

2013 ANNUAL MEETING



APPD/COMSEP
2013 COMBINED
ANNUAL MEETING



MPPDA ANNUAL MEETING

MEANINGFUL
COMPETENCY – BASED
ASSESSMENTS



APRIL 10-13, 2013

NASHVILLE, TN



RENAISSANCE NASHVILLE HOTEL AND
NASHVILLE CONVENTION CENTER
NASHVILLE, TN

F
I
N
A
L

P
R
O
G
R
A
M

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

WELCOME TO MIAMI!

Welcome to the 2013 combined meeting of APPD and COMSEP! This is the second time that our two organizations have held a joint meeting. We look forward to an exciting and educationally fulfilling four days filled with workshops, research presentations, a poster session, and many opportunities to discuss topics of common interest - formally in task force meetings and informally during breaks and non-scheduled times. Kevin Eva's keynote address titled "Competency-based Assessment: The good, the bad, and the puzzling" embraces both the content and the spirit of the exciting innovative changes in competency-based assessment across the continuum. Prepare to see old friends and make new ones as we all learn and share good times in exciting Nashville!



*APPD President:
Patricia Hicks, MD,
MHPE, The Children's
Hospital of Philadelphia*



*COMSEP President:
Jerold Woodhead, MD,
University of Iowa
Children's Hospital*

APPD/COMSEP 2013 Combined Annual Meeting Website
<http://www.appd-comsep2013.org/index.cfm>



Association of Pediatric Program Directors
www.appd.org
info@appd.org



Council on Medical Student Education in
Pediatrics
www.comsep.org
info@comsep.org

SCHEDULE-AT-A-GLANCE

Tuesday, April 9, 2013

7:00am-1:00pm	AMPPA TAGME exam (<i>prior appointment necessary</i>)	<i>RNH Jazz</i>
7:30am-6:00pm	APPD LEAD Meeting	<i>RNH Fisk 2</i>
	APPD Board of Directors Meeting	<i>RNH Belmont 1</i>
8:00am-3:00pm	MPPDA Pre-Course	<i>RNH Belmont 3+2</i>
9:00am-5:00pm	COMSEP PUPDOC Meeting	<i>RNH Country</i>
12:00pm-4:00pm	AMPPA Coordinators' Meeting	<i>NCC 102</i>
2:00pm-5:30pm	APPD Coordinators' TAGME exam (<i>prior appointment necessary</i>)	<i>RNH Jazz</i>
3:45pm-5:15pm	MPPDA Committee Meetings	<i>see page 56</i>
5:30pm-6:30pm	MPPDA Reception (included in MPPDA registration fees)	<i>RNH Ryman</i>
6:30pm-10:00pm	MPPDA Dinner (<i>additional fee</i>)	<i>see page 56</i>

Wednesday, April 10, 2013

7:00am-8:00am	MPPDA Breakfast/Mingle	<i>RNH Music City BR Foyer</i>
8:00am-12:00pm	APPD Session for New Coordinators	<i>RNH Ryman Room</i>
8:00am-12:30pm	APPD LEAD Meeting	<i>RNH Jazz</i>
8:00am-2:00pm	COMSEP Clerkship Administrators Certification Workshop	<i>NCC 202</i>
8:00am-6:00pm	MPPDA General Session	<i>RNH Music City BR</i>
8:00am-5:00pm	APPD Forum for Chief Residents	<i>NCC 204</i>
9:00am-12:00pm	APPD Forum for Directors of Small Programs / Affiliate Chairs	<i>NCC 205</i>
9:45am-11:00am	AMPPA Coordinators' Meeting	<i>RNH Belmont 3</i>
11:00am-2:00pm	COMSEP Educational Research Grants Review Lunch Meeting	<i>RNH Country</i>
12:30pm-1:30pm	APPD New Leader Orientation Lunch Meeting	<i>RNH Bluegrass</i>
2:00pm-6:00pm	APPD/COMSEP Pre-Conference Workshops (<i>additional fee required</i>)	<i>see pages 20-23</i>
	APPD Coordinators' Forum	<i>NCC-205</i>
	COMSEP Administrators' General Session	<i>RNH Ryman</i>
	COMSEP Session for New Clerkship Directors	<i>NCC-210</i>

SCHEDULE-AT-A-GLANCE

6:00pm-7:00pm	APPD LEARN-NBME Pediatrics Milestones Assessment Group Meeting	<i>NCC 202</i>
6:00pm-10:00pm	COMSEP Executive Committee Dinner Meeting	<i>RNH Belmont 2+1</i>
7:00pm-9:00pm	MPPDA Dinner (offsite – additional fee required)	<i>see page 58</i>
7:30pm-9:30pm	APPD Pediatrics Milestones Session	<i>RNH Grand Ballroom</i>

Thursday, April 11, 2013

6:45am-8:00am	Continental Breakfast	<i>RNH East & Center BR</i>
7:00am-8:00am	APPD Pediatric Global Health Educators Annual Meeting	<i>RNH Fisk1 & Fisk 2</i>
	APPD Mentoring Session	<i>RNH West BR</i>
8:00am-9:30am	APPD Grassroots Forum for Program Directors	<i>RNH Music City BR</i>
	APPD Grassroots Forum for Associate Program Directors	<i>NCC 204</i>
	APPD Grassroots Forum for Fellowship Directors	<i>NCC 201</i>
	APPD Coordinators Assembly	<i>RNH Belmont</i>
	COMSEP Members' Business Meeting	<i>NCC 205-206</i>
8:00am-12:00pm	MPPDA Executive Committee Meeting	<i>RNH Classical</i>
9:45am-11:15am	APPD Members' Meeting	<i>RNH Grand Ballroom</i>
	COMSEP Networking / Open Forum / Hot Topics	<i>NCC 205-206</i>
11:30am-12:45pm	Combined APPD/COMSEP Task Force Chairs Lunch Meeting	<i>Belmont 3</i>
	APPD Council of Regional Chairs Lunch Meeting	<i>RNH Jazz</i>
	APPD Coordinators' Executive Committee/Leaders Lunch Meeting	<i>RNH Belmont 1</i>
	APPD Focus Group on Education and Service (invitation only)	<i>RNH Country</i>
1:00pm-2:00pm	APPD/COMSEP Key Stakeholders in Education - Across the Continuum - with Interactive Q&A	<i>RNH Grand Ballroom</i>
2:00pm-3:30pm	APPD and COMSEP Presidents; Miller/Sarkin Lectureship	<i>RNH Grand Ballroom</i>
3:45pm-5:15pm	APPD Task Force Meetings	<i>see page 27</i>
	COMSEP Task Force Meetings	<i>see page 27</i>
	APPD Coordinators' Session (Task Force and Workshop)	<i>NCC-204</i>
5:00pm-7:00pm	Western Region Small Group Meeting	<i>RNH Classical</i>

SCHEDULE-AT-A-GLANCE

6:30pm-10:30pm	Dinner and Dancing at Country Music Hall of Fame® and Museum (additional fee)	see page 28
7:30pm-9:30pm	APPD Pediatric Global Health Educators Networking Session	RNH Fisk 2

Friday, April 12, 2013

7:00am-8:00am	APPD Simulation Focus Group	NCC 204
	Continental Breakfast	NCC 205/206
8:00am-10:00am	Combined APPD/COMSEP Task Force Meetings	see page 28
10:15am-11:45am	APPD/COMSEP Workshops Session I	see page 28
12:00pm-1:15pm	APPD Regional Lunch Meetings	see page 36
	(COMSEP attendees welcome. Please register if you plan to attend.)	
1:30pm-3:30pm	APPD/COMSEP Workshops Session II	see page 36
3:45pm-5:45pm	APPD/COMSEP Poster Session	RNH Grand Ballroom Foyer
6:00pm-7:00pm	Miller/Sarkin Fun Run/Walk	see page 44
	LGBTQ Focus Group	RNH Classical
6:00pm-9:00pm	IIPE Dinner Meeting	NCC 208

Saturday, April 13, 2013

7:30am-9:00am	Continental Breakfast	RNH West Ballroom
7:45am-9:00am	APPD Wrap-Up Session from Grassroots Forum (with breakfast)	RNH East & Center BR
	COMSEP Executive Committee Breakfast Meeting	RNH Jazz
9:15am-11:15am	APPD/COMSEP Workshops Session III	see page 45
11:30am-1:30pm	APPD/COMSEP Combined Research Platform Presentations with Boxed Lunch	RNH East/Center Ballrooms
1:45pm-3:45pm	APPD Pediatrics Milestones Wrap-Up Session	NCC 206
	APPD Pediatric Global Health Educators Regional Meetings	RNH Ryman Room

CONTINUING EDUCATION CREDIT

Accreditation Statement

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), Association of Pediatric Program Directors (APPD), the Council on Medical Student Education in Pediatrics (COMSEP) and the Medicine-Pediatrics Program Directors Association (MPPDA). The IAHB is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation Statement

The IAHB designates this live activity for a maximum of 32.75 (MPPDA sessions only for a maximum of 5.0, COMSEP sessions only for a maximum of 17.25 and APPD sessions only for a maximum of 27.75) AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Please Note, the total number of hours available varies based on track followed, the APPD track, the COMSEP track or the MPPDA track

	Time	Title	Hours
Tuesday, April 9, 2013 - maximum of 5.00 MPPDA only			
	8:00 - 3:00 pm	MPPDA Pre-Course	5.00
Wednesday, April 10, 2013 - maximum of 8.50 (8.0 MPPDA / 3.75 COMSEP only / 8.50 APPD only)			
	8:00 - 6:00 pm	MPPDA General Session	8.00
	9:00 - 12:00 pm	APPD Forum for Directors of Small Programs / Affiliate Chairs	2.75
	2:00 - 6:00 pm	APPD/COMSEP Pre-Conference Workshops	3.75
	7:30 - 9:30 pm	APPD Pediatrics Milestones Session	2.00
Thursday, April 11, 2013 - maximum of 6.5 (4.0 COMSEP only / 6.50 APPD only)			
	7:00 - 8:00 am	APPD Global Health Session	1.00
	8:00 - 9:30 am	APPD Grassroots Forum for Program Directors	1.50
		APPD Grassroots Forum for Associate Program Directors	
		APPD Grassroots Forum for Fellowship Directors	
	1:00 - 2:00 pm	APPD/COMSEP Key Stakeholders in Education - Across the Continuum	1.00
	2:00 - 3:30 pm	APPD/COMSEP Presidents; Miller/Sarkin Lectureship	1.50
	3:45 - 5:15 pm	APPD Task Force Meetings	1.50
		COMSEP Task Force Meetings	
Friday, April 12, 2013 - maximum of 5.5 (5.5 COMSEP only / 5.5 APPD only)			
	8:00 - 10:00 am	APPD/COMSEP Task Force Meetings	2.00
	10:15 - 11:45 am	APPD/COMSEP Workshops Session I	1.50
	1:30 - 3:30 pm	APPD/COMSEP Workshops Session II	2.00
Saturday, April 13, 2013 - maximum of 7.25 (4.0 COMSEP only / 7.25 APPD only)			
	7:45 - 9:00 am	APPD Wrap-Up Session from Grassroots Forum	1.25
	9:15 - 11:15 am	APPD/COMSEP Workshops Session III	2.00
	11:30 - 1:30 pm	APPD/COMSEP Combined Research Platform Presentations with Boxed Lunch	2.00
	1:45 - 3:45 pm	APPD Pediatrics Milestones Wrap-Up Session	2.00
Maximum of 32.75 (13.0 MPPDA, 17.25 COMSEP, 27.75 APPD)			

APPD/COMSEP 2013 COMBINED ANNUAL MEETING PROGRAM COMMITTEE

Executive Planning Committee

Suzette Caudle, MD, APPD Program Chair
Carolinas Medical Center, Department of Pediatrics

Aditee Narayan, MD, MPH, APPD Program Co-Chair
Duke University

Ann Burke, MD, APPD Past President
Wright State University Integrated Pediatrics Program

Jenny Christner, MD, COMSEP Program Co-Chair
SUNY Upstate Medical University

Joe Gigante, MD, COMSEP Program Co-Chair
Vanderbilt University / Vanderbilt Children's Hospital

Greg Toussaint, MD, COMSEP Program Co-Chair
Wright State University

APPD Reviewers

Erika Abramson, MD
New York Presbyterian Hospital (Cornell Campus)

Jim Bale, MD
University of Utah

Katy Bartlett, MD
Duke University

Becky Blankenburg, MD, MPH
Stanford University

Susan Bostwick, MD
New York Presbyterian Hospital (Cornell Campus)

Alex Djuricich, MD
Indiana University School of Medicine

Barrett Fromme, MD, MHPE
University of Chicago

Karin Hillenbrand, MD, MPH
Vidant Medical Center/East Carolina University

Dena Hofkosh, MD, MEd
Children's Hospital of Pittsburgh of UPMC

Mark Hormann, MD
University of Texas at Houston

Patricia Jacobi
St. Louis Children's Hospital/Washington University

Russ Kolarik, MD (MPPDA)

Greenville Hospital System/University of South Carolina

Su-Ting Li, MD, MPH
University of California (Davis) Health System

Tai Lockspeiser, MD
University of Colorado Denver

Heather McPhillips, MD, MPH
University of Washington – Seattle Children's Hospital

Kathryn Miller, C-TAGME
Johns Hopkins University

James Moses, MD, MPH
Children's Hospital/Boston Medical Center

Jerry Rushton, MD, MPH
Indiana University School of Medicine

Nancy Spector, MD
St. Christopher's Hospital for Children

Erin Stucky Fisher, MD
University of California (San Diego)

David Turner, MD
Duke University

Dan West, MD
University of California (San Francisco)

COMSEP Reviewers

Erin Balog, MD
Uniformed Services University of Health Sciences

Gary Beck, PhD
University of Nebraska College of Medicine

Heather Burrows, MD, PhD
University of Michigan Medical School

Lavjay Butani, MD
University of California, Davis, School of Medicine

Maribeth Chitkara, MD
The School of Medicine at Stony Brook University Medical Center

Eve Colson, MD
Yale University School of Medicine

Robin English, MD

Louisiana State University School of Medicine in New Orleans

Amy Fleming, MD

Vanderbilt University School of Medicine

Karen Forbes, FRCPC

University of Alberta

Robert Greenberg, MD

Northwestern University The Feinberg School of Medicine

Jan Hanson, PhD, EdS

University of Colorado School of Medicine

Lynn Hernan, MD

Texas Tech University, Paul L. Foster School of Medicine

TJ Jirasevijinda, MD

Weill Cornell University School of Medicine

Amy Jones, MD

Mayo Medical School

Raghu Kasetty, PBC, Dev Beh Pediatrics

Michigan State University College of Human Medicine
Upper Peninsula Campus

Amal Khidir, MD, FAAP

Weill Cornell University School of Medicine

Terry Kind, MD

Clerkship Director University of Alabama School of Medicine

Lynn Manfred, MD, EdD

Medical University of South Carolina College of Medicine

Karen Marcdante, MD

Medical College of Wisconsin

Ofelia Martinez, MD

New York Medical College

Heather McLauchlan, MD

University of Illinois, Peoria School of Medicine

Caroline Paul

University of Wisconsin School of Medicine and Public Health

Donita Pelser

University of Kansas, Wichita School of Medicine

Jean Petershack, MD

The University of Texas School of Medicine at San Antonio

Carrie Phillipi, MD

Oregon Health and Science University School of Medicine

Makia Powers, MD

Morehouse School of Medicine

Joe Real, BS

Vanderbilt University School of Medicine

Mary Rocha, MD, MPH

Baylor College of Medicine

Jared Rubeinstein, MD

University of Hawaii, John A. Burns School of Medicine

Jocelyn Schiller, MD

University of Alabama School of Medicine

John Schmidt, MD

Creighton University School of Medicine

Mitzi Scotten, MD

University of Kansas School of Medicine

Sherilyn Smith, MD

University of Utah School of Medicine

Julie Stamos, MD

Northwestern University The Feinberg School of Medicine

Stephanie Starr, MD

College of Medicine, Mayo Clinic (Rochester)

Rebecca Tenney-Soeiro, MD

University of Pennsylvania School of Medicine

Linda Tewksbury, MD

New York University School of Medicine

Steve Tinguely, MD

University of North Dakota School of Medicine and Health Sciences

Jennifer Trainor, MD

Northwestern University The Feinberg School of Medicine

Anne Warwick, MD

Uniformed Services University of Health Sciences

Stephen Weimer, MD

Tulane University School of Medicine

APPD LEADERSHIP

President

Patricia Hicks, MD (2012-2014)
Children's Hospital of Philadelphia

Secretary-Treasurer

Adam Pallant, MD, PhD (2010-2013)
Brown Medical School

President-Elect

Patricia Hicks, MD (2010-2012)
Children's Hospital of Philadelphia

Past-President

Ann Burke, MD (2012-2014)
Wright State University

Executive Director - Laura Degnon, CAE
Associate Director - Kathy Haynes Johnson

Board of Directors

Cynthia Ferrell, MD, MEd (2010-2013)
Oregon Health and Science University

Lynn Garfunkel, MD (2009-2013)
University of Rochester

Javier Gonzalez del Rey, MD, MEd (2010-2013)
*Cincinnati Children's Hospital Medical Center/
University of Cincinnati College of Medicine*

Ann Guillot, MD (2011-2014)
University of Vermont

Christopher Kennedy, MD (2011-2014)
University of Missouri at Kansas City

Robert J. Vinci MD (2012 - 2015)
Boston Combined Res Prog/Boston Medical Center

Nomination Committee

Ann Burke, MD, Chair
Winthrop University Hospital

Debra Boyer, MD (2012-2014)
Children's Hospital/Boston Medical Center

Monica Sifuentes, MD (2011-2013)
Los Angeles County-Harbor UCLA Medical Center

COMSEP LEADERSHIP

President

Jerold Woodhead MD (2011 - 2013)
University of Iowa Carver College of Medicine

President-Elect

Michael Barone MD, MPH (2011 - 2013)
Johns Hopkins University School of Medicine

Executive Committee

Michael Dell MD (2010 - 2013)
Case Western Reserve University School of Medicine

Robin English MD (2012 - 2015)
Louisiana State University School of Medicine

Jennifer Koestler MD (2010 - 2013)
New York Medical College

Executive Director - Laura Degnon CAE
Association Manager - Carolyn Whittonw

PUPDOC Representative

Susan Bannister MD
University of Calgary

Past President

Christopher White MD (2011 - 2013)
Medical College of Georgia at Georgia Health Sciences Univ

Treasurer

William Raszka, Jr. MD (2012 - 2014)
University of Vermont College of Medicine

Starla Martinez MD (2011 - 2014)
Northeast Ohio Medical University

Pradip Patel MD (2012 - 2015)
University of Louisville School of Medicine

Gregory Toussaint MD (2011 - 2014)
Wright State University Boonshoft School of Medicine

CME Liaison

Joseph Gigante MD
Vanderbilt University School of Medicine

TASK FORCE LEADERS

APPD Task Force Leadership

Curriculum Task Force

Karin Hillenbrand, MD, MPH, Chair
East Carolina University

Becky Blankenburg, MD, MPH, Vice Chair
Stanford University

Evaluation Task Force

Suzette Caudle, MD, Chair
Carolinas Medical Center

Kathleen Bartlett, MD, Vice Chair
Duke University

Learning Technology Task Force

Mark Hormann, MD, Co-Chair
University of Texas

Emily Borman-Shoap, MD, Co-Chair
University of Minnesota

Research & Scholarship Task Force

Heather McPhillips, MD, MPH, Chair
University of Washington

Su-Ting T. Li, MD, MPH, Vice Chair
University of California

Faculty & Professional Development Task Force

Nancy Spector, MD, Chair
St. Christopher's Hospital for Children

Marsha Anderson, MD, Vice Chair
University of Colorado

COMSEP Task Force Leadership

Curriculum Task Force Leaders

Sandra M. Sanguino MD, MPH
Northwestern University The Feinberg School of Medicine

A. Elizabeth Stuart MD, MEd
Stanford University

Gregory Toussaint MD
Wright State University Boonshoft

Evaluation Task Force Leaders

Lisa Martin MD, MPH
Loyola University Chicago

Gwenevere McIntosh MD
University of Wisconsin

Faculty Development Task Force Leaders

Jennifer Christner MD
SUNY Upstate Medical University

Alicia Freedy MD
Virginia Commonwealth University

Stephen Tinguely MD
University of North Dakota

Learning Technology Task Force Leaders

Robert Dudas M.D.
Johns Hopkins University

Mark Hormann MD
University of Texas

Research and Scholarship Task Force Leaders

Gary Beck PhD
University of Nebraska

Robin English MD
Louisiana State University

JOIN A TASK FORCE!

APPD and/COMSEP Task Forces will meet separately on Thursday, April 11th from 3:45-5:30pm and will meet together on Friday morning, April 12th from 8:00-10:00am. For details on plans for the joint sessions, please see the information below, provided by the task force chairs.

APPD/COMSEP Curriculum Task Forces

Karin Hillenbrand, APPD Curriculum Task Force Chair
Rebecca Blankenburg, APPD Curriculum Task Force Vice Chair
Sandra M. Sanguino, COMSEP Curriculum Task Force Co-Chair
Elizabeth Stuart, COMSEP Curriculum Task Force Co-Chair
Greg Toussaint, COMSEP Curriculum Task Force Co-Chair

The Curriculum Task Forces of APPD and COMSEP work to identify, develop, evaluate, maintain, and disseminate curricula designed to meet the training needs of medical student and resident trainees in pediatrics. At this year's meeting the joint Task Forces of the APPD and COMSEP will embark on a project to (1) select a subset of the Pediatric Milestones and (2) identify/build curricula to assure appropriate preparedness for medical students transitioning into pediatric residency programs. During the meeting, members of the joint Task Force will first select a subset of the milestones most relevant to assessment of graduating medical students, and then begin to describe expectations for achievement by graduation. Next steps for the meeting and beyond will be to identify specific curricular initiatives that might be employed during the third and fourth year of medical school to assure appropriate preparedness for a medical student transitioning into a pediatric residency program. Opportunities will be identified for interested members to continue to collaborate on the project over the coming year. In addition, we hope to collaborate with the Evaluation Task Force to identify assessment tools for measuring and reporting these milestones.

