliberate, conscious thinking) to solve clinical problems. We propose that we must teach learners how to think like experts to reduce diagnostic errors. Workshop objectives include describing the framework of cognitive errors, expert thinking model and clinical judgment, analyzing diagnostic errors using a cognitive autopsy format, and identifying cognitive strategies that can be used to minimize diagnostic errors. This interactive workshop utilizes a variety of teaching formats based on Kolb’s learning cycle. The workshop will integrate the skills and experiences that the participants will bring. The workshop begins with engagement of participants through a role play that illustrates diagnostic error. A discussion will follow about individual diagnostic errors and experiences. A case-based didactic session will address theory about cognitive errors and the concept of expert thinking using intuitive and metacognitive capabilities to monitor and regulate clinical judgment. An audience-response question and answer system will be used to promote reflection and active participation. In small groups, participants will identify diagnostic errors in a case scenario, perform a cognitive autopsy in a stepwise manner and propose practical solutions for how doctors can use cognition to prevent errors. The participants will brainstorm about strategies to incorporate acquired knowledge into their practices and discuss how to teach cognitive strategies and clinical judgment to medical learners. Finally, participants will develop action plans for bringing back knowledge to their institutions.

#### Workshop 5

**PDR #2, 3rd Floor**

#### CURRICULUM TASK FORCE: INTERACTIVE SYMPOSIUM OF CURRICULAR TOOLS FOR COMMUNICATION SKILLS

*Susan Bostwick, MD, Weill Cornell Medical College/NYPH-Cornell, New York, NY, Karin Hillenbrand, MD, East Carolina University / Pitt County Memorial Hosp, Greenville, NC*

**BACKGROUND:** Curricula in pediatric graduate medical education cover a wide range of material in the traditional competencies of medical knowledge and patient care areas. There are additional competencies that need to be taught to pediatric residents. These additional competencies are possibly more difficult to define, and therefore increasingly time consuming to develop curriculum around. One of the more difficult to teach competencies is Communication Skills. The Curriculum Task Force originally addressed Practice Based Learning and Improvement for 3 years and then Professionalism for 2 years in this symposium. However, given input from members, we feel that more information about Communication Skills curriculum is needed. There continues to be a need for disseminating ideas and strategies about curricula in Communication Skills. **OBJECTIVE:** To share and disseminate curricular ideas and methods utilized in various programs to teach Communication Skills. These ideas and methods will be conveyed to participants via practical examples of curricular practices in real programs. **DESCRIPTION:** The session will follow the style of a platform session with moderators. The time will consist of 5 program directors presenting 15 minute condensed explanations of their curricula to teach the domain of Communication Skills.

Presentation 1: USING P-B-A-R TO FACILITATE DELIBERATE DIAGNOSTIC CLINICAL REASONING DURING CASE PRESENTATIONS

Presentation 2: KNOWLEDGE AND ATTITUDES ON HANDOFFS OF PEDIATRIC RESIDENTS

Presentation 3: A QUALITY IMPROVEMENT PROJECT TO ENHANCE PEDIATRIC RESIDENT MEDICAL RECORD DOCUMENTATION

Presentation 4: IMPROVING ADOLESCENT GYNECOLOGIC CARE AND CONTRACEPTIVE COUNSELING: A RESIDENT QI PROJECT

Presentation 5: ASSESSING ‘CENTEREDNESS’ OF PEDIATRIC RESIDENTS PRIOR TO A NEW CURRICULUM

## Workshop 6

**Marquette, 3rd Floor**

### MEASUREMENT TOOLS TO SUPPORT EDUCATIONAL INNOVATION (PART I): IDENTIFYING VALID MEASURABLE OUTCOMES AS A FIRST STEP TOWARD EFFECTIVE LEARNER AND PROGRAM EVALUATION

*Su-Ting T. Li, MD, MPH, University of California Davis, Sacramento, CA, Daniel C. West, MD, University of California San Francisco, San Francisco, CA*

How do you know that a resident is ready for practice without direct supervision? How do you know that the innovative program you developed is successful? Evaluating a trainee's clinical competence or an innovative educational program's efficacy is a significant challenge. An essential step in this process is defining important measurable outcomes and identifying valid ways to measure them. Without this step, it is not possible to effectively evaluate learners or new educational innovations. This workshop is designed to help medical educators achieve this essential first step by applying a paradigm that can be used to define important outcomes and tools to measure them. The workshop will begin with interactive presentations on the process of identifying measurable outcomes and the purpose of measurement tools, with specific illustrative examples from medical education. The presenters will then describe the essential elements of validity and specific steps to ensure the creation of a valid measurement tool. Participants will work in facilitated small groups using a detailed planning worksheet to develop a plan to design their own valid measurement tool. At the conclusion of the workshop, participants will have a basic understanding of the elements of validity, a broadly useful approach to identifying measurable outcomes and testing validity, and a plan for developing their own valid measurement tool at their home institution. Participants will be invited to attend a second workshop focusing on designing and testing reliable measurement tools. The workshop will close with a question/answer period, summary, and annotated bibliography of references that includes published examples of measurement tools from clinical research and education and books and articles that describe development of measurement tools.

## Workshop 7

**Williford A, 3rd Floor**

### WHEN KNOWLEDGE ISN'T ENOUGH: PRACTICAL EXERCISES FOR REMEDIATING PROFESSIONALISM, COMMUNICATION, AND CLINICAL REASONING

*Wendy L. Hobson-Rohrer, MD, MSPH, University of Utah/Primary Children's Medical Center, Salt Lake City, UT; Rebecca L. Blankenburg, MD, Lucile Packard Children's Hospital, Stanford, Palo Alto, CA, Ann E. Burke, MD, Dayton Children's Medical Center, Dayton, OH, Nicole D. Marsico, MD, Eva M. Delgado, MD, John D. Peoples, MD, Lindsay M. Jackson, MD, Lucile Packard Children's Hospital, Stanford, Palo Alto, CA*

Background: When did you last encounter a problem learner? What did you do to help? And what is your role as a program leader? Although helping trainees improve their medical knowledge can be relatively straightforward, issues related to professionalism, communication skills, and clinical reasoning are particularly challenging to remediate. Furthermore, the role of the program leadership vs. the faculty-at-large is very different in these difficult situations. Program leaders are faced not only with identifying and diagnosing problem learners, but also with creating successful remediation plans, and yet many feel unprepared to do so. Description: In this interactive workshop using clinical vignettes, video clips, and small group exercises, there will be a brief interactive discussion centering on key elements of identifying and diagnosing problem learners with the program leadership role at the forefront. The majority of the workshop will be in small groups, concentrating on providing participants with hands-on, practical experience using a variety of tools and strategies to enhance the skills of learners. Legal issues, institutional requirements, and documentation of the process will also be addressed. Participants will share their own challenges, solutions, and ideas, and leave with a complete workbook of tools with step by step instructions/ideas to implement in their own programs.

## Workshop 8

**Astoria, 3rd Floor**

### BRINGING STRUCTURE TO CURRICULAR INNOVATIONS IN COMMUNITY PEDIATRICS AND ADVOCACY TRAINING: INTEGRATING GOALS, ACTIVITIES, AND COMPETENCIES

*Benjamin D. Hoffman, MD, University of New Mexico, Albuquerque, NM, Amy J. Starmer, MD, Children's Hospital Boston, Boston, MA, Jeff Kaczorowski, MD, AAP Community Pediatrics Training Initiative, Rochester, NY, Anda K. Kuo, MD, UCSF, SF, CA, Beth Rezet, MD, The Children's Hospital of Philadelphia, Philadelphia, PA, Michael Warren, MD, MPH, Vanderbilt University School of Medicine, Nashville, TN, Susan Guralnick, MD, Director of GME and DIO, Winthrop University Hospital, Mineola, NY, Monique Evelyn, MA, American Academy of Pediatrics, Elk Grove Village, IL*

The ACGME requires that all pediatric residency training programs must incorporate training in advocacy and community pediatrics, but getting buy-in and curricular time, and developing an effective curriculum can pose significant barriers. Beyond fulfilling requirements, pediatric training programs, departments, faculty and residents also have many rewards to gain from this training. This workshop will assist participants with an interest in developing curricula in advocacy training/ community pediatrics in their programs by : 1) providing a brief overview of data demonstrating the importance of community pediatrics and advocacy training in medical education 2) using examples of sustainable and easily implemented curricular approaches and tools successfully employed in residency programs to demonstrate how training can empower trainees to become effective advocates for children from the individual to the systems-level 3) demonstrating with these examples how such curricula can document learner competence in ACGME core competencies to help meet RRC requirements and facilitate accreditation 4) sharing lessons learned from trainees and faculty at institutions where such programs have flourished. Participants will work with facilitators to: 1) develop strategies for implementing effective and easily implementable experiences for learners in advocacy and community pediatrics 2) practice applying tested curricular tools to their own

- programs 3) identify areas within their own programs where ACGME competencies can be demonstrated and apply tools to better document these competencies and apply these to RRC requirements, including in preparation of the RRC PIF 4) Share best-practice competencies developed for community pediatrics and advocacy training by the AAP Community Pediatrics Training Initiative.

• 10:30 – 11:00am                      Break    **Continental Foyer, Lobby Level**

• 11:00am – 1:00pm                      Workshop Session II for Physicians    **Williford B, 3rd Floor**

• Workshop 9

• **WHY OUR BEST EFFORTS AND OUR BEST IDEAS SOMETIMES FAIL: LEADING CHANGE AND THE USE OF THE ADMINISTRATIVE/EDUCATIONAL M&M**

• *Hilary M. Haftel, MD, MHPE, Terry Platchek, MD, Alicia Prisco, MD, University of Michigan, Ann Arbor, MI*

• Implementing change is one of the key responsibilities of an educator and leader. Yet, some innovations never succeed into implementation or are never ingrained within the culture of the institution. Indeed, despite our best intentions, some efforts at change are met with frank disaster. The ability to reflect on our failures, either in administration, curricular innovation, or other educational change efforts, is critical to understanding the organizations in which we work and to improving our leadership skills and our ability to affect change in the future. This workshop will provide participants with an understanding of Kotter's model of Leading Change, and how this model can be applied to educational administration. We will use the format of the Morbidity and Mortality Conference, a process-based educational conference, as a tool to reflect on administrative and educational mishaps. The participants will be provided a framework, which includes both Kotter's model and an Organizational Behavior framework (Bolman and Deal's Four Frame model) to apply to a provided administrative M&M case. Using small-group work and large-group facilitated discussion, the participants will determine why the provided case did not succeed and identify strategies that could have changed the outcome. The participants will then break into small groups to share their own upcoming innovation projects and apply the provided framework to develop an implementation strategy for their own project that will be aligned with their own organizational culture and thus improve the chance of successful implementation. At the end of the workshop, each participant will be provided resource materials and will have developed a strategic outline for their own project for use at their home institutions.

• Workshop 10    **Boulevard A/B, 2nd Floor**

• **MAKING QUALITY IMPROVEMENT (QI) MEANINGFUL FOR PEDIATRIC RESIDENTS USING CONTINUITY CLINIC AS A SITE FOR QI**

• *Mary Kay Kuzma, MD, Raj Donthi, MD, John D. Mahan, MD, Nationwide Children's/OSU, Columbus, OH*

• Making Quality Improvement (QI) Meaningful for Pediatric Residents Using Continuity Clinic as a Site for QI OBJECTIVES

• -- By the end of the workshop, participants will be able to: 1. Describe basic elements of a pediatric resident or fellow QI project from initial QI concepts to implementation and dissemination of a QI project by the trainee 2. Identify strengths and weakness of using a single clinical site (such as continuity clinic) as the focus for resident QI projects 3. Define potential value to a training program and medical institution of pediatric resident/fellow QI projects that are tied to program and institution QI efforts 4. Develop a QI program format for pediatric residents or fellows that can be instituted in your center

• **DESCRIPTION**

• The workshop will start by asking participants to identify the top challenges they face in developing effective pediatric resident/fellow QI projects in their own institutions. The participants will then be presented the Pediatric Resident Continuity Clinic QI model developed at Nationwide Children's Hospital as an example of a QI format for trainees. In particular, the instructional strategies and formats used to guide residents through the process will be demonstrated. Examples of practical benefits of this program will be highlighted by description of outcomes from 4 specific projects. Methods to incorporate these projects into continuous improvement efforts in the training program and medical center will be discussed and additional options applicable to the participants' own institutions defined. Small group sessions will provide opportunities for participants to discuss and develop QI models that could be applicable at their own institutions. Finally, the groups will reconvene to share ideas and discuss opportunities for implementing single clinical site QI projects, such as in resident continuity clinic, in their own centers.

• Workshop 11    **Astoria, 3rd Floor**

• **TOOLS TO SAVE TIME: BRIGHT FUTURES TOOLKIT SUPPORTS PRACTICE AND QUALITY IMPROVEMENT!**

• *Gregory S. Blaschke, MD MPH, OHSU, Portland, OR, Christine Johnson, MD, Naval Medical Center San Diego, San Diego, CA, Ann E. Burke, MD, Wright State University, Dayton, OH, Franklin Trimm, MD, University of South Alabama, Mobile, AL, Beth Rezet, MD, CHOP, Philadelphia, PA*

• Background: The 2007 AAP Bright Futures Guidelines, 3rd Edition provides content for preventive services for children and adolescents from birth to age 21. In 2009 a new Bright Futures Tool and Resource Kit was released which can be used to assist residents in implementing preventive service guidelines in measurable ways. Improvements to content and delivery of well child care are well supported in the literature, with only 38% of children receiving recommended well child care; The Guideline, Tools and related resources can assist residents develop health supervision knowledge and skills through experiential learning in ambulatory practice. In addition, by developing quality improvement projects related to health



supervision visits, program directors and faculty can document competency assessment of ACGME RC required practice based learning and improvement (PBLI) for individual and groups of residents. Objectives: 1. Understand how to use Bright Futures philosophy, guidelines and tools to implement high quality well child care 2. Share ways to incorporate Bright Futures materials into your residency curriculum while documenting competency 3. Discuss how to utilize Bright Futures to document quality improvement and PBLI Methods: Following a brief introduction to Bright Futures, 3rd ed. and the companion Toolkit, participants will break into groups focusing on one aspect of well child care to discuss the application of the Toolkit materials to quality improvement for practice and resident education. Each group will have access to tools, measures, and change strategies addressing a specific topic such as: assessing parental concern, oral health (birth to three), developmental services (birth to five), and school age and adolescent strength based risk screening that can be implemented in continuity clinic. This workshop will provide a unique opportunity to review, discuss, brainstorm and create specific initial designs to use the Bright Futures Toolkit to meet individual program s goals in PBL&I and QI training.

#### Workshop 12

**Williford C, 3rd Floor**

##### MCCHIEF ROUNDS: A NOVEL FORMAT

*Matthew B. McDonald, MD, Katherine Gargiulo, MD, St. Christopher's Hospital for Children, Nancy Spector, MD, Sharon Calaman, MD, Robert S. McGregor, MD, St. Christopher's Hospital for Children, Philadelphia, PA*

Providing teaching conferences is a professional responsibility of residency program faculty. The ideal format is not defined. Challenges include addressing a variety of learning styles and engaging multiple levels of learners in a short time frame. In many training programs, chief rounds (chief resident led educational activity) is a unique opportunity to explore novel and effective approaches to education. The facilitators will present methods that will maximize participation, engage a variety of learning styles and influence commitment to change across a continuum of medical training levels. The presenters will engage participants through a variety of interactive formats including case based work, competitions, utilization of creative handouts and technology. In particular, the audience will participate in a role play in a novel format affectionately known as McChief Rounds, a progressive, interactive team based activity that allows maximum interaction for all level of learners. In the role play, teams are grouped according to level of medical training and the number of questions permitted per team decreases as the level of training increases. In addition, the tasks assigned vary by level of training. This format fosters poignant, relevant, discriminating questioning often modeled by the more experienced participants while the majority of discussion is maintained by resident level learners. Large group discussion will focus on teaching chief residents and faculty how to facilitate teaching activities, engage all learners, limit disruption by faculty and choose a modality that best matches the learning objectives. Also, we will discuss the use of additional modalities to reinforce teaching points such as board type questions and simulation scenarios. The large group will also develop strategies to measure success and efficacy of these modalities.

#### Workshop 13

**Joliet, 3rd Floor**

##### TO ERR IS HUMAN, TO REFLECT DIVINE

*Susan Guralnick, MD, Director of GME and DIO, Winthrop University Hospital, Mineola, NY, Robyn Blair, MD, Gary Fernando, MD, Stony Brook University, Stony Brook, NY*

In this era there is a heightened awareness of medical error and an appropriate emphasis on patient safety. This presents a new arena for medical educators, the incorporation of this complex and subtle curriculum into an already busy residency training program. Continuous critical reflection on one s professional practice is an important behavior leading to expertise. The literature clearly supports the concept that clinical reasoning skills can be improved through Reflective Practice, Deliberate Practice and training in the concepts of Diagnostic Error. At Stony Brook University we have introduced a series of workshops during which residents learn and practice these skills. During this session the leaders will briefly educate the participants about the concepts of Diagnostic Error, Reflective Practice and Deliberate Practice. The participants will then break into small groups and move through several short interactive exercises, facilitated by workshop faculty, that can be applied in their training programs. Finally, the large group will share how and where these exercises can be integrated into their training programs, and discuss solutions to perceived barriers. Workshop participants will leave with the materials necessary to begin a similar program at their home institution.

#### Workshop 14

**Williford A, 3rd Floor**

##### TO CLICK OR NOT TO CLICK: NO LONGER A QUESTION

*Keith J. Mann, MD, Children's Mercy Hospital, Ross E. Newman, DO, Childrens Mercy, Amber M. Hoffman, MD, Children's Mercy Hospital and Clinics, Lindsey Albenberg, DO, Childrens Mercy, Denise Bratcher, DO, Children's Mercy Hospital, Sarah McCormick, DO, UMKC, Kansas City, MO*

To Click or Not to Click: No Longer a Question Introduction: Audience response systems (ARS) or clickers are instructional technologies that allow teachers to rapidly collect and analyze student responses to questions during a lecture. They are an increasingly popular tool in medical education for engaging residents, promoting interactive lectures, gathering real-time feedback, pre-assessing knowledge, assessing residents' understanding of didactic material, and promoting peer learning. We will review the basics of audience response systems and teach the participants the multiple uses through highly interactive and hands on demonstrations. Objectives: 1)Identify the key components of an audience response system 2)Recognize the multiple ways an audience response system can enhance teaching and learning 3)Become facile at incorporating audience response system slides and concepts into a presentation 4)Name at least one non-teaching related use of an audience

- response system 5) Apply the learned skills through the development of a short lecture using ARS technology Workshop
- Format: We will begin by using the ARS to assess the knowledge of the group. We will subsequently gear the workshop to the level and interest of the audience in two different ways. Introductory topics we will cover in varying depth pending the pre-assessment will include a basic review of ARS, the evidence behind their use in education, the adult learning theory necessary to fully appreciate their use, the multiple uses in medical education, and the multiple uses in the administrative component of residency programs. Audience response technology will be used throughout to highlight the benefits of the technology. The second half of the workshop will focus on uses in medical education. We will break the participants up into small groups based upon their skill level, specific interests, and whether or not they currently have an audience response system in their program. Through hands on demonstration and interactive small group discussion, we will guide participants through the creation of a lecture using various aspects of the technology.

Workshop 15

**Marquette, 3rd Floor**

**MEASUREMENT TOOLS TO SUPPORT EDUCATIONAL INNOVATION (PART II): TESTING THE RELIABILITY OF MEASUREMENT TOOLS TO EVALUATE LEARNER AND PROGRAM PERFORMANCE**

*Su-Ting T. Li, MD, MPH, University of California Davis, Sacramento, CA, Daniel C. West, MD, University of California San Francisco, San Francisco, CA*

Now that you've developed a valid tool to measure a learner's competence or the effect of an educational innovation in our first workshop, "Measurement Tools to Support Educational Innovation (Part I): Identifying Valid Measurable Outcomes as a First Step Toward Effective Learner and Program Evaluation," how do you know that your valid measure is also reliable? This workshop is designed to help medical educators design and test the reliability of their measurement tools. The workshop will begin with interactive presentations on the purpose and value of reliability in the use of measurement tools, with specific illustrative examples from medical education. The presenters will then discuss the basic elements of measurement theory as it relates to reliability and outline specific steps to design and test the reliability of a measurement tool. The emphasis will be on broad principles, rather than detailed statistical formulas. Using a planning worksheet, participants will work in guided small-groups to develop a plan to test the reliability of their own measurement tool. At the conclusion of the workshop, participants will have a basic understanding of the elements of reliability and a plan for developing their own measurement tool and testing its reliability at their home institution. The workshop will close with a question/answer period, summary, and annotated bibliography of references that includes published examples of measurement tools from clinical research and education and books and articles that describe development of measurement tools. This workshop is particularly relevant to educators who want to implement educational innovations in their training programs.

Workshop 16

**PDR #2, 2nd Floor**

**CURRICULUM REVIEW PROCESS: INNOVATIONS FOR LEARNING ABOUT NORMAL DEVELOPMENT.**

*Virginia Niebuhr, PhD, University Texas Med Branch, Marney Gundlach, MD, MPH, MEd, University Texas Med Branch, Cassandra Pruitt, MD, Univ. Texas Med Branch, Galveston, TX*

**WORKSHOP RATIONALE:** This workshop is designed for participants to learn about innovative methods to teach Normal Development/Health Supervision and/or to learn about curriculum review, irrespective of content area. We will present our Normal Development/Health Supervision curriculum as a nidus for discussion, highlighting innovative elements; and we will present a framework for a curriculum review process. **WORKSHOP OBJECTIVES:** Participants will examine the curriculum objectives (what do residents need to learn?); experience selected activities from the curriculum; critique strengths and weaknesses of the curriculum; assess the value of independent learning in residency education; and analyze the curriculum review process. **WORKSHOP METHODS:** A curriculum overview will be presented at the podium and in handout materials, then participants will engage in a series of small group activities to experience components of the curriculum and to practice curriculum review. Activities include critique of objectives for one module, simulation of working through a module, role-play of a counseling activity, and practicing a reflective activity. **OVERVIEW OF PRESENTED CURRICULUM:** Our Normal Development/Health Supervision curriculum includes the following elements: underlying premises, a set of learning objectives, combined clinical experiences and independent learning experiences, reflections, and an evaluation plan. Curriculum goals are for residents to (a) increase knowledge of normal development and improve skills for health supervision, (b) learn where to find answers to parents' questions, and (c) practice counseling. Unique elements are that the curriculum and rotation are distinctly separate from our program's abnormal behavioral-developmental curriculum/rotation, and that residents engage in much independent learning as they complete 15 age and topic focused modules, each with a set of objectives, resources, and questions. Learning comes from figuring out answers to questions that parents ask about their developing child.