APPD/COMSEP Evaluation Task Forces

Suzette Caudle, APPD Evaluation Task Force Chair
Katy Bartlett, APPD Evaluation Task Force Vice Chair
Lisa Martin, COMSEP Evaluation Task Force Co-Chair
Gwen McIntosh, COMSEP Evaluation Task Force Co-Chair

The leaders of the APPD and COMSEP Evaluation Task Forces intend to focus on the sub-internship/acting internship as a point of mutual interest for the membership of both organizations. We plan to start our meeting with a brief presentation of the Sub-Internship Curriculum that was developed by members of the APPD and COMSEP Curriculum Task Forces. We will then invite our COMSEP membership to discuss the various tools that are currently used evaluate students on their sub-internship, emphasizing the need to create a Milestones-based assessment that provides a more uniform and rigorous measure of performance and readiness for internship. Following that we will invite APPD membership to weigh in on the importance of the sub-internship performance for both ranking applicants and establishing a baseline after the match for incoming interns. We will then invite interested members to join one of two working groups. The first will be focused on development of a Milestones-based assessment tool that can be used to evaluate sub-I performance (using the sub-I curriculum as a guide for which competencies should be assessed); this group may include membership from the Curriculum Task Forces as well. The second working group will be focused on pre- and post-match communication about sub-I performance as a way to inform program director of competence at the start of residency, i.e. a baseline estimation of certain milestones against which to measure progress throughout residency.

APPD Faculty and Professional Development Task Force and COMSEP Faculty Development Task Force

Nancy Spector, APPD Faculty and Professional Development Task Force Chair
Marsha Anderson, APPD Faculty and Professional Development Task Force Vice Chair
Jennifer Christner, COMSEP Faculty Development Task Force Co-Chair
Alicia Freedy, COMSEP Faculty Development Task Force Co-Chair
Stephen Tinguely, COMSEP Faculty Development Task Force Co-Chair

The APPD Faculty and Professional Development Task Force and the COMSEP Faculty Development Task Force will focus joint work on two critical areas for Residency Program and Medical Student Program leadership: (1) Mentoring Programs in the two organizations and (2) Educator Development (Development of faculty as effective educators) programs and resources. Both task forces are excited to share previous experiences, successes and challenges in their work in these two areas, as well as explore potential collaborations.

Agenda

8:00am	Welcome and Introductions - Task Force Chairs
8:05-8:15am	Presentations from each task force on Mentoring Programs
8:15-8:35am	Large group discussion
8:35-8:45am	Presentations from each task force on Educator Development Programs and resources
8:45-9:00	Large group discussion and wrap up
9:00-10:00am	Break into small groups to complete Task Force work

APPD/COMSEP Learning Technology Task Forces

Mark Hormann, APPD and COMSEP Learning Technology Task Force Co-Chair
Emily Borman-Shoap, APPD Learning Technology Task Force Co-Chair
Robert Dudas, COMSEP Learning Technology Task Force Co-Chair

In keeping with the meeting theme of Competency-Based Assessment, this year the leadership of both the APPD and COMSEP Learning Technology Task Forces plan to engage the membership in the development and dissemination of “best practices” for the use of simulation-- including OSCEs, mannequins, staged emergency scenarios, and structured record reviews-- in the teaching and evaluation of medical students and residents. Simulation is rapidly evolving, and the potential is great to advance medical education. However, as with any new technology we need to be wary of using simulation because it is “new” or “cool.” We aim to compile effective strategies to implement simulation across the continuum of pediatric education to better assess our learners progression along the Milestones. This project will start at our spring meeting in Nashville, but we envision the group effort to continue throughout this year.

APPD/COMSEP Research and Scholarship Task Forces

Heather McPhillips, APPD Research and Scholarship Task Force Chair
Su-Ting Li, APPD Research and Scholarship Task Force Vice Chair
Gary Beck , COMSEP Research and Scholarship Task Force Co-Chair
Robin English, COMSEP Research and Scholarship Task Force Co-Chair

Our combined Research and Scholarship Task Force will be presenting a preconference workshop together and have had members from both APPD and COMSEP actively planning that time which has been a super collaboration thus far. For our combined task force meeting, we plan to use some of our time in the first organization-specific task force meeting to identify common issues facing medical student and residency education that could be joint research projects. Task force chairs will then meet prior to our combined task force meeting to assimilate ideas from both groups. We will use the combined time to narrow our focus to 1-2 ideas that we might work on collaboratively across the continuum of medical education. A couple of ideas that immediately came to mind for our group included use of milestones in both UME and GME and incorporating simulation to enhance clinical skills.

APPD COUNCIL OF REGIONAL CHAIRS

Cynthia Ferrell, MD, MEd, Chair
Program Director
Oregon Health Sciences University
707 SW Gaines St; Mail Code CDRCP
Portland, OR 97239-2998
ferrellc@ohsu.edu

Ann Burke, MD
APPD Immediate Past President
Pediatric Residency Program Director
Wright State Univ Integrated Peds Prgrm
Dayton Children's Med Ctr, 1 Children's Plaza
Dayton, OH 45404-1815
ann.burke@wright.edu

Mid-America Region

Abdulla K. Ghori, MD
Peds Residency Program Director
MetroHealth Medical Center
2500 Metro Health Drive
Cleveland, OH 44109
aghoric@metrohealth.org

Christine Mayes, BA
Pediatric Residency Coordinator
Children's Hosp Medical Center of Akron
One Perkins Square
Akron, OH 44308-1062
cmayes@chmca.org

Mid-Atlantic Region

Kelly Bradley-Dodds, MD
Program Director, Pediatric Residency
Crozer-Chester Medical Center
POB 1, Ste 402
Upland, PA 19013
kelly.bradley-dodds@crozer.org

Jennifer C. Bishop, MBA
Pediatric Residency Prog Coordinator
Crozer-Chester Medical Center
30 Medical Ctr Blvd, POB1, Suite 402
Upland, PA 19013
jennifer.bishop@crozer.org

Anna Marie Carr, MD
Associate Program Director
Albert Einstein Medical Center
5501 Old York Road
Philadelphia, PA 19141
carra@einstein.edu

Meredith Carter MD
Associate Program Director
Inova Fairfax Hosp for Children
3300 Gallows Road
Falls Church, VA 22042
meredith.carter@inova.org

Midwest Region

Amy Stier MD
Program Director/Clinical Asst Prof Peds
Univ of Iowa -Children's Hospital
200 Hawkins Dr - Dept of Peds
Iowa City, IA 52242-1083
amy-stier@uiowa.edu

Emily Borman-Shoap MD
Assoc Program Director - Peds Res Prog
University of Minnesota
2450 Riverside Ave, M136 1st Flr, East Bldg
Minneapolis, MN 55455
borm0029@umn.edu

Ambrosya Amlong BA, C-TAGME
Coordinator, Pediatric Education
Univ of Iowa Children's Hospital
200 Hawkins Dr, 2572 JCP
Iowa City, IA 52242-1083
ambrosya-amlong@uiowa.edu

Peter Smith, MD
Fellowship Program Director
Univ of Chicago Medical Center
950 E. 61st St, 2nd Flr, SSC Rm 207
Chicago, IL 60637
wisemen@uchicago.edu

New England Region

Edwin L. Zalneraitis, MD
Residency Program Director
CT Children's Medical Center
Medical Educ, 4H, 282 Washington St
Hartford, CT 06106
ezalner@ccmckids.org

Kelley Pike, BA
Residency Coordinator
Albany Medical Center
43 New Scotland Ave, MC-88
Albany, NY 12208
pikek@mail.amc.edu

New York Region

J. Auxford Burks, MD
Program Director
Albert Einstein Coll of Med, Jacobi Med Ctr
1400 Pelham Pkwy S, Rm 829
Bronx, NY 10461
auxford.burks@einstein.yu.edu

Elizabeth Sanchez-Rocca, C-TAGME
Pediatrics Residency Coordinator
Brookdale Univ Hospital & Med Ctr
1 Brookdale Plaza, 300 CHC
Brooklyn, NY 11212
esanchez@brookdale.edu

Southeast Region

Betty Staples, MD
Program Director Peds Residency Trng
Duke University Medical Center
Box 3127
Durham, NC 27710
betty.staples@duke.edu

Holly Hering, BS
Program Coordinator
Duke Pediatrics
Box 3127, DUMC
Durham, NC 27710
holly.hering@duke.edu

Southwest Region

Jon Courand, MD, FAAP
Residency Program Director
Univ of Texas Health Science Center
7703 Floyd Curl Drive, MC 7816
San Antonio, TX 78229
courand@uthscsa.edu

Beth Payne, MAEd, C-TAGME
Div Administrator, Educ & Trng/
Academic Progs Coord
Univ of Texas Hlth Sci Ctr-San
Antonio-Peds
House Staff Ofc MC 7816
7703 Floyd Curl Dr
San Antonio, TX 78229-3900
paynee@uthscsa.edu

Teri L. Turner, MD, MPH, MEd
Assoc Dir, PHSE & Gen Academic FD
Baylor College of Medicine
Department of Pediatrics
One Baylor Plaza, MCM 320
Houston, TX 77030
tturner@bcm.edu

Western Region

Sandra Barker
Pediatric Residency Program
Coordinator
Phoenix Children's Hospital
1919 E. Thomas Road
Phoenix, AZ 85016
sbarker@phoenixchildrens.com

Lilia Parra-Roide, MD
Associate Program Director
Phoenix Children's Hospital
1919 E. Thomas Rd
Phoenix, AZ 85016
lparraroide@phoenixchildrens.com

APPD COORDINATORS' LEADERSHIP

Coordinators' Executive Committee

Patricia Jacobi, Co-Chair (2010-2013)

Washington University/B-JH/SLCH Consortium

Kathryn Miller, C-TAGME, Co-Chair (2010-2013)

Johns Hopkins University

Ambrosya Amlong, BA (2012-2015)

University of Iowa Children's Hospital

Jean Ashley, MSBC, C-TAGME (2011-2014)

University of Louisville

Staci Leitner (2011-2014)

Stanford University

Kelley Pike, BA (2012-2015)

Albany Medical Center

Coordinators' Professional Development Task Force

Co-Chairs: Ellen Marr (Southern Illinois University) and Tara Shirley (University of Kansas-Wichita)

Management/Supervision/Team Building Committee of the Professional Development Task Force

Co-Chairs: TBD

Coordinators' Communication and Tools Committee

Co-Chairs: Amy Gaug (University of Minnesota), Tara McKinley (University of Louisville) and Beth Payne (University of TX Health Science Center-San Antonio)

Coordinators' Forum for Professional Development Planning Committee

Co-Chairs: Vanessa Goodwin (University of Vermont) and Melodie Allison (Baylor College of Medicine)

• APPD LEAD

• **APPD Leadership in Educational Academic Development (APPD LEAD)**

• The APPD has formed the highly requested APPD LEAD, envisioned as a nationally recognized program that provides a unique opportunity for pediatric academic leaders in medical education to engage and learn from seasoned program directors, pediatric educators, and other national leaders in pediatrics.

• The LEAD curriculum focuses on organizational leadership, competency-based curriculum development, faculty development, residency and fellowship program administration, scholarship and career development. The curriculum is paced over three educational conferences, with additional group activities, readings and project work expected between conferences.

• Inaugural Council Members / Faculty

• Franklin Trimm, MD, Chair

• University of South Alabama

• Susan Bostwick, MD, MBA

• New York Presbyterian Hospital/Cornell Campus

• Grace Caputo, MD, MPH

• Phoenix Children's Hospital/Maricopa Medical Center

• John Frohna, MD, MPH

• University of Wisconsin

• Hilary Haftel, MD, MHPE

• University of Michigan

• Su-Ting Li, MD, MPH

• University of California (Davis) Health System

• Linda Waggoner-Fountain, MD, MEd

• University of Virginia

• The first APPD LEAD Cohort (see list below) was selected from among a highly qualified group of applicants. The first Cohort, an energetic and focused group of educational leaders, will graduate from the program during the APPD Members' Meeting at the APPD/COMSEP 2013 Annual Spring Meeting.

• Marsha Anderson, MD

• University of Colorado Denver

• Chad Brands, MD

• All Children's Hospital Johns Hopkins Medicine

• Susie Buchter, MD

• Emory University

Michele Carney, MD
University of Michigan

Joseph Cernich, MD
University of Missouri at Kansas City

Stephanie Dewar, MD
University of Pittsburgh Medical Center Medical Education Program/
Children's Hospital of Pittsburgh

Geoffrey Fleming, MD
Vanderbilt University

Bruce Herman, MD
University of Utah

Jay Homme, MD
College of Medicine, Mayo Clinic (Rochester)

Michelle Howenstine, MD
Indiana University School of Medicine

Laura Koenigs, MD
Baystate Medical Center/ Tufts University School of Medicine

Jerry Larrabee, MD
University of Vermont

Keith Mather, MD
University of Oklahoma College of Medicine-Tulsa

Allison McBride, MD
Wake Forest University School of Medicine

Angela Myers, MD
University of Missouri at Kansas City

Paul Schwartzberg, DO
Jersey Shore University Medical Center

Dawn Tuell, MD
East Tennessee State University

Renuka Verma, MD
Monmouth Medical Center

A call for applicants for Cohort 2 is underway. The deadline for applications for this group is April 29, 2013. For additional information or to submit an application, go to <https://www.appd.org/leadapp/begin.cfm>

• APPD LEARN

• (Longitudinal Educational Assessment Research Network)

• APPD LEARN has been active on several fronts. Our pilot study of assessment of Pediatrics Milestones, conducted in collaboration with the National Board of Medical Examiners, is past the halfway point in data collection. A total of 18 APPD LEARN programs (see list below) are active in this study, with faculty, senior residents, nurses, pharmacists, social workers, and others at each program engaged in observation of interns and subinterns using rating instruments. You'll hear an update from this study, and information about future directions for studying assessment of Pediatrics Milestones, in collaboration with the IIPE, at this meeting.

• APPD LEARN received six proposals in its first submission round of the call for proposals from member sites to submit educational research projects that would benefit from using the APPD LEARN network, data repository, and project support. These proposals have resulted in three planned studies that will begin during 2013, and we will be contacting member sites to invite you to participate in these study opportunities.

• Alan Schwartz, PhD, APPD LEARN Director
• Robin Young, APPD LEARN Program Manager

• APPD LEARN – NBME PEDIATRICS MILESTONES ASSESSMENT GROUP

• Baylor College of Medicine
• Boston Medical Center Program: Boston Combined Residency Program
• Children's Hospital of Philadelphia
• Children's National Medical Center, Pediatric Residency Program
• Cincinnati Children's Hospital
• Emory University School of Medicine, Pediatric Residency Program
• University of Florida, Pediatric Residency Program
• University of Illinois at Chicago
• Inova Children's Hospital, Pediatric Residency Program
• University of Louisville School of Medicine
• University of Michigan- C.S. Mott Children's Hospital
• Phoenix Children's Hospital
• Stony Brook Long Island Children's Hospital
• University of Tennessee
• Vermont Children's Hospital
• University of Virginia Health System
• Winthrop-University Hospital
• Wright State University

• APPD LEARN has its own web site at <http://learn.appd.org>

APPD/COMSEP 2013 COMBINED ANNUAL MEETING
MPPDA 2013 ANNUAL MEETING
APRIL 9-13, 2013 ~ NASHVILLE, TN

MEANINGFUL COMPETENCY-BASED ASSESSMENTS

APPD MEETING SCHEDULE

TUESDAY, APRIL 9

- 7:30am-6:00pm APPD LEAD Meeting (private meeting)
RNH Fisk 2
- APPD Board of Directors Meeting
RNH Belmont 1
- 9:00am-5:00pm COMSEP PUPDOC Meeting
RNH Country
The Paediatric Undergraduate Program Directors of Canada meet for their annual day-long business meeting.
- 2:00pm-5:30pm APPD Coordinators' TAGME exam (prior appointment necessary)
RNH Jazz

WEDNESDAY, APRIL 10, 2013

- 6:30am-8:00pm APPD/COMSEP Registration
NCC 3rd Floor Lobby
- 8:00am-12:00pm APPD Session for ***New Coordinators'***
RNH Ryman Room
All new coordinators are welcome. You are not alone!! Meet other new coordinators and learn how the APPD Coordinator's section can support you as you navigate the complex work of Graduate Medical Education and pediatrics training.
(IMPORTANT: This is a repeat of information presented at the APPD 2012 Fall Meeting.)
- 8:00am-12:30pm APPD LEAD Meeting (private meeting)
RNH Jazz
- 8:00am-2:00pm COMSEP Clerkship Administrators Certification Workshop (additional fee)
NCC 202
The Clerkship Administrator Certificate Program is composed of three workshops and a career enhancement project. All three workshops will be completed during the pre-conference workshop. During the course of the next year, a career enhancement project will be undertaken and reported at the following annual meeting. A certificate of completion will be awarded upon completion of the project.
- 8:00am-5:00pm APPD Forum for Chief Residents
NCC 204
Coordinated by Erin L. Giudice, MD, Pediatric Residency Program Director, University of Maryland, Cynthia Ferrell, MD, MSED, Pediatric Residency Program Director, Oregon Health Sciences University, Kenneth B. Roberts, MD,

- *University of North Carolina School of Medicine, Edwin L. Zalneraitis, MD, Pediatric Residency Program Director,*
- *University of Connecticut, Carolyn M. Wilhelm, MD and Miriam Saad, MD, Chief Residents at the University of Maryland*
- *and Darshita Bhatia, MD, Blair Dickinson, MD, MS, and Betsy Maxwell, MD, MS, Chief Residents at St. Christopher's*
- *Hospital for Children, Sponsored by the Faculty and Professional Development Task Force*
- Rising Chief Residents and Graduating Chief Residents are invited to attend this forum! Chief Residents face a diverse set
- of challenges in academic medical centers related to the multiple roles that they assume as leaders, clinicians, educators,
- administrators, and mentors. To be effective across these multiple domains, Chief Residents must have a broad skill set and
- acquire new skills, especially to address the leadership and administrative aspects of the position. The APPD's Forum for Chief
- Residents is a series of educational sessions designed to help residents learn key administrative, academic, and leadership
- skills in order to facilitate a successful year as a Chief Resident, and to be able to use the Chief Resident year for enhancing
- success in subsequent years. This one-day forum will include a variety of interactive workshops led by experienced program
- directors and current Chief Residents to address these administrative, academic, and leadership topics relevant to Chief
- Residents. There will be opportunities to network with current and rising Chief Residents. The afternoon session will have
- two separate tracks: a track for rising Chief Residents will focus on planning the Chief Resident's academic year and a track
- for graduating Chiefs will focus on professional development beyond the chief resident year. (Breakfast and Lunch will be
- included).

9:00am-12:00pm **APPD Forum for Directors of Small Programs / Affiliate Chairs**
NCC 205

Janara Huff, MD, Children's Hospital at Erlanger, Mark Bugnitz, MD, University of Tennessee

This Forum will cover many topics of interest to directors of small programs and affiliate chairs, including:

- Individualized months and variable tracks
 - Progress UTCOM-Chattanooga
 - Audience suggestions to collate
- Faculty Development
- Confidentiality
- Changing to Milestones evaluations and clinical competency committees
- Open discussion of other related topics

("Small programs" have been defined as having 10 or less residents per year. However, many programs consider themselves "small" as compared to other larger programs in their vicinity. Any program that feels they may be having difficulty attaining programmatic goals due to the fact that their program is "small or medium" in size is welcome to attend. No numeric cutoff is necessary.)

11:00am-2:00pm **COMSEP Educational Research Grants Review Lunch Meeting**
RNH Country

12:30pm-1:30pm **APPD New Leader Orientation Lunch Meeting**
RNH Bluegrass

2:00pm-6:00pm **APPD/COMSEP Pre-Conference Workshops**

Pre-Conference Workshop 1

NCC 108

RESIDENT AS TEACHER: A MUTUALLY BENEFICIAL ARRANGEMENT

Sponsored jointly by the APPD and COMSEP Curriculum Task Forces

H. Barrett Fromme, MD, MHPE, Associate Professor of Pediatrics, The University of Chicago, (APPD), Steve Paik, MD, EdM, Assistant Professor of Pediatrics, Columbia University Medical Center (APPD), Shari Whicker, EdD, MEd, Education Administrator, Duke University (APPD), Kathleen Gibbs, MD, Mount Sinai School of Medicine (APPD, COMSEP),

OBJECTIVES: By the end of the pre-course, participants will be able to:

1. Appreciate the importance of and need for Resident-As-Teacher (RAT) Curricula for graduate medical trainees
2. Recognize the need for collaboration between clerkship and program directors in establishing and maintaining RAT curricula
3. Discuss the relevant current literature on RAT programs in pediatrics, including program formats, resources and evaluation
4. Utilize Kern's six-steps for curriculum development to plan/improve a RAT program
5. Identify local and national partners and resources for collaboration in development and maintenance of RAT curricula

DESCRIPTION: This workshop will provide participants with a framework for developing meaningful Residents as Teachers curricula at their home institutions. The presenters will introduce participants to Kern's six steps for curriculum development in medical education (Kern, 1998). Through both small and large group discussion, participants will acquire the tools that will help them to identify problems and perform targeted needs assessments; create goals, objectives, and educational strategies;

and implement and evaluate curricula related to improving their learners' skills as teachers. Throughout the course and through the different activities, participants will have time to develop relationships with colleagues throughout the country who are interested in RAT development. Participants from programs of all sizes will leave this workshop with a structure in place and resources in hand to maximize their residents' ability to teach effectively.

Audience: Program Directors, Associate Program Directors, Clerkship Directors, and anyone else interested in developing curricula to enhance their learners' teaching skills.