1:00 – 2:30pm

Lunch on Own

2:30 – 4:30pm

Mentoring Session for Physicians

**Williford C, 3rd Floor**

**The NEW APPD Mentoring Program – Two Mentoring Options Offered to those who pre-registered for this session**

In response to requests made by the APPD membership, the APPD Mentorship Program has been revised. The

New Mentoring Program is designed to support educators in meeting their career, program, and personal goals related to residency education. Two modes of mentoring will be offered at the 2010 Spring Meeting:

- Traditional Dyadic Mentoring
- Facilitated Peer Group Mentoring

In traditional dyadic mentoring, one mentor is matched with one mentee based on common interests and often, geography. The dyad participates in a bi-directional relationship. In facilitated peer group mentoring, a senior mentor is assigned to a small group of mentees. The group members serve as peer mentors to each other while working on common interests or projects. The process is facilitated by the senior mentor, often a content expert. An example of facilitated peer group mentorship includes the design and presentation of the “Leading from the Middle” workshops at the national meetings, designed by a group of Associate Program Directors.

If you are interested in participating, please check one of the two boxes on the registration form (page 42) for this session. You will choose to participate as a mentor or mentee and choose the mode (Traditional Dyadic or Facilitated Peer Group Mentoring).

The leadership of the APPD Mentoring Program will be in contact with you prior to the meeting in April. In order to take part in this program, we ask that you register by March 1st.

4:30 – 6:00pm

Poster Session

**Continental A/B/C, Lobby Level**

### **Descriptive Posters**

Poster Number 1

**INTEGRATED BOARD REVIEW CURRICULUM IS ASSOCIATED WITH IMPROVED FIRST-TIME PASS RATES ON THE PEDIATRIC BOARD CERTIFICATION EXAMINATION**

*Jennifer A. Hudson, MD, Kerry K. Sease, MD, Jonathan E. Markowitz, MD, Greenville Hospital System/USC School of Medicine, Greenville, SC*

Objective The aim of this study was to measure the effect of an integrated, comprehensive board review curriculum during pediatric residency on first-time pass rates for the American Board of Pediatrics (ABP) certification examination. Methods Resident graduates for three years before and three years after the curricular change were evaluated. The curriculum included system-specific lectures to complement assigned readings over 18 months. Every 4-weeks, a 60-question PREP test and group test review were completed for a system. We examined first-year (PL-1) and third-year (PL-3) pediatric national in-training examination (ITE) scores as well as first-time ABP certification examination pass rates to determine the effect of our curriculum on standardized test results. Results We evaluated a total of 53 residents; 26 trained pre-curriculum (group 1) and 27 completed the curriculum (group 2) during residency. Of group 1, 18/26 (69%) passed the ABP certification examination on the first try. Of group 2, 27/27 (100%) have passed on the first try. The change in first-time pass rates was determined to be statistically significant ( $p = 0.002$ .) To control for the difference in knowledge levels before residency training, we also evaluated PL-1 and PL-3 ITE scores for both groups. Compared with group 2, residents in group 1 had slightly lower Z-scores at the PL-1 level and much lower Z-scores at the PL-3 level. In a logistic model, both a high PL-1 ITE score and being in the interventional learning group (group 2) were independently associated with passing the ABP certification examination on the first try. Conclusion We conclude that pediatric medical knowledge acquisition both before residency training and during residency training influence ABP certification examination first-time pass rates. Without a curriculum that provides a comprehensive review of necessary medical knowledge during residency, graduates who have low ITE scores are at higher risk of failing the ABP certification examination on the first try.

Poster Number 2

**DOULAS AND RESIDENTS TOGETHER (DART) PROGRAM: NOVEL EDUCATIONAL APPROACH TO TEACH BREASTFEEDING AND CULTURAL COMPETENCY TO RESIDENTS**

*Jennifer C. Takagishi, MD, Sharon M. Dabrow, MD, University of South Florida, Tampa, FL*

Doulas are experienced professionals who emotionally support mothers prenatally, natally and post-partum. Doulas consider breastfeeding education important to their work. Pediatric residents usually receive this education in the newborn nursery and outpatient clinics, but not in the patient's home. This project evaluated the impact on residents' knowledge of breastfeeding and cultural competency after exposure to community outreach doulas during prenatal breastfeeding classes and home visits. During a one month, community-based advocacy rotation between August 2007 and August 2009, residents were enrolled in the DART Program. Residents reviewed a doula website to learn about their profession, and completed an on-line cultural competency module. They then attended a prenatal class with doulas and mothers in an obstetric clinic for low income, predominantly minority women. Subsequently, residents scheduled a postpartum home visit with a doula. At the rotation's conclusion, residents completed a written questionnaire about their experiences. Residents' comments were analyzed for common themes. Twenty one of 22 enrolled residents noted improved knowledge of breastfeeding, including enhanced ability to teach it. All residents learned about community resources and economic and familial obstacles facing these families. Four of

- six who attended home visits wanted to act more as observer than teacher. Another was not allowed inside the patient's home, but talked to her outside. One "loved the home visit." Sixteen were unable to attend a home visit due to scheduling conflicts or misunderstood rotation directions. Two desired more opportunities to visit clients' homes, and several wanted more time to reschedule missed home visits. Thus, linking pediatric residents with community based doulas is a novel educational approach to teach breastfeeding and enhance cultural competency taught on-line. Scheduling conflicts and clarified expectations of home visit goals will need to be addressed to develop this program further.

#### Poster Number 3

##### **SURFBOARDS (STRATEGIC UNIFIED REGIMEN FOR PASSING THE BOARDS): CREATING A UNIQUE AND EFFECTIVE BOARD EXAMINATION PREPARATION CURRICULUM**

*Michael C. Weisgerber, MD, MS, Jay Nocton, MD, Utpala Das, MD, Aaron Weiss, MD, Elizabeth Paulson, MD, Medical College of Wisconsin, Milwaukee, WI*

Background: Several factors may hinder an individual's ability to perform well on the American Board of Pediatrics certifying examination. These include poor test taking skills, deficient knowledge, and inadequate preparation. The multiple demands of residency may prevent some residents from adequately preparing for the examination. Methods: We developed a curriculum to: 1) improve test taking skills; 2) increase knowledge in the specific content areas designated by the American Board of Pediatrics; and 3) provide an enjoyable format for residents to participate in board examination preparation. The SURFboards program includes a monthly competition in which residents answer questions using an audience response system. Residents compete individually as well as in teams. The content of each month's questions is derived from the topics in the previous month's Pediatrics in Review (PIR) publication. During a one-hour session, the residents answer questions under time constraints. Invited content experts then review the answers, discussing each question. Individual scores and team scores are calculated and each month the team with the highest score receives specially designed lapel pins. The cumulative highest individual scorer is recognized with a "leader's jersey", worn during each competition. Residents have been surveyed regarding their reading and preparation behavior and satisfaction with the program. Results: 89% of residents rate the quality as very good or excellent. 100% strongly agree or agree they enjoy the format. There has been a significant change in reading behavior. Only 23% reported reading PIR often or every month prior to this program versus 62% after the initiation of SURFboards. 47% report re-reading PIR after each session and 37% pursue additional reading. Conclusions: The SURFboards program has been well-received by our residents and has resulted in significant behavior change. Further follow-up is planned to evaluate how effective the program will be in improving the performance of our graduates on the board certifying examination.

#### Poster Number 4

##### **DEVELOPING LEADERS IN CHILD HEALTH: EARLY OUTCOMES OF THE UCSF PLUS PROGRAM**

*Anda K. Kuo, MD, UCSF, San Francisco, CA, Robert K. Kamei, MD, Duke-NUS Graduate Medical School, Singapore, Singapore, Daniel C. West, MD, UCSF, San Francisco, CA*

Background: With growing health disparities and soaring health care costs, there is a clear need for physician leaders. Residency training, however, does not traditionally focus on developing the necessary leadership skills. The Pediatric Leadership for the Underserved (PLUS) program, developed in 2004 at the University California San Francisco (UCSF), incorporates leadership development into the framework of standard clinical training. PLUS focuses on three curricular pillars: critical thinking, community engagement and leadership. Four residents are accepted into PLUS each year through a separate match. The curriculum includes an annual PLUS rotation and periodic half-day seminars during clinical rotations. One requirement is for trainees to complete a child health project. Structured advising pods consist of faculty and a peer from each training year. To assess outcomes, trainees completed a questionnaire on entering and exiting PLUS. Results: Of the 24 residents, thus far, 38% entered the program with additional relevant degrees (e.g. MPH, MPA, JD), and 20% self-identify as under-represented minorities. Participants reported a high degree of satisfaction with their training, and most reported a moderate to significantly positive impact of the PLUS experience on their overall clinical education. Early outcomes include: 10 project grants and local and national trainee awards for leadership and commitment to community. Of 18 graduates, 7 pursued fellowship training in research, policy or public health while 7 who went into practice are in positions of leadership. Key lessons learned include: the importance of emphasizing a skill-based, rather than a topic-based, curriculum, linking the leadership curriculum explicitly to the clinical experiences, and balancing a specialized program in the context of a larger training program. Conclusion: Our experience with PLUS has served as a successful pilot for other educational tracks in our categorical program and demonstrates the potential of explicitly incorporating leadership skills into clinical training regardless of one's career goals.

#### Poster Number 5

##### **LONGITUDINAL ELECTIVE IN COMMUNITY ORIENTED PRIMARY CARE FOR PEDIATRIC, INTERNAL MEDICINE, AND MED-PEDS RESIDENTS**

*Ariel S. Frey, MD, MAT, MGHfC Pediatric Residency Program, Susan R. Hata, MD, MGH Med-Peds Residency Program, Shannon E. Scott-Vernaglia, MD, MGHfC Pediatric Residency Program, Jeffrey P. Collins, MD, MA, MGH Center for Community Health Improvement, Boston, MA*

Background: Given the changing face of chronic disease, physicians must be able to enter the workforce not only with the ability to care for individual patients, but also to work on the community level to improve baseline levels of health. Currently,

residents receive little education in community-oriented primary care (COPC) or community-based participatory research (CBPR), two recognized methods for engaging communities in health improvement. As well, residents are rarely given the opportunity to collaborate with individuals in different medical specialties to bring their combined expertise to bear on issues of chronic disease. The Longitudinal Elective in COPC for pediatric, internal medicine, and med-peds residents was created to teach a curriculum in COPC and CBPR and to allow for collaboration across medical disciplines. Project Design: The elective begins with a 2 week didactic session which explores the components of COPC and CBPR through foundational lectures and case studies. It is funded in part by a Community Pediatrics Training Initiative Grant through the AAP. Speakers for the didactic session include individuals with backgrounds in medicine, public health, social work, and public policy. After the didactic session, participating residents choose an on-going CBPR/COPC project to work on over the course of 1-2 years to learn how to effectively do COPC/CBPR under the mentorship of individuals with expertise in these methods. The residents will, at the completion of their projects, present a poster on their work to the larger resident community. Results: Early results from surveys of participating residents indicate that they gained knowledge of and comfort with the components of COPC and CBPR from the didactic session. They stated that they were excited at having the opportunity to do a project while in residency. They also indicated that the didactic session had changed their perceptions of what they see themselves doing professionally after residency such that, after the didactic session, they are more interested in making COPC/CBPR part of their careers.

#### Poster Number 6

##### DEVELOPING A RESIDENT DRIVEN PEDIATRIC LEADERSHIP CURRICULUM

*Heather L. Helton, MD, Beatrice G. Zepeda, MD, James VanBeynen, MD, William Bush, MD, Karen M. Dahl, MD, David Dickens, MD, Jeri Kessenich, MD, MSU, GRMERC, Helen DeVos Children's Hospital, Grand Rapids, MI*

**BACKGROUND:** Physicians fill leadership positions throughout their careers. For a physician, the role of leader may include heading up a treatment team, teaching medical students, educating patients, and advocating in the community. In other industries, leadership training is an essential step in career development. **OBJECTIVE:** To develop a resident driven three year longitudinal leadership curriculum that provides education and exposure to skills that will enable pediatric residents to become more effective leaders. **METHODS/RESULTS:** Through a focus group of residents, we developed a list of topics that residents deemed important in leadership education. Our steering committee for leadership curriculum development (community and hospital based faculty and residents), defined the following areas: core leadership skills, communication, practical management skills, career development and professionalism. We then developed a curriculum consisting of didactic lectures, panel discussions and training-year specific skills sessions to address those specific areas. Topics are delivered during lecture hours, evening sessions and resident retreats. Lecturers include hospital and community-based physicians, professionals with expertise in crisis management, and residents. Utilizing material developed for the business world such as The Leadership Challenge, Crucial Conversations, emotional intelligence literature, the on-line Pedialink® resource from the Pediatric Leadership Alliance, and medical professionalism material, we have tailored our curriculum for physicians-in-training. To evaluate the effectiveness of our curriculum we added leadership competency questions to our resident evaluations by faculty. **CONCLUSIONS:** Leadership training during residency is important for physician career development. Our pediatric residency program has developed a three year longitudinal leadership curriculum that engages residents by including them in the development, delivery, and evaluation of topics. Further study is needed to determine whether participation in this type of curriculum during residency gives pediatricians better leadership skills.

#### Poster Number 7

##### NEEDS ASSESSMENT FOR RESIDENT EDUCATION IN PRIMARY CARE

*Adam A. Rosenberg, MD, M.D. Jones, MD, Carol Kamin, EdD, University of Colorado Denver, Aurora, Co*

The current pediatric training model of almost exclusive one-month experiences fragments training and mentor relationships. This approach may prepare residents well for some careers, but not for others. Therefore, we wanted to develop an education intervention with a 4 month longitudinal career-weighted learning experience. As an initial step, we sought to better understand ways to improve the training program for graduates choosing a career in general pediatrics. **Methods:** 1) Collection of 5 years of survey data from program graduates who are practicing general pediatrics - collected after their 3rd year in practice. 2) Focus groups with 8 different pediatric practices (6 metro and 2 rural) were conducted. Two consistent interviewers visited each practice. Sessions were audiotaped and transcribed for analysis. Statements from practitioners were divided into single units that depicted a single concept. Using an inductive approach, these units were grouped into similar conceptual categories until we felt confident of the dominant themes. **Results:** The graduate survey had a 75% response rate of whom 44% went into primary care. Overall, they felt well trained to identify a sick child, but identified weaknesses in behavior and development, mental health and practice management knowledge. The focus groups identified curricular needs in mental health, behavioral medicine, practice management, orthopedics, procedures and phone triage. Mental health issues were identified by all as the leading curricular short coming when they entered practice. Curriculum structure needs identified were a lack of continuity of care and the need for additional training during their first six months in practice. This was especially true for the non metro provider. All practices felt continuity of care could not be taught in a once per week continuity of clinic model. **Conclusions:** Our survey results and focus groups identified areas of need for the resident interested in a primary care career. This information has lead us to design an educational intervention that will allow residents interested in primary care to have a 4 immersion experience during residency.

• **Poster Number 8**

• **A NOVEL APPROACH TO RESIDENTS' SCHOLARLY ACTIVITIES (RRC REQUIREMENT IV B)**

• *Fernanda E. Kupferman, MD, Rusly Harsono, MD, David Di John, MD, Lily Q. Lew, MD, Pediatrics, Flushing, NY, Louis H. Primavera, PhD, School of Health Science, Bay Shore, NY, Susana Rapaport, MD, Pediatrics, Flushing, NY*

• Introduction ACGME requires residents to participate in scholarly activities such as research that will contribute to their comprehensive lifelong learning experience. Hypothesis Our novel research curriculum (NRC) improves residents' scholarly activities and fulfills their research project requirement. The NRC In 2007, a research team leader was appointed to develop NRC, teach and supervise all research activities. The NRC includes early involvement of residents in post graduate year (PGY) 1 level into research activities: literature review, research question, mentor selection, objective, hypothesis, study design, data management, basic statistics, ethics, IRB submission, and creating scientific posters and oral presentations. Each resident's progress is reviewed weekly and individual mentoring is provided. Residents are entitled to a 3-week research elective. The final project presentation was advanced to December prior to graduation year. All new abstracts are submitted to local, regional and national scientific meetings. Methods We compared number of residents research projects accepted at local, regional and national scientific meetings before (PGY 3 in or prior to year 2006, group 1, G1), at initiation (PGY 3 in year 2007, group 2, G2) and after full implementation (PGY 3 in year 2008, group 3, G3) of our NRC. Satisfaction surveys were collected from graduated residents. Data was reported in percentage, mean  $\pm$  SD and analyzed using ANOVA. Results G3 showed higher number of presentations at regional and national meetings. ANOVA was significant for regional ( $p=.007$ ), national ( $p=.037$ ), and total number of presentations ( $p=.037$ ). No difference among the 3 groups was found for local presentations ( $p=.626$ ). Of 35 ex-residents, 24 (69%) completed the satisfaction survey (G1 = 59%; G2 = 78%, G3 = 89%). Most G3 residents responded that NRC provided a positive educational experience (96%) and would recommend it to others (92%). Conclusions The implementation of NRC helps residents to improve their research skills, and to successfully meet the scholarly activity required as part of RRC, requirement IV B.

• **Poster Number 9**

• **BEYOND JOURNAL CLUB: A NOVEL EVIDENCE-BASED MEDICINE CURRICULUM**

• *Kathleen W. Bartlett, MD, Melissa A. Hendricks, MD, Aimee B. Chung, MD, Alyssa M. Stephany, MD, Duke University Pediatric Residency Program, Durham, NC*

• Background: According to ACGME requirements, residents must graduate with the skills to locate, appraise, and assimilate evidence from scientific studies related to patient health problems. We created an Evidence Based Medicine (EBM) Curriculum designed to establish these skills. At our morning report venue senior residents teach core EBM concepts to learners, reflecting the idea that teaching engenders true mastery of material. Residents apply EBM skills by completing Critical Appraisal Templates (CAT) for articles of interest and preparing Senior Notes on the inpatient service. Methods: Each 3rd-year resident is responsible for leading one EBM session. The resident is assigned an area (therapy, diagnosis, harm, prognosis, or systematic review) and devises a relevant clinical question within that area. The resident then performs a literature search, acquires an article, critically appraises it, and uses the article to answer the clinical question. At morning report, the resident leads participants through discussion of the article and teaches relevant EBM concepts. Afterwards the resident submits a CAT. Supervisory residents on the wards draw on the skills acquired at EBM morning report to write Senior Notes for the patients they admit. In the note, the resident poses a clinical question, locates applicable medical literature, and appraises the new evidence. The final paragraph is devoted to applying new and existing medical knowledge to the patient in question in order to make diagnostic or treatment decisions. Results: All residents who completed training in 2009 facilitated an EBM morning report. Expert faculty evaluated residents on EBM and teaching skills. All were deemed competent or proficient. Senior Notes were placed in the chart and reviewed by the attending. Residents discussed the results during rounds and used the evidence to support medical decision making. Conclusions: We have developed a successful EBM curriculum that teaches residents key components of EBM, encourages the incorporation of medical evidence into patient care, and develops a model for lifelong practice-based learning and improvement.

• **Poster Number 10**

• **SUCCESSFUL COLLABORATIVE STRATEGIES FOR ENHANCING INPATIENT SUBSPECIALTY EXPOSURE IN A SMALL PEDIATRIC RESIDENCY PROGRAM**

• *Anna M. Carr, MD, Matilde Irigoyen, MD, Robert S. Wimmer, MD, Albert Einstein Medical Center, Robert S. McGregor, MD, St. Christopher's Hospital for Children, Philadelphia, PA*

• BACKGROUND: Small pediatric residency programs struggle to provide sufficient subspecialty exposure to trainees in the inpatient setting. Limited exposure to subspecialty patients can threaten continued ACGME accreditation. OBJECTIVE: To examine the impact of multiple strategies utilized by a small residency program to increase subspecialty exposure in the inpatient setting. METHODS: Based on declining census and subspecialty exposure, in 2003 Albert Einstein Medical Center closed its pediatric inpatient unit and established the Einstein Inpatient Teaching Service at St Christopher s Hospital for Children. To increase inpatient subspecialty exposure, we implemented the following strategies: 1) streamlined all admissions across the Einstein primary care network to the Einstein Service; 2) initiated a co-management partnership with five surgical subspecialties; 3) directed selected admissions to the Einstein Service from medical subspecialties (Hematology, Pulmonary); 4) partnered with St. Christopher s to develop a collaborative Oncology service integrating residents of both programs. We report on the proportion of subspecialty admissions for the Einstein service 2001-2009. These numbers were obtained from

lists of 100 consecutive diagnoses sampled on an annual basis from the Einstein inpatient service log. RESULTS: Under the old model, subspecialty admissions were 11%-13% (2001, 02). Subspecialty admissions grew to 22% and 27% during the first two years of the Einstein Service at St. Christopher s (2003, 04). The surgical co-management model expanded subspecialty to 26%, 30% and 30% (2005-07). Selective admissions from Hematology and Pulmonary further increased subspecialty exposure to 40% and 46% (2008, 09). Lastly, the Oncology rotation provides an inpatient rotation with 100% subspecialty patients. CONCLUSION: A small pediatric residency program was successful in increasing its inpatient subspecialty exposure through increased utilization of its primary care network and multiple collaborative strategies in partnership with a children s hospital.