Pre-Conference Workshop 2

NCC 211-212

ENGAGING STUDENTS AND RESIDENTS IN GLOBAL HEALTH

Sponsored jointly by the APPD and COMSEP Curriculum Task Forces

Sabrina Butteris, MD, Department of Pediatrics, Global Health Education Director, University of Wisconsin School of Medicine & Public Health, Chuck Schubert, MD, Associate Residency Program Director, Global Health, Cincinnati Children's Hospital Medical Center, Maneesh Batra, MD MPH, Associate Residency Program Director, University of Washington School of Medicine, Department of Pediatrics, James Conway, MD, Associate Director for Health Sciences, University of Wisconsin-Madison Global Health Institute, Ty Dickerson, MD, MPH, Director Global, Rural & Underserved Child Health Certificate Program, University of Utah, Lynn Garfunkel, MD, Associate Program Director Pediatrics & Internal Medicine-Pediatrics, University of Rochester, Brian Good, MD, Pediatric Clerkship Director, University of Utah, Cindy Howard, MD, MPHTM, Department of Pediatrics Global Health Education Director, University of Minnesota, Jacquelyn Kuzminski, MD, Department of Pediatrics Global Health Program Associate Director, Medical College of Wisconsin, Christiana Russ, MD, Director of Global Health Rotations, Boston Combined Residency Program, Nicole St. Clair, MD, Department of Pediatrics Global Health Program Director, Medical College of Wisconsin, Donna Staton, MD, MPH, American Academy of Pediatrics Section on International Child Health, Parimi Suchdev, MD, MPH, Global Child Health Track Director, Emory University

OBJECTIVES:

1. Utilize existing evidence to design a global health curriculum for students or residents
2. Identify areas in current medical student or resident curricula where global health content could be added or augmented
3. Perform a program-specific assets and needs assessment to determine what local resources are available and which are needed to implement a global health curriculum

DESCRIPTION:

In 2012, 30% of graduating US medical students participated in a global health experience during medical school, doubling the percentage of students participating in these experiences over a 4-year period of time (AAMC 2012). Similarly, in pediatrics, the proportion of residency programs that offered global health programs more than doubled between 1996 and 2007 (Stanton B, Ped Ann 2008). Given the ever-expanding interest in global health among trainees, it is imperative that medical student and resident educators understand and harness the enthusiasm of their learners. In concert with the increased interest among trainees, there is an expanding body of literature highlighting core elements of a global health curriculum, and the requisite infrastructure necessary to implement these elements. This workshop will take medical student and resident educators through a series of exercises and small group sessions that will allow them to develop an action plan for augmenting global health education within their trainees' existing curriculum.

The workshop will cover the following critical elements:

- Defining essential elements of a global health curriculum
- Capitalizing on existing opportunities
- Engaging trainees with an interest in global health
- Inspiring trainee investment in & ownership of their global health education
- Functioning within the constraints of today's medical school and residency requirements
- Identifying necessary resources

Pre-Conference Workshop 3

NCC 109

THE ABC'S OF CURRICULUM DEVELOPMENT

Sponsored jointly by the APPD and COMSEP Curriculum Task Forces

Karin Hillenbrand, MD, MPH, Brody School of Medicine, East Carolina University, Greenville, NC (APPD), Susan B. Bostwick, MD, MBA, Weill Cornell Medical College, New York, NY (APPD), Ann E. Burke, MD, Wright State University, Dayton, OH (APPD), Cori M. Green, MD, Weill Cornell Medical College, New York, NY (COMSEP), Aditee Narayan, MD, MPH, Duke University School of Medicine, Durham, NC (APPD), Franklin Trimm, MD, University of South Alabama Children's and Women's Hospital, Mobile, AL (APPD)

OBJECTIVES: Following this workshop, participants will be better able to:

1. Describe the core components of curriculum development.
2. Perform a needs assessment related to development of a new curriculum.
3. For a given curriculum topic, define curricular goals and write specific, measurable learning objectives.

- 4. Identify and select appropriate teaching and evaluation strategies for a curriculum.
- 5. Recognize and develop opportunities within curricular projects to measure progress for selected milestones.
- 6. Develop a draft of a new curriculum based on individual need.
- 7. Identify and address barriers to implementation of a new curriculum.

DESCRIPTION: Residency program directors and student clerkship directors are frequently tasked to provide and deliver curricula addressing a variety of content areas. As learner needs and training requirements change, directors must have the ability to develop new curricula to meet identified needs. This workshop is intended as an introduction to the process of curriculum development, and is particularly targeted to new or junior clerkship and residency program directors, as well as other interested individuals. Participants will be asked in advance to select a curriculum topic of interest to work on during the workshop, and can expect to leave the workshop with a framework for their new curriculum, as well as with tools for delivery and evaluation of curricular elements.

A structured approach to developing a new curriculum, using the “ABCs” will be taught:

- **ASSESSMENT:** Perform a needs assessment for this curriculum, using a variety of methods.
- **BACKGROUND:** Explore the resources already available; are there curricula about this topic already available that could be adopted or adapted to your need? What are you already doing at your institution? Who are champions? What are the potential barriers?
- **CONTENT:** Define the curricular goals and learning objectives; determine content; prioritize.
- **DELIVERY:** Identify and select appropriate teaching methods to deliver the curriculum content.
- **EVALUATION:** Identify and select methods to evaluate learners who participate in the curriculum. Incorporate relevant milestones. Also plan for an evaluation of the curriculum itself.

Pre-Conference Workshop 4

NCC 201

ENHANCING ASSESSMENT THROUGH DIRECT OBSERVATION

Sponsored jointly by the APPD and COMSEP Evaluation Task Forces

Suzette Caudle, MD, Program Director, Carolinas Medical Center (APPD), Katy Bartlett, MD, Associate Program Director, Duke University Medical Center (APPD), Gwen McIntosh, MD, Clerkship Director, University of Wisconsin School of Medicine and Public Health (COMSEP), Lisa Martin, MD, Clerkship Director, Loyola University Stritch School of Medicine (COMSEP)

Objectives

1. Define the critical features of good assessment tools
2. State the rationale for including direct observation in clinical education
3. Recognize opportunities for direct observation assessment in your training environment
4. Identify useful direct observation assessment tools for use in your clerkship or residency program

Abstract: Direct observation is a critical component of assessment in both undergraduate and graduate medical education. It is only through observation of a learner's actions and behaviors that the progression of knowledge, skills and attitudes in medical education can be assessed. However, finding the opportunities and tools for direct observation may present challenges to program directors and clerkship directors alike. Seizing available opportunities will become increasingly important as we transition to milestones-based assessment in medical education.

Description: 1. Review the concepts of validity, reliability and utility/feasibility as they apply to assessment tools. Participants will be asked to apply these concepts to a traditional rating scale after observing a clinical vignette. 2. Discuss Miller's Pyramid as a model for assessment of clinical skills, competence and performance. Participants will be asked to place different types of assessment tools at appropriate levels on the pyramid. The benefits and challenges of direct observation will be described. 3. Participants will break into small groups to discuss opportunities for direct observation assessments in the training environment for each of the Core Competencies. 4. Multiple tools for direct observation will be introduced, and small groups will each have the chance to apply one tool to a video scenario. This will be followed by a large group discussion of the merits and feasibility of each tool. 5. Finally, the concept of Milestones-based assessments will be demonstrated, and the group will brainstorm about opportunities to observe behaviors described in the milestones to inform assessment.

Pre-Conference Workshop 5

NCC 208

THE HOW AND WHY OF FOSTERING REFLECTIVE PRACTICE ACROSS THE CONTINUUM

Sponsored by the APPD Curriculum Task Force

Lavjay Butani, MD, University of California Davis, Sacramento, CA, Rebecca Blankenburg, MD, MPH, Vice Chair, APPD Curriculum Task Force, Lucile Packard Children's Hospital, Stanford, Palo Alto, CA, Albina Gogo, MD, Associate Program Director, University of California Davis, Sacramento, CA, Kathryn Sutter, MD, University of California Davis, Sacramento, CA, Michele E. Long, MD, University of California San Francisco, San Francisco, CA

The ability of learners to reflect critically on experiences remains a challenge especially in the current era of duty hour restrictions. The medical education literature supports that professional formation, empathy, diagnostic accuracy, and patient outcomes can all

be improved by nurturing reflective capacity. Increased emphasis on self-assessment seeking strategies at all levels of medical education has driven professional organizations and accrediting bodies to emphasize the vital role of reflective practice across the educational continuum as a means to cultivate resilience and build competence, especially in the domains of practice based learning and improvement, interpersonal and communication skills and professional identity formation. This can only be achieved by educator knowledge and expertise on how to stimulate and provide feedback on critical reflection in learners.

This workshop will review reflective practice, discuss various strategies to incorporate reflective teaching into existing curricula and train participants how to process learner reflections including 1) evaluating the depth of reflections, and 2) articulating feedback to take learners to a higher reflective level.

Participants will leave with a toolbox of various strategies to promote reflection in action and reflection on action in each of the 3 domains of medical reflective practice (doctor as 'person,' 'scholar' and 'expert').

Pre-Conference Workshop 6

NCC 209

YOUR EDUCATIONAL SCHOLARLY PROJECT: FROM IDEA TO ANALYSIS TO DISSEMINATION

Sponsored jointly by the APPD and COMSEP Research Task Forces

Heather McPhillips, MD, MPH, Chair, APPD Research and Scholarship Task Force, Associate Director, University of Washington – CHMC, Gary Beck, PhD, Associate Director, Medical Education, University of Nebraska Medical Center College of Medicine/Creighton University, Su-Ting Li, MD, MPH, Vice Chair, APPD Research and Scholarship Task Force, University of California/Davis, Medical Center, Robin English, MD, Associate Professor of Pediatrics, Louisiana State University School of Medicine in New Orleans, Daniel West, MD, Program Director, University of California (San Francisco), Erika Abramson, MD, Associate Program Director, New York Presbyterian Hospital - Weill Cornell, Tai Lockspeiser, MD, Associate Program Director, University of Colorado Denver, David Turner, MD, Fellowship Program Director, Pediatric Critical Care Medicine, Duke University, Caroline Paul, MD, Assistant Professor, University of Wisconsin School of Medicine and Public Health, Jean Petershack, MD, Associate Clerkship Director, The University of Texas School of Medicine at San Antonio, Linda Tewksbury, MD, Clerkship Director, Dept. of Pediatrics, New York University School of Medicine, Jennifer Trainor, MD, Northwestern University The Feinberg School of Medicine, Eve Colson, MD, Associate Professor, Yale University School of Medicine, Mary Rocha, MD, MP, Associate Clerkship Director, Baylor College of Medicine, Marsha Anderson, MD, Associate Program Director, Children's Hospital Colorado

Background: Faculty members of academic medical centers are challenged with balancing their time between patient care, teaching, administration, and research. This pre-conference workshop led by members of the Research and Scholarship Taskforces of both APPD and COMSEP is designed to develop knowledge and skills among educators to transform their educational innovations into educational scholarship.

Objectives: By participating in this workshop, attendees from COMSEP and APPD will:

- 1) Differentiate the key types of scholarship as they apply to medical education.
- 2) Develop a SMART (Specific, Measurable, Achievable, Relevant and Timely) question and specific aims for their own scholarly project.
- 3) Identify appropriate study designs, outcome variables and statistical analysis plans to address their specific aims.

Description: After introductions, presenters begin with a brief interactive didactic introducing Glassick's Criteria for Scholarship and illustrating three types of educational scholarship that relate to teaching (Discovery, Application, and Integration). For the remainder of the workshop participants will work in facilitated small groups to develop their ideas into a research plan using an educational scholarship planning tool. Following a series of brief didactic sessions about the components of a SMART research question, participants will learn how to apply the SMART research question method and effective literature review to refine their research question and convert that question into a set of specific aims. Workshop leaders will then review different study designs and demonstrate how to best match specific aims to a study design. Participants will practice applying these principles by working in small groups to review published abstracts with the goal of understanding how different study designs address different types of specific aims. Participants will then identify which study design and outcome variables are best suited to their individual project. Finally, there will be an interactive didactic review of statistical tests commonly used in educational research as well as discussion about how best to work with a mentor or statistician. The workshop will conclude with specific examples for dissemination of scholarship including alternatives to traditional journals. Participants will leave this workshop with a completed planning worksheet, a list of references and resources, and several published examples of the Scholarship of Discovery, Application and Integration.

APPD Coordinators' Forum for Seasoned Coordinators **NCC-205**

Welcome to the first APPD Coordinators' Forum, a forum designed to promote professional development for residency and fellowship coordinators. Topics that will be addressed are Work/Life Balance, latest Needs Assessment Survey Data, and Coordinators' Scholarly Activities.



1. Stress Resilience: Chasing the Elusive Work/Life Balance

Jim Kendall, LCSW, CEAP, Manager, Work/Life Connections-EAP, Vanderbilt University. (Work/Life Connections – EAP (WLC-EAP) provides psychological support to the Vanderbilt faculty and staff and promotes problem solving and stress resilience through counseling, coaching, and consultation. The Program is available to provide psychological support to the Vanderbilt faculty and staff (approx. 25,000) of all ten University Schools (including the School of Medicine, Vanderbilt University Hospital, the Children's Hospital, clinics, satellite clinics) as well as housestaff, spouses and same-sex domestic partners.)

Since life surprises us with ups and downs, we need to maintain a lifestyle that allows us to bounce back from these stresses. Most professionals are “balance challenged”. You are being pulled from every direction. Based upon a survey on stress at Vanderbilt, a number of strategies were identified to maintaining a stress resilience.

OBJECTIVES:

1. Describe the concept of Resilience as it relates to physical and emotional wellness.
2. Identify perceived control, predictability and outlets for frustration as critical components for increased stress.
3. Review the components necessary to find and maintain life balance (sleep, exercise, quiet time, nutrition, an optimistic attitude, humor)
4. Develop a strategy for personal stress management.

2. Review of Needs Assessment Survey Data

Pat Jacobi, Residency Program Coordinator, St. Louis Children's Hospital/Washington University, Kathy Miller, C-TAGME, Medical Training Program Administrator, Johns Hopkins University and Ambrosya Amlong, C-TAGME, Coordinator, Pediatric Education, University of Iowa Children's Hospital

3. Coordinator Workshop: Don't Wait, Self Create: Program Coordinator Generated Scholarly Activity

Beth Payne, MAEd, C-TAGME, The University of Texas Health Science Center at San Antonio, Yvette Foster, BA, The University of Texas Health Science Center at San Antonio, Kathy Miller, BS, C-TAGME, Johns Hopkins University, Jacqueline Riley, Emory University and Valerie Cole, University of Minnesota

The APPD Coordinators' Professional Development Task Force created a Scholarly Activity Subcommittee to reinforce the need for coordinator driven scholarship as well as to educate the current Program Coordinator population on the “nuts and bolts” of generating scholarly activity. The role of Administrators and Coordinators in Graduate Medical Education embodies that of a community of leaders and learners. Program Coordinator driven scholarly activities should be established as a voluntary educational initiative to promote the sharing of ideas and support for all persons managing post-graduate training programs. Each coordinator brings a rich background of individual experiences and by participating in scholarly activity, learners will be able to create ideas and opportunities to develop innovative learning environments for career growth, advancement, and self-development. Involvement in these educational initiatives will also allow coordinators to work in collaboration with GME offices and program leadership on shared projects to improve organizational and educational processes throughout the program, institution and national organizations. The primary functions of the Scholarly Activity Subcommittee and this workshop are: to establish support for professional development, to facilitate communication between all Graduate Medical Education community members in an effort to make recommendations for improvement, and to set a standard of excellence for all program coordinators by way of providing instruction and guidance on professional development opportunities via scholarly activity. This workshop strives to reinforce the need for coordinator driven scholarship and educate the current program coordinator population on the “nuts and bolts” of generating scholarly activity. By participating in scholarly activity, learners will be able to create ideas and opportunities to develop innovative learning environments for career growth, advancement, and self-development. The workshop will provide instruction and guidance on professional development opportunities via scholarly activity and will offer small group sections to allow for a richer learning environment via experiential learning opportunities. Bring your list of interests for abstract and poster development.

COMSEP Administrators' General Session **RNH Ryman Room**

“The Unprofessional Student 101” Guest Speaker, Mark Harrison, M.D., University of Kansas School of Medicine-Wichita. Administrator Leadership Team: Donnita Pelsner, Gretchen Shawver, Cathy Chavez, Debbie Hernandez, Alison Ricker, Jakki Outlaw and Marlo Meyer.

COMSEP Session for New Clerkship Directors (additional fee) **NCC-210**

THE ABCS OF MEDICAL STUDENT EDUCATION: FUNDAMENTALS FOR PEDIATRIC EDUCATORS

Andy Mutnick, MD, Columbia University, New York, NY; Anton Alerte, MD, University of Connecticut, Hartford, CT; Stephanie Starr, MD, Mayo Clinic, Rochester, MN; Lisa Leggio, MD, Georgia Health Sciences University, Augusta, GA

This interactive workshop is designed for educators who would benefit from an introduction to a variety of topics related to medical student education. Target audiences are new clerkship directors, site directors, sub-I directors, coordinators

and anyone else wanting an exposure to the basics of leading medical student educational programs. If you have questions about getting started, curriculum development and implementation, problem solving strategies and your own career development, then this is the workshop for you! Strategies that have worked for others will be highlighted. Workshop leaders will share challenges and solutions including “lessons I wish someone had taught me when I started my job,” “how do I keep my eye on the ball while managing the minutiae,” and “what should I be doing that I don’t even know about”? Please join us for an informative, real world, and FUN workshop designed to give you a jump-start and help you succeed in your new role. Workshop Learning Objectives: Understand requirements for a productive educational experience understand objectives and competencies; understand regulatory requirements governing medical education; understand various teaching methodologies; compare and contrast different feedback and evaluation methods and determine the feasibility of implementation; assemble a model for curriculum design; and compile resources to further enhance your academic success as an educator. Learners will work in small groups to enhance exchange of ideas during key portions of the workshop. If you are attending a COMSEP meeting for the first time, this is a perfect introduction to the organization.

6:00pm - 7:00pm **APPD LEARN-NBME Pediatrics Milestones Assessment Group Meeting (private meeting)**
NCC 202

Currently active APPD LEARN - NBME Pediatrics Milestones Assessment Group members (see list on page 18) are invited to discuss challenges and insights from the ongoing pilot study and plans for future work.

6:00pm-10:00pm **COMSEP Executive Committee Dinner Meeting**
RNH Belmont 2+1

7:30pm-9:30pm **APPD Pediatrics Milestones Session**
RNH Grand Ballroom

Large group format presented by leaders in Milestone development and implementation from the ACGME/RC, ABP and APPD, with the most up to date information about pediatrics milestones. This session will review the purpose of milestones, the requirements and timetable around implementation, and meaningful assessment of residents within the framework of the milestones. Information about rater training, tools and faculty development will be shared as well as opportunities to be involved in the APPD LEARN/NBME project and other national initiatives around milestones. A membership survey prior to the meeting will help direct topics covered in the session, and a period of time for open microphone questions will be included.

THURSDAY, APRIL 11, 2013

6:45am-8:00am **Continental Breakfast**
RNH East & Center BR

7:00am-5:30pm **APPD/COMSEP Registration**
NCC 3rd Floor Lobby

7:00am-8:00am **APPD Pediatric Global Health Educators Annual Meeting**
RNH Fisk1 & Fisk 2

All those with an interest in global health education are welcome and encouraged to attend! There will be an update about the current status of global health education within APPD, an overview of ongoing efforts happening regionally and nationally to enhance and standardize pediatric resident global health education, and discussion about next steps with opportunities for all to get involved.

APPD Mentoring Session
(open only to those who pre-registered and completed the pre-meeting survey)
RNH West BR

The APPD Mentoring Program will meet over breakfast on Thursday April 11 from 7am to 8am. (Please pick up your breakfast first in the RNH East/Center Ballroom at 6:45am.) Completion of a pre-meeting survey is required for participation. This program is for program directors, associate program directors, and fellowship directors only. Coordinators are served by the Coordinator Mentoring Group, Chief Residents/Trainees are served by the Chief Resident Forum. Aditee Narayan and Rhonda Graves, Co-Chairs, APPD Mentorship Committee of the APPD Faculty and Professional Development Task Force.

- 8:00am-9:30am **APPD Grassroots Forum for Program Directors**
- ***RNH Music City BR***
- The Grassroots Forum for Program Directors will focus on timely topics of interest to Program Directors. This years' facilitators
- will be Drs. Dan West (University of California/San Francisco) and Heather Fagan (University of Chicago).
-
- **APPD Grassroots Forum for Associate Program Directors**
- ***NCC 204***
- 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, there will be short, peer-reviewed
- presentations from Associate Program Directors. We hope to build upon six years of successful meetings and invite you to
- bring your ideas to this energetic group session. Leaders: Drs. Jerry Larrabee (University of Vermont), Heather McPhillips
- (University of Washington), and Lynn Gardner (Emory University).
-
- **APPD Grassroots Forum for Fellowship Directors**
- ***NCC 201***
- The forum for subspecialty program directors will be an open discussion of hot topics raised by the participants with
- facilitation by Dr. Chris Kennedy (University of Missouri at Kansas City).
-
- **APPD Coordinators Assembly**
- ***RNH Belmont***
- This session includes a look back at the "Coordinators' Executive Committee over the years" and introduction and discussion
- of proposed new "Next Mentoring Group System" for coordinators.
-
- **COMSEP Members Meeting and Plenary Session**
- ***NCC 205-206***
-
- 9:45am-11:15am **COMSEP Networking/Open Forum/Hot Topics**
- ***NCC 205-206***
-
- 9:45am-11:15am **APPD Members' Meeting**
- ***RNH Grand Ballroom***
- 9:45-9:50 Welcome
- *Dr. Patricia Hicks, President and Dr. Dena Hofkosh, President-Elect*
- 9:50-9:55 Report from the APPD Secretary-Treasurer
- *Dr. Adam Pallant*
- 9:55-10:05 Election Results and Farewells
- *Dr. Ann Burke, Immediate Past President*
- 10:05-10:15 APPD Awards (Holm/Tunnessen/Berkowitz)
- *Dr. Ann Burke, Immediate Past President*
- 10:15-10:25 Special Presentation honoring Dr. James A. Stockman. III
- *Dr. Patricia Hicks, President*
- 10:25-10:45 APPD LEAD Report and Graduation of First LEAD Cohort
- *Dr. Franklin Trimm, LEAD Council Chair*
- 10:45-10:55 ACGME Update
- *Dr. Mary Lieh-Lai, Senior Vice President, Medical Accreditation, ACGME, Ms. Caroline*
- *Fischer, Executive Director, Accreditation Standards, ACGME Review Committee and*
- *Dr. Joseph Gilhooly, Chair, Pediatric Review Committee, ACGME*
- 10:55-11:05 ABP Update
- *Dr. Gail McGuinness, ABP Executive Vice President*
- 11:05-11:15 Q&A
-
- 11:30am-12:45pm **Combined APPD/COMSEP Task Force Chairs Lunch Meeting**
- ***Belmont 3***
-
- **APPD Council of Regional Chairs Lunch Meeting**
- ***RNH Jazz***
-
-

APPD Coordinators' Executive Committee/Leaders Lunch Meeting
RNH Belmont 1

1:00pm-2:00pm

APPD/COMSEP Key Stakeholders in Education - Across the Continuum - with Interactive Q&A

RNH Grand Ballroom

1:00-1:15pm

APPD and COMSEP shared goals and activities

Patricia Hicks, MD, MHPE, APPD President and Jerold Woodhead, MD, COMSEP President

1:15-1:25pm

Update on Education in Pediatrics Across the Continuum (EPAC) and AAMC work on drafting set of competencies for graduating medical students

Carol Carraccio, MD, Vice-President, Competency-based Assessment, American Board of Pediatrics

1:25-1:30pm

Update on Clinical Reasoning Collaborative

Elizabeth Stuart, MD, MEd, Clerkship Director, Stanford University School of Medicine

1:30-1:35pm

APPD LEARN-NBME Pediatrics Milestones Assessment Pilot – Assessment across the continuum of sub-interns to interns: brief report

Alan Schwartz, PhD, APPD LEARN Director

1:35-1:45pm

Relevant questions and challenges for APPD/COMSEP member consideration

APPD and COMSEP Task Force leader representatives

1:45-2:00pm

Open microphone discussion

2:00pm-3:30pm

APPD and COMSEP Presidents' Report

RNH Grand Ballroom

APPD President: Patricia Hicks, MD, MHPE, The Children's Hospital of Philadelphia

COMSEP President: Jerold Woodhead, MD, University of Iowa Children's Hospital

Miller/Sarkin Lectureship

Guest Lecturer: Kevin Eva, PhD

Competency-Based Assessment: The Good, the Bad, and the Puzzling



Dr. Eva is Senior Scientist in the Centre for Health Education Scholarship, and Professor and Director of Educational Research and Scholarship in the Department of Medicine at the University of British Columbia. He completed his PhD in Cognitive Psychology (McMaster University) in 2001 and became Editor-in-Chief for the journal Medical Education in 2008. He is Chair of the Medical Education Assessment Advisory Committee at the Medical Council of Canada and maintains a number of international appointments as well as serving as founding Co-Director of the Maastricht-Canadian Masters of Health Professional Education program. His research interests include the development, maintenance, and assessment of competence in health professionals, the selection of students, clinical reasoning strategies, and the role of self-regulation in professional practice. We look forward to hearing Dr. Eva share his thoughts on learner assessment.