#### Poster Number 11

##### SELF CARE VITAL SIGNS

*Suzanne Wright, MD, Kathleen M. Finta, MD, Marshfield Clinic, Marshfield, WI*

Training programs are required to monitor resident stress and alert faculty to the risks of resident fatigue and sleep deprivation. Programs must diligently try to protect residents from excess stress and monitor duty hours; however, residents must also prioritize the development of good self care habits. Residents with poor self care habits may develop troubled relationships, social isolation, depression, physical health problems, poor concentration and impaired job performance. Surveys suggest depression is common during residency. Checking "Self Care Vital Signs" is a quick, helpful way to periodically assess individual resident well-being, and to track the 'pulse' of the program. This simple survey of six domains of self care provides an opportunity for self reflection, and prompts the resident to act, before the effects of stress start to take a more serious toll on his/her personal and professional life. Residents rate themselves on a scale of 0-3 with regard to mood, relationships, sleep, exercise, nutrition, and substance abuse. This survey is given to our residents every other month at town hall. They submit their answers anonymously. The results are tabulated and distributed to all residents, with a reminder to see their primary care doctor, contact the resident well-being committee, or talk with their mentor if their score is low. The results are periodically shared with faculty alerting them to current resident stress levels, and encouraging faculty to be role models of good self care. Not surprisingly, the most frequent areas of concern have been lack of sleep and lack of exercise/recreation. Several residents are now proactively working on these areas and sharing their strategies for improved self care with others. "Self Care Vital Signs" may help identify poor self care habits before they lead to significant harm, and promotes a healthy, balanced lifestyle for the next generation of physicians.

#### Poster Number 12

##### RESIDENTS AS RESEARCHERS: A LONGITUDINAL CURRICULUM IN RESEARCH SKILLS FOR PEDIATRIC RESIDENTS

*Martha S. Wright, MD, MEd, Robyn H. Strosaker, MD, Brian Chow, MD, Mary Ann O'Riordan, MA, Case Western Reserve University, Rainbow Babies and, Cleveland, OH*

The Residency Review Committee for Pediatrics requires that residents participate in scholarly activity. Our program has a long-standing requirement for residents to complete a scholarly project, although we have only recently created a formal curriculum to support the needs of our residents. Our curriculum is longitudinal over the course of residency and culminates with the presentation of a faculty-mentored scholarly project. The longitudinal nature of this curriculum allows for residents to pursue a broad range of elective experiences while still completing their scholarly project. Residents do have the option of using one of their elective blocks to work on their projects. The didactic portion of the curriculum consists of an online self-study evidence-based medicine curriculum for PL-1s and a two track noon-lecture series repeated annually. The basic track includes lectures designed for residents in the early stages of designing a project (e.g. developing a research question, turning a question into a study, introduction to the IRB with mock IRB session.) The advanced track is designed for residents currently working on their scholarly project (e.g. troubleshooting IRB proposals, data collection and analysis and presenting your findings.) Residents are also provided individual guidance from a faculty mentor as well as the support of a biostatistician as they complete their projects. Each resident is required to develop and present a 10-minute talk at the annual Rainbpw Science Day. This event is designed to mimic a scientific meeting and is attended by faculty and residents. Residents receive written feedback on their projects and presentations both from their faculty mentors as well as from faculty members who serve as moderators. Over the past 4 years, various components of this curriculum have been added into the Residency curriculum. The fully integrated curriculum was implemented in July 2007. Since that time, our 2 graduating classes (n=47) have had 6 accepted manuscripts and 14 accepted abstracts for poster and platform presentations at regional and national meetings.

#### Poster Number 13

##### RESIDENT SCHOOL: THE TRANSITION FROM DAILY NOON CONFERENCE TO WEEKLY PROTECTED BLOCK DIDACTICS IN A PEDIATRIC RESIDENCY PROGRAM

*Jennifer Maito, MD, UNM Chief Resident, Benjamin Hoffman, MD, Emily Macdonald, MD, Walter Dehority, MD, Tito Monge, MD, UNM, Albuquerque, NM*

BACKGROUND: Formal resident education at the University of New Mexico Pediatric Residency program has consisted of a daily one hour noon conference. This format was associated with many problems, including poor attendance, and late arrival and early departure of residents. Residents repeatedly voiced concern over these issues which were felt to favor service over education. Through a group quality improvement project, a new didactic format was developed. SOLUTION: The new

- format consists of a weekly 4-hour block period which includes a variety of didactics, journal club presentations, small group discussions, and patient simulation labs. Resident School is required, protected time with all patient care covered by faculty.
- EVALUATION: Noon conference attendance for the preceding year was 62%. Attendance since implementation has been over 80%, including 100% of eligible residents. We conducted a survey prior to implementation of the new format. While 41% of residents felt that they missed a significant portion of noon conference 'most' or 'all of the time' due to clinical obligations, only 3% of faculty felt this was an issue. 42% of residents identified daily noon conference as a hindrance to complying with duty hour regulations. 32% of faculty were 'unhappy', with resident attendance at noon conference, with 27% 'neutral', and only 19% 'happy'. 29% of faculty were 'very happy' or 'happy' with the proposed Resident School, with 40% 'neutral' and 24% 'unhappy' or 'very unhappy'. Among residents, 85% were 'very happy' or 'happy' with the proposed change, 15% were 'neutral' and none were 'unhappy'. A post-implementation survey will be conducted in December 2009 and reported at the APPD. Informal feedback on the new curriculum, however, has been overwhelmingly positive. CONCLUSION: Protected educational conferences for pediatric residents offered in a weekly block format while residents are protected from patient-care responsibilities will improve attendance, quality of education and will help emphasize education over service during residency training.

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• **Poster Number 14**

• **THE RAINBOW RESIDENCY WELLNESS INITIATIVE**

• *Aparna Bole, MD, Jamie Dickey, PhD, Stephanie Chin, MD, Robyn H. Strosaker, MD, Jacqueline Sherry, MBA, Martha S. Wright, MD, Rainbow Babies and Children's Hospital, Cleveland, Ohio*

• Residency is a stressful time for trainees. There is increasing concern that if left unaddressed, resident stress reactions may negatively impact empathy, professionalism, and quality of patient care, as well as individual mental health. Using the available information on resident well-being and data from an internal needs assessment, we developed a program within our residency intended to counter the negative effects of stress and provide experiences to assist residents in establishing a framework for career-long attention to individual wellness needs. Previous work by a former resident revealed that 70% of residents wished for a structured program on stress management within the residency. Subsequently, our needs assessment, which was designed to identify specific activities residents felt would be helpful, demonstrated high levels of interest in social events both inside and outside the hospital, confidential access to mental health resources, active group wellness activities like hiking excursions, and facilitated group sessions on topics related to life-work balance. The resulting Wellness Initiative includes intern-only and all-resident components. An introduction to the Wellness Initiative is part of Intern Orientation; the Intern Retreat provides interns an opportunity to develop strategies for collaboration and conflict resolution; and monthly, facilitated noon conferences are offered so that interns can share difficult situations and support each other while identifying coping strategies. All residents are invited to noon conferences on life-work balance, winter blues, dealing with difficult people, and maintaining personal relationships during residency. Wellness and mental health resources are posted on the resident education website; a Wellness bulletin board in the resident lounge publicizes wellness information and Chief Residents organize monthly wellness social events and the Kudos Program, in which residents are recognized publicly by peers, faculty, and ancillary staff at monthly housestaff meetings. Informal resident feedback on this initiative has been uniformly positive. A formal feedback survey is planned for June 2010.

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• **Poster Number 15**

• **TO ERR IS HUMAN: INDIVIDUAL AND SYSTEMS APPROACHES TO MEDICAL ERRORS**

• *Stephanie B. Dewar, MD, Dena Hofkosh, MD, Ann Thompson, MD, Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA*

• Background: The ACGME requires that residents demonstrate the ability to evaluate their care of patients and to improve patient care based on self-evaluation. They are also expected to develop the ability to implement changes for practice improvement; and participate in identifying system errors and implementing systems solutions. Methods: We created a recurring learning forum in which residents feel comfortable sharing experiences and reflecting in a group setting regarding medical errors, near misses and approaches to developing personal and systems based solutions. These occurred in 2 monthly one hour sessions, one for interns and one for upper level residents, with dedicated, experienced faculty. During the sessions: 1. The faculty explain the goals. 2. Residents share a clinical experience in which a patient care issue involving communication, interpersonal interaction, documentation or medication error or a near miss event was identified. 3. The group acknowledges the emotional impact of the experience for the resident and reflects on responses to medical errors. They consider the systems issues that contributed to the event and brainstorm about potential approaches to address both individual and systems changes to avert future events. 4. Residents complete a written self reflection in order to summarize the nature of the patient issue identified, the important elements of the discussion, changes in their own practice that would improve their care of patients and system changes that would avoid the problem in the future. Residents are reminded via email about their proposed changes to their practice every other month and the effect that these changes had are discussed with the program directors at their semiannual meetings. Results Systems issues were analyzed and discussed with the appropriate service and hospital administration to promote system changes. Data regarding specific errors and impact on resident clinical practice will be presented along with resident participation.



Poster Number 16

**MCCHIEF ROUNDS: A NOVEL FORMAT**

*Matthew B. McDonald, MD, St. Christopher's Hospital for Children, Katherine Gargiulo, MD, Nancy Spector, MD, Robert McGregor, MD, St. Christopher's Hospital for Children, Philadelphia, PA*

In our residency program, chief rounds is a daily opportunity for residents and medical students to engage in case based learning. Challenges include engaging a variety of learning styles and multiple levels of learners in a short time frame. Our goal is to provide an educational experience that maximizes learning, interaction and influences commitment to change across levels of training. There is evidence that traditional didactic conferences are ineffective in meeting learning objectives. Chief rounds at St. Christopher 's Hospital for Children currently is a daily 30 minute case based conference involving learners ranging from third year medical students to senior faculty. This project compares this current format to a novel method (McChief Rounds). In addition to being interactive and case based, McChief Rounds is team based with buzz groups assigned by educational level within the large group. Each team is allowed a fixed number of questions based on the level of education. The H&P inquiries progress through the levels of education beginning with multiple questions from the student team and ending with one pointed question allowed from the faculty team. The number of questions permitted decreases as the educational level increases. Finally, each small group creates a list of differential diagnoses independently. This format allows maximum inclusion and participation across the continuum of educational levels which in other formats can prove to be difficult. Outcomes observed: McChief Rounds has allowed for more resident and student participation while limiting faculty to focused teaching points allowing time to complete set educational objectives. This format has fostered poignant, relevant, discriminating questioning often modeled by the experienced participants. The majority of discussion is maintained by resident level learners. Faculty and residents report satisfaction with the experience. The standard format chief rounds will be compared to McChief Rounds using an educational evaluation which focuses on medical knowledge, influence on patient care, commitment to change and overall effectiveness with opportunity to share a personal needs assessment.

Poster Number 17

**INCORPORATING CONTINUOUS QI INTO RESIDENT EDUCATION**

*Jane V. Trinh, MD, Suzanne K. Woods, MD, Duke Medicine-Pediatrics Residency Program, Durham, NC*

Background: Since the ACGME introduced "Practice-based learning and improvement" as a core competency requirement, residency programs have been challenged to incorporate curriculum that teaches trainees key components of quality improvement (QI) methods. We created a QI curriculum that introduces QI early in residency training. This allows them to build a project from an initial idea and develop the project over multiple QI lifecycles throughout residency training. Methods: Mid-intern year, residents receive an orientation to QI, using a PowerPoint presentation describing critical steps of the QI process, common models, frequent pitfalls, and examples and resources for QI. The next step is an idea for a QI project using a standard QI template. The project can be done individually or as a small group. The initial idea is reviewed by program leadership and feedback is provided on feasibility, applicability, and clinical relevance. Residents are required to modify the proposal, and begin the first steps of the "Plan, Do, Study, Act" (PDSA) cycle. Subsequently, residents submit their progress at specified time periods. Program leadership reviews each cycle in detail, offering suggestions for improvement. The cycle is continued until the project is complete or the resident graduates from the program. Results: For 21 Med-Peds residents in our program, there were 12 unique QI projects introduced during the academic year 2008-2009, and progress continues to date. All topics were ambulatory care-based in our Med-Peds Continuity Clinic; though, this was not a pre-specified expectation. Project ideas ranged from pediatric to adult topics, and from preventative medicine and screening to systems based improvements. Each project evolved during the year, going through three PDSA cycles, and was edited according to barriers seen on the prior PDSA cycle, changes in practice guidelines, and in clinic staff support. Conclusions: We have developed a successful QI curriculum that teaches residents key components of QI, encourages independent project development, and provides ongoing QI project re-evaluation throughout the entire residency.

Poster Number 18

**SHOULD I STAY OR SHOULD I GO? NOON CONFERENCE ATTENDANCE AND STRUCTURE**

*Vasudha L. Bhavaraju, MD, Michelle K. Arzubi, DO, Ryan Bode, MD, Donna Holland, MD, Grace L. Caputo, MD MPH, Phoenix Children's Hospital/Maricopa Medical Center, Phoenix, AZ*

Background: The structured "noon conference" series has traditionally been a key venue for formal education within residency programs. The increasing demands on residents, work-hour limits, and educational preferences impact conference attendance. Earlier data showed that each of our residents attended less than half of all required conferences. Methods: The Curriculum Committee, a resident-driven QI task force, created a 15 question survey addressing the structure of the conference series, the value of specific standard conferences, and the factors that affect attendance; 54 of 92 pediatric and medicine-pediatric residents completed the anonymous, on-line survey. Results: "Improving pediatric knowledge and skills" was the most influential factor in choosing to attend conference (4.57 on 1-5 Likert scale). Less important reasons were "it is a program requirement" (3.72) and "to prepare for boards" (3.26). The main factor inhibiting residents from attending was "patient responsibility coinciding with conference" (4.19). Other barriers were: "parking" and "driving from a community location" (3.57 and 3.12, respectively). Most residents (63%) preferred rotation-specific lectures and self-directed learning compared to the current model of daily conferences; 61% of residents stated they spend more than 2 hours daily in independent learning. Discussion: The Curriculum Committee used survey data to revise the conference model with the following goals: 1) maintain conferences with a strong educational foundation, 2) ensure residents' educational time is protected, 3) utilize teleconferencing

- for convenience and accessibility, 4) integrate large and small group learning with rotation specific conferences and independent study, and 5) improve targeted conferences. A strategic plan for each goal was outlined and approved by our GMEC. Conclusion: Resident attendance at conferences is dependent on many variables. Limited attendance rates led our QI committee to survey residents and create a conference model that better adapts to their workload, time-constraints, and educational goals. The effect of these changes is under evaluation.

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• **Poster Number 19**

• **TRANSITIONING FROM CLINICAL SCIENCE TO SOCIAL SCIENCE: A MODEL FOR FACULTY AND RESIDENT DEVELOPMENT IN MEDICAL EDUCATION RESEARCH**

• *John L. Roberts, MD, Karen H. Miller, PhD, Michael Ostapchuk, MD, Graduate Medical Education, Louisville, KY*

• Although most pediatric faculty and residents are well grounded in clinical science research, too few are at home with social science research - the foundation of education research. This gap in knowledge creates two challenges: meeting the ACGME Institutional Requirement for systematic curricular review, and meeting the Common Program Requirement to support residents' scholarly activity. In 2008-09, two Pediatrics faculty members worked with faculty from the Department of Medical Education to design and conduct a series of three 3-hour professional development workshops on planning and conducting medical education research. Session I, Identifying Research Questions, included (a) the need for research in medical education, (b) understanding differences between physical science research and social science research, and (c) developing a medical education research question. Session II, Education Research Methodologies, included (a) quantitative methodologies (including a statistics refresher), and (b) qualitative methodologies (including Constant Comparison and data coding). Session III, Protocol Development and IRB Submission, included (a) developing an education research protocol, and (b) working through IRB (institutional review board) and compliance requirements. An in-depth evaluation of the series showed positive results. Attendance for each session was consistent, participants were engaged and comfortable with small group work, and at least one faculty member is formally pursuing an education research question first developed during a session. On pre and post tests with 30 points as the maximum score, all three sessions resulted in improved scores with a statistically significant increase on Session I (5.4 points) and Session III (4.45 points). Although the series was piloted with faculty, we are now adapting the materials for at least one other department to offer to residents in partial fulfillment of the ACGME Common Program Requirement for supporting scholarly activity and to help with development of their Senior Projects.

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• **Poster Number 20**

• **USING P-B-A-R TO FACILITATE DELIBERATE DIAGNOSTIC CLINICAL REASONING DURING CASE PRESENTATIONS**

• *Satid Thammasitboon, MD, MHPE, West Virginia University, Morgantown, WV, Mary Ottolini, MD, PhD, Children's National Medical Center, Washington, DC, Jeffrey Lancaster, MD, West Virginia University, Morgantown, WV, Geeta Singhal, MD, Baylor College of Medicine, Houston, TX*

• "Over the years, countless preceptors and learners have spent countless hours listening to tedious case presentations, trying to revive themselves sufficiently at the end of the presentation to make a few intelligent remarks". Excessively detailed case presentations frequently do not capture the essence of clinical problems, and are susceptible to cognitive biases and diagnostic errors. We need to teach medical learners to put the emphasis on data synthesis instead of data delivery, highlight discriminating instead of inconspicuous features, and conceptualize the big picture or problem representation instead of merely putting factual information into their case presentations. The PBAR (Problem, Background, Assessment and Recommendation) is a formalized technique to incorporate clinical diagnostic reasoning into effective case presentations. The steps to formulate a case presentation include: 1) deliberately represent the case using abstractions to conceptualize a clinical problem in one sentence; 2) report the key information related to the diagnosis using co-selection and discriminating features; 3) analyze the case by comparing and contrasting discriminating features in the context of the committed problem representation; and 4) describe goals for management and express uncertainties that trigger further learning. This tool allows preceptors to access the learner's diagnostic clinical reasoning via a brief, learner-centered, case presentation between patient encounters. We have also developed guidelines for direct observation and feedback sessions. These tools can be used to promote diagnostic clinical reasoning among learners, and subsequently to reduce diagnostic errors.

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• **Poster Number 21**

• **AN INNOVATIVE CURRICULUM ON DIAGNOSTIC ERRORS: TEACHING COGNITIVE STRATEGIES TO MEDICAL LEARNERS**

• *Satid Thammasitboon, MD, MHPE, West Virginia University, Morgantown, WV, Geeta Singhal, MD, Pratip Nag, MD, Baylor College of Medicine, Houston, TX, Mary Ottolini, MD, MPH, Children's National Medical Center, Washington, DC*

• The common approach to reduce diagnostic errors has been limited to the health care delivery system and not physicians who make clinical judgments. Clinical judgment is often taught via a hidden curriculum through clinical training in an apprenticeship format between novices and experts. Experts attain proficiency in making valid judgments from life-long experiences, and use clinical expertise, a blend of intuition (rapid unconscious thinking) and metacognition (deliberate, conscious thinking), to optimize clinical judgment. We developed an interactive learning module to teach learners how to use cognitive strategies to reduce diagnostic errors. Learning objectives include describing the framework of cognitive errors, clinical expertise, clinical reasoning and judgment principles, analyzing diagnostic errors using a cognitive autopsy

format, and identifying cognitive strategies that can be used to minimize diagnostic errors. The module utilizes active and self-directed learning strategies based on Kolb's learning cycle to enhance knowledge and to promote desired changes in behavior. The module begins with engagement of learners through a streaming video that illustrates common diagnostic errors. A discussion about individual s diagnostic errors allows for reflection on prior knowledge and experience. A series of case-based, interactive lectures about cognitive errors, clinical expertise, clinical reasoning and cognitive forcing strategies challenge learners to integrate new concepts with their prior experience. The learner then identifies diagnostic errors in a case scenario, performs a cognitive autopsy in a stepwise manner and proposes practical solutions for how to employ cognition to prevent errors in clinical practice. An action plan to demonstrate a commitment by the learner to implement cognitive strategies into daily practice completes the learning cycle. Finally, the learner will submit a reflective report on implementing these strategies.

#### Poster Number 22

##### TEACHING ADVOCACY WITH SYSTEMS-BASED PRACTICE: A NOVEL APPROACH TO ADVOCACY TRAINING

*Elizabeth K. Nelsen, MD, Ann S. Botash, MD, Karen Teelin, MD, Upstate Golisano Children's Hospital, Syracuse, NY*

Background: Advocating for children as they navigate community systems is integral to good patient care. After a workshop on referral systems, all first year residents are required to give a 20 minute department presentation describing their case, an agency or service and the system issues encountered. Objective: To describe residents attitudes and knowledge about community resources and self reported practice changes after participation in the program. Methods: A 15-question survey was developed and administered to all 41 residents in June 2009. All responses were anonymous. Data included level of training, location of medical school, and number of presentations attended, patient referral information, and resident self-assessments. Eight questions were based on a five-point Likert scale. Results: Thirty-eight returned completed surveys (93%). Two PL-2s and one PL-3 did not return the survey. Thirty-two percent attended medical school in North America and 32% in Asia. Eighty-eight percent made five or fewer referrals to community agencies per month, and 60% attended four or more presentations during the academic year. Eighty-nine percent of have a better understanding of community resources, 47% felt the presentations changed the number of referrals and 60% felt it changed how they referred patients. Of residents that gave presentations (n=31, 82%), 83% liked doing them. Sixty-two percent reported they liked teaching others, and 32% liked gathering information. Thirty-six percent reported unhappiness with the availability of information and 26% did not like the presentation length. Three-quarters of residents stated that they have practiced what they learned in preparing for their presentations and 84% feel that they are better advocates for their patients. Conclusion: The resident presentations have increased awareness of community resources for all residents, not just those who gave presentations. These data support the continuation of this program and open doors for further research into new ways to teach residents about advocacy.

#### Poster Number 23

##### TEACHING RESIDENTS SYSTEMS-BASED PRACTICE UTILIZING A NOVEL SYSTEMS ERROR CONFERENCE

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Background: Many programs have difficulty teaching systems-based practice. Common methods utilized include morbidity and mortality conferences, or hospital committee meetings which discuss system cause(s) of adverse patient outcomes. While these meetings are valuable, educating residents regarding systems errors is not their primary goal. We therefore developed a conference specifically for residents that focuses on identifying and discussing systems errors and potential solutions. Methods: Monthly conferences are attended by senior pediatric residents, program directors, the hospital chief medical officer (CMO), risk manager, and hospital safety officers. Prior to each conference, two PL-3 residents select a case for discussion and meet with the CMO to prepare the presentation. This preliminary meeting ensures the error to be discussed is appropriate, the discussion will focus on systems issues rather than individual performance, and that the residents are prepared to lead the discussion during the conference. At the conference, the case is presented and the system error(s) discussed; this is facilitated by faculty and program directors. Specific data relevant to cases discussed is collected following the conference. We also plan to survey the residents regarding satisfaction with the conference, and perceptions of how well the conference prepares them to identify and solve system errors. Results: The use of specific hospital services such as teleradiology and interpreter services has changed after specific errors were discussed at this conference. Informally, residents have expressed satisfaction with the conference, particularly the relevance of the cases and the focus on resident education. Additional specific outcome and resident survey data will be available by the time of the APPD meeting. Conclusions: The systems error conference is an effective method to teach residents systems-based practice, and results in changes in behaviors. Resident feedback suggests focusing on errors identified by residents and limiting the group participants permits for more meaningful and relevant discussion.

#### Poster Number 24

##### DEVELOPING AND EVALUATING AN INNOVATIVE CORE (CURRICULUM ONLINE FOR RESIDENT EDUCATION)

*Aditee P. Narayan, MD MPH, Shari A. Whicker, MEd, Pediatrics, Kathleen A. McGann, MD, Duke Pediatrics, Durham, NC*

Our poster presents the evidence for a methodical approach to faculty development in competency-based education and

evaluation of the process. This approach includes analyzing the curricular needs and designing, developing, implementing, and evaluating an innovative competency-based curriculum. Our process is easily generalizable to other training programs and may serve as a model for meeting ACGME expectations. We utilized the ADDIE approach for the process, which involves the following steps. 1. Analysis: Curriculum Committee (CC) was created to assess the residency training program's current curricular needs. 2. Design: CC created competency-based goals and objectives to better synthesize and standardize the curriculum. 3. Develop: An Education Manager (EM) system categorized 37 rotations into 14 Educational Areas (EA) with 1-2 EMs per EA. Faculty development included: EM job description and contract, non-fiscal senior leadership support, semi-annual workshops, and individual meetings. EMs and CC redesigned the entire residency program's curriculum. 4. Implement: Redesigned curriculum was posted as Curriculum Online for Resident Education (CORE). 5. Evaluate: Outcomes Logic Model used to assess program inputs, outputs, and outcomes: resident self-assessments, resident/faculty surveys, clinical skills fairs, objective-based evaluations and focus groups. Key outcomes include: 82% of residents use CORE to track rotation progress. CORE addresses resident skills in most competencies: MK 90%, PC 70%, ICS 60%, SBP 65%, PBLI 70%. Most EMs met job expectations with high satisfaction. Faculty utilizing CORE felt it was valuable. More interventions are necessary to disseminate CORE to non-EM faculty. Conclusion: We describe a unique approach to curriculum design, implementation, and evaluation via an EM system and CORE. The process requires reasonable inputs that most programs can provide, while producing substantial outputs and trends towards beneficial outcomes. This approach should be generalizable to other training programs interested in major curricula development or revision.

#### Poster Number 25

##### IMPLEMENTING A QUALITY IMPROVEMENT CURRICULUM FOR PEDIATRIC RESIDENTS

*Rachel N. Caskey, MD, MPP, University of Illinois - Chicago - Med-Peds, Chicago, IL, Amanda D. Osta, MD, University of Illinois - Chicago - Pediatrics, Chicago, Illinois, Michelle M. Barnes, MD, University of Illinois- Chicago - Pediatrics, Chicago, IL*

**Background:** The ACGME requires that residents gain competence in both systems-based practice and practice-based learning. In addition, the American Board of Pediatrics recently instituted the MOC program which evaluates how pediatricians measure quality of care and effectively improve quality gaps in their practice. Historically, pediatric GME has not provided residents with the education needed to effectively measure quality of care, identify gaps in care, and implement change to improve patient care. **Methods:** To provide our pediatric residents with the framework for understanding and implementing quality improvement (QI) in a medical practice we have implemented a QI curriculum. In the fall of 2009, the residents attended a series of interactive lectures to learn the fundamentals of QI concentrating on the Plan-Do-Study-Act (PDSA) cycle. The residents are divided into groups based on their continuity clinic day, and each group has selected a process of care to improve. Throughout the fall the groups will 1) conduct a process mapping of their QI project; 2) involve all stakeholders in the process of care; 3) implement a change; 4) measure the outcomes of the change; and 5) reflect on the results of the process change. Each group works in conjunction with a faculty mentor and protected time has been provided for groups to work. The curriculum is designed to evolve over a 3-year residency. To ensure continuity of QI efforts over time the team leaders are second year residents who will then re-examine their QI projects during their third year. The results of the final projects will be presented at Grand Rounds this spring. Finally, the faculty will implement a PDSA cycle on the QI curriculum to ensure the course meets the needs of the residents. **Conclusion:** A sustainable QI curriculum in which residents are active participants is an opportunity for teaching core competencies to residents. Continuity clinic is an ideal setting to perform QI projects as the residents are intimately involved in the processes of care in the clinic.

#### Poster Number 26

##### RESIDENT SELF-DIRECTED LEARNING WITH MOBILE TECHNOLOGY

*Deirdre A. Caplin, PhD, James F. Bale, MD, Paul Carbone, MD, Rebekah Grow, BS, University of Utah, Salt Lake City, UT*

**Resident Self-Directed Learning with Mobile Technology RATIONALE** For pediatric residents podcasts may be a useful alternative to traditional lectures. We developed self-directed podcast modules and evaluated the impact on resident knowledge, satisfaction, clinical practice and exposure, as well as faculty satisfaction. **METHODS** Subjects: 79% of pediatric residents from three rotations participated (17 PGY1, 12 PGY2, and 16 PGY3). **Procedures:** Online modules (podcast and review article), knowledge tests (pre/post), and satisfaction surveys were posted for: Developmental screening (DS), Evaluation of developmental delay (GDD), Cerebral palsy (CP), Autism screening (AT), Pediatric migraine (HA), Newborn hearing screening (NS), Assessing head size/shape (HS), and Hypertension (HT). Faculty perceptions with the podcast medium were also surveyed. **Analysis:** Exposure was measured using the average number of residents listening per module compared to mandatory lectures. Summary and within subject comparisons (t-test) assessed knowledge gain from pretest to posttest were used. **RESULTS** Significant improvement in knowledge was observed across modules and class year (13%;  $p < .0073$ ). PGY-1 (19.1%,  $p < .000$ ) and PGY-3 (12%,  $p < .007$ ) residents improved significantly, compared to PGY-2s (7%, ns). Knowledge improved for CP ( $p < .005$ ), GDD ( $p < .002$ ), DS ( $p < .006$ ), and AT ( $p < .000$ ). Podcast exposure was comparable to versus lecture (34% v. 39%, ns). Residents found podcasts easy to use (91%), understandable (97%), and appropriate to level of training (100%). 12% of residents found the modules inconvenient and 30% felt podcasts were not as effective as lectures. Overall, residents found the modules clinically applicable (97%) and were likely to integrate content into their clinics (91%). 100% of faculty reported that the podcasts were an efficient use of time and were educationally valuable. 75% thought that podcasts were only somewhat comparable to traditional lectures. **CONCLUSIONS** Podcasting is a feasible, desirable, effective tool to enhance medical knowledge in pediatric residents. Sponsored by APPD Special Projects Grant, 2007-08

Poster Number 27

**APPROACH TO THE PEDIATRIC TRAUMA PATIENT**

*Rhett H. Lieberman, MD, MPH, Brett McAninch, MD, Dena Hofkosh, MD, Children's Hospital of Pittsburgh, Pittsburgh, PA*

Background: Pediatric residents need a skill set to care for pediatric trauma patients in the ED setting. Advanced Trauma Life Support (ATLS) is currently the standard of trauma education for health care providers. The ATLS course requires two days, is geared towards surgeons and EM specialists and incorporates formal didactics with some simulation and animal skill stations. We designed a curriculum focused on the assessment and management of pediatric trauma, specifically for Pediatric residents. Objective: 'The Approach to the Pediatric Trauma Patient' course was designed to provide a practical, pediatric focused education and training to pediatric residents in the initial assessment and management of the pediatric trauma patient. Methods: 31 second year pediatric residents (25 categorical, 4 med-peds, and 2 ped/psych triple board) participated in course. The course was a combination of independent learning via online learning modules and hands on, simulation based learning. Knowledge: The residents' baseline knowledge and attitudes were measured by a written pre-course survey and pre-test prior to doing the independent online modules. Online learning modules of 10 core trauma topics with specific emphasis on pediatric trauma were completed prior to the simulation experience. After the simulation experience a post-course written test was completed. Skills: The simulation experience using SimMan® (Laederal Medical) consisted of 4 pediatric trauma simulations each managed by a team of 3-4 residents. Each team participated in all 4 simulations and after completion of each simulation the team debriefed with the instructor facilitating the simulation. Attitudes: Using pre and post course surveys, we recorded attitudes regarding trauma education in a pediatric training program, effectiveness of online and simulation based learning and comfort levels in caring for pediatric trauma patients. Results: We will present data illustrating improvement in knowledge, retention of the skills 4-6 months after completion of the course as well as attitudes regarding value of formal trauma education and comfort levels in pediatric residents caring for pediatric trauma patients.

Poster Number 28

**SIMULTANEOUS DEVELOPMENT AND IMPLEMENTATION OF RESIDENCY PATHWAYS IN GLOBAL HEALTH AND COMMUNITY PEDIATRICS AND ADVOCACY**

*Maneesh Batra, MD MPH, Suzinne Pak-Gorstein, MD, MPH, PhD, Brian D. Johnston, MD, MPH, Kyle E. Yasuda, MD, Richard P. Shugerman, MD, Sylvia J. Lago, BA, MBA, Heather A. McPhillips, MD, MPH, University of Washington School of Medicine, Seattle, WA*

The University of Washington Pediatric Residency has developed a combined experience in global health and community health and advocacy that we believe is unique in residency training. The global health (GHP) and community pediatrics and advocacy (CPAP) pathways were designed to equip interested pediatric residents with the knowledge and experience to reduce health disparities among indigent children in the US and abroad. We developed these pathways to 1) inspire residents who are interested in serving the underserved either domestically or globally, 2) provide a means for residents to explore career options beyond traditional subspecialty or primary care careers, and 3) respond to the increasing demand for tailored residency curricula. These pathways involve a 4 month curriculum over the last 2 years of residency. In the 1st month, CPAP and GHP residents work together in an experiential, interactive curriculum designed to expose them to issues in public health, social justice, program evaluation, media training and ethics. The curriculum involves small group discussions with leaders and potential mentors in child advocacy, public health and global health; experiential learning with local organizations engaged in activities in these fields; an individualized learning plan (ILP) to focus independent work in future months; and a series of problem-based learning sessions through which residents engage the community. Combining the pathways in the first month was an explicit design to convey commonalities in the skills needed to work with underserved populations here and abroad and to encourage sharing common goals and interests among the residents. In the 2nd month of the curriculum, residents design a project with their assigned preceptor based on objectives identified in their ILP. In the PGY3 year, each resident has a two-month block for an intensive experience in either local advocacy or global health. The global health experience is based in a rural district hospital in Kenya where our residents are paired with a pediatric resident from the University of Nairobi.

Poster Number 29

**IMPACT OF A PROCEDURE WORKSHOP ON PEDIATRIC RESIDENTS COMFORT LEVEL WITH PROCEDURES**

*Karen R. Judy, MD, Laura Vargas, MD, Loyola University Medical Center, Maywood, IL*

The Pediatric RRC mandates that each residency program ensure that residents achieve the required competency performing certain procedural skills. One of the first steps towards competency is self-reported comfort when performing a procedure. This assumes that a resident who is not comfortable is also unlikely to be competent in a given procedure. No universal curriculum exists to teach basic procedures to pediatric residents. Venipuncture (VP), peripheral intravenous catheter placement (PIV), and lumbar puncture (LP) have been identified as some of the most critical procedural skills for pediatric residents. We developed a workshop to formally instruct residents in these skills and to assess the change in comfort level occurring as a result of the workshop. Twenty-three pediatric residents participated in a 2 hour procedure workshop. All participants were asked to answer a pre-test, using a 7 point Likert scale, assessing their comfort performing each procedure as well as their comfort with anatomy, equipment, technique, and complications. The workshop began with an instructional video followed by practice on training simulators. At the conclusion of the workshop, participants were asked to fill out a post-test, rating their level of comfort with each procedure. Differences between pre and post-tests were analyzed using the Wilcoxon Signed-Rank Test for matched pairs of answers and the Mann-Whitney Test for independent answers. After participating in the workshop, residents reported a significant improvement in their overall comfort and in the level of comfort

- with all four aspects of the procedure. For lumbar puncture, there was significant correlation between previous experience and comfort level performing the procedure, but this was not the case with intravenous catheter insertion and venipuncture.
- The degree of improvement from baseline comfort levels was similar between those with and those without prior experience.
- Further studies are needed to compare the results of this study with the actual success rate performing these procedures in real life.

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• **Poster Number 30**

• **KNOWLEDGE AND ATTITUDES ON HANDOFFS OF PEDIATRIC RESIDENTS**

• *Shilpa J. Patel, MD, Lauren A. Destino, MD, Stanford University, Palo Alto, CA*

• **BACKGROUND:** Despite the abundance of information indicating the importance of properly conducted handoffs, very few residency programs provide formal training or supervision in handoffs. In one study, handoff problems and lack of supervision were the cause of 70% of trainee related medical errors. Combined with a reported increase of 40% in the number of handoffs after residency duty hour reduction, these types of statistics make handoff training more compelling than ever. **OBJECTIVES:** To compare baseline and year-end shifts in attitudes and handoff knowledge after implementation of a new hand off curriculum for pediatric residents in a large academic children's hospital. **METHODS:** Prior to implementing a new handoff curriculum in July 2009, residents took a pre-test and an attitudes survey about handoff knowledge, process and tool. The new curriculum includes a site-specific video training module and a restructuring of the current handoff process, which was implemented in September 2009. The post-test and post-implementation attitudes survey will be administered in Spring 2010. **RESULTS:** Highlights from the 38 pre-survey responses: 40% of residents self-report having patients who experienced harm or a near miss due to inadequate handoffs. Over 30% don't know the plan of care at the end of sign out or what to do if the clinical status of the patient changes. 40% of overnight concerns cannot be answered from information received in sign out. Over 80% noted the computerized sign out tool was inaccurate. The knowledge pre-test scores from 63 residents demonstrated lack of knowledge about the impact of handoffs on patient care and the components/priorities of an effective handoff; interestingly, all respondents agreed that checklists would improve handoff safety. **DISCUSSION:** The pre-implementation survey and handoff pre-test results indicate that many pediatric residents are lacking in fundamental knowledge about handoffs and would benefit from formal training in effective handoffs, which would also improve patient care and safety. **References:** The Joint Commission. [http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/08\\_hap\\_npsqs.htm](http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/08_hap_npsqs.htm) Streitenberger K, Breen-Reed K, Harris C. Handoffs in Care: can we make them safer? *Pediatr Clin N Am* 2006 Dec;53(6):1185-1195. Wilson, RM, Runicaman WB, Gibberd RW, Harrison BT, Hamilton JD. The Quality in Australian Health Care Study. *Med J Aust* 1995 Nov 6;163(9):458-71. Zinn C. *BMJ* 1995 June 10;310:1487 Vidyarthi AR. <http://webmm.ahrq.gov/case.aspx?caseID=134#ref3> (accessed 10/2/09). Singh H, Thomas EJ, Peterson LA, Studdert DM. Medical Errors Involving Trainees: a study of closed malpractice claims from 5 insurers. *Arch Intern Med* 2007 Oct 22;167(19):2030-6. Horwitz, LI, Krumholz HM, Green ML, Huot SJ. Transfers of Patient Care Between House Staff on Internal Medicine Wards. *Arch Intern Med* 2006 Jun 12;166(11):1173-7.

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• **Poster Number 31**

• **BARRIERS TO ACCULTURATION OF INTERNATIONAL GRADUATES IN PEDIATRIC RESIDENCY TRAINING**

• *Aarati Rao, MD, Marilyn O'Brien, Christopher Freed, PhD, Franklin R. Trimm, MD, University of South Alabama, Mobile, AL*

• **Barriers to acculturation of international medical graduates in pediatric residency training** The degree of acculturation of international medical graduates (IMGs) is manifested in the way they perceive the concepts, beliefs and values that are taken for granted by US graduates (USGs). IMGs experience challenges at work including communication with patients, interactions with staff and technology and then go home to a displaced environment where their transitional challenges continue. IMGs might benefit from program changes that enhance transition into the US culture and academic milieu. This qualitative study was conducted to identify perceived barriers to this transition. PL-1 and PL-3 IMGs participated in separate focus groups at the end of the 2008-2009 academic year. The two groups were selected to reflect incoming residents' challenges and outgoing residents' adaptations. Data were analyzed by two sociology faculty with expertise in qualitative studies. Both groups reported work-related and non-work challenges upon arrival to the US. Work challenges involve issues with medical insurances, learning about documentation and medico-legal liability, and communication. Language fluency and accents lead to misinterpretation, particularly with nursing staff and patients. Varied gender roles, shy demeanor and speaking when spoken to are cultural practices that are often misinterpreted by peers and faculty. Non-work challenges include difficulty in obtaining social security numbers, apartments, driver's license and insurance. IMGs felt their initial year of training was more about acquiring skills to live in America than about acquiring academic knowledge. A suggested intervention was that IMGs be on a lighter clinical rotation initially and have temporary housing. Graduating residents perceived peer confidence in their abilities and hard work over time helped overcome the communication problems rather than any learned changes in accent or language. Understanding barriers faced by incoming IMGs can help guide strategies to promote efficient acculturation allowing IMGs to focus on their pediatric education earlier.

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• **Poster Number 32**

• **A QUALITATIVE ASSESSMENT OF INTERNATIONAL MEDICAL GRADUATES' (IMGS) INTERACTIONS WITH NURSING STAFF IN A PEDIATRIC RESIDENCY PROGRAM**

• *Aarati Rao, MD, Franklin R. Trimm, MD, University of South Alabama, Mobile, AL*

• Work challenges for IMGs include communication with patients, interaction with nursing and technology used for documentation. Our prior study revealed communication with nurses as a significant barrier to their transition into the

American work culture. The IMG-nurse work relationship was a source of distress for members of the health care team. Nurses were asked about their perception of the strengths and weakness of IMGs as compared to US graduates (USGs). A total of 80 surveys was distributed and 44 responses were obtained (55%). Twenty of 46 nurses(43%)on general pediatric floor,16 of 22(73%) emergency room and 8 of 12 (67%)outpatient nurses replied. All 44 nurses had worked with IMGs and would continue working with an IMG if given a choice. Sixty-one percent of nurses enjoyed working with IMGs while 39% were neutral. Strengths noted: 1) being multilingual they are an asset in communicating with patients from other countries and cultures; 2) they are more likely to be culturally sensitive and show patience with families that have language or communication barriers; 3) they are likely to be more knowledgeable, efficient and less arrogant as compared to USGs. A unanimous weakness identified was language difficulties and hence communication barriers between staff or patient families and the resident. When seeking help with their patient,inpatient and outpatient nurses were likely to bypass an intern (both IMG and USG)and ask the senior resident as the intern lacks sufficient experience and would have to ask the senior for advice in any case. Communication was a less frequent reason to bypass the intern. When rating USGs and IMGs for various attributes, they felt IMG residents were more eager to learn, patient, sincere, reliable and culturally more sensitive as compared to a USGs. An IMG was more likely to have communication problems, and weaker interpersonal skills and bedside manner as compared to the USG resident. Future curricula on pediatric medical acculturation for IMGs should incorporate these nursing attitudes to be successful.

#### Poster Number 33

##### “OSCE-LITE , DEVELOPING COMPETENCY ASSESSMENT TOOLS WITH NO BUDGET

*Sarah A. Rawstron, MB,BS, Cynthia Katz, MD, The Brooklyn Hospital Center, Brooklyn, NY*

The ACGME outcome project requires that programs add direct observational assessments of residents to the monthly attending evaluations. An OSCE (Objective Structured Clinical Examination), should consist of 12-20 separate standardized patient encounter stations, each lasting 10-15 minutes. OSCEs are used in many US medical schools, are useful to measure specific clinical skills, but are difficult to create and administer. We have tried to develop a scaled down version of the full OSCE, in order to accommodate the limitations of physical space, time, manpower and money in a 12 resident per year pediatric program. In May 2004, we developed a 4 station mini-OSCE for PL1s, followed by a 4 station OSCE for PL3s. We have continued this every year, developing and refining the cases and assessment tools. A session takes approximately 4 hours. We only have space for 4 stations, and time constraints (duty hours) require performance in the morning. Each station lasts 15 minutes, thus 4 residents are evaluated each 1 hour session, with 3 sessions for each OSCE (12 residents). The stations require standardized patients (medical students or PA students), and faculty observers. The competency skills tested include: patient care (history taking), communication, medical knowledge, professionalism, systems based practice and practice based learning. Results from our first year (2007 grads), showed these average scores for the stations: 1 (74.3%), 2 (61.8%), 3 (42.8%), 4 (46.0%),total stations average 53%. The next year we refined the tool for station # 3 (language delay)to reduce the items (32 instead of 72), with the following results: station 1 (86.7%), 2 (70.9%), 3 (75.6%), 4 (71%), total stations average 76.9%. Although our tools have not been validated, our mini-OSCE is useful in a) comparing residents with each other (ranking) and b) evaluating each resident over time. Testing all residents under the same conditions with the same observer gives us confidence in identifying residents with either outstanding or below average communication skills, and enables us to target our help and intervention to those residents to improve their skills.