3:45pm-5:15pm

APPD Task Force Meetings

Curriculum

Evaluation

Faculty and Professional Development

Learning Technology

Research and Scholarship

RNH Music City Ballroom

RNH Belmont

RNH Fisk

NCC 207

RNH Ryman

COMSEP Task Force Meetings

Curriculum

Evaluation

Faculty Development

Learning Technology

Research and Scholarship

NCC 103

NCC 213-214

NCC 105-106

NCC 104

NCC 110-11

- APPD Coordinators' Session (Task Force and Workshop)

• **NCC-204**

- “Putting the Pieces Together: Building Your Team”

- *Teresa D. Flournoy, UMKC/Children's Mercy Hospitals and Clinics, Celeste M. Farley, SUNY Buffalo / Children's Hospital, Teresa Woods, St. Louis University School of Medicine*

- Graduate Medical Education should be a group effort. It takes residents, coordinators, directors, and faculty all working together
- towards a common vision. In this workshop, coordinators will learn about developing teams. Participants will learn about vision
- statements and walk away with the tools for building one. Participants will learn how they act as both member and leader of the
- team. Coordinators will learn how trust is essential in the workplace and the importance of role flexibility in groups.

- 6:30pm-10:30pm Dinner and Dancing at Country Music Hall of Fame® and Museum (additional fee)

• The Country Music Hall of Fame® and Museum has been the home of America's music since
• 1967. Located on the west bank of the Cumberland River, just a few steps from the historic Ryman
• Auditorium and the honky-tonks of Lower Broadway, the museum is just a couple of blocks away
• from the Renaissance Hotel. For our banquet, we have rented the entire museum. The evening will
• include a self-guided tour of the museum (\$23 value), with dinner and dancing in the Rotunda
• and Conservatory. Please plan to join us! 222 5th Avenue, South, between 4th and 5th Avenue on
• Demonbreun (615-416-2001). (Limited to first 400 registrants. Tickets will be distributed at the
• registration desk.) Current Exhibits: <http://countrymusichalloffame.org/exhibits/>



- 6:30pm-10:30pm APPD Pediatric Global Health Educators Networking Session

RNH Fisk 2

- All those with an interest in global health education are welcome to attend! Come meet others with an interest in global health education. This forum will provide an opportunity for those interested in global health education to discuss possible collaboration around either particular topics or within particular regions.

• FRIDAY, APRIL 12, 2013

7:00am-5:30pm APPD/COMSEP Registration
NCC 3rd Floor Lobby

- 7:00am-8:00am Continental Breakfast
- NCC 205/206*

- APPD SIG on Simulation
- *NCC 204*

- This forum represents the first meeting of the APPD Focus Group on Simulation and is open to any and all individuals who are interested in collaborating to enhance pediatric GME through simulation. From mannequins, task trainers, and standardized patients to virtual reality and screen based simulation -- this focus group will have something for you. Please come and join us before the combined task force meetings!

8:00am-10:00am	Combined APPD/COMSEP Task Force Meetings
	Curriculum
	Evaluation
	Faculty and Professional Development
	Learning Technology
	Research and Scholarship

RNH East
RNH West
RNH Center
RNH Ryman
RNH Belmont

- 10:15am-11:45am APPD/COMSEP Workshops Session I
- Workshop 1: THE I-PASS HANDOFF PROCESS: TEACHING AND ASSESSING STANDARDIZED APPROACHES TO
- TRANSITIONS OF CARE ALONG THE EDUCATION CONTINUUM

- **NCC 209**

- Amy J. Starmer, MD, MPH, Oregon Health and Science University, Portland, OR, Jennifer K. O'Toole, MD, Cincinnati Children's
- Hospital Medical Center, Cincinnati, OH, Megan Aylor, MD, Doernbecher Children's Hospital, Oregon Health and Science
- University, Portland, OR, James F. Bale, MD, University of Utah School of Medicine, Salt Lake City, UT, Becky Blankenburg, MD,

MPH, Lucile Packard Children's Hospital, Stanford University, Palo Alto, CA, Sharon Calaman, MD, St. Christopher's Hospital for Children, Drexel University, Philadelphia, PA, Brian P. Good, MD, BCh, Primary Children's Medical Center, University of Utah, Salt Lake City, UT, Amy B. Guiot, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Shilpa J. Patel, MD, Kapiolani Medical Center for Women and Children, University of HI, Honolulu, HI, Glenn Rosenbluth, MD, UCSF Benioff Children's Hospital, University of California, San Francisco, CA, Lauren G. Solan, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Adam T. Stevenson, MD, Primary Children's Medical Center, University of Utah, Salt Lake City, UT, Daniel C. West, MD, UCSF Benioff Children's Hospital, University of California, San Francisco, CA, Christopher P. Landrigan, MD, MPH, Theodore C. Sectish, MD, Boston Children's Hospital, Harvard Medical School, Boston, MA, Nancy D. Spector, MD, St. Christopher's Hospital for Children, Drexel University, Philadelphia, PA

Due to intensifying duty hour requirements and educational demands for medical students and housestaff, handoffs are increasing in academic health centers. ACGME program requirements and the APPD/COMSEP pediatric Sub-I curriculum emphasize that training programs should establish and monitor handoff processes to ensure patient safety. However, most programs lack the curricula and assessment tools to meet this requirement. This lack of training is alarming as the development of one's skills surrounding this entrustable professional activity must start at the beginning of the continuum of medical education and be cultivated throughout one's career. In this interactive workshop, participants will learn an evidence-based, consensus-driven approach to teaching and assessing trainee handoffs based on the work of the I-PASS Study Group. This group includes educators, hospitalists, and health services researchers from ten pediatric institutions. The group designed an educational intervention based on data from a pilot study that demonstrated a 40% reduction in medical errors following the implementation of a bundle of handoff interventions. The workshop will begin with an overview of the science, guiding principles, and needs assessment that served as a foundation for the I-PASS Study curriculum. Participants will then experience portions of the educational curriculum including highlights of the interactive training workshop, handoff simulations, and use of validated observation tools. Finally, participants will work with I-PASS facilitators to develop an implementation plan for their own institution that includes: 1) Faculty development 2) Strategies to empower trainees to teach and assess handoff skills; 4) Targeted assessment of skills at various levels of training; and 5) Elements of a campaign to ensure sustainability. Individuals will spend time in small group discussion, self-reflection, and planning for how they will approach standardizing handoffs within their own programs. References, resources, curricular materials, and validated tools will be available to all participants.

Workshop 2: "BOOT CAMP" BEST PRACTICES: DESIGNING A ROTATION TO PREPARE 4TH YEAR MEDICAL STUDENTS FOR PEDIATRIC INTERNSHIP

NCC 210

Jennifer B. Walsh, MD, UT Southwestern Medical School, Dallas, TX, Kenya A. McNeal-Trice, MD, University of North Carolina School of Medicine, Chapel Hill, North Carolina, Judith L. Rowen, MD, University of TX Medical Branch, Galveston, TX, Jennifer L. Trainor, MD, Northwestern University, Feinberg School of Medicine, Chicago, IL

Residency training has changed significantly in the last decade with the advent of resident work hour guidelines and competency-based assessment of knowledge and skills. Collaboration between medical student educators and residency program directors in implementation of curricula designed to facilitate successful transition to residency is more important than ever. As graduate medical training has become centered on competency-based assessments, it is essential that medical students are also assessed and evaluated using competency-derived outcome measures. This workshop is designed to facilitate discussion between residency and medical student program faculty regarding the planning and implementation of transitional boot camp courses to develop practical knowledge and skills relevant for future pediatric interns distinct from what is typically covered in the subinternship. The workshop will begin with a group brainstorming process in which participants will generate a list of knowledge and skills desired in incoming interns, then discuss how this list correlates with ACGME Pediatrics milestones. Workshop leaders who have successfully implemented boot camp courses at their own programs will each present a key component of the curriculum design process, including assessment of outcomes, for their respective transitional courses. We will discuss challenges faced and barriers overcome. Participants will then break out into facilitated small groups to discuss ways to measure competency-based outcomes for the various curricular components presented. These ideas will then be shared with the large group. Time will be provided at the end for participants to outline desired curricular components for a boot camp course at their own institution. Participants will leave this workshop with examples of curricula implemented at other institutions, an audience-derived list of essential skills, and competency-driven assessment tools for evaluation of a boot camp curriculum.

Workshop 3: PERFORMANCE-BASED ALTERNATIVE ASSESSMENT TECHNIQUES IN MEDICAL EDUCATION

NCC 211-212

Kadriye O. Lewis, Ed.D, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Serkan Toy, Ph.D, Children's Mercy Hospital, Kansas City, MO

The ACGME requires dependable measures to assess resident competencies. However, no single method is adequate to appropriately measure all aspects of medical learners' knowledge, skills, performance, and personal attributes. Thus, medical educators need training for gaining in-depth knowledge of multidimensional performance-based modes of evaluation and assessment in medical education. This type of multifaceted assessment system incorporates criterion-based, developmental,

- work-based assessment procedures, including both quantitative and qualitative measures which provide evidence about a learner's abilities in a variety of situations that can be evaluated against standards. This workshop will present performance-based alternative assessment techniques that are most effective in medical teaching and learning settings. Participants will first reflect on their own assessment practices through interactive exercises and group discussion. Then participants will engage in alternative assessment techniques through group exercises to expand their knowledge and skills. Specific assessment examples will include case analysis, projects, e-portfolios with rubric based scoring tools, self-assessments, peer evaluations, reflective journals, observations, rating scales, triple jump, and patch text. Through group activities, participants will utilize assessment strategies to develop a plan to improve their own assessment and evaluation practices depending on each participant's interest and level of experience. The workshop will also discuss the concepts of assessment of learning vs. assessment for learning, the qualities of good assessment and flaws in the assessment processes, deficiencies in course, rotation, program content and resources, assessor ability or shortcomings, learners' lack of preparedness, and other learner-related factors. At the end of this session, participants should leave with a toolbox of strategies to assist in their common assessment needs at their institution as well as the resources in meeting those needs.

Workshop 4: ON THE ROAD TO INTERPROFESSIONAL EDUCATION IN PEDIATRICS

RNH Fisk 1

Robert Dudas, MD, Johns Hopkins University, Baltimore, MD, Alicia Freedy, MD, VCU SOM Inova Campus, Falls Church, VA, Barry Solomon, MD, MPH, Michael Barone, MD, MPH, Johns Hopkins University, Baltimore, MD

Interprofessional education (IPE) occurs when trainees from two or more professions learn with, from and about one another to improve collaboration and the quality of care. Children are a uniquely vulnerable population and require the coordinated performance of an interprofessional healthcare team. The Canadian Interprofessional Collaborative and a consortium of healthcare organizations in the US have each published IPE competencies. This workshop is designed to introduce resident and medical student educators to the IPE general competency framework. Participants will discuss strategies to link competencies to the needs of medical schools and residency training programs. Faculty will introduce materials and assessment resources which will help participants contribute to the development, implementation and evaluation of an IPE project at their home institution. Participants will work in groups to create pilot projects which could be launched at their home institutions. We will tap into the wisdom of the crowd to help develop these ideas and will provide opportunities to network with like-minded colleagues.

Workshop 5: MAPPING OF MILESTONES FOR MEANINGFUL EVALUATIONS

NCC 201

Renuka Verma, MD, Janice Lichtenberger, MD, The Children's Hospital at Monmouth Medical Center, Long Branch, NJ, Chad Brands, MD, All Children's Hospital Johns Hopkins Medicine, St. Petersburg, FL, Angela Myers, MD, MPH, Children's Mercy Hospital and Clinics, Kansas City, MO

The goal of this workshop is to address and review the how to of the pediatric milestones with your faculty in your training program. This will facilitate your faculty in recognizing the necessity and ease of meaningful evaluation of trainees. All participants will be working in small groups. 1. The workshop will begin with an introduction to the Pediatric Milestones and the ACGME requirement for semi-annual reporting. 2. Each group will then be assigned to a competency and asked to identify where and how this competency and its sub-competencies are being taught in the program. 3. Based on these thoughts and input from the working groups, the next segment will consist of the synthesis of evaluation tool based on the competencies for each specific clinical area. 4. Each small group will be then asked to evaluate a resident after witnessing a clinical encounter using the program's current evaluation tool and then using a new evaluation tool based on the pediatric milestones. At the conclusion, participants will be able to categorize Pediatric Milestones for different learning areas and activities; extrapolate and formulate tools for their own requirements.

Workshop 6: CREATING SIMULATION CASES TO TEACH AND ASSESS THE PEDIATRIC MILESTONES: YOU CAN DO IT!

NCC 102

Shannon E. Scott-Vernaglia, M.D., Ariel S. Frey-Vogel, M.D., M.A.T., Lindsay P. Carter, M.D., MassGeneral Hospital for Children, Boston, MA

Patient-based student and resident training has long been the standard for delivering apprentice-model learning opportunities. However, duty hour restrictions, shift work, and an evolving landscape of medical care inevitably lead to more variability in training over time. While some medical schools and residency programs have used OSCE's to evaluate clinical skills, more institutions are exploring simulation opportunities in order to standardize the (simulated) patient-based learning environment. The Pediatric Milestones Project provides a framework within which to teach, and ultimately assess, trainees with the use of simulation. This workshop is designed to encourage pediatric educators, independent of equipment resources, to consider simulation as a tool for providing trainees with standardized teaching and assessment of milestone attainment. The session will begin with a discussion-based presentation of examples of uses of simulation, including traditional team-based training, medical student- and intern-specific case-based teaching, multi-disciplinary communication training and interpreter collaborative training, with participants adding their own examples of varied simulation uses at their institutions. Since a barrier to launching a simulation program is often the development of cases, workshop leaders will present their experience with developing student and resident level-specific cases and provide a framework for use by participants. Small groups will develop cases designed to address specific pediatric milestones. Groups will be encouraged to design cases that can be

implemented with varied resources, so as to represent realistic opportunities for the use of simulation in different settings. The workshop will conclude with participants discussing and refining the cases as an example of the realistic process of iterative case review by consensus of the simulation administrative team. Participants will leave the workshop with sample level-specific cases to try at their home institutions and will be asked to reflect on how they can use the skills learned in the workshop in the coming year.

Workshop 7: BOOT SCOOTIN BOOGIE COLLABORATION TO ACHIEVE SUCCESS IN BOTH RESIDENT AND STUDENT EDUCATION

RNH Music City Ballroom

Ambrosya Amlong, BA, C-TAGME, Manager Pediatric Education Programs, Cathy Chavez, Certified Clerkship Administrator, University of Iowa, Iowa City, IA, Tara Shirley, Senior Pediatric Residency Coordinator, Donnita Pelser, BA, Certified Clerkship Administrator, University of Kansas, Wichita, KS

Participants in this workshop will be given an overview of how medical student administrators and residency coordinators collaborate to ensure a successful and productive experience for both the students and the residents. This workshop will allow attendees to see how two programs approach the issue of medical student and residency education, similarities and differences and the importance of teamwork. Information will be shared on the training hierarchy and how changes to residents' schedules impact medical student schedules and vice versa. Attention will also be given to opportunities to improve communication and interaction between the medical student administrator and the residency coordinator. Participants will have the opportunity to work in small groups to share ideas and suggest ideas for change/improvement. Finally, participants will leave this workshop with concrete ideas that can be implemented in their own institutions.

Workshop 8: ASSESSMENT AND AFFILIATES - A CASE-BASED APPROACH

RNH Bluegrass

Karen E. Wang, MD, Thomas Jefferson Medical School, West Reading, PA, Alisa Losasso, MD, Thomas Jefferson University, Philadelphia, PA, Jonathan Gold, MD, Michigan State University, East Lansing, MI, Mahesh Sharman, MD, Michigan State University, Flint, MI, Lisa Leggio, MD, Medical College of Georgia, Augusta, GA

Assessment and Affiliates A Case- Based Approach Increasingly students from medical schools are placed at a variety of community and affiliate sites for clinical rotations. These sites provide varied clinical experiences and can provide a breadth to the clinical curriculum of a medical school. Affiliate sites also accommodate the growing class sizes of many medical schools across the country. We know that there is wide variation in evaluative practices across medical schools in this country, and that inter- and intra- school evaluation reliability is often in question. Training all faculty in meaningful, effective evaluation is difficult, made even more pronounced when faculty are spread across several sites and sometimes great geographic distances. Affiliate faculty often feel disconnected from the faculty based at the medical school and are often uncompensated, with little if any time set aside from their clinical duties in the private practice or other settings for either faculty development or the increased administrative duties required of the job. Clerkship directors must attempt to bridge this gap. Student perception of experiences at different clinical sites can also be variable. With at least some components of assessment being subjective, students may perceive bias by faculty members at some clinical sites, or grade inflation at others. Faculty may not be sure how to compare students when they have a limited subset of students each year. Additional challenges are posed in work with affiliate sites when grades are questioned by students and remediation is needed. We plan to use case studies in small groups as a springboard for discussion on assessment across affiliate sites from our experiences at our home programs and gathered from others and the literature. We hope to brainstorm with workshop participants on ideas for giving all faculty members a common language for meaningful student assessment to create a toolbox of skills in this area. Participants will leave with an action plan for facing the challenges with assessment by affiliate faculty they are experiencing.

Workshop 9: EXPLORING STRATEGIES TO STIMULATE THE INTRINSIC MOTIVATION OF LEARNERS

NCC 103

Melissa M. Cellini, MD, Mark S. Craig, MD, Lynn C. Garfunkel, MD, Cynthia Christy, MD, William S. Varade, MD, University of Rochester Medical Center, Rochester, NY

Motivation science teaches that learners are intrinsically motivated to learn and naturally inclined to self-regulate. Studies of Self-Determination Theory (SDT) have demonstrated that individuals who receive autonomy support are more likely to cultivate intrinsic motivation to pursue goals, achieve more personal satisfaction, and ultimately become higher achievers than those who are prodded to perform by extrinsic rewards and punishments. SDT also encourages development of internalized self-regulation in the face of extrinsic controlling forces such as rules and mandates. This workshop will apply SDT concepts to the medical education setting. First, participants will discuss the importance of motivation in teaching and learning. The presenters will briefly discuss how satisfaction of the three basic components of self-determination (autonomy, competence, and relatedness) enhances the intrinsic motivation of students and residents. The presenters will dramatize these principles in a short role-play of a teacher interaction with a passive resident. Participants will then divide into small groups and be given (a) an autonomy-challenging resident-teacher interaction scenario that calls for educational intervention and (b) an evidence-based handout with 12 tips for stimulating motivation in learners. Their task will be to practice the application of the 12 tips in the context of the scenario, and generate additional tips to share with the larger group. After a group debriefing, the presenters will introduce a related topic: external control and self-regulation, as understood by SDT, and their educational applications.

The group will develop strategies to help students and residents learn to internalize external mandates in the medical learning environment. A collated list of strategies will be developed for email distribution.

Workshop 10: PLEASURE TO WORK WITH: DEVELOPING INNOVATIVE METHODS TO ELICIT LEARNER ASSESSMENTS IN THE COMPETENCIES AGE

NCC 105-106

Paola A. Palma Sisto, MD, CCMC, Melissa Held, MD, Connecticut Children's Medical Center, Hartford, CT, Michael C. Weisgerber, MD, Residency, Medical College of Wisconsin, Joshua D. Noe, MD, Clerkship, Medical College of Wisconsin, Ginny Cleppe, AM, Medical College of Wisconsin, Milwaukee, WI

Educators have been long been challenged with eliciting clear, performance-based, competency-driven narrative assessments on learners from evaluators along the spectrum of medical education. Comments have traditionally been vague on specific measures of performance and often influenced by the personality of the learner. Hesitancy to give negative feedback has added to the challenge of eliciting adequate descriptors of performance from these evaluators. ACGME and LCME have required educators to measure their learners' competence more quantitatively and in a progressive manner to assure learners are ready for the next phase of training. Many programs have developed creative tools to properly capture a learner's performance in a meaningful way, providing both effective feedback to the learner and easing translation by the educator into measures of competency. Presenters will review the literature related to eliciting effective assessments on learners, highlighting best practices and effective tools being used in medical education. They will present the tool developed for the ambulatory portion of the Pediatrics clerkship at the Medical College of Wisconsin (MCW) that allowed evaluators of students to check off the best descriptors, written in a developmentally progressive manner, of the students performance and describe the impact it had on student assessments. They will also present methods developed to elicit assessments of residents on inpatient rotations at MCW and their impact on the resident assessments. Participants will be asked to offer best practices for eliciting meaningful narrative assessments and to share components of their educational program they have found challenging to elicit meaningful assessments. Participants with common challenges will be grouped together to develop strategies for improving this process using all the methods presented from the literature, the presenters institutions, and the participants best practices. This toolkit of methods will be collected and electronically distributed to all the participants after the workshop.