#### Poster Number 34

##### H1N1 IS NO FUN: LESSONS IN DISASTER PREPAREDNESS

*Shaquita Bell,MD, James Metz, MD, Katie Nielsen, MD, Heather McPhillips, MD, MPH, Maneesh Batra, MD, MPH, Johannes von Alvensleben, MD, Richard Shugerman, MD, University of Washington/Seattle Children's Hospital, Seattle, WA*

Disaster preparedness has been a topic of increasing concern to hospitals, medical schools and residency programs following the 9/11 terrorist attacks, Hurricane Katrina and the appearance of potentially pandemic illnesses. In the summer of 2009, in anticipation of major increases in ED and inpatient census due to H1N1, our hospital undertook an institution-wide preparedness effort using a 3-tiered model of illness prevalence in the community. The effort included the development of a contingency plan for our residency program. Working with hospital leaders, employee health/infection control, laboratory medicine and the emergency department, we prepared detailed protocols for testing/treatment/prophylaxis of residents with influenza-like-illness (ILI) symptoms and for the redistribution of residents from non-essential medical services to those requiring resident presence. Despite this advance planning, our entire system was challenged when 19 of 33 R1's developed ILI symptoms over a 2 day period in late September following a week long retreat. Using email, text paging and telephone communication, our chief residents contacted all members of the R1 class within 24 hours of the first confirmed H1N1 case. Using testing and treatment algorithms, oseltamivir prophylaxis or treatment was dispensed to all interns. All symptomatic interns were furloughed from patient care services. In total, 19 symptomatic interns were tested and 17 of the 19 were positive for H1N1 by FA and/or PCR. Based upon CDC recommendations, all residents testing positive (almost 60% of the R1 workforce) remained out of clinical duties for 7 days. Due to the remarkable commitment and teamwork of the R2 and R3 classes and the healthy R1's, residents were redistributed to cover all essential services during this very taxing period. No cases of H1N1 were suspected or identified in the patients of affected residents. Lessons learned from this outbreak include 1) disaster planning for residencies is important, 2) rapid notification and response to infections can limit the impact on patients and staff, and 3) no disaster unfolds exactly as it is planned.

## • **Research Posters**

### • Poster Number 35

#### • RECRUITMENT OF DIVERSE HOUSESTAFF IN PEDIATRICS: STRATEGIES FOR SUCCESS

• *Shaquita L. Bell, MD, Heather A. McPhillips, MD, MPH, Richard P. Shugerman, MD, University of Washington, Seattle, WA*

• Background: Increasing the minority pediatric workforce is of the utmost importance. At the University of Washington, a resident-led, faculty-supported diversity committee has been in place for eight years. In that time period, the committee has been awarded a funded sub-internship program through local grants and has refined unique recruiting strategies to increase the enrollment of minority residents. Methods: Underrepresented minority (URM) medical students interviewing at the University of Washington Pediatrics Residency Program were invited to attend a diversity committee event, had unique interview days arranged, and an exit interview performed. Satisfaction in regards to recruitment experience was measured via a web-based survey after match lists were due but before match day over the past 5 years. Applications, interviews offered, and number of URM students matriculating were tracked each year to determine if efforts were increasing minority applications and matched residents. Results: Over the course of the previous five years, the number of URM applicants interviewed increased by 3% and matched increased by 5%. Since starting the sub-internship program, 30% of the participants went on to matriculate into our residency program (3/10 students). 52% of respondents to the web-based survey in 2009 found their interactions with the resident diversity committee very helpful and 75% found the existence of a diversity sub-internship program to influence their opinion positively. Response rate was 50%. Conclusions: URM applicants appreciate directed recruitment strategies. The formation of a visible, resident-led group improved on the experience of the applicants. These efforts have led to an increase in applications and matriculation of URM students into our residency program.

### • Poster Number 36

#### • PEDIATRIC RESIDENT-AS-TEACHER CURRICULUM: A NATIONAL SURVEY OF EXISTING PROGRAMS AND FUTURE NEEDS

• *Shari A. Whicker, MEd, Duke University, Durham, NC, H B. Fromme, MD, University of Chicago, Chicago, Illinois, Steve Paik, MD, EdM, NYU School of Medicine, New York, NY, Larrie Greenberg, MD, Office Faculty Affairs, Washington, DC, Jennifer L. Koestler, MD, New York Medical College, Chappaqua, NY, Lyuba Konopasek, MD, New York Presbyterian-Cornell Campus, New York, NY, Beverly P. Wood, MD, MEd, PhD, University of Southern California, Los Angeles, CA*

• Residents assume significant teaching responsibilities and, over the last 30 years, Residents as Teachers (RAT) programs have been reported in the literature. Currently LCME and ACGME requirements mandate this curriculum. We report results of a nationwide survey of Pediatric residency programs describing curricula of existing RAT programs. 106 of 172 (62%) Pediatric program directors (PDs) completed our survey. 13% of responding programs do not have a formal RAT curriculum and over 50% allocate 10 hours or less to this teaching throughout a three year residency training program. The primary teaching modalities in programs with curricula are lectures (78%) and workshops (66%). Content areas include feedback, inpatient teaching, communication skills, case-based teaching, role modeling, evaluation, leadership skills, one minute preceptor, teaching/learning styles, professionalism, and small group teaching. 64% of PDs also use direct observation of residents in clinical settings as an opportunity for skills practice for their residents. Whereas 63% of programs report evaluating their curricula, only 27% perceive their program to be either very or extremely effective. Overall, the vast majority of respondents (95%) express interest in a national RAT curriculum, most indicating web-based modules as the preferred method for dissemination. This survey demonstrates that despite a national mandate for resident teaching programs, there are still programs without curricula to address this. The majority of programs with curricula consider them only moderately effective. Our survey indicates that a wealth of curricular material exists across residency programs nationally; these materials offer a variety of content and methods of evaluation (of both the curricula and resident performance) that could be disseminated, perhaps using web-based modules, to complement existing RAT curricula and aid programs without curricula. Establishing a national RAT curriculum would offer PDs resources to meet educational mandates and the ability to tailor programs to best fit the needs of their own programs.

### • Poster Number 37

#### • ETHICS AND PROFESSIONALISM EDUCATION FOR PEDIATRIC RESIDENTS

• *Jennifer C. Kesselheim, MD, MEd, Boston Combined Residency Program in Pediatrics, Theodore Sectish, MD, Boston Combined Residency in Pediatrics, Steven Joffe, MD, MPH, Boston Combined Residency Program in Pediatrics, Boston, MA*

• Background: Competency in confronting dilemmas related to ethics and professionalism can develop over time with teaching efforts during residency training. Methods: We surveyed directors of pediatric residency training programs (N=187) to explore the teaching and assessment strategies used to ensure learning in ethics and to comply with the ACGME core competency of Professionalism. Results: Surveys were completed by 98 program directors (52%). When selecting interns, the majority of respondents reported applicants' professionalism is explicitly considered by interviewers (52%) and when ranking applicants (77%). Most directors convey to new interns expectations for professionalism in writing (64%) or during orientation (92%). However, when presented with 14 professional experiences that could foster learning in ethics and professionalism, at least 50% of the program directors reported that "None or Few" of their residents engage in 12 of these experiences. In addition, a minority (27%) of program directors have a written curriculum in ethics or professionalism. When evaluating professionalism



in residents, the most frequently used assessment strategies include 360° evaluation, written evaluations from supervising clinicians or peers, and questionnaires completed by patients and families. However, these evaluation methods were rated as “very useful” by only a modest proportion (25-52%) of the respondents who report using them. Conclusions: Most pediatric residency program directors explicitly consider professionalism during intern selection and convey to new interns expectations for professionalism. However, residents do not commonly participate in many of the experiences that might foster learning in ethics and professionalism included in our survey. Also, program directors express only moderate satisfaction with their current strategies to evaluate professionalism. These data provide a strong rationale for developing novel curricula and assessment methods to foster high quality education in ethics and professionalism.

#### Poster Number 38

##### IMPACT OF A TEACHING ROTATION ON RESIDENTS' ATTITUDES TOWARD TEACHING: A 5-YEAR STUDY

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**BACKGROUND:** Residents spend a large part of their training teaching medical students and other residents. Recognizing the tremendous role that residents play in medical education, many residency programs have instituted formal instruction on teaching. A prior study using open-ended interview questions found a qualitative improvement in residents' enthusiasm for teaching after participation in a teaching curriculum. This 5-year study was conducted to quantitatively evaluate the impact of a teaching rotation on residents' attitudes toward teaching. **METHODS:** Residents participated in a one month teaching rotation. The rotation included didactic sessions on lecturing, teaching in various clinical settings, and providing constructive feedback. Residents practiced these skills by lecturing at conferences and by teaching in the outpatient and inpatient settings. Before and after the rotation, residents anonymously filled out surveys with questions focused on their attitude towards teaching. Data was collected from 73 residents from July 2004 to September 2009. The data was analyzed using a two-tailed t-test with independent variables and a one-way ANOVA followed by a post test. **RESULTS:** Four categories showed significant improvement including feeling prepared to teach (20% increase,  $P<0.0001$ ), having confidence in their teaching ability (16% increase,  $P<0.0001$ ), being aware of their expectations as a teacher (19% increase,  $P<0.0001$ ), and feeling that their anxiety about teaching was at a healthy level (9% increase,  $P=0.0112$ ). There was an increase in the level of enthusiasm (4% increase), but the p-value did not reach a significant range ( $P=0.121$ ). The level of enthusiasm started high and was significantly higher on the pretest than every other tested category ( $P<0.05$ ). **CONCLUSION:** Residents are enthusiastic about teaching and their level of enthusiasm remains high following a teaching rotation. Residents feel more prepared to teach, more confident in their teaching ability, more aware of their expectations as a teacher, and less anxious about teaching following a formal teaching rotation.

#### Poster Number 39

##### READING PROGRAM SUCCESS ON IN-TRAINING AND CERTIFYING EXAM SCORES

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The pass rates of the General Pediatric Certifying Exam are a publically shared outcome measure of ACGME accredited pediatric residency programs. The annual In-Training Exam is the best predictor of eventual success on the certifying exam. On average, residents gain 100 points per year on the In-Training exam with a score of 410 needed to pass the certifying exam. In an effort to better prepare our residents for passing boards, in 2006, we developed a reading program that was mandatory based on the results of the individual's In-Training Exam: PL1 scores  $<100$ , PL2 scores  $<200$ , and PL3 scores  $<350$ . The reading program consisted of the following: 1. Regular meetings with program director to review and track progress. 2. Complete 25 PREP questions on Pedialink per month. For PL1's, 50 questions per month. 3. Complete weekly on-line “Case of the Week”. 4. Conference attendance  $>70\%$  5. Commitment to read on every patient. 6. For PL3's, read “Pediatrics in Review” monthly, complete questions and submit 10 learning points. 7. PL3's encouraged to take a Board Review course at the completion of residency. Over a two year period, the average PL1 In-Training exam score was 147 (42 residents). Within the same cohort, as PL2's the average score increased to 277 - an increase of 130. Average PL2 score over this 2 year period was 282 (40 residents) increasing to 362 as PL3's - an increase of 80. Over this 2 year period, 25 residents were on the reading program with average score increase of 156. 57 residents were not on the reading program with an average score increase of 84. Using a paired t test to compare the impact of the reading program on the means between each individual class revealed statistically significant results:  $t=5.5869$ ,  $df=3$ ,  $p=0.0113$ . In addition, from 1999-2006, prior to the reading program, our General Pediatric Certifying Exam first time pass rate was 92%(101/110). From 2007-2008, this has increased to 94%(30/32). A structured reading program, specifically using PREP questions, is successful at increasing In-Training Exam scores and first time pass rates on the General Pediatric Certifying Exam.

#### Poster Number 40

##### DELIVERY ROOM EDUCATION DURING A NICU ROTATION IMPROVES RESUSCITATION SKILLS

*Amy Wood, MD, Cassidy A. Delaney, MD, Adam A. Rosenberg, MD, James S. Barry, MD, University of Colorado Denver, Aurora, Co*

Neonatal resuscitation skills are usually developed through neonatal resuscitation program (NRP) education and during residency through apprenticeship roles, experience and repetition. Objective: By providing delivery room (DR) centered education for residents during an NICU rotation, we will demonstrate an improvement in knowledge of DR equipment and skills necessary for neonatal resuscitation. Methods: Beginning in July 2008, interns during their NICU rotation had structured

- education in DR resuscitation. Each intern had a scored assessment of preparation of a 44 item equipment list in the DR
- followed by a scored assessment in one of 3 standardized resuscitation scenarios (28 week preterm infant, term infant with meconium or preterm infant with hypovolemic shock. After the session, each intern received education about the equipment and a debriefing of their performance in the simulation by a neonatologist, neonatal fellow or neonatal nurse practitioner.
- At the end of their month, the interns were scored again for equipment preparation and on a different resuscitation scenario. Senior residents were assessed once during their month with no education intervention. Results: PL1's (n=28) initial equipment list score was 53 +/- 2% which improved to 83 +/- 1% (p<0.001) at the end of the month. The lowest equipment scores were use of a plastic bag to prevent heat loss in small preterm infants (32%), preparation for needle thoracentesis (48%) and placing an umbilical venous line to the correct depth (52%). Average score on their initial scenario was 76 +/- 2% which improved to 85 +/- 2% (p<0.001) at the end of month assessment. Senior residents (n=21) had an average equipment score of 66 +/- 3% and simulation score of 81 +/- 2%. There was no difference in scenario scores between interns and senior residents at the end of the month (p=0.15). Conclusions: After their NRP education, neither pediatric interns or senior residents were proficient in their knowledge of delivery room equipment. A structured education program was able to address this deficiency.

• **Poster Number 41**

• **COMPLIANCE WITH RESIDENT PHYSICIAN DUTY HOUR REGULATIONS: A 16-WEEK OBSERVATIONAL STUDY AT THE WOMEN AND CHILDREN'S HOSPITAL OF BUFFALO, NEW YORK**

• *Lorna K. Fitzpatrick, MD, Joyce J. Lee, MD, SUNY at Buffalo Pediatrics, Buffalo, NY*

• Resident physician duty hour restrictions remain a contentious issue in Graduate Medical Education. Limitations have arisen in response to concerns that resident fatigue adversely affects patient safety, resident safety, and resident education. These regulations emphasize efforts to promote compliance and resident education within the constraints of limited duty hours. Our specific goals include: 1) to objectively assess overall compliance with ACGME or NYS Health Code 405 duty hour regulations among pediatric residents at our institution, 2) to identify the number and severity of violations, and 3) to recognize resident assignments that are particularly prone to violations. Methods: Forty-six pediatric residents were asked to clock into and out from duty between November 17, 2008 and March 8, 2009. All daily punches for all residents on service in the NICU, PICU, WARD, and ED were reviewed for compliance. Total violations, violations by department, and violations by specific regulation were determined. Results: 140 duty hour violations were observed over 1,513 shifts (9.3%). Department specific non-compliance was greatest in the PICU followed by the ED, NICU, and WARD. 82 violations (58.6%) resulted as residents exceeded 27 hours per shift, 13 violations (9.3%) as residents returned to work less than 10 hours since the end of their last shift, and 45 violations (32.1%) as residents exceeded 12 hours per ED shift. No resident exceeded 80 hours per week or 7 consecutive workdays. Conclusions: Overall, 9.3% non-compliance with resident physician duty hour restrictions was observed at our institution. Similar studies are not available for direct comparison. Areas most vulnerable included our critical care units and the 24-hour call shift. It is imperative to objectively and critically assess non-compliance rates. Only then is it possible to affect positive change and create a training environment in which residents are guaranteed sufficient clinical exposure to ensure education while maintaining safety and minimizing fatigue.

• **Poster Number 42**

• **RESIDENT PERCEPTIONS OF BARRIERS TO COMPLIANCE WITH WORK HOUR REGULATIONS**

• *Lorna K. Fitzpatrick, MD, Danielle L. Bonnevie, MD, Joyce J. Lee, MD, Bree C. Kramer, DO, SUNY at Buffalo Pediatrics, Buffalo, New York*

• Background: Resident work hour limitations have been mandated by the ACGME since 2003. A prior study by SUNY Buffalo pediatric residents showed 141 work hour violations in 1,645 assessed shifts. Violations were committed by 79.6% of residents studied. Objective: To assess pediatric residents' perceptions of what barriers impede compliance with work hour regulations. Design/Participants: A survey including 25 questions regarding barriers to compliance was administered to 53 pediatric residents. Measurements: Resident perceptions were measured on a 5-point Likert scale (1=no barrier, 3=some barrier, 5=significant barrier). Results: The survey response rate was 79.2%. Questions in 6 categories (pre rounds, rounds, teaching, sign out, unpredictable clinical circumstances, and unfulfilled responsibilities) were rated from 1 to 5. Ratings of 3, 4 or 5 were considered perceived barriers to compliance. Survey responses were analyzed by training year. The main perceived barrier to compliance with work hours for PGY-1 residents is "too many notes to write" (82.4%). Other major barriers include "carrying too many patients" (70.6%) and "too much team/attending discussion on post call rounds" (70.6%). Barriers for PGY-2 residents include "admission in the sign-out period" (66.7%), "too many notes to write" (58.3%) and "acutely ill patient in the sign out period" (58.3%). Perceived barriers for PGY-3 and 4 residents were "too many notes to write" (46.2%), "notes too time intensive or cumbersome" (38.5%), "carrying too many patients" (30.8%), "too many admissions" (30.8%) and "too much team/attending discussion on post call rounds" (30.8%). Overall, barriers to compliance include "too many notes to write" (64.3%), "carrying too many patients" (52.4%) and "admission in the sign out period" (42.9%). Conclusions: This study suggests that residents perceive circumstances including pre rounds, rounds, patient volume, and unpredictable clinical circumstances as barriers to compliance with work hour regulations. Perceived barriers vary by PGY level. It is important to address these barriers to improve resident compliance with work hour regulations.

Poster Number 43

**SUCCESSFUL SELF-DIRECTED LIFE-LONG LEARNING IN MEDICINE: A CONCEPTUAL MODEL DERIVED FROM QUALITATIVE ANALYSIS OF A NATIONAL SURVEY OF PEDIATRIC RESIDENTS**

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**BACKGROUND:** Self-directed lifelong learning is recognized as an integral component of medical professionalism, yet how best to encourage its development during clinically intensive training is unknown. We developed a model for successful self-directed learning by analyzing qualitative data from a national survey of residents collected in 2008-9. **METHODS:** Pediatric and medicine/pediatric residents at 46 training programs completed a web-based survey. Self-reported barriers to and strategies for achieving self-directed learning goals were systematically analyzed through inductive iterative review. **RESULTS:** 57% (992/1738) responded. Barriers to achieving self-directed learning goals were categorized into: difficulty with personal reflection, environmental strain, competing demands, difficulty with goal generation, and problems with plan development and implementation. Strategies for achieving self-directed learning goals included creating goals that were important (relevant to the learner and prioritized by the learner as important to achieve), specific (with broad goals broken down into incremental steps and a specific plan for each step), measurable, accountable (with reminder and tracking systems and building in internal and external accountability), realistic (achievable goals which utilize existing opportunities and constant self-adjustment), and included a timeline for completion of the goal (and incorporation of goal into their daily routine). **CONCLUSIONS:** Based on the data, we propose a conceptual model for self-directed lifelong learning that involves creation of learning goals and plan development based on individual reflection and self-assessment and continual revision of goals and/or plans based on degree of goal attainment. This model could be broadly applicable across the continuum of medical education.

Poster Number 44

**ASSESSING 'CENTEREDNESS' OF PEDIATRIC RESIDENTS PRIOR TO A NEW CURRICULUM**

*Keith J. Mann, MD, Children's Mercy Hospital, Sheryl A. Chadwick, BS, Deedra J. Miller, AAS, Children's Mercy Hospitals and Clinics, Sarah C. Petersen, MD, University of Missouri Kansas City Pediatric Resident, Kansas City, MO*

**Objectives:** The Patient-Practitioner Orientations Scale (PPOS) measures physicians' attitudes towards the doctor-patient relationship on a scale ranging from patient- to physician/disease-centered. We aim to document a baseline measure of centeredness in pediatric interns, and compare that baseline to third year residents, prior to implementing a patient- and family-centered curriculum. **Methods:** A non-randomized control group pretest-posttest design will be used to assess the curriculum. This abstract summarizes the pre-test data. The PPOS was given to both 2009 interns and graduating residents. The 18 item PPOS assesses two domains of "centeredness", caring and sharing. Scores ranges from 6, patient centered, to 1, physician/disease centered. Mean scores were compared by two-tailed t-test; p values <0.05 are statistically significant. **Results:** 32/32 interns and 18/26 senior residents completed the PPOS. The mean ( $\pm$ SD) score for the interns was 4.6 ( $\pm$  0.42). Interns scored similarly in the sharing domain, mean 4.5 ( $\pm$  0.52), compared to the caring domain, mean 4.7 ( $\pm$  0.4). Female interns (4.7  $\pm$  0.39) were slightly more patient-centered than male interns (4.4  $\pm$  0.42) (p=0.06). Female interns (4.64  $\pm$  0.49) scored significantly higher than males (4.19  $\pm$  0.48) in the sharing domain (p<.05). For third year residents, mean total PPOS (4.5  $\pm$  0.40) and mean caring domain scores (4.7  $\pm$  0.46) were statistically similar to interns. The difference in the sharing domain (PI-3, 4.27  $\pm$  0.51 vs. PI-1, 4.5  $\pm$  0.52) approached statistical significance (p = 0.12). **Conclusion:** Pediatric residents in our program have a patient centered attitude that is consistent throughout training. Females are more patient and family centered than males, especially in their comfort sharing information and decisions with families. Third year residents scored lower than interns in the sharing domain. While this difference was not statistically significant, one would expect that experience would lead to more, not less, comfort in sharing information and decisions with families.