Workshop 11: ASSESSING DIGITAL IDENTITY AND PROMOTING ONLINE PROFESSIONALISM: SOCIAL MEDIA AND MEDICAL EDUCATION

NCC 203

Terry Kind, MD, MPH, Children's National / GWU, Washington, DC, Pradip D. Patel, MD, University of Louisville SOM, Louisville, Kentucky

Are you feeling ready to make use/better use of social media, but wonder how to take the first or next steps? Do you want to know what the fuss is about? Are you skeptical about mixing social media with your career as a medical educator? Social media when used well can be a form of engagement that enhances the lives of and learning by health professionals and trainees, ultimately for public good. Participate in this workshop where we'll develop a rationale for using social media as a medical educator.

In this workshop, we will begin with introductions and review objectives (10 min). We will proceed with a roundtable discussion where participants will complete self and peer assessments regarding their past and present digital identity in social media (15 min). After this exercise, we will provide a brief background on the intersection of social media, professionalism, medical education, and training (10 min), then we will explore some examples pertaining to students, residents, fellows, and faculty, while discussing benefits and challenges to this kind of educational engagement (20 min). We will include a brief didactic on established online professionalism guidelines, with a small group exercise to help participants apply these guidelines to their own use (20 min) and then each group will report their key insights to the large group (10 min). Workshop leaders will draw upon their own experiences and research in this area. By the conclusion of the workshop, participants will develop individual goals for future use of social media as clinical educators, completing a social media action plan for next steps (25 min). This action plan can be tailored for use at participants' home institutions with their peers and trainees. We will wrap up with a discussion of key points including Q&A and a resource guide (5-10 min).

Objectives as listed plus: Identify your professional goals for using social media in medical education and formulate a plan for next steps

Workshop 12: USING THE PEDIATRIC MILESTONES TO DIRECT AND INDIVIDUALIZE LEARNING

RNH Fisk 2

Tai M. Lockspeiser, MD, Adam Rosenberg, MD, J. Lindsey Lane, BM BCh, Janice Hanson, PhD, EdS, University of Colorado, Aurora, CO, Su-Ting Li, MD, MPH, University of California, Davis, Sacramento, CA, Ann Burke, MD, Wright State University, Dayton, OH

Beginning in 2013, pediatric residency programs must assess residents' capabilities on 21 Pediatric Milestones. The use of the Milestones as an assessment tool provides an opportunity to individualize educational experiences and facilitate progress in

a standardized framework. This interactive workshop will develop participants' skills in collaborating with learners across the continuum to connect the program's assessment of a learner's Milestone capability with learner self-reflection and individual goal setting. The first half of the workshop will focus on review of Milestone data and how to work with learners to promote informed self-reflection. Participants will work in small groups and review examples of Milestone files that summarize the assessment made by a clinical competence committee. Examples will include medical student and resident learners with varying degrees of capability in the Milestones. After reviewing the Milestone files, participants will role-play coaching a learner in the self-reflection process. The second half of the workshop will focus on the creation of learning goals based on the Milestone data, clinical competency committee assessment, and learner self-reflection. Participants will first work in pairs to practice writing learning goals with the ISMART mnemonic (Goals must be important and specific with specific steps to achieve them. The outcome must be measurable. There must be both internal and external accountability. Goals must be realistic. There must be timeline for when the goal will be met.). They will then critique their learning goals using the Colorado Learning Goal Scoring Rubric. Participants will role-play discussing the creation of learning goals with the learner. Finally, each table will brainstorm about other creative ways that Milestone data might be used to guide the learning process. After this workshop, participants will be equipped to discuss Milestone level with learners, promote learner self-reflection, and help learners develop and write individual learning goals that will facilitate their progress in the Milestones.

Workshop 13: STOP LECTURING ME- HOW TO USE INTERACTIVE TEACHING TECHNIQUES **NCC 208**

Stacey Bernstein, MD FRCP, University of Toronto, Toronto, Ontario, Diane M. Moddemann, MD MEd FRCP, University of Manitoba, Winnipeg, Manitoba, Susan L. Bannister, MD MEd FRCP, University of Calgary, Calgary, Alberta

Rationale: Active involvement in the learning process promotes retention among learners and stimulates higher learning such as analysis, synthesis and evaluation. Feedback to the learner and teacher is more immediate and enhanced with active trainee participation. Learners and teachers indicate increased satisfaction when interactive techniques are utilized. This workshop will be relevant to all those who engage in small and large group learning activities and lead faculty development related to interactive teaching. Objectives: Following this interactive workshop participants will be able to: 1. Discuss the rationale and potential barriers in using interactive teaching techniques. 2. Build a repertoire of practical techniques that can be implemented to enhance interactivity in large and small group settings. 3. Demonstrate the use of interactive teaching methods. Methods and Content: Participants will engage in a number of activities in this highly interactive workshop. As a group, the rationale for using interactive teaching techniques will be reviewed reflecting on the medical education literature from the perspective of learners and teachers. Effective questioning, icebreakers, wordles, think-pair-share, live debates, real time online polling, tweeting and other audience survey methods will be demonstrated. Participants will share interactive approaches implemented in their institutions. The presenters will supplement these with other innovative ideas for discussion. In small groups, participants will practice these techniques in fun, creative interactive activities. Implementation tips will be provided covering the who, when, where, and how of interactive teaching. The group will brainstorm on the challenges of interactive teaching and identify successful strategies to overcome them. Attendees will leave with a toolbox of practical and interactive methods they can utilize to make presentations more engaging and memorable. Upon completion of this workshop, participants will have the ability to engage faculty in incorporating these techniques in their teaching.

Workshop 14: THE NUTS AND BOLTS OF CREATING AN OBSERVED STRUCTURED CLINICAL EXAMINATION (OSCE) FOR MEDICAL STUDENTS AND RESIDENTS

NCC 110-111

Sophia Chen, DO, Christin M. Traba, MD, MPH, Susan G. Mautone, MD, UMDNJ - New Jersey Medical School, Newark, NJ

The implementation of an OSCE to assess the clinical skills of medical students and residents is becoming a standard component of clerkships and residency programs as both the LCME and ACGME focus on the need to document student/trainee competencies by direct observation. Developing an OSCE can be labor intensive and requires many resources but, unlike standard written examinations which primarily assess medical knowledge, the OSCE can be used to assess areas critical to clinical performance including the ability to obtain a history, perform a physical exam pertinent to the patient, problem-solve, communicate, and handle unpredictable patient behavior. The OSCE, including pediatric standardized patients, has been utilized for more than 20 years at UMDNJ-New Jersey Medical School as a component of student and resident assessment. Workshop leaders include the residency program director, associate program director, clerkship director and director of the preclinical doctoring course. At the start of the session, workshop leaders will provide a brief introduction to designing an OSCE including developing a blueprint, creating a case, and recruiting/training both faculty and standardized patients. After this review, participants will work in small groups to develop a case including learning objectives, patient script and a scoring checklist. Individual groups will present their case and reflect on any obstacles encountered during case development. The workshop will close with the workshop leaders summarizing the common pitfalls in implementing an OSCE, strategies for overcoming barriers, guidelines for successful implementation, and a question/answer period. In addition, a video of a pediatric standardized patient interacting with a student will be shown. Copies of OSCE cases utilized by the workshop leaders as well as those developed during the workshop will be provided to all participants.

Workshop 15: SHAPING THE FUTURE OF PEDIATRIC EDUCATION IN A COMPETENCY-BASED WORLD

NCC 104

Sandra M. Sanguino, MD, MPH, Northwestern University Feinberg School of Medicine., Chicago, IL, William B. Cutrer, MD, M.Ed., Vanderbilt School of Medicine, Nashville, TN, John D. Mahan, MD, Nationwide Children's Hospital / The Ohio State University College of Medicine, Columbus, OH, Heather McPhillips, MD, MPH, University of Washington, Seattle, WA, Kenneth B. Roberts, MD, University of North Carolina School of Medicine, Mebane, NC, Teri Turner, MD, MPH, M.Ed., Baylor College of Medicine, Houston, TX

Rationale: The competencies needed by pediatricians in 2025 are likely to be very different from today. The explosion of medical knowledge requires a paradigm shift in how we train physicians and assess their readiness to progress towards independence. Medical education must reflect these changes. The Federation of Pediatric Organizations (FOPO) has convened a working group to examine training issues along the medical education continuum. Key questions for the group are "What should a pediatrician be able to do in 2025 and how do we educate those pediatricians?" We invite members of APPD and COMSEP to re-imagine the structure, process and content of pediatric education across the continuum for the future. **Objectives:** At the completion of the session participants will be able to: 1) Identify the critical training issues affecting UGME and GME and explore solutions. 2) Discuss ideas for targeted training of trainees based on career interests. 3) Outline ideas for best practices that can be incorporated into individual training programs. **Methods and Content:** We will begin with an introduction that outlines the rationale and charge of the FOPO Pediatric Training Across the Continuum Working Group. We will then pose key themes for discussion: 1) Defining best practices along the UGME and GME continuum including robust assessment tools and 2) Ideas for targeted training of trainees based on career needs. Participants will reflect on these themes and divide into small groups to brainstorm about the key issues for training and practice in the next 10 years and possible solutions. FOPO working group members will facilitate each group. Information generated in the groups will be shared with the larger audience for continued discussion. At the conclusion of the workshop we will provide participants with a bibliography as well as collect the key issues that participants have identified during the workshop. Following the workshop, participants will complete an online survey around key themes from the meeting using a Delphi technique to guide FOPO members in this important work.

Workshop 16: WHAT IS AN OSTE? USING OBJECTIVE STRUCTURED TEACHING EXERCISES TO PROMOTE TEACHING SKILLS USING STANDARDIZED LEARNERS

NCC 107

Linda Tewksbury, MD, NYU School of Medicine, New York, New York, Cynthia Osman, MD, Lucy Chang, MD, MS, NYU School of Medicine, New York, NY

Rationale: Objective Structured Teaching Exercises (OSTEs) have recently been developed, based on the OSCE model, using standardized learners to develop and assess teaching skills. Studies have shown OSTEs can improve faculty teaching skills, and more importantly, can serve as innovative competency-based assessments for evaluating teaching effectiveness. As the ACGME and LCME now mandate that we provide our core faculty and residents with programs to enhance teaching, OSTEs provide a significant step up from didactic presentations. They allow faculty and residents to receive real time feedback about their teaching skills, a critical step in adult learning. Unique challenges exist in developing OSTEs for faculty and residents, particularly for those who are new to this format. **Methods and Content:** I. The workshop begins with an introduction to the OSTE and background literature on its recent use in different settings. The presenters will then briefly share their experience developing two OSTE cases and checklists for a department-wide faculty development program. II. Participants will then have the opportunity to experience two OSTEs, from both the teacher and learner perspectives. Following the experience, the large group will debrief the exercise, discussing reactions and potential challenges, particularly for faculty new to such a format. III. Presenters will briefly discuss the necessary steps in developing an OSTE including designing realistic scenarios, choosing and training standardized learners, designing competency-based checklists, using video technology, and managing the logistics of a multi-station OSTE. IV. Participants will work in small groups to create an OSTE case for either faculty or residents, using a worksheet to carefully guide them through the necessary steps to implement in their own institution.

Workshop 17: A PRACTICAL APPROACH TO TEACHING EBM TO PEDIATRIC RESIDENTS

NCC 108

Maribeth Chitkara, MD, Rachel Boykan, MD, Stony Brook Long Island Children's Hospital, Colleen M. Kenefick, MLS, AHIP, Stony Brook University, Stony Brook, NY, Martha S. Wright, MD, MEd, Rainbow Babies and Children's Hospital, Cleveland, OH

Most pediatric residency programs utilize weekly or monthly Journal Clubs to teach evidence-based medicine (EBM). This format does not readily prepare trainees to apply EBM principles in their clinical practice (practice-based learning). Recent work suggests that teaching EBM in a more clinically integrated and longitudinal format may improve resident life-long learning and promote EBM practice. Beginning this education during medical school may also help to provide a background for trainees upon which they can build during their residency training. Such goals are perfectly aligned with a competency-focused medical education training program, as well as the new pediatric milestones (specifically # B 1: to "Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems.") This workshop will provide participants with tools and background needed to design a novel EBM curriculum for both medical students and pediatric residents by introducing alternate strategies, venues and resources for teaching these skills. Using the six-step approach

to curriculum design described by Kern, et al., the facilitators will begin by reviewing examples of current curricula from established programs. A medical librarian will lend perspective on a librarian's involvement in educational opportunities. In small groups, participants will work together to identify the gaps and needs of their individual programs and identify program-specific objectives. Following a large group discussion of novel educational methods (online CAT banks, wikis, mobile apps, etc), small groups will work together with facilitators to develop curricular plans and strategies for implementation. Finally, after an overview of evaluation strategies and resources, participants will break into small groups again to design appropriate evaluation tools for their curricula. The workshop will conclude with a large group discussion of strategic implementation. Participants will leave with meaningful next steps that can be utilized at their home institution, regardless of school/program size or resources.

Workshop 18: QUALITY IMPROVEMENT ACROSS THE LEARNER CONTINUUM

NCC 213-214

Jocelyn Grunwell, MD, Emory University Pediatrics, LaKesha Davison, MD, Emory University Pediatrics, Joseph Hilinski, MD, Emory University Pediatrics, Nurcan Ilksoy, MD, Emory University Internal Medicine, Susie Buchter, MD, Emory University Pediatrics, Danielle Jones, MD, Emory University Internal Medicine, Atlanta, GA

To achieve patient care of the highest quality, medical students, residents, and faculty need familiarity with quality improvement methods. The Institute of Medicine, the ACGME, and the American Board of Pediatrics/American Board of Internal Medicine have outlined expectations for QI methods to be practiced across the continuum. In this workshop, participants will be surveyed via an audience response system for the current status and optimal involvement of learner involvement in QI initiatives. Barriers to implementation will be identified. This activity will be followed by a brief didactic session that introduces the QI concepts of Aim Statements, the Plan-Do-Study-Act Cycle, the Fishbone Diagram, the Tally Sheet, the Histogram and the Run Chart. These concepts will be demonstrated with an actual problem identified in a clinical setting. Participants will break into small groups with facilitators and each group will discuss how and where to implement a QI curriculum into their educational setting. Each group will discuss developing faculty participation and skill through the use of a QI curriculum toolkit. The participants will identify opportunities for faculty scholarly activity related to QI. The groups will reconvene and share their ideas. The teaching methods in this workshop are used at Emory University in a medical student outpatient experience, in the Pediatrics residency, in the Internal Medicine residency, and in faculty development sessions. All participants will receive the QI module on jump drives to aid in implementation of the workshop in their own programs and clerkships.

Workshop 19: SNIPPETS: TAILORING EFFICIENT, EFFECTIVE FACULTY DEVELOPMENT

NCC 109

Miriam E. Bar-on, MD, University of Nevada School of Medicine, Las Vegas, NV, Lyuba Konopasek, MD, Weill Cornell Medical College in Qatar, New York, NY, Franklin Trimm, MD, Benjamin Estrada, MD, University of South Alabama College of Medicine, Mobile, AL

Models of faculty development have traditionally focused on 60 minute grand rounds presentations and multiple-hour workshops. While these models have been shown to be effective, they may not be the best mode for delivering this material to faculty with multiple competing priorities i.e. clinical care, administrative duties and teaching. In addition, the next accreditation system and specialty specific milestones require faculty to develop new skills in point of service assessment. To address these challenges, a shorter bite-sized faculty development session the snippet - has been created. Each 20 minute snippet is designed to focus on a specific skill related to effective teaching or learner assessment. Snippets are a combination of didactic information and interactive activities. Snippets accommodate faculty's need for efficient use of their time. They are for the most part not discipline specific and can be applied across the medical education continuum. Snippets do not replace traditional in depth faculty development, but rather bring it to individuals who cannot routinely attend these types of sessions. The purpose of this workshop is to demonstrate the application of this innovative methodology to point of service assessment of residents and fellows. After introductions, the presenters will review the objectives of the session. Session leaders will facilitate a large group discussion to identify barriers to faculty development implementation. The concept of snippets, their origin and philosophy/educational rationale behind their development will be presented with references to the literature. Utilizing the expertise of the large group, a list of potential snippet topics targeting point of service assessment will be generated. In small groups, attendees will have the opportunity to select a topic and develop a snippet that can be exported to their home institutions. The workshop will conclude with small group report outs to share their snippets. The leaders will collect and compile the snippets designed at the workshop to share with all participants. Handouts will be provided.

Workshop 20: CSI PEDIATRICS: COMMUNICATIONS SKILLS INSTRUCTION AND GUIDED SELF REFLECTION USING ROLE PLAY WITH SIMULATED PATIENTS AND SCENARIOS FOR VARIOUS LEVELS OF LEARNERS.

NCC 207

Sylvia Choi, MD, Evelyn C. Reis, MD, Dena Hofkosh, MD, MEd, University of Pittsburgh School of Medicine / Children's Hospital of Pittsburgh, Pittsburgh, PA

CSI Pediatrics: Communications Skills Instruction and guided self reflection using role play with simulated patients and scenarios for various levels of learners. Effective communication is vital for physicians but teaching skills and assessing competency is challenging. We've developed a course for pediatric residents consisting of 2 hour sessions focused on communication skills used in provocative emotional situations. Realistic scenarios and simulated parents are used; the process

- of learning is experiential and uses guided self reflection, discussion among peers and feedback from the simulator and faculty. Trained faculty facilitate using positive commentary from fellow learners to highlight skills, and gentle guidance on how to handle emotion and build empathy. Scenarios present different challenges, building on the skill sets relevant for each trainee's level. Interns experience delivering difficult news, 2nd year residents practice leading Family Centered Rounds with a challenging medical student, and 3rd year residents practice error disclosure. The simulated parents are trained actors who provide valuable learning through direct feedback about specific aspects of the interaction. Residents are encouraged to reflect on their current skills and the course facilitates a deeper awareness of internal obstacles to effective communication. In addition to self-assessment, there is the opportunity for direct feedback and observation of skills by faculty who can then assess competency. During this workshop we will describe how to create similar courses at other institutions. The primary teaching method of guided facilitation and self reflection will be explained and demonstrated. Training of faculty facilitators, creating a safe learning environment for role play, and specifics on needed resources will be reviewed. We will share specific scenarios for different levels of trainees. Participants will be given the opportunity to practice using role plays so they can receive real time feedback from the course directors.

• Workshop 21: CLINICAL COMPETENCY COMMITTEES: NOT JUST A NEW NAME FOR WHAT WE ALREADY DO • **NCC 204**

- *Daniel Schumacher, MD, MEd, Robert Vinci, MD, Scott Hadland, MD, MPH, Boston Combined Residency Program, Boston, MA, John Frohna, MD, MPH, University of Wisconsin, Madison, WI*
- The structure of committees focused on resident promotion, remediation, and readiness for graduation vary between programs to meet the needs of individual programs. While some variation will continue, the shift toward meaningful competency-based assessment and the implementation of milestones in 2013 will require a significant shift toward clinical competency committees (CCC) equipped to utilize and report on milestones in their deliberations and decisions. Many considerations must be taken into account: What is the optimal composition of the CCC? How do you engage, develop, and support faculty participation? What is the role of the program leadership in the governance and decisions of the CCC? How do milestones-based assessments get presented to the CCC? How does the CCC use those assessments to report on milestones and make decisions around promotion, remediation, and readiness for graduation? How much time should be spent on developing and monitoring remediation plans and how much time should be devoted to ensuring the development of all residents and preparing summary assessments for milestone reporting and resident summative feedback on their development? What should the CCC do when it recognizes curricular or achievement gaps? This highly interactive workshop will help programs answer many of these questions through the use of structured worksheets, small group sharing, and large group discussion. The goal of the workshop will be equipping participants to develop a CCC while maximizing practicality, acceptability, and educational impact at their home institutions. A rich bibliography and additional resource materials will be provided to participants.

12:00pm-1:15pm	APPD Regional Lunches (COMSEP attendees welcome. Please register if you plan to attend.)	
	Mid-America: West PA, OH, WV, KY, IN, MI	NCC 206
	Mid-Atlantic: Southern NJ, East PA, DE, MD, Washington DC	RNH Belmont 2/3
	Midwest: IL, WI, MN, IA, MO, KS, NE, OK, SD	RNH West Ballroom
	New England: ME, NH, MA, CT, VT, RI	RNH Ryman
	New York: NY, Northern NJ	NCC 205
	Southeast: VA, NC, SC, GA, FL, AL, MS, LA, AR, TN	RNH Center Ballroom
	Southwest: TX	RNH Belmont 1
	Western: CA, NV, OR, WA, AK, CO, NM, UT, AZ, HI	RNH East Ballroom

• 1:30pm-3:30pm APPD/COMSEP Workshops Session II • Workshop 22: EXAMINING THE EVIDENCE: VALIDATING AN ASSESSMENT TOOL FOR CLINICAL REASONING • **NCC 201**

- *Mary E. M. Rocha, MD, MPH, Baylor College of Medicine, Houston, TX, April O. Buchanan, MD, University of South Carolina School of Medicine, Greenville, SC, Janice L. Hanson, PhD, University of Colorado Denver School of Medicine, Aurora, CO, Amal M. Khidir, MD, FAAP, Weill Cornell Medical College in Qatar, Doha, Doha, TJ Jirasevijinda, MD, Weill Cornell Medical College, New York, NY, Julie K. Stamos, MD, Northwestern University Feinberg School of Medicine, Chicago, IL, Raghu Kasetty, MBBS, MD, Michigan State University, Gladstone, MI, Jared Rubenstein, MD, Texas Children's Hospital, Houston, TX, Jocelyn H. Schiller, MD, University of Michigan, Ann Arbor, MI, Anne B. Warwick, MD MPH, Uniformed Services University, Bethesda, MD, Linda Tewksbury, MD, NYU School of Medicine, New York, NY*
- Rationale: Medical educators need specialized skills to apply validity principles to their work in assessing learners and evaluating programs. The aim of this workshop is to introduce participants to current methods for examining validity evidence using a Clinical Reasoning Assessment Tool developed by members of the COMSEP Research and Scholarship Task Force. Valid methods of assessing clinical reasoning skills allow for verification of achievement in the ACGME domains of patient care, practice-based learning and medical knowledge. Objectives: Participants will 1. Explain construct validity as defined by the Standards for Educational and Psychological Testing as it relates to medical education; 2. Analyze the validity evidence for a Clinical Reasoning

Assessment Tool and its Scoring Rubric; 3. Develop a strategy for validating your own instruments. Methods and Content: I. The workshop begins with an introduction and needs assessment followed by an overview of construct validity (content and response process domains). Illustrations from the medical education literature and active engagement of participants using Poll Everywhere (a mobile audience response system) will help clarify these concepts. II. Next, in small groups, participants apply these concepts to a Clinical Reasoning Assessment Tool (CRAT) using a validity evidence worksheet. III. A second brief didactic of construct validity (internal structure, relations to other variables and consequences domains) are presented using the same format as the first. IV. Again, in small groups, participants apply the concepts to the Scoring Rubric for the CRAT using a validity evidence worksheet. Then, participants will share their insights in a large group discussion. V. Finally, the workshop concludes with discussion on next steps participants are planning regarding clinical reasoning assessment and validation of instruments. A validity toolbox and references will be distributed.

Workshop 23: TRAINEE DEVELOPMENT-ARE THEY MEETING THEIR MILESTONES?: USING DISCHARGE SUMMARIES TO EVALUATE PEDIATRIC SUB-COMPETENCIES

RNH Fisk 1

Alicia S. Freedy, M.D., VCU SOM Inova Campus, Meredith L. Carter, M.D., Inova Children's Hospital, Falls Church, VA
Rationale: Discharge summaries are an important tool for physician communication, and multiple studies have demonstrated that their quality and timeliness can affect patient outcomes (Moore, Wisnivesky, Williams, & McGinn, 2003; van Walraven, Seth, Austin, & Laupacis, 2002). Although interns are frequently required to complete discharge summaries, education on this key skill does not occur universally in medical schools or residency programs. By implementing a discharge summary curriculum at the acting intern/intern level we are able to evaluate important sub-competencies in patient care and interpersonal and communication skills. Methods and Content: Workshop leaders will begin with an introduction of the literature regarding discharge summary quality and its effects on patient outcomes. In addition, pediatric sub-competencies which are relevant to discharge summaries and a tool for chart stimulated recall (CSR) will be reviewed (35 minutes). During small group sessions, participants will be given the opportunity to review a sample of discharge summaries and rank them by relevant developmental milestones. Based on the CSR tool, small groups will also be asked to formulate learner questions triggered by review of the discharge summaries (35 minutes). To wrap up the session, we will compare developmental milestone rankings between groups and compile a list of questions for chart stimulated recall. Participants will be asked to discuss ways in which they can adapt these tools to their institutions (20 minutes).

Workshop 24: USING A COMPREHENSIVE INTERN OSCE FOR THE INITIAL ASSESSMENT OF NAS MILESTONES

RNH Bluegrass

Carolyn Stalvey, MD, Nicole Paradise Black, MD, MEd, University of Florida, Gainesville, FL
Course leaders will share with session participants details of an 11 station objective structured clinical examination (OSCE) that was introduced in June 2011 at the University of Florida (UF) College of Medicine. All incoming interns complete the OSCE, which assesses knowledge, skills, attitudes and behaviors across nine practice domains (data gathering, physical examination, inter-professional communication, patient-communication and professionalism, clinical decision-making, synthesis and documentation, patient safety, patient education and test interpretation). These practice domains, in turn, have been aligned with internal medicine and pediatrics Next Accreditation System (NAS) milestones in each of the six core competencies. This alignment allows faculty to assess intern readiness and establish milestone proficiency at the earliest stage of residency using performance data to develop individualized learning plans for residents. Workshop leaders will discuss case and item development, rationale, item statistics and the process used to align practice domains with NAS milestones. The session allows time to discuss barriers and potential solutions to the implementation of a comprehensive OSCE. Session attendants will leave the course with access to the processes, cases and guidelines for implementation at their own institution. Finally, the session participants will devise and evaluate novel pediatric milestone-based OSCE stations. (5 minutes) Introduction of session leaders and review of learning objectives. (30 minutes) Didactic presentation on the UF intern OSCE. (10 minutes) Small group discussion to identify barriers and possible solutions to the implementation of a comprehensive OSCE at their current institution. (20 minutes) Large group discussion to address barriers to implementation and potential solutions. (20 minutes) Small group discussion to devise an OSCE station aligned with the pediatric milestones. (10 minutes) Public gallery walk to examine newly devised OSCE stations. (20 minutes) Large group discussion critically evaluating newly devised OSCE stations. (5 minutes) Wrap up and concluding remarks.

Workshop 25: DEVELOPING MEANINGFUL COMPETENCY-BASED LEARNER ASSESSMENTS ACROSS THE CONTINUUM

NCC 102

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

Determining whether learners across the continuum of medical education have achieved a competency, a certain level of a milestone, or entrustment of a particular professional activity is a daunting challenge because it requires the use of assessment tools with a level of validity evidence sufficient for high-stakes decision making. This workshop addresses this challenge and the central theme of the 2013 APPD/COMSEP Combined Meeting by providing educators the skills to both better judge the strength of validity evidence supporting existing learner assessment tools and develop a plan to create new assessment tools

- where they are needed. The workshop will begin with an interactive didactic session describing elements of the most current validity paradigm. To reinforce concepts from the didactic session and to build understanding of methods and strategies to build validity evidence, participants will work in both pair-share and large groups to critique and analyze the strength of evidence supporting the validity of example assessment tools (using both published literature and examples provided by the facilitators). Finally, participants will work in pair-share groups using a step-by-step worksheet to develop a plan to generate evidence of validity for a new competency-based assessment tool. Participants may work on their own assessment tool ideas or choose from a menu of ideas provided by the facilitators. By the end of the workshop, participants will be able to identify key elements of validity, critique the validity evidence of existing assessment tools, and identify key strategies and methods that should be used to generate validity evidence for any assessment tool. All participants will leave with a step-by-step guide applicable to the critique or development of a meaningful competency-based learner assessment tool.

Workshop 26: USE OF SIMULATION TO ESTABLISH AND ASSESS PROCEDURAL COMPETENCE

NCC 208

Tara R. Lang, MD, Jay H. Homme, MD, Grace Arteaga, MD, Mark Mannenbach, MD, Christopher Colby, MD, Mayo Clinic, Rochester, MN

ACGME Pediatric Program requirements for procedural competence have recently expanded to include bag-mask ventilation, bladder catheterization, giving immunizations, neonatal endotracheal intubation, peripheral intravenous catheter placement, simple laceration repair, and umbilical catheter placement. Wide variation exists in exposure to many of these and other necessary procedures both among residency programs and within a program itself. This interactive workshop will provide the participant with strategies to improve the standardization of both procedural education and assessment using simulation methodologies. The workshop will begin with a discussion of the new ACGME Pediatric Program Requirements, the critical components of assessment in graduate medical education, and the effectiveness of simulation as both an education and assessment tool. Small groups will share how they may have utilized simulation in their programs, allowing all of us to learn from their experience. We will then introduce our program, which has utilized simulation-based procedural assessment for several years. Participants will develop stations using both low and high tech forms of simulation for procedural education and assessment, specifically targeting the needs of their program. The workshop will conclude with participants practicing assessment of each other using simulation stations and tools that they have developed. All participants will leave with a compilation of strategies and tools to utilize in procedural education and assessment.

Workshop 27: HOW DO I EXPLAIN THE MILESTONES TO MY FACULTY AND LEARNERS?

NCC 204

Kimberly A. Gifford, MD, Children's Hospital at Dartmouth Pediatric Residency, Lebanon, NH, Alison V. Holmes, MD MPH, The Geisel School of Medicine at Dartmouth, Adam R. Weinstein, MD, Geisel School of Medicine at Dartmouth, Hanover, NH, Catherine D. Shubkin, MD, Children's Hospital at Dartmouth Residency Program, Lebanon, NH, Leslie H. Fall, MD, Geisel School of Medicine at Dartmouth, Hanover, NH

Are you wondering how you are going to explain the Milestones to your faculty and learners? In order for the Pediatric Milestones to be utilized as a tool to teach or assess learners, we must first explain them to both our learners and faculty. This workshop will give participants the opportunity to explore several different activities that we have found to be effective in introducing the Milestones to various groups of learners and faculty as well as make a plan of how to utilize one of the activities with their own learners or faculty. The workshop will begin with a brief explanation of the Milestones that we use with our residents and faculty. Then the participants will work together in small groups on brief Milestones-based activities, including: learners completing a self-assessment to introduce them to the Milestones; learners writing Milestones-based goals for an individualized learning plan; faculty using a framework to create Milestones for a simple non-medical skill; faculty in different settings outlining the specific observations that they could make in their setting that would correspond to a given set of Milestones; and faculty helping learners design targeted practice activities. Finally, participants will select one of the activities that they want to implement with their own faculty or learners and be placed into different small groups based on the activity selected. The small groups will brainstorm ways to adapt the activity for use in their own programs as well as discuss barriers and solutions. Finally, each participant will create a plan to implement the activity in his or her own program.

Workshop 28: FACULTY DEVELOPMENT FOR PEDIATRICS MILESTONES: RATER TRAINING AND GIVING FEEDBACK USING SCOS

NCC 108

Rebecca Tenney-Soeiro, MD, Children's Hospital of Philadelphia/Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Jeanine C. Ronan, MD, Children's Hospital of Philadelphia/ Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Anna K. Weiss, MD, MSc, Children's Hospital of Philadelphia, Philadelphia, PA, Dawn Young, MEd, Children's Hospital of Philadelphia, Philadelphia, PA, Colleen Canavan, MS, National Board of Medical Examiners, Philadelphia, PA, Patricia J. Hicks, MD, MHPE, Children's Hospital of Philadelphia/ Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA

The first iteration of the Pediatrics Milestones (PMs) has been released and all Pediatric residency programs are required to begin assessing their residents using these milestones, beginning in July 2013. Direct observation will be necessary to

determine the achievement of many Milestones. A SCO instrument has been developed by APPD LEARN and the National Board of Medical Examiners (NBME) and is currently being studied in approximately 20 programs for use during inpatient rounds and during the new-patient history-taking process. Work rounds occur on a daily basis, yet providing meaningful feedback on resident performance does not consistently occur. A rounds-based SCO provides the opportunity for explicit feedback to residents on directly observed behaviors, informing residents about their performance and thus allowing them to construct individualized improvement goals in situ. For assessment of the PMs to be meaningful, instruction for faculty raters and faculty feedback providers is needed. Using a train-the-trainer model, this workshop will engage participants in rater training and calibration using standardized video prompts and using instruments developed by APPD LEARN and the NBME. Workshop attendees will practice giving feedback based on the content they observed and scored using the calibration videos. Attendees will share their experience, discuss challenges and generate new ideas. All attendees will receive faculty development instructional materials to conduct similar sessions within their own institutions.

Workshop 29: ACGME GOES GLOBAL: CREATING AN INDIVIDUALIZED CURRICULUM FOR RESIDENTS WITH GLOBAL HEALTH INTERESTS

NCC 203

Jacquelyn C. Kuzminski, MD, Nicole St Clair, MD, Medical College of Wisconsin, Milwaukee, WI, Lynn C. Garfunkel, MD, University of Rochester, Rochester, NY, Maneesh Batra, MD MPH, University of Washington School of Medicine, Seattle, WA, Sabrina M. Butteris, MD, University of Wisconsin-Madison, Madison, WI, Chuck Schubert, MD, University of Cincinnati, Cincinnati, OH, Cynthia R. Howard, MD, University of Minnesota, Minneapolis, MN, Parmit S. Suchdev, MD MPH, Emory University, Atlanta, GA, Ty T. Dickerson, MD MPH, University of Utah, Salt Lake City, Utah, Christiana Russ, MD, Boston Combined Residency Program, Boston, MA

The central aim of this workshop is to equip program leaders with the tools to formulate an individualized curriculum for residents interested in global health. The workshop will use a combination of both didactic and small group discussions to achieve the objectives. In order to optimize discussion, participants should come prepared with an understanding of their current residency program's anticipated plan to address the new ACGME requirements. The session will begin by summarizing the current state of global health education in North American pediatric residency programs. After gaining an understanding of the current offerings, the discussion will move toward understanding and applying the new ACGME requirements, which mandate a minimum of six educational units of an individualized curriculum centered on the learning goals and future career aspirations of the resident. Through the use of small group discussion, participants will reflect on the necessary steps to develop an individualized curriculum for global health education at their own institution. The workshop will conclude with a discussion of the critical aspects of a 6 month individualized curriculum in global health. The workshop, led by global health track directors, will provide participants with the opportunity to identify institution-specific challenges to implementing individualized global health curriculum and brainstorm with other global health educators on strategies to overcome these potential barriers. Workshop facilitators will highlight how to apply pre-existing resources at each participant's training program toward global health education. At the conclusion of the session, participants will be provided with helpful tools to assist residents in creating individualized global health curriculum at their respective institutions as well as a group consensus for the critical aspects to include in individualized global health training.

Workshop 30: THE MENTEE'S ROLE IN CREATING AND SUSTAINING EFFECTIVE MENTORING RELATIONSHIPS

NCC 103

Mario Cruz, MD, Nancy Spector, MD, Sharon Calaman, MD, Leonard Levine, MD, Patricia Cruz, MSW, Blair Dickinson, MD, MS, Darshita Bhatia, MD, Elizabeth Maxwell, MD, MS, Mackenzie Frost, MD, St. Christopher's Hospital for Children, Philadelphia, PA, Barry Solomon, MD, MPH, Janet Serwint, MD, Johns Hopkins University School of Medicine, Baltimore, MD

Effective mentoring relationships are important contributors to career satisfaction, academic productivity, perceived self-efficacy, and successful networking. Unfortunately, such relationships can be difficult to find and challenging to sustain. With the emergence of individualized learning plans at all levels of medical education, the need for effective mentorship will become increasingly important. This workshop offers strategies on how to identify and recruit new mentors. In addition, participants will learn to maximize their mentoring relationships by using mentee-driven approaches, developing a mentoring mosaic, and performing a thorough needs assessment. Workshop leaders will represent a wide continuum of clinical and leadership experiences, and includes program directors, associate program directors, a clerkship director, chief residents, and a program coordinator. After dividing into discipline-specific subgroups, participants will apply the corporate concept of managing up to their current mentoring relationships. Next, participants will identify their unique mentoring needs and discuss in small groups. Workshop leaders will introduce the characteristics of an ideal mentor as well as the concept of a mentoring mosaic. Participants will then create their own mentoring mosaics that describe the depth and breadth of their potential and existing mentoring networks. With guidance from the workshop facilitators, participants will expand upon their mentoring mosaics by exploring possibilities for untapped mentoring resources (recognizing that mentors can come from the junior, peer, and senior levels). In small groups, participants will discuss several challenging mentoring scenarios, including: how to recruit new mentors, how to maximize the limited time of a mentor, and how to recognize mentor abuse. Finally, each participant will evaluate the quality of one of their mentoring relationships and utilize guidance from their small group peers to develop strategies for improvement. Participants will leave with worksheets and tools that can be used to apply these mentee-driven principles at their home institutions.

- **Workshop 31: INSTILLING FORM IN YOUR FORMS: MAKING COMPETENCY-BASED ASSESSMENT MEANINGFUL**
- **NCC 105-106**

- *Susan L. Bannister, MD MEd FRCP, University of Calgary, Calgary, Alberta, Diane M. Moddemann, MD MEd FRCP, University of Manitoba, Winnipeg, Manitoba, Stacey Bernstein, MD FRCP, University of Toronto, Toronto, Ontario*
- Rationale: Evaluation (or assessment) forms are the main way that residency program and clerkship directors receive feedback about the performance of their medical trainees on their different rotations. On many occasions, though, these forms do not accurately depict the competencies achieved by the learners. This presents a significant challenge to all program directors and educational leaders. Objectives: By the end of this interactive workshop participants will be able to: 1. Identify the challenges of evaluation form completion at the individual and program level. 2. Identify key components of high quality completed evaluation forms. 3. Distinguish between high-quality and poor-quality evaluation forms using an evidenced-based rating scale. 4. Complete a high-quality evaluation form. 5. Describe the ways that as educational leaders, residency program and clerkship directors can support faculty to provide accurate and meaningful evaluations. Methods and Content: In this highly interactive workshop, participants will engage in several activities. In a large group interactive session, participants will identify the reasons why evaluation forms are often not completed well and compare these to the evidence in the literature. Individually and then in pairs, participants will evaluate real-life evaluation forms using an evidenced-based scoring sheet. Participants will review and practice completing quality evaluation forms in a fun, practical exercise using video clips. They will engage in a peer-consultation exercise to receive feedback on their personally completed evaluation forms. By the end of the session, participants will walk away with the knowledge and skills to evaluate evaluation forms and complete high-quality evaluation forms. Furthermore, they will have the knowledge to support their faculty, thereby improving the competency-based assessment process at their institution.

- **Workshop 32: INDIVIDUALIZED MEDICAL EDUCATION ACROSS THE CONTINUUM**
- **RNH Fisk 2**

- *Ryan S. Bode, MD, Daxa Clarke, MD, Grace Caputo, MD, MPH, Dana Ursea, MD, Phoenix Children's Hospital/University of Arizona, Phoenix, Arizona*
- Medical education, across the continuum from medical student to faculty member, needs to be flexible, individualized and future career-driven. This is highlighted in the revised ACGME pediatric program requirements calling for a "minimum of six educational units of individualized curriculum." Learning opportunities should be more flexibly directed toward the variety of career choices available to our learners. Recent studies have shown that approximately two-thirds of students who enter pediatric residency state they have decided upon their career choice of either primary care or planned fellowship and specialty care. Three-quarters of these same residents maintain that same career choice when surveyed again during their third year of residency. Medical education programs need to continue to find creative, efficient and effective means of providing individualized education. New and innovative curriculum needs to be evaluated and the outcomes, both successes and failures, need to be disseminated remembering that the beneficiary is our future physicians. The presenters of this workshop have experience developing, implementing and evaluating an individualized education curriculum with medical students, within a large pediatric residency program and as a model of faculty development. This workshop will: 1. Review recent literature regarding individualized education. 2. Ask participants to share their experiences and future plans in regards to individualized education of all learners. 3. Describe specific model examples of individualized medical education across the continuum from medical student to resident to fellow to faculty development. 4. Work in small groups to discuss and share challenges and opportunities of individualized education - from operations to outcome measures. 5. Participants will leave with a jump drive "Individualized Education tool kit" which will include copies of the presentation, literature review, specific examples of established models of individualized curricula, including student, resident and faculty examples, and a proposed curricula outcome dashboard.

- **Workshop 33: THE ACGME COMPETENCIES: ADDING A LITTLE RELISH TO YOUR FEEDBACK SANDWICH**
- **NCC 207**

- *Julie M. Noffsinger, MD, Jennifer B. Soep, MD, University of Colorado Denver, Aurora, CO, Erin K. Balog, MD, Matthew Eberly, MD, USUHS, Bethesda, Maryland*
- Background: The importance of quality feedback in training medical students and residents has been well-documented (Ende 1983). Lack of formal feedback training as well as clinical demands often prevent faculty from giving timely and constructive feedback. The current Pediatric Milestones Project aims to further define and apply the ACGME competencies across the continuum of pediatric medical education and will have implications on how trainees are assessed. Therefore, faculty need to be able to apply the competencies when delivering feedback to learners. Objectives: 1) Review and practice essentials of high quality feedback. 2) Outline applications of ACGME core competencies in learner assessments. 3) Explore links between sample evaluation forms and competency-based feedback. 4) Practice giving competency-based feedback using a newly developed tool. 5) Discuss practical solutions for implementing this technique with your faculty. Methods: This workshop will begin with a brief didactic outlining the "basics of feedback" and a review of the ACGME competencies (10 minutes). Next, participants will observe a trainee-patient interaction and evaluate the student based on a global evaluation, then discuss how competency-based assessment might change feedback (15 minutes). Data will be presented on effectiveness of a competency-based feedback intervention in a resident population (5 minutes). Facilitated small groups (divided by practice setting) will list behaviors pediatric trainees should demonstrate in the 6 core competencies. After a large group debrief, this draft will be used to create a competency-based feedback tool (30 minutes). Video cases and worksheets will be used to

practice giving feedback in this new framework(20 minutes). This workshop will conclude with large group discussion about implications this method may have on evaluations as well as examples of how these tools can be used or taught at your home institutions(10 minutes). This workshop has something to offer both first timers learning the basics of feedback as well as feedback veterans wanting to master or learn to teach a new technique.

Workshop 34: “GIVE ME YOUR TIRED, YOUR POOR, AND YOUR HUDDLED MASSES”: DEVELOPING AN INNOVATIVE CURRICULUM TO TEACH RESIDENTS TO ADDRESS THE SOCIAL DETERMINANTS OF HEALTH NCC 213-214

Melissa Klein, MD, Cincinnati Children's Hospital Medical Center, Alicia Alcamo, MD, MPH, Jennifer K. O'Toole, MD, Cincinnati Children's Hospital, Cincinnati, OH

Resident physicians often care for families from underserved backgrounds. Such patients may experience social and legal issues related to poverty that influence health and their ability to access health care. Since many residents were not raised in households with social hardships, sensitive inquiries and discussions may occur less frequently and naturally. Moreover, identification of poverty-related risks is limited by traditional medical curricula that do not emphasize screening for social determinants of health (SDH). In addition, today's "Millennial" learners may benefit substantially from the incorporation of adult learning theory principles and technology to improve their screening for SDH. During this interactive workshop, attendees will be introduced to an innovative video trigger curriculum aimed at improving resident screening for SDH during well child care. The curriculum contains professionally developed video encounters of residents inappropriately and appropriately screening for food insecurity, public benefit issues, housing conditions, maternal depression, domestic violence and education. Additionally, each topic contains a "day in the life" video encounter featuring a family telling their story providing the learner an opportunity to "walk in their shoes." Participants will start off sharing their experiences regarding learners SDH screening practices at their own institution. The participants will then observe the social history videos and practice direct observation utilizing a newly developed social history direct observation tool. Attendees will also be introduced to a new caregiver feedback survey and discuss how to use these tool to improve feedback on physician screening. Then, we will demonstrate how this curriculum can be used evaluate learner competence utilizing a newly developed continuity clinic evaluation tool that includes entrustable professional activities (EPAs) addressing screening and intervention for SDH. Finally, participants will identify ways to enhance SDH-focused education at their own institution.