**QI Posters**

Poster Number 45

**A QUALITY IMPROVEMENT (QI) PROJECT TO DECREASE PAGES DURING RESIDENT CONFERENCES**

*Keith J. Mann, MD, Mary Hamm, MD, Lory Harte, PharmD, Children's Mercy Hospital, Kansas City, MO*

**Objectives:** 1) Identify the volume and character of the pages that disrupt residents during noon conference 2) Decrease non-urgent pages during noon conferences by 75% within 6 months **Methods:** The study is a resident driven single site quality improvement (QI) study. We created a fishbone diagram identifying causes for non-urgent pages and held focus groups to identify possible solutions. A multidisciplinary group created a nursing communication card documenting vital information including times of resident availability. We collected data through tally sheets filled out by residents answering pages during conference. Information collected included the nursing unit, nature of the call, the caller's occupation, and call urgency. The data was coded and entered into an Excel spreadsheet. We collected 23 days of pre-intervention data. We then began to distribute the nurse communication card while continuing data collection. We plotted the data on a control chart (x-axis = day #, y axis = number of pages) and used Excel QI Macros for analysis. A statistically significant change, based on standard QI methodology, exists when 8 consecutive post-intervention points fall on one side of the pre-intervention mean. **Results:** Prior to our intervention, there were 121 pages recorded over 23 days. The mean number of pages was 5.26 with an upper control limit (UCL) of 12.16 and a lower control limit (LCL) of 0.5. 17/121 (14%) of pages were considered urgent. After the implementation

- of the nursing communication card, there were 29 pages over 16 consecutive days (mean = 1.81, UCL = 5.85, LCL = 0). After a peak of 6 paging interruptions 5 days post-intervention, there were 11 consecutive days where there were less than 5 pages (the mean pre-intervention was 5.26) suggesting statistical significance. Conclusion: The vast majority of pages during noon conference are non-urgent in nature. A simple nurse communication card can significantly decrease the number of non-urgent pages during resident noon conference.

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• **Poster Number 46**

• **APPLYING LEAN INITIATIVES TO INPATIENT ROUNDS TO IMPROVE DISCHARGE DELAYS**

• *Beatriz M. Cunill-De Sautu, MD, Marcos Mestre, MD, Antonio Rodriguez, MD, Nikole Sanchez-Rubiera, RN, BSM, MBA, Miami Children's Hospital, Miami, FL*

• **BACKGROUND:** The Pediatric RRC's system-based practice requirement calls for residents to participate in quality improvement projects aimed at identifying opportunities in patient care and hospital processes. Resident feedback in our program suggests that the lack of standardization of inpatient rounds and multidisciplinary care coordination hampers efficiency in executing patient care duties, such as discharges. This leaves them less time for educational activities and self-directed learning. **METHODS:** Lean concepts were utilized to analyze the activities of a typical day on the inpatient wards. A value stream map was developed to measure the duration of the discharge process. The medical team's improvement intervention consisted of the 1) standardization of rounding schedules, 2) identification of potential discharges 24 hours in advance to facilitate document preparation, 3) prioritization of discharges on rounds, and 4) completion of discharge orders on rounds. A 'try-storm' or pilot of the interventions was conducted, and times were compared. **RESULTS:** The discharge process from decision to discharge to admission of a new patient took up to 8 hours with variation amongst process steps. Discharge decision to time of discharge order written (a resident function) took up to 4 hours. 80% of discharge orders were processed after 1 pm. After the intervention implementation, the discharge process time decreased by 60% to 3.25 hours. Discharge decision to time of discharge order written decreased by 88% from 3 hours to 12 minutes. **CONCLUSIONS:** Resident participation in this QI project aimed at improving the discharge process yielded multiple benefits. The intervention by the medical team led to a significant reduction in discharge delays and improved patient flow. Additionally, multidisciplinary communication, care coordination, and patient satisfaction all indirectly benefited from the intervention. Efficiencies in rounding and the discharge process benefited the resident by increasing the likelihood of attending educational activities and decreasing the likelihood of duty hour violations due to inpatient service obligations.

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• **Poster Number 47**

• **OBESITY AND OVERWEIGHT - DO RESIDENT PHYSICIANS RECOGNIZE AND DOCUMENT IN AN AT RISK POPULATION?**

• *Sarah Yount, MD, Kerry Sease, MD, Greenville Hospital System/Univ of SC School of Med, Greenville, South Carolina*

• The rapid increase in obesity and overweight children in the general pediatric population is a significant concern for practicing pediatricians. A recent press release sponsored by the Piedmont Healthcare Foundation found 41% of Greenville County youth overweight or obese - above the SC state rate 31.5% and the National rate 28.8%. Knowing the associated morbidity and mortality of obesity, development of a protocol to identify and treat an at risk population at the Center for Pediatric Medicine (CPM) was felt necessary. A quality improvement project following the PDSA (Plan -Do-Study -Act) cycle was started to discern if a difference was being made in the at risk patients at CPM. Method: Through multiple PDSA cycles; a retrospective chart review of patient encounters between July 2008 and April 2009 was completed to evaluate documentation of obesity, overweight, nutritional counseling and follow up visits. Physicians of all levels were not consistent with documenting the assessment of overweight and obesity, counseling and follow up interval. A reminder system was put in place for all physicians to document obesity or overweight based on BMI. A comprehensive handout was developed to provide consistent counseling, dietary recommendations and follow up. The handout was available in both English and Spanish. Results: An average of 25% of patients were not diagnosed as overweight or obese despite qualifying BMI. This was unaffected by a reminder system or educational efforts. Conclusion: We are not consistently identifying obesity and overweight in the at risk population at CPM. These findings are consistent with the American Heart Association Policy Position Statement on the Prevention, Assessment, Diagnosis and Treatment of Child and Adolescent Obesity in the Healthcare Environment. This statement identified that only one third of pediatricians use body mass index during patient visits and feel uncertain with their ability to provide anticipatory guidance to children with obesity risk factors. Continued efforts to improve knowledge and comfort in management of obesity is necessary.

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• **Poster Number 48**

• **SCOLIOSIS SCREENING IN MED-PEDS CLINIC: BACK TO BASICS**

• *Lisa Nguyen, MD, Aimee Chung, MD, Suzanne Woods, MD, Jane Trinh, MD, Duke Medicine-Pediatrics Residency Program, Durham, NC*

• **Background:** Appropriate screening for scoliosis can lead to early detection and prevent future morbidity. Specific screening recommendations vary. The AAP recommends if screening is undertaken, females should be screened twice at ages 10 and 12, and boys once, at age 13 or 14. We found that residents in our Med-Peds clinic are unaware of the recommendations and are not comfortable with scoliosis screening. **Methods:** We created a proposal for scoliosis screening for our quality improvement (QI) project, using our program standard QI template. Baseline data collection of scoliosis screening in adolescents using a

random sample of 10 Med-Peds residents was done. An electronic survey with questions designed to address the definition of scoliosis screening recommendations and screening tools was sent. An educational tool designed to address those topics was created, and given to the selected residents. This was followed by a post-test survey. We plan to re-evaluate screening frequency among those residents in adolescent well child visits during a randomly selected time period. Results: Baseline data collection of our selected residents showed the average screening rate was 47.8%. The pattern of screening suggested there were two major groups: residents who knew and applied the screening recommendations, and those likely not aware of the recommendations. In the pre-test survey, most residents could correctly define scoliosis. More than 50% knew the AAP recommended ages for screening. Less than 50% understood the Adams forward bend test or that a scoliometer was used to measure trunk rotation in a forward bent position. After the educational tool was implemented, the post-test survey revealed that 90% of residents knew the AAP recommended screening ages and 100% expressed understanding of the Adams forward bend test and functionality of a scoliometer. Conclusion: We implemented a successful educational tool to improve knowledge for scoliosis screening in our clinic using QI methods introduced during our residency training. We plan to re-evaluate screening rates and expand the use of our educational tool through future PDSA cycles.

Poster Number 49

#### A QUALITY IMPROVEMENT PROJECT TO ENHANCE PEDIATRIC RESIDENT MEDICAL RECORD DOCUMENTATION

*Hai Jung H. Rhim, MD, MPH, Avni Bhalakia, MD, Luis Umana, MD, David Fagan, MD, St. Barnabas Hospital, Bronx, New York*

**BACKGROUND:** The Accreditation Council for Graduate Medical Education (ACGME) requires residents to participate in a quality improvement project. Participation in QI projects especially when resident driven may provide an opportunity to address one or more of the six ACGME core competencies. **BACKGROUND:** A PGY-2 resident conducted an on-line chart review of cases admitted to the Pediatric Inpatient Service during November 2007. 30 random charts were measured against a checklist of 36 criteria supplied by the Medical Records Department. The Pediatric Inpatient Division was at greater than 90% compliance with 26 of the 36 criteria. The areas not in compliance were: Identification Data (83%), Discharge Summary (57%), Admission Consent (83%), Growth chart (73%), H & P immunizations (83%), H & P medications (63%), Admission Note attending signature and date, (83%), Progress Notes (87%), Physician Orders timed and dated (87%), and Legibility of writing (70%). **METHOD:** To improve compliance in the deficient areas, the resident prepared a one hour conference on documentation. The mandatory conference, given in February 2009, addressed proper documentation in the medical record and included the areas of non-compliance as identified by the chart review. The conference used specific examples from charts to demonstrate the areas that required improvement, such as Legibility of Progress Notes and Orders, Timing and Dating of Progress Notes and Orders and Medication Reconciliation. The conference also addressed standard acceptable abbreviations and do not use abbreviations (i.e. QD, QID). **RESULTS:** To assess the impact of the conference on resident documentation, the resident reviewed five charts each month from March 2009 through July 2009, again using the checklist of 36 criteria. The Pediatric Inpatient Division was at greater than 90% compliance with 31 of the 36 criteria. **CONCLUSIONS:** The addition of a medical documentation conference had a positive impact on pediatric resident documentation and provided exposure to the ACGME competencies of Systems-Based Practice and Practice Based Learning and Improvement.

Poster Number 50

#### IMPROVING ADOLESCENT GYNECOLOGIC CARE AND CONTRACEPTIVE COUNSELING: A RESIDENT QI PROJECT

*Stephanie de Wit, MD, Johns Hopkins Hospital, Baltimore, MD, Jennifer Cameron, MD, Riley Hospital for Children, Indianapolis, IN, Kristy Healy, MD, University of Rochester, Rochester, NY, Esther Liu, MD, Baltimore Washington Medical Center, Glen Burnie, MD, Lynn Garfunkel, MD, University of Rochester, Rochester, NY*

Participation in a mandatory workshop early in the R2 year provided a basic understanding of quality and improvement. During the R2 and R3 years, ongoing project development and implementation greatly impacted adolescent primary care in a resident continuity clinic. The Concern: High rates of adolescent pregnancy and sexually transmitted infections (STI) which exceed national averages in our clinic population. Potential solution: Improve STI screening and contraceptive counseling. Problem: Does our clinic systematically provide "best practice" for adolescent girls? Using the PDSA cycle we learned how our practice differed from ideal practice and then implemented changes to eliminate the gap between current practice and ideal practice. PLAN: Evaluate care and counseling of a group of adolescent girls. We conducted a chart review of well-child visits for girls ages 15-19. DO: After development of a chart review tool, we assessed 100 charts: 1. Was a Sexual History (SH) documented? 2. Were sexually active (SA) adolescent girls screened for STIs, including gonorrhea, Chlamydia, and HIV? 3. Were SA adolescent girls offered contraception? 4. Were SA adolescent girls offered Emergency Contraception (EC)? STUDY: 93% had SH documented; 50% were SA and of those, 46% were screened for gonorrhea and Chlamydia; 30% were offered HIV testing; 74% were offered contraception; 6% were offered emergency contraception. SH documentation met standards; however we wanted to increase STI screening and EC discussion. ACT: Findings were presented to faculty, residents and nurse practitioners at pre-clinic conferences. The electronic medical record template was modified with prompts for STI screening and EC. A second chart review after provider education and implementation of the new template showed higher HIV screening rates (40%), and improved contraception (81%) and EC (24%) management. Given the large adolescent female population served by our clinic, improving our practice will hopefully impact STI and teen pregnancy rates. Offering better care to our patients with a relatively simple process helped us appreciate the value of QI.

- 6:00 – 6:30pm **LEARN Session**
- **Williford C, Third Floor**
- Please join the new Director of the APPD Longitudinal Educational Assessment Research Network (LEARN), Hilary Haftel, for a brief informational and strategic planning session to launch LEARN's first collaborative project. Based on feedback from a member survey prior to the meeting, an initial project will be highlighted, potential leaders and collaborators identified, and first steps implemented. (NOTE: This session will be offered twice for your convenience, both Friday and Saturday from 6:00-6:30 pm.)

## SUNDAY, APRIL 18

6:30am **APPD Information Desk**  
**3rd Floor Foyer**

6:30 – 8:00am **Continental Breakfast**  
**3rd Floor Foyer**

7:00 – 8:00am **IPE: Navigating the Next Round: FAQ & Lessons Learned**  
**Williford C, 3rd Floor**

8:00 – 10:00am **Workshop Session III for Everyone**  
**Workshop 17** **Marquette, 3rd Floor**

**DEVELOPING THE FUTURE LEADERS OF PEDIATRICS: ATTRACTING THE BEST CHIEF RESIDENTS AND MAXIMIZING THEIR PROFESSIONAL DEVELOPMENT**

*Daniel J. Schumacher, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, John G. Frohna, MD, MPH, University of Wisconsin, Madison, WI, Mia Mallory, MD, Brian E. Wagers, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*

"Position Opening: Chief Resident. Looking for motivated, hard working, and responsible resident to delay entering practice or fellowship training one year to work beyond given title. Must be able to routinely navigate difficult conversations with residents and faculty, give feedback that is not well-received, and gracefully accept feedback about improvements that should be made in scheduling, teaching, and leadership activities. Salary below national average for level of training and non-negotiable." Do some of your best chief resident candidates view the chief year position this way? If so, you are not alone. Many program directors share the challenge of recruiting residents to accept a chief resident position. How do we best convince these residents, as well as those thinking about starting fellowship or entering practice, to accept a chief resident position? This workshop will review opportunities for maximizing the personal and professional development of chief year, perks and benefits that can make the job description more appealing, and how to develop a longitudinal support structure for chief residents. These best practices can be utilized to recruit the best chief resident candidates and maximize the satisfaction and success of the chief resident year. We will explore resources that have been developed in other fields, including internal medicine and emergency medicine, and are high-yield resources for chief residents and program leadership. With significant time for interactive discussion, sharing, and planning, this workshop will provide attendees with new ways to attract and retain the best chief resident candidates and maximize the impact of their year!

**Workshop 18** **Astoria, 3rd Floor**

**SIMULATION-BASED INTERPROFESSIONAL TEAM TRAINING: DEVELOPING AN EFFECTIVE AND SUSTAINABLE PROGRAM UTILIZING A 360-DEGREE EVALUATION OF TEAMWORK AND COMMUNICATION SKILLS.**

*Sandrijn van Schaik, MD, PhD, Jennifer Plant, MD, Glenn Rosenbluth, MD, University of California San Francisco, San Francisco, CA*

Growing emphasis on interprofessional education and 360-degree evaluation have created new opportunities for development and utilization of simulation programs. We have developed and implemented a low-budget simulation program around pediatric emergencies designed to meet diverse interprofessional learning goals in addition to providing all participants with multi-source feedback. This workshop aims to share our 3 years of program experience in an interactive manner. The overall goal is to help participants set up an educationally sound and effective team-training program that is feasible, sustainable, low-budget, and targeted to meet the interprofessional training and multi-source evaluation requirements set forth by the ACGME. In this interactive workshop, participants will learn how to set up an effective interprofessional team training program using basic principles of curriculum development. After a brief introduction outlining the essential steps, small group exercises will follow the steps of curriculum development, with a focus on how to perform a needs assessment and how to use this to develop goals and objectives that address diverse educational needs among learners. Next, participants will identify stakeholders and potential resources at their own institutions, as well as possible barriers including costs, appropriate training location, schedule conflicts and interference with patient care. We will discuss development of simple patient case scenarios targeted to specific goals and objectives. In addition, we will highlight our strategies for direct observation and

360-degree feedback for all learners, and share our tool. Facilitators will show videos demonstrating a debriefing method that incorporates 360-degree feedback and evaluation. This demonstration with video examples will lead to a discussion of evaluation tools to assess learners and the program as a whole, and examples of such tools will be shared among participants.

#### Workshop 19

**Buckingham, Lobby Level**

#### MEASURING WHAT COUNTS: DEFINING THE EVIDENCE FOR ASSESSING LEARNERS IN CLINICAL SETTINGS AND DEVELOPING SKILLS IN CONSTRUCTING USEFUL COMPETENCY ASSESSMENTS FOR TRAINEES

*John D. Mahan, MD, Nationwide Children's/OSU, Columbus, OH, Diane Kittredge, MD, Dartmouth Hitchcock Medical Center, Lebanon, NH*

Measuring what counts: Defining the evidence for assessing learners in clinical settings and developing skills in constructing useful competency assessments for trainees **OBJECTIVES** -- By the end of the workshop, participants will be able to: 1. Describe basic principles of learner assessment in clinical settings. 2. Identify competency-based learner assessment strategies that apply to residents and fellows in training. 3. List three examples of evidence-based assessment tools that can be applied to the trainees in their own teaching environment. **DESCRIPTION** The workshop will start by asking participants to identify the top challenges they face in assessing learner performance. Common themes around the assessment of residents and fellows in training will be identified. Leaders will then review principles of competency-based assessment applicable to various clinical settings, and current evidence for formative and summative methods that have particular value in pediatric resident and fellow training. Small group sessions will assemble participants around similar trainees/interests so that participants discuss and develop competency assessment strategies and tools to implement in their own institutions. Finally, the groups will reconvene to present their competency assessment strategies and tools for further input and discussion. Opportunities for future collaboration among participants will also be defined.

#### Workshop 20

**Boulevard A/B/C, 2nd Floor**

#### WORK-WORK BALANCE: WHY IS 80 HOURS NOT ENOUGH TIME FOR RESIDENTS TO GET THEIR WORK DONE?

*Cynthia L. Ferrell, MD, MEd, David Rozansky, MD, PhD, Beau Weill, MD, Laurie Ashenbrenner, C-TAGME, Oregon Health & Science University, Portland, Oregon*

Work-work balance: Why is 80 hours not enough time for residents to get their work done? The current generation of residents has work-life balance figured out. They are more skilled than most pediatric faculty in their ability to manage work and life activities. Due to issues like duty hour implementation, increased complexity of hospitalized patients and hospital systems, increased use of technology (including email and electronic medical records), and more regulatory requirements for data entry by residents (duty hour logging, procedure logging), a new personal struggle has arisen. Pediatric residents are now grappling with their attempts to balance all the professional requirements of their job and their education during the work day. They are having difficulties with work-work balance. As a result of their attempts to manage, they are facing new challenges to their professionalism. This interactive workshop will begin by addressing the conceptual framework of work-work balance. Data from our pediatric residency training program will be shared and will drive group discussion of other major impediments to residents completing work-related tasks during the workday. Through small group interaction, we will explore solutions, both personal and institutional or national, to help improve the ability of residents to get their work completed. At the conclusion of the workshop, Program/Associate Program Directors, Chief Residents, and residency coordinators should have a better understanding of the current generation of workday challenges facing residents and leave with some ideas for potential solutions to implement in their own institution.

#### Workshop 21

**Joliet, 3rd Floor**

#### TEACHING AND ASSESSMENT OF RESIDENT PROCEDURAL COMPETENCE UTILIZING VIDEO AND SIMULATION

*Dawn S. Tuell, MD, Quillen College of Medicine, George Abraham, MD, East Tennessee State University, Martin Eason, MD, JD, Quillen College of Medicine, Johnson City, TN*

Procedural competency is mandated by the ACGME for successful completion of residency; however, it has proven to be a difficult task to ensure trainees are adequately taught and competent to perform all required procedures. Duty hour restrictions and lack of opportunities for observing proper technique and practicing under appropriate supervision may subject trainees to informal learning and evaluation. Our institution has developed a novel curriculum with the goal of teaching appropriate procedural techniques and to systematically evaluate competency. To assist those interested in incorporating a web-based program using patient simulation for teaching, practicing and evaluating required procedures, we propose an interactive workshop that demonstrates the techniques for teaching, recording and archiving those procedures. The goal is to determine which procedures are amenable to audiovisual recording, create a system for recording training procedures and evaluating trainee competency, and setup a system for uploading and archiving those recorded videos. **Workshop format:** 1. First 30 minutes: Presenters discuss the need for improving efficiency of teaching procedures and using inexpensive, available technology developing a system for archiving and evaluating trainee competency. The presenters will demonstrate a technique for recording a skill session and participants will determine what procedures will be useful for recording and archiving at their institution. 2. Second 30 minutes: Presenters will introduce readily-available recording equipment and in small groups participants will perform and record a medical procedure using the techniques discussed by the presenters. 3. Third 30 minutes: Presenters will demonstrate various techniques to upload the recorded sessions for viewing and archiving. Time permitting participants will attempt to upload the video created during the session. At the conclusion of the workshop, participants will understand how to use a web-based program to record and archive required procedures for trainee education and competency evaluation.

**Workshop 22****ASSESSMENT IN MEDICAL EDUCATION: WHAT IT IS AND IS NOT**

*Patricia J. Hicks, MD, Children's Hospital of Philadelphia, Philadelphia, PA, Ann E. Burke, MD, Wright State University, Dayton, OH, Carol Carraccio, MD, University of Maryland, Baltimore, MD*

Background There are new and exciting developments in Pediatric GME, including the Initiative for Innovation in Pediatric Education (IPE), and the ACGME /ABP's Milestones Project, both of which depend on the expertise of program directors in measuring outcomes of learners and curriculum. Many educators find assessment challenging and seek to understand the available methodology, its application and limitations.1-3 Additionally, many teachers may confuse assessment and evaluation. Validity evidence is sought for outcomes in pediatric medical education so that measurement of learner performance and curricular effectiveness can inform future pediatric program design. Thus, it is imperative and timely to focus on program director professional development regarding assessment. Description This workshop's content will focus on themes that emerge from the results of a survey of the APPD membership's identified learning needs in assessment. Case-based examples will be used to illustrate approaches to measuring outcomes of learners and evaluation of curriculum. Emphasis will be placed on the strengths and limitations of different approaches and in aligning choice of assessment methods to the content to be measured. In small group break-out sessions, workshop attendees will have the opportunity to discuss examples of assessment or evaluation issues relevant to their own program's needs. The workshop will end with a summary of "lessons learned" and workshop attendees will leave with case examples, references and other relevant materials to assist them in developing and implementing tools for assessment and evaluation.