Workshop 35: CREATING COLLABORATIVE SPACE: FACILITATING MEDICAL EDUCATION USING WIKIS NCC 211-212

Kadriye O. Lewis, EdD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, John D. Mahan, MD, Nationwide Children's Hospital, Columbus, Ohio, Teri L. Turner, MD, MPH, MEd, Baylor College of Medicine/Texas Children's Hospital, Houston, TX, Cynthia L. Ferrell, MD, MEd, Oregon Health & Science University/Doernbecher Children's Hospital, Portland, OR

Wikis have emerged as a promising collaboration platform and teaching tool. Using RSS technologies, Wikis support social and peer interactions that promote positive learning experience, develop critical thinking skills, and improve flexibility in teaching and learning. For educational uses, wikis offer unique advantages and opportunities for medical learners. As a Web-based participatory model, they have potential of creating communities of practice, supporting both explicit and tacit knowledge management, integrating information from multiple widespread sources. Implementing wikis into medical education environment can serve many teaching opportunities such as ready access to rotational information including goals and objectives, rotation manuals and access to didactic presentation materials all in one place. All these capabilities complement the ACGME mandates for training in pediatrics as stated that residents must demonstrate the ability to use internet and information technologies to optimize learning as part of the practice-based learning and improving competencies and LCME regulations for standardized curricula. This hands-on, interactive workshop is designed for participants interested in using RSS- based open source technologies (e.g., Wikis) to create dynamic work environments for medical learners. The workshop will showcase examples of different types of Wikis so that participants gain exposure to different Wiki hosting options. This will help them acquire a framework to envision how they can adapt Wikis to meet their individual and/or program needs. During this workshop, participants will learn how to use and build a Wiki, customize administrative settings, make text entries, set up a learning activity, import photos, video, gadgets or widgets, and link to Internet resources as well as to invite collaborators and medical learners to visit their Wiki on PBWorks. Presenters will share a range of design and collaboration strategies as well as their own experiences with Wikis through a national collaborative project.

Workshop 36: CAN LETTERS OF RECOMMENDATION FOR PEDIATRIC RESIDENCY BE A PLEASURE TO WORK WITH? HOW TO COMPOSE AND REVIEW LETTERS AND CONSIDERATION OF AN APPD/COMSEP STANDARDIZED LETTER OF RECOMMENDATION

NCC 210

Meg G. Keeley, MD, Linda A. Waggoner-Fountain, MD, MEd, University of Virginia, Charlottesville, VA, Timothy W. Kelly, MD, University of California, San Francisco, San Francisco, CA, Colin M. Sox, MD, Boston University, Boston, MA, Michael Dell, MD, Case Western Reserve University, Cleveland, OH

Rationale: Letters of recommendation (LOR) are important components of applications to residency programs, but they often differ in their structure and content. Letter writers may not know what to include or how to write letters for average or weak

- students. Some LOR authors use an unofficial hierarchy of superlatives to rank applicants. Variability in the structure and content of LORs can make them difficult to interpret, causing occasional miscommunications. More than two decades ago, non-standardized Deans Letters caused similar problems, which led the AAMC to implement the Medical Student Performance Evaluation (MSPE) system. The Council of Emergency Medicine Residency Directors developed a Standardized Letter of Recommendation (SLOR) in the late 1990s to address concerns of the lack of evaluative data in the MSPE, variability of narrative LORs and a need for efficient screening of candidates. The competitive landscape of the Match and the prevalence of pass/fail curricula have led to inflating importance of USMLE scores. In order to add discriminative data to LORs, pediatric faculty should receive some instruction in how to compose and review letters. Additionally, consideration should be given to the development of an APPD/COMSEP endorsed SLOR. Methods and Content: Led by both APPD and COMSEP members representing perspectives as clerkship directors, intern selection chairs, program director and student affairs dean. Large group discussion of COMSEP and APPD survey data regarding LORs (10 min) Small group analysis of sample letters and discussion of challenges for letter writers (20 minutes) Large group review of literature and creation of best practice letter writing guidelines (30 min) Small group review of the Emergency Medicine SLOR template and discussion of pros and cons of a SLOR for Pediatrics (15 min) Large group reflection on the SLOR concept and formation of a joint APPD/COMSEP working group to further explore a potential template and pilot project (15 min)

Workshop 37: DOING THINGS RIGHT WHEN YOUR LEARNER IS GOING WRONG

NCC 109

Robyn J. Blair, MD, Stony Brook Medicine, Stony Brook, NY, Susan Guralnick, MD, Winthrop University Hospital, Mineola, NY

We teach medical students to document, residents to document, but did anyone teach you how to document appropriately when you accepted your role in program leadership? Were you taught how to develop policies that will protect both your learners and your program? Most program directors receive no formal (or informal) training in this realm, yet they are expected to master legal documentation and authoring of policies. The pressure of meticulous documentation is even greater when dealing with a problem learner. Learners with performance problems, academic or professional, demand substantial program director and staff time, while inducing emotional exhaustion. When policies are strong and processes are well defined there is a clear path for remediation, probation and if necessary termination. When remediation is unsuccessful, these policies and processes are essential to prevent program turmoil and legal disaster. This workshop is designed to enable participants to learn and strategize from personal experience, and to develop policies and tools that will protect them in the future. The session will begin with participants working in small groups to share and analyze de-identified cases of Academic and Professional Deficiency, from successful to disastrous, identifying what has gone right and what has gone wrong in their processes. Session leaders will then share their experiences, lessons learned and pearls of wisdom for policy development, documentation (including documentation of verbal complaints from faculty!), and tools for moving an unsuccessful learner remediation toward termination. Topics addressed will include: ensuring a paper trail that supports your decisions, tips for conducting and documenting meetings with a problem learner, when to involve the hospital legal department, and more. The small groups will then work, using the information learned, to design a remediation/probation/termination process that can be applied in their home institutions. The large group will then meet again to discuss barriers and strategies newly identified during the activity. Participants will receive samples of documentation tools, policies, and guidelines to adapt for use in their own programs.

Workshop 38: USING ORAL CASE PRESENTATIONS TO TEACH AND ASSESS CLINICAL REASONING SKILLS ACROSS THE CONTINUUM OF LEARNERS

NCC 104

Priya Garg, MD, Floating Hospital for Children at Tufts Medical Center, Boston, MA, Linda O. Lewin, MD, University of Maryland School of Medicine, Baltimore, MD

BACKGROUND: Clinical reasoning plays a key role in the ability of a learner to develop accurate assessments of their patients and attainment of this skill has been shown to be an important component of advancing from a novice to expert clinician. Medical educators in all settings continue to struggle with teaching and assessing clinical reasoning, and often turn to the inpatient case presentation as a way to judge these skills in all levels of learners. With the development of pediatric milestones, it has become essential to use objective measures to assess students and residents and to utilize tools that can assess learners across the continuum of training. We have used a validated oral case presentation rating scale to assess clinical reasoning skills in third and fourth year medical students, and have developed a clinical reasoning curriculum to improve student presentations. This tool could be used in residents as well for the same purpose. **DESCRIPTION:** We will start by introducing the basic clinical reasoning skills needed by trainees and the published Pediatric Milestones that address them, followed by small group discussions of how student and resident program leaders evaluate those milestones now. We will then shift the focus to oral case presentations and have the group listen to one recorded presentation and discuss what it reveals about the presenter's clinical reasoning. We will then present a curriculum in clinical reasoning, developed for sub-interns, and the Patient Presentation Rating Scale that can be used as tools to teach and evaluate clinical reasoning that is demonstrated during an oral presentation. At the end of the workshop, we will facilitate a large group discussion of how the rating scale could be adapted to directly mirror the required milestones, and how participants could use these resources in their own institutions.

Workshop 39: FACULTY DEVELOPMENT: TIME FOR NEW TRICKS FOR THE OLD DOG

NCC 209

Kenya A. McNeal-Trice, MD, Michael Steiner, MD MPH, University of North Carolina School of Medicine, Chapel Hill, NC, Jennifer L. Koestler, MD, New York Medical College, Valhalla, New York, Robert P. Drucker, MD, Duke University School of Medicine, Durham, NC, Julie S. Byerley, MD MPH, University of North Carolina School of Medicine, Chapel Hill, NC, Skyler Kalady, MD, Cleveland Clinic Lerner College of Medicine, Cleveland, Ohio

Resident and medical student educators are often charged with designing faculty development curricula to ensure faculty have the skills necessary for competently teaching. As faculty who teach our students and residents have diverse professional priorities, balance increasing clinical demands, and often practice at multiple sites, it is imperative that faculty development curricula be not only innovative, but also readily accessible. It is no longer easy to bring all faculty together for traditional workshops to boost their teaching skills. Program leaders need resources for faculty development that are more available, efficient, engaging, and impactful. Student and resident educators together will lead this workshop. Facilitators will guide participants in identifying the core competencies most essential to faculty development in academic and community settings. Participants will then highlight the common challenges to developing and implementing a faculty development curriculum into resident and medical student education programs. Examples of faculty development curricula and delivery modalities implemented at multiple institutions will be provided to workshop participants, with an emphasis on novel and efficient ideas for delivery to a broad faculty audience in multiple settings. Resources will be shared. Participants will spend the bulk of the workshop focused on curriculum development for use in their home setting. Working in small groups based on modalities or topics of interest, participants will develop an outline for implementing innovative faculty development curriculum at their own institutions. Participants will work together to flesh out ideas and materials, with the goal of the workshop being that participants leave with at least one faculty development tool they can implement upon return to their programs.

Workshop 40: AN APPLE “A” DAY, THE EDUCATIONAL WAY: INTERACTIVE TEACHING IN MEDICAL EDUCATION

RNH Music City Ballroom

Teresa Urena, Harvard Medical School/ Massachusetts General Hospital, Boston, MA, Gretchen Shawver, Stanford University Medical Center, Palo Alto, CA, Alison D. Ricker, Geisel School of Medicine at Dartmouth, Hanover, NH

Rationale: Studies have shown the new generation of medical students do not highly value traditional methods of learning, such as reading and listening to lectures. This workshop will explore how using current trends in communication can effectively engage students and provide a new platform for teaching by integrating new technology and social media in medical-based curriculums. Objectives: By the end of the session, participants will be able to: (1) Build a foundation to integrate social media into their own curriculums, (2) Discuss a variety of mobile devices for teaching and optimizing efficiency, (3) Discuss safeguards and boundaries surrounding effective use of these tools. Methods and Content: The workshop will begin with an introduction to social media and technology. Participants will hear how these tools were integrated and the feedback from the students. Using scenarios, they will then be divided into groups and will have the opportunity to discuss ways to engage students using new technology.

Workshop 41: PLEASURE TO WORK WITH: DEVELOPING INNOVATIVE METHODS TO ELICIT LEARNER ASSESSMENTS IN THE COMPETENCIES AGE

NCC 107

Paola A. Palma Sisto, MD, CCMC, Hartford, CT, Ginny Cleppe, AM, Medical College of Wisconsin, Milwaukee, WI, Melissa Held, MD, Connecticut Children’s Medical Center, Hartford, CT, Joshua D. Noe, MD, Clerkship, Medical College of Wisconsin, Michael C. Weisgerber, MD, Residency, Medical College of Wisconsin, Milwaukee, WI

Educators have been long been challenged with eliciting clear, performance-based, competency-driven narrative assessments on learners from evaluators along the spectrum of medical education. Comments have traditionally been vague on specific measures of performance and often influenced by the personality of the learner. Hesitancy to give negative feedback has added to the challenge of eliciting adequate descriptors of performance from these evaluators. ACGME and LCME have required educators to measure their learners’ competence more quantitatively and in a progressive manner to assure learners are ready for the next phase of training. Many programs have developed creative tools to properly capture a learner’s performance in a meaningful way, providing both effective feedback to the learner and easing translation by the educator into measures of competency. Presenters will review the literature related to eliciting effective assessments on learners, highlighting best practices and effective tools being used in medical education. They will present the tool developed for the ambulatory portion of the Pediatrics clerkship at the Medical College of Wisconsin (MCW) that allowed evaluators of students to check off the best descriptors, written in a developmentally progressive manner, of the students’ performance and describe the impact it had on student assessments. They will also present methods developed to elicit assessments of residents on inpatient rotations at MCW and their impact on the resident assessments. Participants will be asked to offer best practices for eliciting meaningful narrative assessments and to share components of their educational program they have found challenging to elicit meaningful assessments. Participants with common challenges will be grouped together to develop strategies for improving this process using all the methods presented from the literature, the presenters’ institutions, and the participants’ best practices. This toolkit of methods will be collected and electronically distributed to all the participants after the workshop.

- **Workshop 42: QUALITY IMPROVEMENT ACROSS THE LEARNER CONTINUUM**

- ***NCC 110-111***

- *Jocelyn Grunwell, MD, Susie Buchter, MD, Emory University Pediatrics, LaKesha Davison, MD, Emory University Pediatrics, Joseph Hilinski, MD, Emory University Pediatrics, Nurcan Ilksoy, MD, Danielle Jones, MD, Emory University Internal Medicine, Atlanta, GA*

- To achieve patient care of the highest quality, medical students, residents, and faculty need familiarity with quality improvement methods. The Institute of Medicine, the ACGME, and the American Board of Pediatrics/American Board of Internal Medicine have outlined expectations for QI methods to be practiced across the continuum. In this workshop, participants will be surveyed via an audience response system for the current status and optimal involvement of learner involvement in QI initiatives. Barriers to implementation will be identified. This activity will be followed by a brief didactic session that introduces the QI concepts of Aim Statements, the Plan-Do-Study-Act Cycle, the Fishbone Diagram, the Tally Sheet, the Histogram and the Run Chart. These concepts will be demonstrated with an actual problem identified in a clinical setting. Participants will break into small groups with facilitators and each group will discuss how and where to implement a QI curriculum into their educational setting. Each group will discuss developing faculty participation and skill through the use of a QI curriculum toolkit. The participants will identify opportunities for faculty scholarly activity related to QI. The groups will reconvene and share their ideas. The teaching methods in this workshop are used at Emory University in a medical student outpatient experience, in the Pediatrics residency, in the Internal Medicine residency, and in faculty development sessions. All participants will receive the QI module on jump drives to aid in implementation of the workshop in their own programs and clerkships.

- 3:45pm-5:45pm APPD/COMSEP Poster Session (see page 59 for poster abstracts)
RNH Grand Ballroom Foyer

- 6:00pm-7:00pm Miller/Sarkin Fun Run/Walk
Off-site

- The Miller/Sarkin Fun Run/Walk is an event created in honor of esteemed colleagues the late Drs. Steven Miller and Richard Sarkin. Proceeds from annual Miller-Sarkin Fun Run/Walk T-Shirt sales go towards honoring the achievements of leaders in the field of pediatric education. To participate, please stop by the registration desk for more information and the opportunity to purchase a T-Shirt (quantities limited).

- **LGBTQ Focus Group**
RNH Classical

- We invite you to join us for a discussion on the topic of supporting LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer/Questioning) residents and fellows in pediatrics. Possible topics for discussion include:

- How residents and fellows in the LGBTQ community can safely explore how welcoming a program may be
- Supporting residents and fellows in the coming out process
- Enhancing institutional sensitivity to LGBTQ issues
- Supporting residents and fellows who have experienced homophobic sentiment from peers and staff
- High risk situations related to managing sexuality

- 6:00pm-9:00pm IIPE Dinner Meeting (private meeting)
NCC 208

- **SATURDAY, APRIL 13, 2013**

- 7:00am-5:00pm APPD/COMSEP Registration
NCC 3rd Floor Lobby

- 7:00am-5:00pm Luggage Storage
As you check out of your hotel rooms on Saturday morning, you may store your luggage at the Renaissance Hotel's Bellstand, located in the hotel lobby adjacent to the front desk.

- 7:30am-9:00am Continental Breakfast
RNH West Ballroom

- 7:45am-9:00am APPD Wrap-Up Session from Grassroots Forums (with breakfast)
RNH East & Center BR

COMSEP Executive Committee Breakfast Meeting
RNH Jazz

9:15am-11:15am

APPD/COMSEP Workshops Session III

Workshop 43: TECHNOLOGY IN TEACHING: TOOLS TO ENGAGE THE MILLENNIAL LEARNER

NCC 102

Chris Bergsman, MD, OUWB School of Medicine, Royal Oak, MI, Emily Borman-Shoap, MD, University of Minnesota, Minneapolis, MN, T. Bernard Kinane, MD, Massachusetts General Hospital, Boston, MA, Pradip D. Patel, MD, University of Louisville SOM, Louisville, KY, Robert Dudas, MD, Johns Hopkins University, Baltimore, MD, William Mills, MD, MPH, UNC School of Medicine, Chapel Hill, NC, Raghunandana Kasetty, MD, Michigan State University, Escanaba, MI

This workshop will focus on the use of technology in student education, specifically as it relates to the learning styles of Millennial students. We will focus on techniques that engage students and promote active, collaborative learning. Instructors will emphasize easy-to-use, inexpensive options. The following techniques will be demonstrated: 1) Audience Response Systems such as Poll Everywhere, 2) Twitter as a tool for collaborative off-site asynchronous discussions, 3) The iPad as a tool for creating and delivering an interactive lecture that incorporates visual learning, including an overview of apps that are effective for teaching, 4) Remote learning/mentoring via video conferencing technologies such as Facetime, 5) Using Google forms for real time audience participation. The format will be a brief introduction of concepts and goals of the session followed by dividing the class into 5 groups which will rotate through the various stations demonstrating each technique in real time. The demonstrations will include step-by-step instructions so that anyone can start using the technique immediately. References will be provided so that participants can read about the various strategies in more depth and gain an understanding of the available literature supporting these techniques. After the individual sessions, there will be a brief wrap-up discussion with the entire group to answer questions and get feedback. Participants will be asked to design a brief teaching exercise that would utilize one of these technologies at their home institution. Lastly, we will discuss potential ways of utilizing these technologies as a tool for assessment of learners.

Workshop 44: THE DIFFICULT LEARNER: PREVENTION, DIAGNOSIS, AND TREATMENT OPTIONS

RNH Fisk 1

Linda O. Lewin, MD, University of Maryland, Baltimore, MD, Leah S. Millstein, MD, University of Maryland, Baltimore, Maryland

This workshop will address learners who are difficult to work with from a faculty/preceptor point of view and will be relevant to all levels of learner/evaluator including students, residents, and faculty. We will speak to sub-competencies in the areas of Practice Based Learning, Interpersonal and Communication Skills, and Professionalism. We will structure the session as follows: 15 minutes: Introductions and reflection on participant's most challenging learners will be solicited. Each participant will write down a brief description of their biggest challenge for use later in the session. 15 minutes: Background and information from the literature - We will introduce a construct developed by Vaughn et al to categorize difficult learners into 4 categories: 1) affective, 2) cognitive, 3) structural, and 4) interpersonal. Examples of each will be provided. 30 minutes: Participants will describe their challenging learner to a small group and the group will use the categories described above to identify the problem. Groups will be given additional scenarios to address if they finish their own stories or have stories of learners with similar issues. 30 minutes: Approaches to primary prevention of these challenging situations will be described, including setting clear expectations for learners, asking the learner for his/her own goals and expectations, and following up frequently to be sure they are being met. Secondary prevention strategies will also be described, including intervening early when problems are identified, giving clear and frequent feedback, and monitoring progress closely. Treatment of problems that remain will also be discussed including creating an ILP for an identified problem, seeking help from appropriate resources in the school of medicine and/or hospital, and appropriately documenting the situation. A worksheet that can be used to document and track all of these approaches will be distributed and reviewed.

Workshop 45: CURRICULUM TASK FORCE: INTERACTIVE SYMPOSIUM OF CURRICULAR TOOLS FOR TEACHING EFFECTIVE USE OF ELECTRONIC COMMUNICATION

NCC 105-106

Karin Hillenbrand, MD, MPH, East Carolina University, Greenville, NC, Rebecca Blankenburg, MD, MPH, Lucile Packard Children's Hospital, Stanford, Palo Alto, CA

BACKGROUND: As medicine and society evolve, residents and students are interacting with electronic media in their personal and professional lives in an increasing variety of circumstances. Learners may use an electronic health record for patient care, search the internet to answer clinical questions, communicate with patients or colleagues by email, use electronic platforms to educate themselves or their patients, and post to social media sites. While electronic resources provide many benefits for communicating with a broad audience and for accessing and disseminating information, their use may also present challenges to effective communication, protection of confidentiality, and maintenance of professional interactions. Program and clerkship directors may feel unprepared to provide adequate guidance about electronic communication to residents and students. Annually, the Curriculum Task Force strives to present cutting edge curricular innovation to address current curricular challenges. This year, we propose a symposium focused on methods to teach and evaluate effective, efficient, safe,

and professional use of a range of electronic communication resources. **DESCRIPTION:** The session will follow the style of a poster symposium. Five clerkship and/or program directors will be invited to present an overview of their curriculum to address topics related to electronic communication, such as effective use of the electronic health record or use of social media. These will be solicited prior to the meeting from members of the APPD and COMSEP Curriculum Task Forces and from poster submissions. For the first 15 minutes, workshop participants will review each of the posters, and then each speaker will have 5 minutes to briefly present their work. This will be followed by small group discussion, which will include discussing methods to evaluate the impact of each curriculum on learner outcomes. Participants will leave the workshop with new ideas for teaching and evaluating the use of electronic communication in their own programs.

Workshop 46: NEW LIFE-SAVING DEVICES: THE TABLET COMPUTER ACROSS THE PEDIATRIC CONTINUUM

RNH Fisk 2

Shilpa J. Patel, MD, Kyra Len, MD, Jennifer Di Rocco, DO, Angely Andrade-Vallarta, MPA, Cherise Saito, MD, Justin Hino, MD, Daniela Chan, Medical Student, University of Hawaii, Honolulu, HI

Medical devices in the classroom and on hospital wards are ubiquitous, with roughly one quarter of United States medical schools now utilizing iPads for their medical students in lieu of textbooks and paper syllabi for coursework. Residency program leaders and clerkship directors are also enamored by the utility of a compact device that houses so much potential for educational and tracking purposes. However, it is time-consuming to sort through the myriad of choices. This interactive workshop will present useful, efficient, and innovative uses of tablet computers to streamline and improve medical education across the continuum. Content will address milestone tracking; teaching tools; remediation resources; logging of cases, procedures, and activities; exciting presentation formats and tools; engaging and interactive audience response systems; patient and family education resources; reflection and individualized learning plans; administrative documentation, communication, and scheduling. This workshop will benefit a wide audience including medical students, clerkship directors, pediatric residents, program directors, program coordinators, and medical educators at any level. The workshop will consist of facilitated small group hands-on trialing of different tablet resources. The participants will create their own personal "Tablet Bento Box" (the name of our local Hawaiian boxed lunch) containing a variety of meaningful, "life-saving" morsels for the busy medical professional. Our multidisciplinary facilitator team includes a medical student, pediatric residents, a program coordinator, program directors, and a clerkship director combining our direct experiences with integrating iPads into clinical and medical education activities. Participants will leave the workshop with an armamentarium of ideas and applications specific to their programs' needs (e.g., educational, administrative, productivity-related, patient care).