**Workshop 23****ELECTRONIC PROFESSIONALISM: APPROPRIATE BEHAVIOR IN THE NEW AGE OF COMMUNICATION**

*Paul S. Matz, MD, Nancy D. Spector, MD, Leonard Levine, MD, Katherine Garguilo, MD, Matthew McDonald, MD, Robert McGregor, MD, St. Christopher's Hospital for Children, Philadelphia, PA*

Advances in technology in recent years have revolutionized medical education and expanded the reach of communication both within and outside of the medical community. While these advances have increased access to clinical information, they also have created new challenges in professional behavior for medical students, residents and faculty. The use of e-mail, text messaging, smart phones, social networking, etc. has accelerated communication between members of the medical community, but has the potential to create conflicts not previously encountered. The questions of how to teach, monitor, and remediate behavior with these electronic interfaces is a new challenge to the medical educator. In this workshop, the presenters will review some of the current technology and its potential pitfalls. They will discuss the unique aspects of these methods of communication including topics such as: content, language, tone, timing, distribution, rate of response and appropriate mode utilized. Real-life examples will be used for discussion and a curriculum developed by the presenters will be shared with the group. The participants will have the opportunity to discuss issues in electronic professionalism and to create guidelines and develop possible solutions. The participants will leave with an understanding of the current issues in electronic professionalism and have resources to address these issues and anticipate conflicts in the future.

10:15am – 12:15pm

**Workshop IV for Everyone****Workshop 24****BACK TO SCHOOL-- EXPANDING PEDIATRIC RESIDENCY TRAINING**

*Kami Larsen, MD, University of Nevada School of Medicine, Kira Torreblanca, DO*

School based clinics are often a great source of pediatric training and serve the dual roll of providing a source of outreach as well as valuable patient encounters, however it may be difficult to find a way to incorporate them into training programs. Often resident schedules are already full of required rotations and adding additional outreach hours can be problematic. In addition, funding is difficult and space can be an issue. Using the combined experience of several school based outreach clinics, we will explore partnerships, coalitions, and funding sources. We will discuss resident involvement in planning the opening of a new clinical site and how to involve the residents in acute care, classroom education, shot clinics and working with the school districts. The group will then be broken into small groups to develop a small school based clinic plan and then discuss ways in which the residents will be able to find time in their schedules to participate and ultimately gain knowledge in the six competencies through outreach. We will come back together as a large group to discuss these plans and give feedback. Lastly, we will focus on unique ways to incorporate assessment tools as a method of evaluating residents using the six competencies and ways to provide residents the opportunity to evaluate the rotation itself.

**Workshop 25****LESSONS LEARNED AND BEST PRACTICES FOR RESIDENT QUALITY IMPROVEMENT PROGRAMS**

*Greg Randolph, MD, MPH, NC Children's Center for Clinical Excellence, Chapel Hill, NC, Suzette Caudle, MD, Carolinas Medical Center, Charlotte, NC*

A gap exists between the quality of care that is possible and the actual care delivered to persons living in the United States. The Pediatric RRC now requires all residents learn QI methods and participate in a QI project during their residency. The Pediatric Residency Program at UNC has developed a Resident QI program to assure each resident acquires knowledge about QI methods and tools with the goal of increasing residents' skills, and abilities to apply QI over the course of their residency



and careers. The key innovative feature of this program is the experiential longitudinal curriculum that spans across resident's one month block rotations. Each resident works with a faculty advisor to effectively conduct their QI project. The QI program teaches residents how to select a priority area for improvement, write a project aim with measurable goals, test and implement changes using PDSA cycles, use seven basic quality tools, and measure processes and outcomes related to these changes using run charts. In 2008-09, third year residents' average increase in pre- vs. post-assessment scores were 3.6 points higher on a 10 point scale rating their confidence in using tools and conducting a QI project. Even though each QI project is unique to UNC, the process that each resident is engaged in is generalizable to other pediatric residency programs throughout the US. We will discuss and summarize the residency QI curriculum, evaluation results, and lessons learned from the program, focusing on 4 domains: resident engagement, faculty engagement, faculty development, and sustaining residents' QI projects after completion. Workshop participants will participate in small group discussions of the processes, best practices, lessons learned, and generalizability in their own settings within these 4 domains. Each group will report their key learnings to the entire workshop. The workshop will conclude with each participant creating an action plan to pilot test and implement changes related to one or more of these domains to enhance their own resident QI program. Workshop faculty will circulate to assist participants with their action plans and formulating next steps.

#### Workshop 26

**Williford B, 3rd Floor**

#### **OOPS ROUNDS AND OTHER INNOVATIVE WAYS TO TEACH PATIENT SAFETY AND TEAM COMMUNICATION**

*Jackson H. Williams, MD, Barbara Stechenberg, MD, Deborah Smith, RN, Baystate Children's / Tufts University, Springfield, MA*

This interactive workshop will discuss several innovative ways to teach medical errors, patient safety and team communication to residents and other learners at your institution. At our hospital we have been able to foster a collaborative and open environment around patient safety and medical errors. This has been accomplished by: training in multidisciplinary Team STEPPS communication, developing a monthly safety and errors conference (Oops Rounds), and instituting a rapid response team. We will discuss ways that programs can create a non-threatening environment where medical errors and patient safety are discussed openly by faculty, residents, students, and other healthcare providers. Ideas will be shared about how to empower faculty and learners to improve systems which may create errors. The workshop will include interactive discussion and small group sessions to discuss barriers and potential solutions to integrating safety and team training into the resident curriculum. We will also share several video vignettes created by our hospital multi-disciplinary team training leaders. Finally, we will address how teaching these concepts can help to fulfill the ACGME Core Competencies of Practice-Based Learning, Systems-Based Practice, and Interpersonal/Communication Skills.

#### Workshop 27

**Boulevard A/B/C, 2nd Floor**

#### **MENTORING IN THE NEW MILLENIUM: STRATEGIES FOR SUCCESS**

*Kristin M. Millin, MD, Patricia Quigley, MD, John Frohna, MD, MPH, Susan Pearson, MA, Craig Becker, MSSW, LCSW, University of Wisconsin, Madison, WI*

Pediatric residency programs have always had a strong commitment to mentoring relationships. However, in the changing world of medical education, it is difficult to maintain rewarding mentoring relationships when faculty have restricted time on inpatient services and are being asked to increase their clinical or research productivity, and residents are asked to restrict their duty hours. Historically, our program and others have matched residents and faculty early in the first year of residency, based on resident career goals. We have found that, despite both parties being willing to be involved in a mentoring relationship, it is rarely as successful a relationship as we would like it to be. Using a series of self-assessment and needs assessment tools, we have now started to place residents with mentors based on core values and characteristics, rather than based on the resident's career goals. Rather than focusing only on career development, the goals of our mentoring program are: 1) show residents how our faculty continue to learn; 2) help residents understand how our faculty work on life balance; and 3) provide an opportunity for residents to talk with faculty about dealing with physical and emotional fatigue. We believe that with this foundation, our residents will be successful in any of their career choices. We would like to share our ideas and inspire other programs to consider this new way of mentoring and hopefully utilize the tools we have developed. This interactive and fun workshop will help educators examine their mentoring program and identify a broader set of goals, based on the relationship between residents and faculty. Through dynamic discussion and brainstorming activities, participants will reflect on the roles of the mentor and mentee in the current medical education environment and identify strategies to direct and track resident self assessment. The workshop will conclude with an interactive critique of tools available to foster effective mentoring relationships. A resource list generated by workshop leaders and participants will be developed for distribution to the APPD.

#### Workshop 28

**Astoria, 3rd Floor**

#### **FLEXIBLE TRAINING AND WORK-LIFE BALANCE: THE DEVIL IS IN THE DETAILS**

*Mary Beth Gordon, MD, Boston Combined Residency Training, Boston, MA, Ann E. Burke, MD, Wright State University, Dayton, OH, Robert J. Vinci, MD, Children's Hospital/Boston Medical Center, Boston, MA, Virginia Barrow, MD, UCLA/Cedars Sinai, Los Angeles, CA*

Background: The "Report of the Task Force on Women in Pediatrics" is a document that outlines specific recommendations that address issues of "family balance in the lives of pediatricians during training and practice, including concerns regarding productivity, career advancement and individual fulfillment." One of the recommendations focuses on flexible, part-time training; another aims to better counsel pediatric learners regarding work-life balance issues. Most educators desire to aid in their learners' well-being and work-life balance, however, navigating the maze of part-time pay and benefits, adhering

- to the details of the American Board of Pediatrics training requirements, and scheduling appropriately and fairly; all the
- while keeping your learners feeling equally treated can be difficult. The APPD membership should be actively involved in
- this dialogue to explore and set practice standards for flexible training and work-life balance, as these goals and topics will
- have significant impact on our trainees' learning experience. Description: A brief overview of the literature regarding the
- current state of flexible training and work-life balance will be shared. In response to the FOPO recommendations, a survey
- of residents was performed via an APPD Special Projects grant. The results of this survey will be summarized. Then there
- will be a 20 minute open and engaging discussion of various points of view from participants. After this segment of lively
- interaction, workshop participants will self-select to one of four break out groups for 40 minutes. The groups' topics will be:
- 1) barriers to part-time training, 2) strategies for counseling and mentoring learners in exploring work-life issues, 3) logistic
- concerns to navigating part-time training schedules, and 4) perception of work-life balance needs of learners. Each group
- will have specific questions and cases to discuss. The facilitators will support the discussion. These groups will summarize
- their discussions and report back to the larger group. The participants will hear success stories and problem solving around
- flexible training that has occurred in various programs.

#### Workshop 29

**Joliet, 3rd Floor**

#### IMPROVING CULTURAL PROFICIENCY THROUGH EXPERIENTIAL LEARNING

*Kathleen W. Bartlett, MD, Philippa J. Strelitz, PhD, Betty B. Staples, MD, Duke University Pediatric Residency Program, Durham, NC*

Background: Our residency program has developed and implemented an innovative approach to ensuring the cultural proficiency of our residents. Traditionally residency programs have relied on role-modeling and didactic presentations to educate trainees about cultural proficiency. However, for cultural competency training to fully impact clinical practice, repeat exposures to key concepts and non-didactic formats that include opportunities for experiential learning are required. Thus we developed a workshop for residents and fellows, entitled Improving Health Outcomes through Cultural Proficiency with the expertise of a medical anthropologist from Texas State University who specializes in Health Disparities. The workshop includes self-assessment, didactic presentation, personal reflection, case discussion, and role play to explore the role of culture in our interactions with patients and colleagues. All residents participate in this workshop during their training. Description: 1. Participants will first complete a cultural competence personal assessment to identify some of their own implicit biases that may affect communication with patients and colleagues from other cultures. We will also explore institutional attitudes toward cultural diversity and barriers to achieving cultural proficiency. 2. We will describe the content of our cultural proficiency curriculum, including how it was developed, and demonstrate some of the tools that can be used in facilitating communication with patients and colleagues from different backgrounds. 3. Participants will break into small groups to practice use of these tools through case discussion and analysis as well as role play. 4. Groups will reconvene to discuss ways to implement similar curricula at other residency training programs. This will allow collaboration between programs, including the development of support networks and suggested resources for post-workshop needs. 5. Finally, we will share evaluation tools and strategies so that participants can determine if cultural proficiency training is effective.

#### Workshop 30

**Williford A, 3rd Floor**

#### MENTORING AND ADVISING PEDIATRIC TRAINEES - IT'S ALL GREEK TO ME.

*Joseph O. Lopreiato, MD, MPH, National Capital Consortium, Bethesda, Maryland, Nancy D. Spector, MD, St. Christopher's Hospital for Children, Philadelphia, PA, Keith J. Mann, MD, Children's Mercy Hospital, Kansas City, MO, Clifton Yu, MD, National Capital Consortium, Bethesda, MD*

Advising and mentoring pediatric trainees is a professional responsibility of educators. While required by accrediting bodies, the specific behaviors and responsibilities of faculty are not always clearly defined or structured for faculty. Some may think that establishing a mentoring and advising relationship with trainees is so complicated that it may be "All Greek to me" and fail to capitalize on the opportunity to be a teacher within the advising and mentoring world. The presenters will engage the audience through a series of interactive self reflections to accomplish the session objectives within a framework of collegial discussion, debate and informed judgment. We will use note cards, buzz groups, self-critique, discussion forums and review of quotes from the mentoring literature to accomplish our objectives. The workshop presenters have years of experience in advising and mentoring and welcome comments and questions from the audience. Whether a chief resident, program director, program coordinator or a valued everyday teacher, all participants should be able to leave this workshop with a clear set of behaviors or responsibilities that they will commit to doing when they return to their home institution. We promise not to dwell on Greek mythology about mentoring, but provide practical advice and comment for teachers.

12:15 – 12:45pm Break and Late Check-Out

The Hilton Chicago offers **late check-out for all APPD attendees** until 12:45 pm. You may use this break to check-out of your room. In addition, a **storage room for APPD luggage** will be available at the Hilton in Lakeside Green (right off the front desk) where you may leave your bags for pick-up and departure after the Working Lunch Session.

12:45 – 1:45pm Working Lunch Session: Action Points & Next Steps from Plenary  
(boxed lunch provided by APPD)

**Williford C, 3rd Floor**

# EXHIBITORS

## **APPD Would Like To Thank The Following Companies For Their Participation As Exhibitors At This Year's Meeting**

*Be sure to visit them on Friday and Saturday, April 16-17 in the Continental Foyer*

### **MyEvaluations.com**

Medical Training Management solutions by MyEvaluations.com for Portfolio, Goals & Objectives, Competence Milestones, Duty-Hours, Scheduling, and Procedure and More. Ask about Self-Appraisals, Curricula & Credentialing documentation, and Competency performance tracking.

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Email: David@MyEvaluations.com ~ Web address: www.MyEvaluations.com  
Booth Personnel: David P.Melamed, MD and Sasha Snyder

### **MedStudy Corporation**

Publishers of Peds & IM board review Core Curriculums, board-style Q&As, video board reviews on DVD, and board prep conferences (Peds conference September 4-11, 2010 in Dallas, TX). AMA PRA Category 1 Credits™ available on all.

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Email: mferguson@medstudy.com ~ Web address: www.medstudy.com  
Booth Personnel: J. Thomas (Tommy) Cross, Jr., MD

### **Hospital Corporation of America (HCA)**

HCA Kids is a one stop recruitment office for pediatric opportunities in 20 states, a great resource for help in finding a great opportunity.

Hospital Corporation of America (HCA)  
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Brentwood, TN 37027  
Tel: 937-235-5890; Fax: 937-235-5897  
Email: kathleen.kyer@hcahealthcare.com ~ Web Address: <http://hca-kids.com/>  
Booth Personnel: Kathy Kyer, Manager - Ped Subs Recruitment

# EXHIBITORS

## **Challenger Corporation**

Challenger provides learning and testing tools for program directors and institutions to quantify the skill sets of residents and PAs in training. Challenger's reporting system yields compliance, performance and remediation data on individual users, program years, and for your entire program. These statistical outputs permit client institutions to prove compliance and effectiveness to certifying organizations.

Challenger Corporation  
5100 Poplar Avenue, Suite 1410  
Memphis, TN 38137  
Tel: 1-901-762-8444; Fax: 1-901-767-7019  
Email: [anitra.arcenaux@chall.com](mailto:anitra.arcenaux@chall.com) ~ Web Address: [www.chall.com](http://www.chall.com)  
Booth Personnel: Bob Sweeney, DA, MS

## **Pathways Awareness**

Pathways provides educational materials about early detection of motor delays. Our brochure, "Assure the Best for Your Baby's Physical Development," was developed by our Medical Round Table and is endorsed by the AAP

Pathways Awareness  
150 N. Michigan Ave., Suite 2100  
Chicago, IL 60601  
Tel: 800-955-2445; Fax: 888-795-5884  
Email: [friends@pathwaysawareness.org](mailto:friends@pathwaysawareness.org) ~ [www.pathwaysawareness.org](http://www.pathwaysawareness.org)  
Booth Personnel: Felicia Kurkowski and Stacey Dickert

## **Abbott Nutrition Health Institute**

Our vision is to be the trusted worldwide leader in providing innovative and superior nutrition that advances the quality of life for people of all ages.

Abbott Nutrition Health Institute Headquarters  
625 Cleveland Avenue  
Columbus, OH 43216  
Tel: 203-912-2733; Fax: 614-727-9541  
Email: [robert.dahms@abbott.com](mailto:robert.dahms@abbott.com) ~ [www.ANHI.org](http://www.ANHI.org)  
Booth Personnel: Bob Dahms and Terry DeFelice

# EXHIBITORS

## **PediaLink Online/American Academy of Pediatrics**

Come visit the PediaLink Resident and Program Director Center.

PediaLink Online/American Academy of Pediatrics  
141 Northwest Point Blvd. ~ Elk Grove Village, IL 60007  
Tel: 847-434-4723; Fax: 847-434-8000

Email: [dkurpiewski@aap.org](mailto:dkurpiewski@aap.org) ~ Web address: [www.pedialink.org](http://www.pedialink.org)  
Booth Personnel: Scott Bradbury and Charlette Nunnery

## **Bright Futures/American Academy of Pediatrics**

The American Academy of Pediatrics is pleased to present Bright Futures – valuable resources and tools that offer guidelines and proven best practices for a wide range of childhood health issues. Check out all the most current publications from Bright Futures, including the new Bright Futures Tool and Resource Kit based on the 3rd edition of the Bright Futures Guidelines.

Bright Futures/American Academy of Pediatrics  
141 Northwest Point Blvd. ~ Elk Grove Village, IL 60007  
Tel: 847-434-7146; Fax: 847-434-8780

Email: [mreynolds@aap.org](mailto:mreynolds@aap.org) ~ Web address: <http://brightfutures.aap.org>  
Booth Personnel: Jane Bassewitz, MA and Amy Pirretti, MA

## **American Academy of Pediatrics (Journals)**

For continuing education at the forefront of child health care, look no further than the trusted source of pediatrics information – AAP Journals. Visit our table for discounts on new subscriptions.

American Academy of Pediatrics  
141 Northwest Point Blvd. ~ Elk Grove Village, IL 60007  
Tel: 847-434-4000; Fax: 847-434-8000

Email: [dmack@aap.org](mailto:dmack@aap.org) ~ Web Address: [www.aappublications.org](http://www.aappublications.org)  
Booth Personnel: Diana Cook and Wendy Stoner

## **American Academy of Pediatrics Publications**

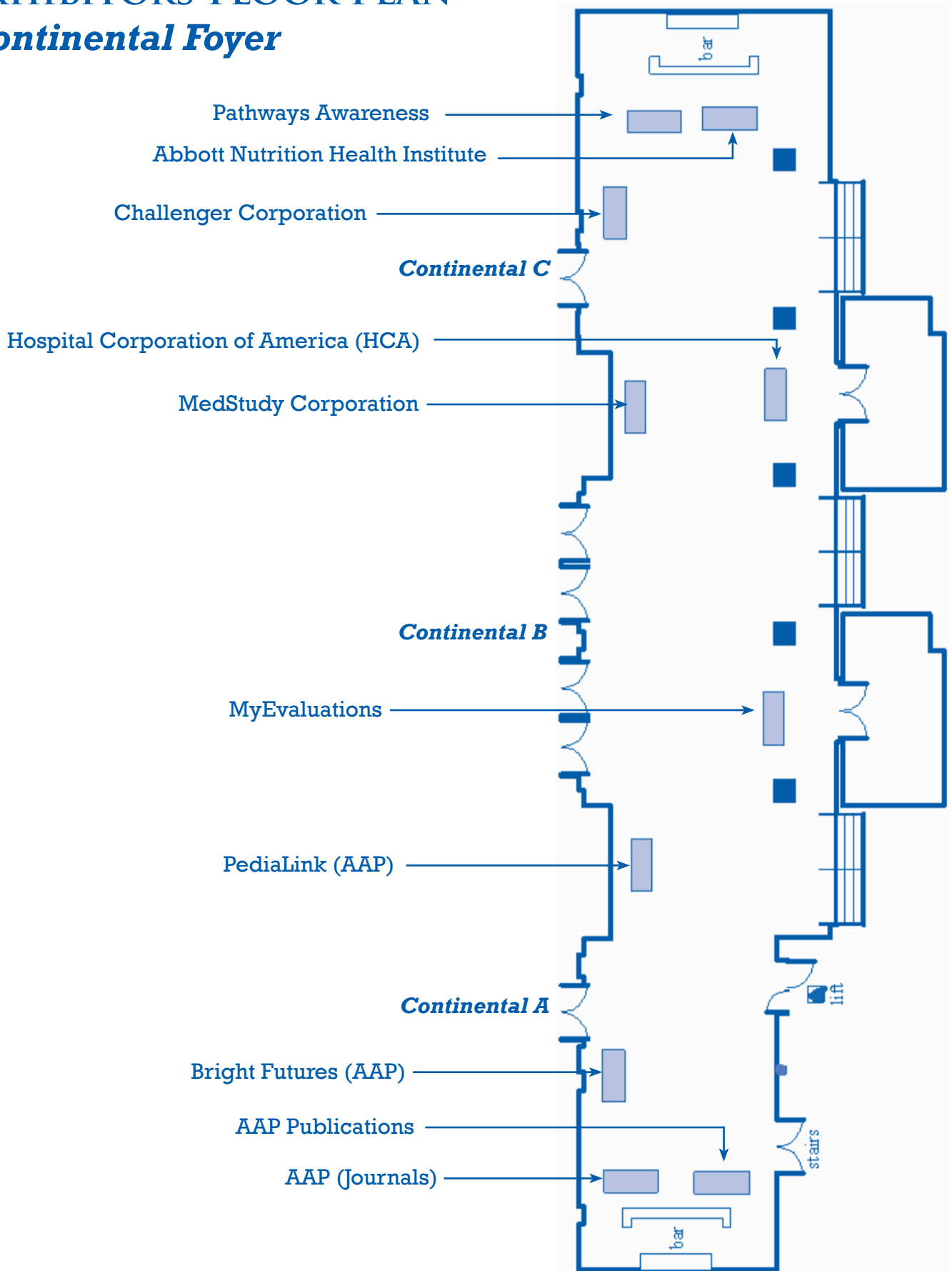
American Academy of Pediatrics is an organization of 60,000 pediatricians committed to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults, and is the leading publisher and trusted source of information in the field of Pediatrics.

American Academy of Pediatrics  
141 Northwest Point Blvd. ~ Elk Grove Village, IL 60007  
Tel: 847-434-7928; Fax: 847-434-8780

Email: [sevett@aap.org](mailto:sevett@aap.org) ~ Web Address: [www.aap.org](http://www.aap.org)  
Booth Personnel: Jean Wesloski and Kim FitzSimmons

# EXHIBITORS FLOOR PLAN

## *Continental Foyer*



# WINDY CITY ADVENTURE

Look for your Windy City Adventure card in your registration packet, similar to the one shown below. As you visit each exhibit in the Continental Lobby, mark the corresponding icon with a sticker. Once all the icons on your card have been marked, return it to the APPD registration desk, no later than Saturday, April 17, 6:00pm, to be eligible for the prize drawing.



Challenger Corporation



Pathways Awareness



Hospital Corporation of America



MyEvaluations



MedStudy Corporation



MILLENNIUM PARK PediaLink

## Windy City Adventure

Visit all the Chicago icons (you'll find them nearby in the Continental Lobby) and enter the drawing for a gift from APPD!

Stop by each exhibit booth to receive a sticker for your **Windy City Adventure Card** (found in your registration packet), place the stickers on the Chicago icon that corresponds with that exhibitor, then return your completed card to the registration desk by **Saturday, April 17 at 6:00 pm** to be eligible for the prize drawing. You can check out the prize at the APPD Registration Desk throughout the meeting.

Good luck!



Abbott Nutrition

Your name: \_\_\_\_\_

Your program: \_\_\_\_\_

Your e-mail: \_\_\_\_\_

Phone during conference: \_\_\_\_\_

**SAMPLE**



Bright Futures



AAP (Journals)



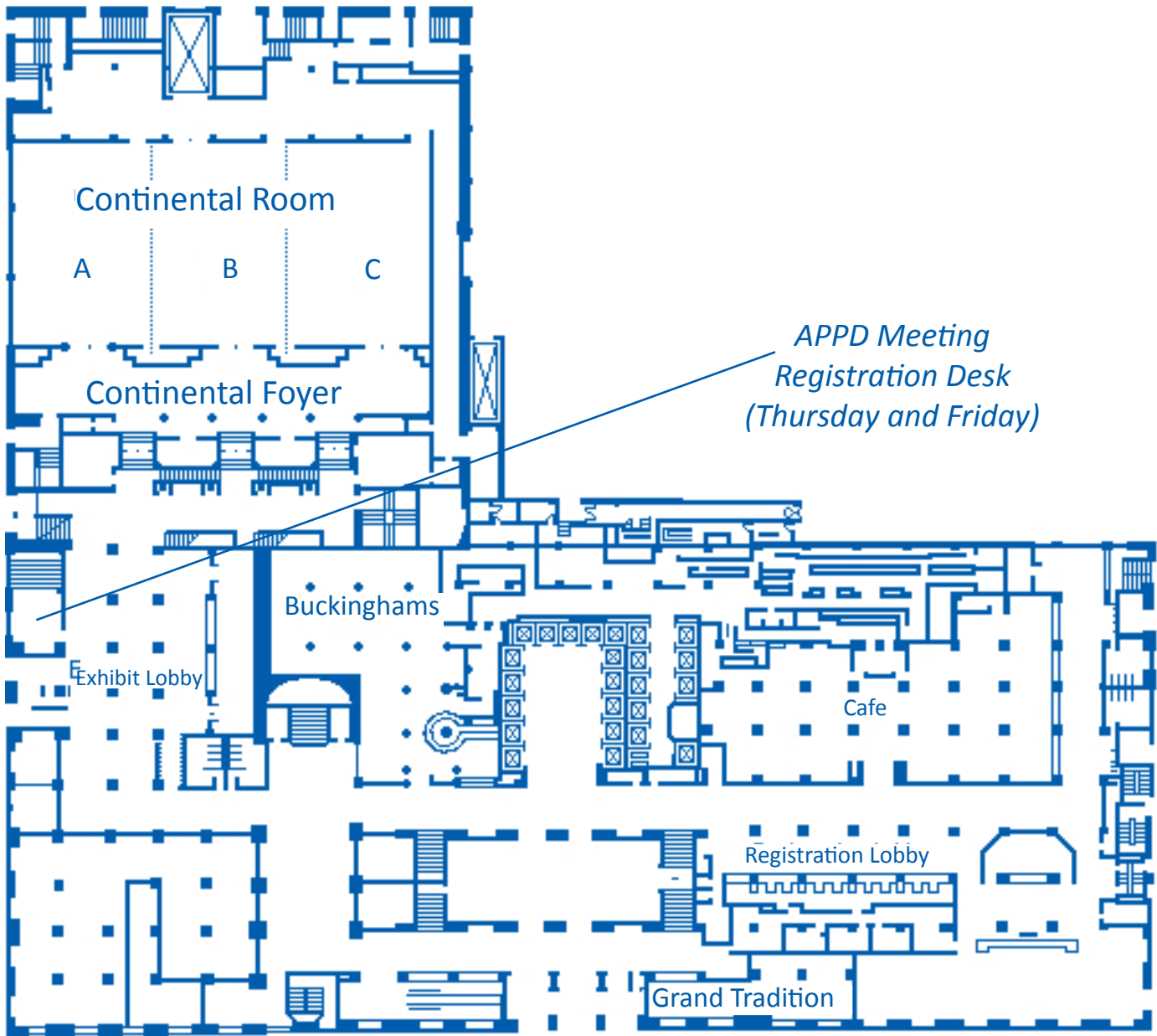




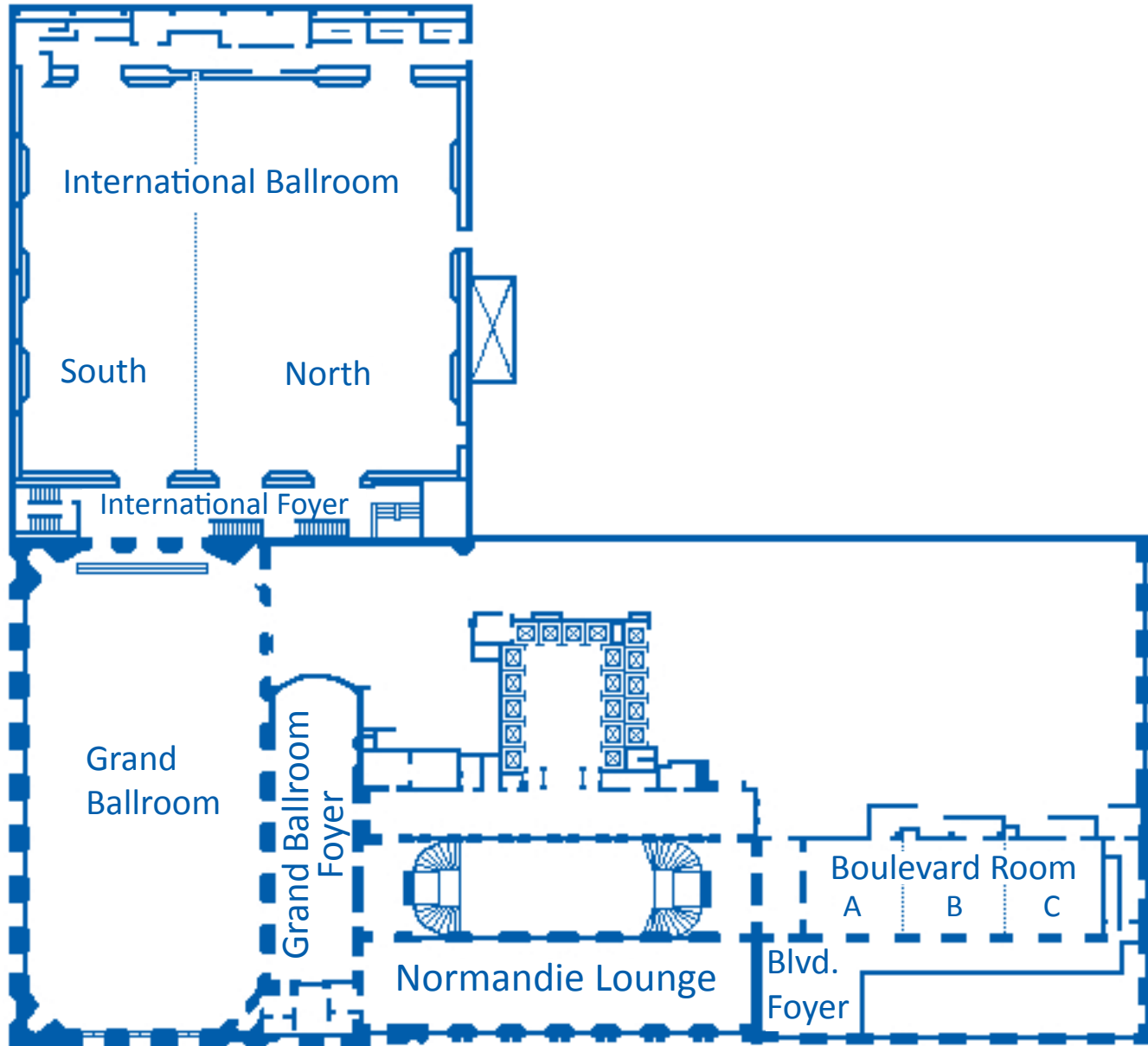
NOTES

Lined area for taking notes, consisting of 24 horizontal lines.

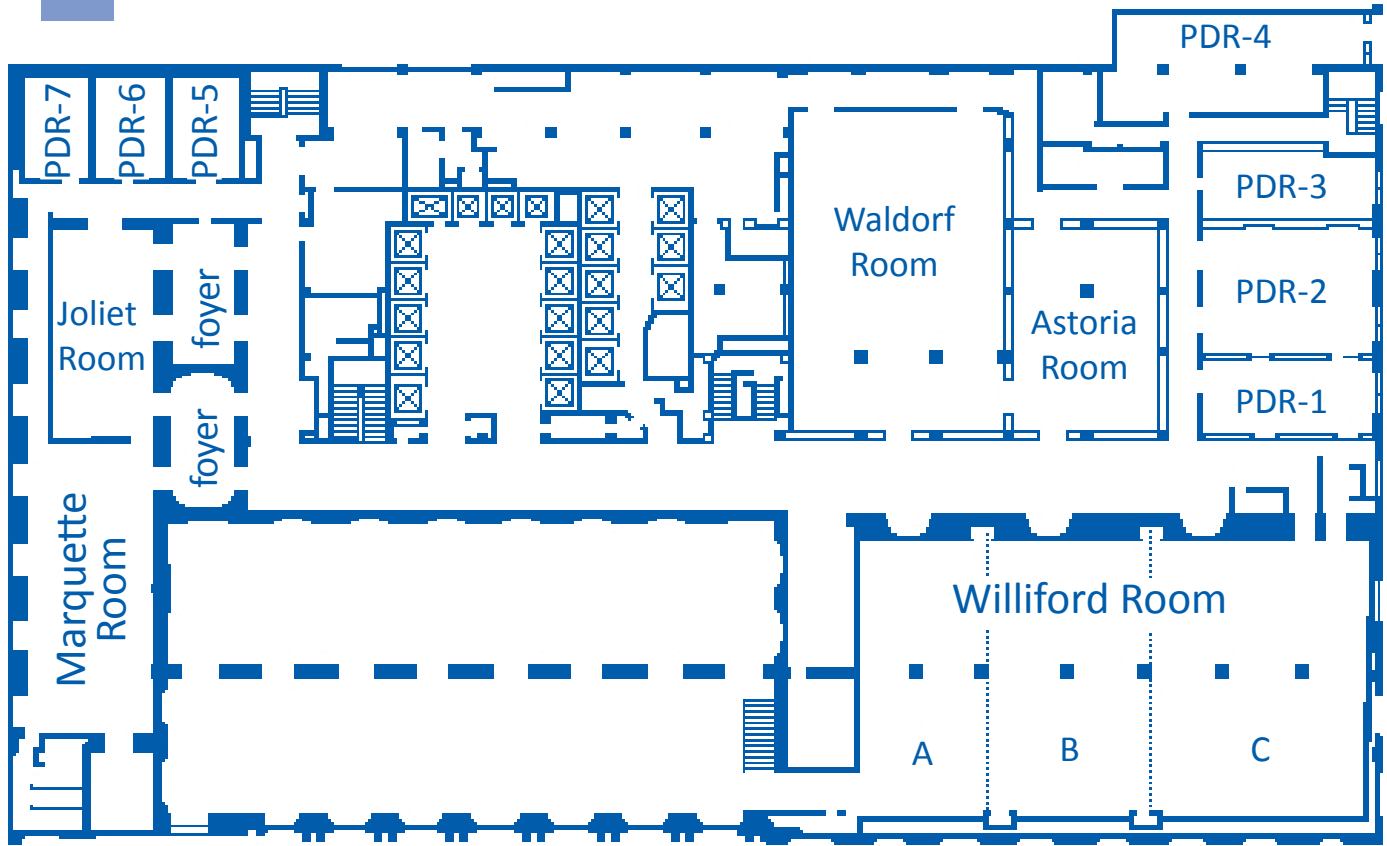
# HOTEL FLOOR PLAN - LOBBY LEVEL



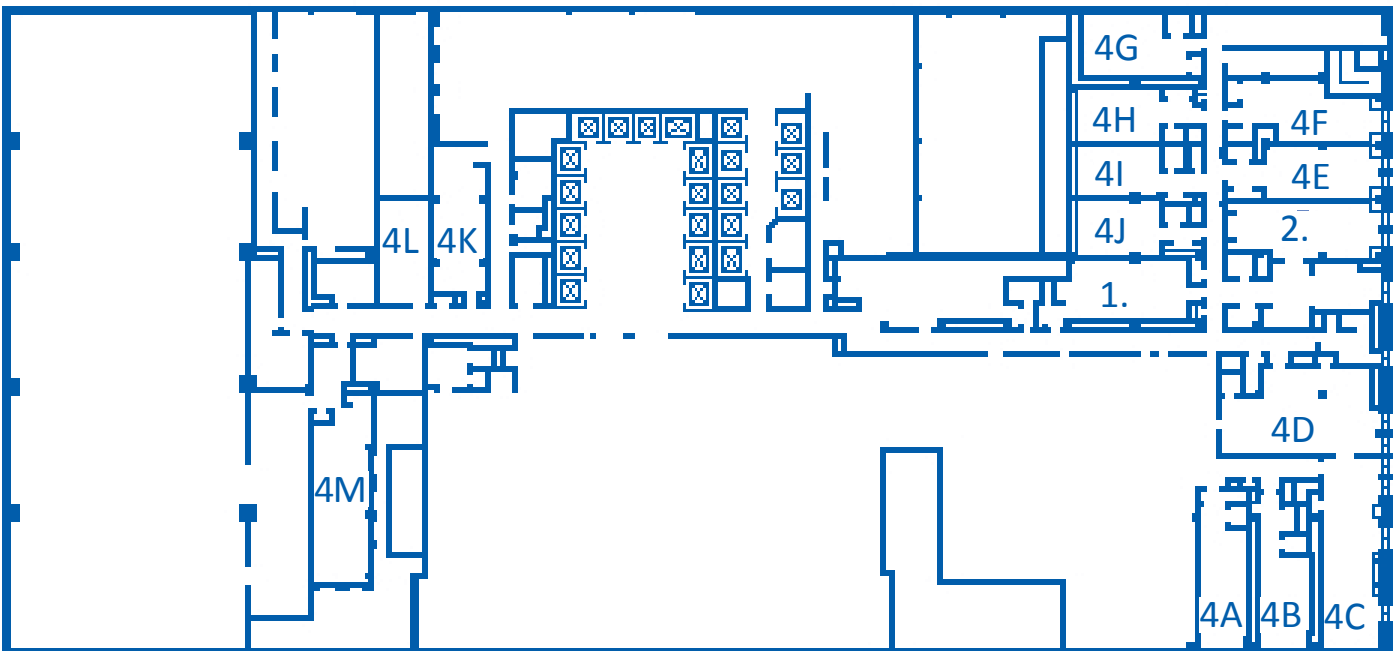
# HOTEL FLOOR PLAN - SECOND FLOOR



# HOTEL FLOOR PLAN - THIRD FLOOR

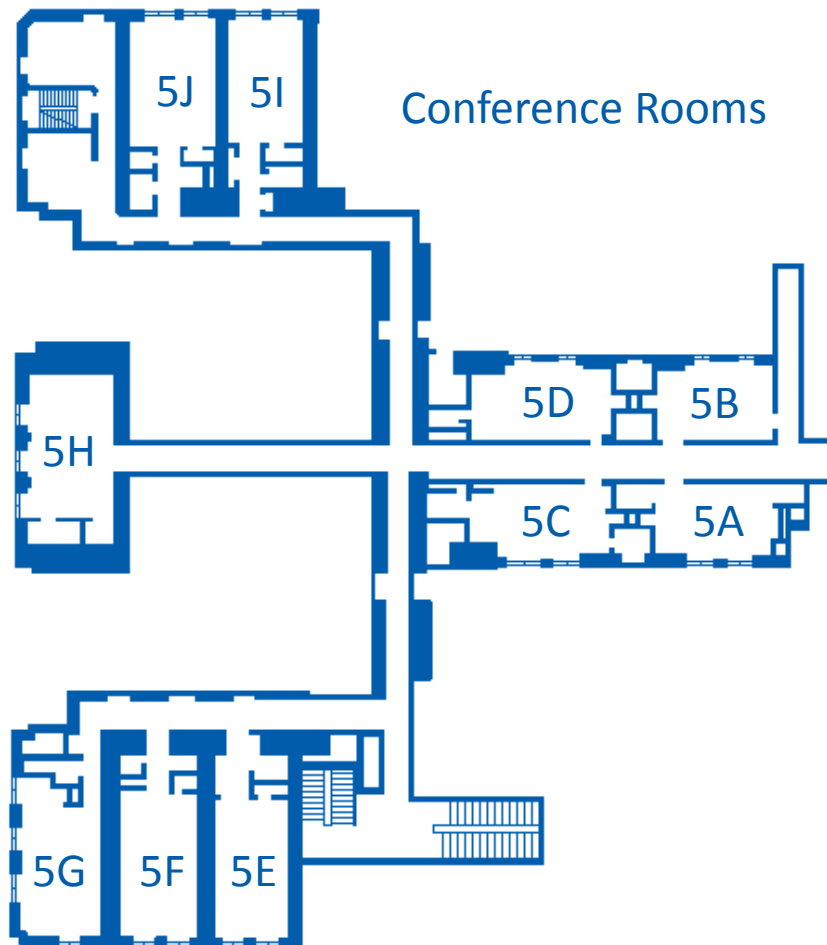


# HOTEL FLOOR PLAN - FOURTH FLOOR

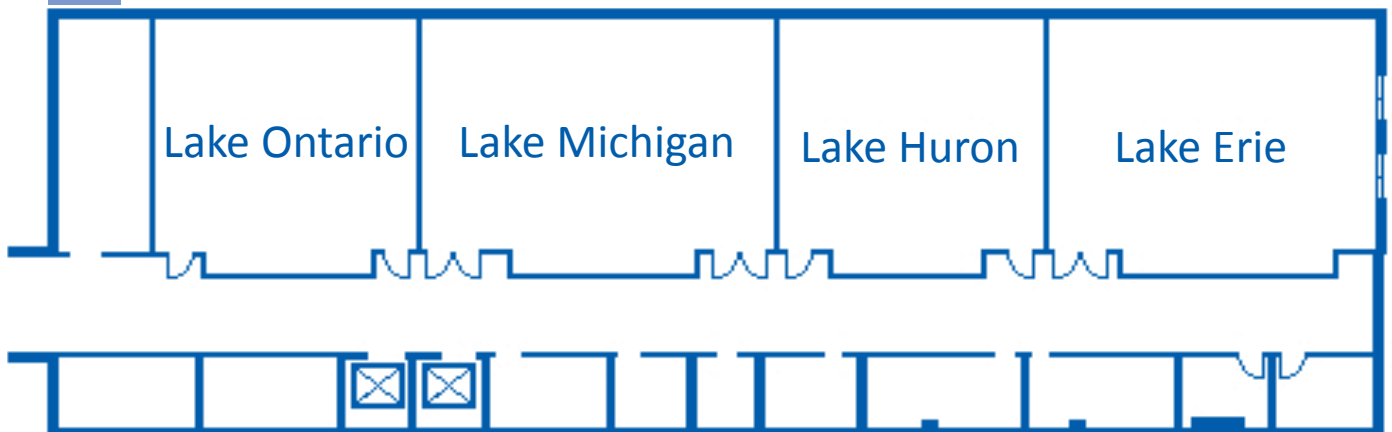


1. Pullman Boardroom    2. McCormick Ballroom

## HOTEL FLOOR PLAN - FIFTH FLOOR



## HOTEL FLOOR PLAN - EIGHTH FLOOR





# ASSOCIATION OF PEDIATRIC PROGRAM DIRECTORS

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P  
P  
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14TH ANNUAL FALL MEETING  
SEPTEMBER 19 - 21, 2010

HYATT REGENCY HOTEL  
RESTON, VA

Keynote Address and Dinner  
*Sunday evening, September 19*

Sessions for Program Directors, Fellowship Directors,  
Associate Directors, Program Coordinators,  
and Fellowship Coordinators  
*Monday and Tuesday, September 20-21*

CELEBRATING

25

years of

AP Educational  
PD Excellence!

APPD 2011  
ANNUAL MEETING

March 31-April 3, 2011  
Miami, FL

*We'll be having a big birthday  
bash to celebrate APPD's first  
25 years of service to pediatric  
residency programs.*

Visit [www.APPD.org](http://www.APPD.org) for details as they become available.