Workshop 47: RECOGNIZING, FOSTERING AND PRACTICING HUMANISM AMONG FACULTY AND TRAINEES

NCC 211-212

Janet R. Serwint, MD, Johns Hopkins University, Michael Barone, MD, Johns Hopkins University School of Medicine, Baltimore, MD, Ann E. Burke, MD, Wright State University Boonshoft SOM, Dayton, OH

Humanism has been a core quality within medicine since the time of Hippocrates. In serving as the underpinning of altruistic interactions with patients, it helps to link science with the art of medicine. Modern medicine's high acuity, reliance on technology and busy pace can threaten the practice of humanism. In our positions as faculty clinicians, researchers, educators and role models, we must stress the central and utmost importance of humanism in the professional formation of our learners across the continuum: medical students, residents, fellows, faculty and ourselves. This interactive workshop will explore aspects of humanism within a theoretical framework and include literature review, skills to teach and reflect on humanism, and the sharing of idea through dyad and large group discussion. We will also provide tools to enhance participants' own humanistic qualities along with mechanisms with which to measure and promote humanism. Innovative methods will include debriefing on videotaped clinical encounters in film and reflection on narratives, music and artwork. Large group discussion will then allow for sharing of insights so that participants can reconnect with their own humanism and share innovative techniques to teach and recognize empathy, compassion and caring for our patients and our community of colleagues. An exercise of completing a humanistic teaching qualities self assessment tool and methods to incorporate the Personal and Professional Development Milestones will also highlight the concepts. We will end with small group discussions and report out which will further help to provide a tool box of practical techniques for individuals to model, teach and assess humanism at their home institutions. Participants will leave with renewed insight into the importance of humanism in finding meaning in their work as physician healers and teachers, as well as the essential role of humanism in maintaining balance and wellness within our careers and personal lives.

Workshop 48: THEY CAN BE MENTORED AND YOU CAN MENTOR THEM: PRACTICAL APPROACHES TO ENGAGING TRAINEES IN RESEARCH

NCC 203

Cori Green, MD, MS, Erika Abramson, MD, MS, Weill Cornell Medical College/New York Presbyterian, New York, New York, Terry Kind, MD, MPH, Children's National/GWU, Washington, DC, Gary L. Beck, PhD, University of Nebraska Medical Center, Omaha, Nebraska, Maribeth Chitkara, MD, SUNY at Stony Brook, Stony Brook, New York, Jennifer Dipace, MD, Weill Cornell Medical Center/New York Presbyterian Hospital, New York, New York, Su-Ting Li, MD, MPH, University of California, Davis, Sacramento, California

Trainees of all levels are increasingly interested in conducting research, and participating in scholarly activity is an ACGME requirement. However, there is little published on how to best facilitate trainee participation in research and evaluate these skills in line with educational competencies. In this workshop, we will draw upon our experiences and other published models to discuss how to best facilitate trainee participation in research by maximizing individual mentorship relationships and through program development at the departmental level. Part one of the workshop will focus on building the mentor-mentee relationship. Video testimonials by students and residents who have been involved in research that was relatively successful or unsuccessful due to mentorship or lack thereof will be shown. We will then break in to small groups where participants will be asked to draw upon their own experiences, both positive and negative. We will then report out to the larger group and end the discussion highlighting literature that reviews characteristics of a successful mentor-mentee research relationship, including steps for building this relationship. The second part of the workshop will focus on programmatic development to better engage trainees in research. Participants will work in small groups to identify barriers they have encountered when facilitating trainee research and mentorship. Participants will use structured worksheets to map out ways in which they can implement or build upon their department's own research program and overcome identified barriers. We will reconvene as a large group to discuss novel approaches to challenges. Workshop leaders will also provide an overview of existing models in implementing research curriculum, including evaluation strategies. Participants will leave with meaningful next steps that can be implemented at their home institution, regardless of school/program size or resources. Attendees will receive tools such as sample research mentorship guides, evaluation tools, and an annotated bibliography of effective models.

Workshop 49: GETTING ON TRACK: STANDARDIZING INDIVIDUALIZED CURRICULA FOR SIX EDUCATIONAL UNITS NCC 109

Aisha B. Davis, MD, Neha Shah, MD MPH, Cara Lichtenstein, MD, MPH, Sandra Cuzzi, MD, Ed Sepe, MD, Dewesh Agrawal, MD, Children's National Medical Center, Washington, DC

Beginning in July 2013, the Accreditation Council for Graduate Medical Education (ACGME) will begin to require that each resident participate in six educational units of an individualized curriculum determined by their learning needs and career plans. However, the ACGME provides little structure regarding how to design and implement such a curriculum. Various programs are developing different strategies of fulfilling this requirement including mentored selection of electives or participation in a more formalized pathway or track during residency. In this workshop, we will explore an approach to the development of individualized pathways and tracks. The workshop will begin with introduction of SWOT analysis as a method to determine the needs and opportunities for track and pathway development on a programmatic and institutional level. Subsequently, facilitators will share examples of track and pathway curricula from Children's National Medical Center, including community health, longitudinal research and primary care tracks, and global health and inpatient careers pathways. Attendees will break out into small groups based on area of interest and work with colleagues to create a basic curricular framework. Each group will include an expert facilitator who will guide participants through the exercise and compilation of a summary statement which will be shared with the larger group. Participants will be provided with a toolkit of resources to take with them for continued program development.

Workshop 50: MAKING INTERPROFESSIONAL SIMULATION WORK- DEMYSTIFYING AND DEFINING THE NEED FOR TEAM TRAINING

NCC 107

Mary E. Huckabee, MD, University of Arkansas for Medical Sciences, Little Rock, AR, Lucy Y. Chang, MD, MS, NYU School of Medicine, New York, NY, Lisa Gilmer, MD, University of Kansas-Kansas City, Kansas City, Kansas, Kenya A. McNeal-Trice, MD, University of North Carolina School of Medicine, Chapel Hill, North Carolina, Jennifer L. Trainor, MD, Feinberg School of Medicine, Northwestern University, Chicago, IL, Mitzi S. Scotten, MD, University of Kansas Medical Center, Kansas City, KS, David A. Turner, MD, Duke University, Durham, NC

Curriculum designed to emphasize the importance of teamwork and communication amongst healthcare professionals has demonstrated improved outcomes in patient safety. While there is evidence to support that interprofessional collaboration reduces clinical errors and improves patient outcomes, there are multiple barriers to successful implementation of interprofessional learning activities as well as a paucity of curriculum available to help programs execute this training during undergraduate and postgraduate medical education. This workshop is designed to help participants incorporate and implement innovative Interprofessional Education (IPE) into their simulation programs. The workshop will start with a brief review of literature on the importance and utility of Interprofessional Education, including a discussion of how IPE might address the pediatric milestones. Next, participants will identify barriers to introducing IPE into their current simulation programs. In small groups, based on the most common barriers identified, participants will brainstorm strategies to overcome the barriers that are most relevant to their institution. Next, workshop leaders will share examples of how IPE has been successfully integrated into simulation at our own programs in both medical student and resident education. This will give participants multiple examples of effective interprofessional simulation activities and how they might be used to assess different competencies of the Pediatric Milestones. Participants will again break into small groups based on program resources. Participants will develop an action plan to integrate IPE into their own simulation program. We will wrap up the workshop by bringing the ideas developed in small groups back to the larger group for discussion. Workshop participants will leave with examples of how other institutions have implemented IPE, common barriers to IPE and targeted solutions for their institution, and an action plan for integration at their own program.

Workshop 51: MAKING LEARNING FUN FOR ALL: WORKING WITH LEARNERS

NCC 213-214

Rosina A. Connelly, MD, MPH, University of South Alabama, Mobile, AL, Marney Gundlach, MD, MPH, MEd, University of Texas Medical Branch, Galveston, TX, Galveston, TX

Making Learning Fun For All: Working With Learners Differences Everyone has different preferred methods for learning new information, which usually influences our personal approach to teaching. When an educator's style does not match the student's, learning will likely be suboptimal and the student may be labeled as a "problem learner" due to a style mismatch. This workshop is designed to provide a framework for working with "problem" learners. By reframing the problem as a mismatch, it is easier for teachers to work with learners to accommodate the learners' strengths. This technique can also help learners identify personal strengths, facilitating their own self-directed learning. By focusing on the mismatch, instead of pejoratives like a "bad" teacher or a "lazy" learner, it can help learners and teachers to obtain the common goal - improved learning outcomes. First, participants will partake in an interactive exercise where they are asked to "perform" using their "worst" talent (drawing, writing, acting, or building), and contrast this experience to repeating the exercise using their "best" talent. Next, participants will use the Gregorc Style Delineator™ to classify themselves by different mind styles. We find that the Gregorc model is easily understood, and provides a good framework for discussing differences between learners in a systematic way. Through interactive exercises and large group discussion, participants will discuss different learning styles. Participants will form groups by learning styles and discuss ideal and worst learning environments, and subsequent effects on learning outcomes. Groups will brainstorm creative ways to incorporate techniques that address the learning needs of different styles of learners and devise a case-based remediation plan for the opposite style learner, with feedback from that group. Participants will end with a commitment to working with a challenging learner using a principle discussed in the workshop.

Workshop 52: EPAS--A BRIGHT NEW IDEA THAT IS CURRENTLY AS CLEAR AS MUD: UNDERSTANDING, CREATING, UTILIZING, AND EMBRACING ENTRUSTABLE PROFESSIONAL ACTIVITIES IN RESIDENT ASSESSMENT
NCC 210

Jacob Robson, MD, Duncan Henry, MD, University of California San Francisco, San Francisco, CA, Daniel Schumacher, MD, MEd, Robert Vinci, MD, James Moses, MD, MPH, Boston Combined Residency Program, Boston, MA

As pediatric residency programs prepare to enter the next era of competency-based assessment, there remains a question of how Entrustable Professional Activities (EPAs) can be utilized to augment the use of milestones as a component of competency assessments. EPAs have been offered as a creative strategy for accomplishing resident assessment, and while the term has become more mainstream, the practical aspects of implementing EPAs have yet to be elucidated. We view EPAs as key, observable activities in medical training that can be used to assess trainees' professional progression and readiness for additional responsibility. Previously, we discussed our efforts in generating resident evaluations with embedded EPAs, allowing experienced clinicians to evaluate trainees on concrete behaviors intrinsic to their area of practice. We will begin this workshop by discussing our experiences with the integration of EPAs in the Boston Combined Program. We will then facilitate small group discussions centered on developing a common working definition of EPAs and lead participants in an iterative process for identifying EPAs in their own programs. We will discuss how to align EPAs with curricular objectives and how they can be used to inform the development of assessment tools. With required assessment of resident milestone achievement nearing, we will propose a framework whereby EPAs can be implemented and assessed in tandem, emphasizing the strengths of each. In closing, we will review how EPAs can be used to define and assess the longitudinal process of competency attainment across the educational continuum, focusing on what levels of entrustment can be associated with transitions from intern to supervising resident to unsupervised practice. At the completion of this workshop, participants will be able to: 1) identify and provide a definition of EPAs, 2) articulate how EPAs can be incorporated into a framework for resident assessment in conjunction with the milestones, and 3) describe how they can implement and assess EPAs in their programs.

Workshop 53: MAPPING PROFESSIONALISM MILESTONES: I NEED A GPS!

NCC 108

Cynthia Christy, MD, Lynn C. Garfunkel, MD, University of Rochester, Rochester, NY, April O. Buchanan, MD, University of South Carolina School of Medicine, Greenville, SC, Brett W. Robbins, MD, Caren Gellin, MD, University of Rochester, Rochester, NY

Meaningfully evaluating professionalism - "we know it when we see it" is not good enough. The Pediatric Milestones Project has given us well-articulated anchors for behavioral assessment of professionalism attributes. The challenge: put the milestones anchors to the test - how can they help in evaluation of students and residents. How can they assist in discussing and documenting progress with learners? In this workshop leaders will give a brief overview of the developmental progression of the 6 Professionalism pediatric sub-competencies that the ACGME has chosen for resident semi-annual evaluation (E1-Humanism, E2-Professionalization, E3-Professional conduct, E4-Self awareness, E5-Trustworthiness, E6-Acceptance of ambiguity). Existing tools that can be easily understood and used to assess learners in one sub-competency will be shared in round table discussion. Video snippets and cases that demonstrate the milestones progression of one professionalism sub-competency will be viewed and the learners rated by participants using the assessment tool. In each small group, a new tool for assessing other professionalism sub-competencies will then be developed. The learner's level using the assessment tool will be mapped to the appropriate subcompetency milestone anchor level. In facilitated discussion we will identify where to place these assessments in the student and resident curriculum, and who would be the appropriate evaluator(s).

Leader led discussion of the need for a longitudinal tracking system for learners to follow as they travel from medical school to residency will close the session. Review of documentation requirements for clerkships, medical student performance evaluations (MSPEs), communication about learners, and training rotation evaluations will be aired. At the end of the workshop, participants will be able to navigate through the professionalism milestones and map a course to implementation of assessment strategies.

Workshop 54: HOW TO BUILD AN EFFECTIVE CLINICAL COMPETENCY COMMITTEE (C-3)

RNH Belmont

Dorothy Sendelbach, MD, Lauren Gore, MD, UT Southwestern Medical School at Dallas TX, Dallas, Texas, Teri Turner, MD, MPH, MEd, Baylor College of Medicine, Houston, Texas, Nalinda Charnsangevej, MD, UT Southwestern Austin Pediatric Residency Program, Austin, Texas

The Next Accreditation System's success will rely on the establishment of Clinical Competency Committees (C-3) within each training program. This committee will be responsible for monitoring progress of each resident and with providing valid and reliable clinical evaluations using the milestones. Members of the committee are expected to be interpreter/synthesizer experts. In 2013, the C-3 will be essential for training programs and will help define the core faculty. The committee responsibilities may include implementation of the bi-annual milestone evaluations of residents, remediation of problem trainees, and oversight of residents' individualized curriculum. In addition, members may ideally serve as the core faculty responsible for curriculum oversight for required educational units. Resident mentors are just one group of faculty uniquely suited to form the membership of the C-3. Regardless which faculty is recruited for this activity, additional faculty development and training will be required. Support by the department and institution are critical for success. This workshop is designed for programs that don't currently have such a committee in place, and will provide a framework for individualized development of this committee at the participant's training program. The workshop will address the development of a C-3, solutions to barriers, and effective, efficient strategies for faculty development. The UT Southwestern Dallas program has had a C-3 in place for 8 years and we have extensive experience in the maturation, training and organization of this essential committee. There will be a brief presentation describing the evolution of the C-3 at our institution. Through small group breakout sessions the participants will brainstorm how to select committee members, what qualities committee members should possess, what skill sets they will need, how to get departmental buy-in, and consider non-traditional means of faculty development. Upon completion of the workshop, attendees will have developed a framework for implementation of a C-3 in their own program.

Workshop 55: SHARING THE LIGHT: TEACHING DIFFERENT LEVELS OF LEARNERS IN BUSY CLINICAL SETTINGS **NCC 201**

Amal M. Khidir, MD, FAAP, Marcellina Mian, MDCM, FAAP, Weill Cornell Medical College in Qatar, Ahmed H. Al Hammadi, MD, Magda Wagdy, MD, Hamad Medical Corporation, Doha, Qatar

Sharing the light: teaching different levels of learners in busy clinical settings. Rationale: Teaching and responding to the needs of different levels of learners in a busy clinical setting present serious challenges to clinical instructors. Incorporating the role of residents as teachers and addressing problem learners are among these challenges. In this workshop practical methodologies will be creatively used to address these issues. Objectives: 1) Establish an agreeable and stimulating learning environment, 2) Reflect on how to evaluate and respond to multiple learners' needs while teaching, 3) Utilize validated teaching tools and methods to facilitate learning of different levels of learners, 4) Demonstrate support to residents as teachers. Structure of Workshop: 1) The workshop will begin with a brief interactive introduction about adult learning theory, teaching in clinical settings and challenges faced. Some practical and validated methods will be discussed. 2) Participants will participate in interactive exercises. These exercises composed of small groups discussion and reflection on video clips that demonstrate interactions in clinical rounds and sit-down small group discussions like a tutorial. 3) Participants will apply the methods learned and role-play in small groups practicing teaching different levels of learners in an out patient setting using the same methods. -Video clips and role-play will address: a) Teaching different levels of learners in ward, clinic, and small group discussion using simple validated tools, e.g. SNAPPS, b) Role-modeling agreeable, stimulating learning environment, c) Responding to different needs of individual learners, d) Supporting residents as teachers. -This workshop was approved and conducted as a category 1 AMA CME activity in the 1st Qatar Medical Education Conference in Doha, Qatar. It was well received. References: "Neher JO, Gordon KC, Meyer B, Stevens N. A five-step "microskills" model of clinical teaching. JABFP 1992; 4:419-24 "Wolpaw TM, Wolpaw DR. Papp KK. SNAPPS: a learner-centered model for outpatient education. Acad Med 2003;78:893-898.

Workshop 56: TO THINE OWN SELF BE TRUE: A WORKSHOP ON HOW TO HELP LEARNERS SELF-ASSESS AND SELF-DIRECT

RNH Ryman 2

Linda A. Waggoner-Fountain, MD, MEd, Casey B. White, PhD, University of Virginia, Charlottesville, VA, Hilary M. Haftel, MD, MHPE, University of Michigan, Ann Arbor, MI

Student, residency and fellowship programs around the country are struggling to provide meaningful and relevant curricula that address the ACGME competency problem-based learning and improvement (PBLI). At the core of PBLI is the learner's ability to self-assess strengths and weaknesses, seek external feedback to validate self-assessment, and use both to make changes and improvements in everyday practice. Although there is significant evidence that humans in general are poor

self-assessors, there is also evidence that this is a set of skills that can be learned, with careful thought as to pedagogy and structure. In the context of providing feedback on achievement of milestones, this workshop will provide attendees the opportunity to discuss, demonstrate, rehearse and evaluate the most effective practices that integrate self-assessment, effective feedback on progress and milestone achievement. This workshop will include 1) self assessment of self-directed learning, 2) interactive discussion on the introduction of milestones and interplay with understanding one's own limitations, 3) small group discussion of PBLI and adult learning theory, 4) didactic information on delivering feedback, 5) small group review and discussion of three learner videos and 6) role play in small group on feedback case vignettes.

Workshop 57: TO EACH THEIR OWN: STRUCTURING CASE-BASED LEARNING SESSIONS TO A CONTINUUM OF LEARNERS

NCC 207

Elizabeth C. Maxwell, MD, Blair J. Dickinson, MD, Darshita P. Bhatia, MD, Nancy D. Spector, MD, Sharon Calaman, MD, Matthew B. McDonald, MD, St. Christopher's Hospital for Children, Philadelphia, PA

In academic centers, educational sessions are frequently offered to a continuum of learners, where attendees may include medical students, residents, and attending physicians. Although there are benefits of learning in a multilevel environment, many challenges are added to the educator who attempts to teach to each level. The ideal educational approach should be anchored in adult learning principles, in order to encourage optimal participation, sustain attention, and maximize individual learning. This workshop will illustrate several case-based teaching formats that can be tailored to meet the educational needs of a continuum of learners within the same session. Informal feedback has reinforced that varying the teaching formats continuously engages learners who attend these sessions on a daily basis. The workshop will begin with a brief review of adult learning principles. In the large group, participants will engage in a needs assessment to inventory the variety of educational venues available for educational sessions, as well as the advantages and challenges encountered by participants of teaching an audience of multiple levels of learners. In small teams, workshop participants will then take part in an actual facilitated experience of a novel case-based, team-oriented teaching format, from the perspective of a learner. The leaders will briefly present several additional formats, highlighting how each can be applied to specific learning goals and objectives, while addressing some of the opportunities and challenges articulated by the large group. Participants will then return to their teams to design an interactive teaching session by applying one of the described formats that best highlights the key teaching points for a sample clinical case. Teams will then have an opportunity to showcase their teaching case with the larger group. Participants will leave the workshop with a toolbox of the teaching formats discussed to facilitate integration into available teaching venues at their home institutions.

Workshop 58: AND THE SURVEY SAYS: DESIGNING SURVEYS TO EFFECTIVELY MEASURE OUTCOMES IN EDUCATIONAL PROGRAMS

NCC 103

Daniel C. West, MD, Timothy W. Kelly, MD, University of California, San Francisco, San Francisco, CA

Surveys are commonly used in educational projects for such purposes as needs assessment, curricular quality improvement, faculty development, recruitment, and research projects. Indeed, surveys are likely familiar to all of us (e.g. from the iconic Family Feud game show) and often appear deceptively easy to construct. Yet optimal survey design can be very challenging because there are numerous potential pitfalls that can result in surveys that yield data that do not answer the intended question. Furthermore, training in survey design is often a gap in the skill set of individuals responsible for educational programs. This workshop is designed to fill this gap by providing the basic skills needed to create valid surveys for a wide range of educational projects. Prior to the conference, participants will complete a web-based survey that will illustrate both effective survey design and common pitfalls. At the conference, the workshop session will begin with an interactive didactic session on writing survey questions, choosing response scales, survey quality control methods, and survey administration principles. Using pair-share and large group formats, participants will practice applying these concepts by critiquing questions from the pre-conference survey and mock survey questions that participants will answer during the workshop using an audience response system. Using a survey development worksheet, participants will work in small groups to practice developing different types of survey questions and choosing response scales. The workshop will conclude with a large group session to critique survey questions developed in the small groups. Participants will leave the workshop with a basic knowledge of optimal survey design, a list of resources for future reference, and a step-by-step guide that can be used to write high quality survey questions and identify appropriate response scales for nearly any project. No prior knowledge of survey design is required. Participants with survey project ideas are welcome to work on those ideas during the workshop.

Workshop 59: EMOTIONAL INTELLIGENCE (EI) ASSESSMENT AND DEVELOPMENT IN STUDENTS AND RESIDENTS THE NEW IMPERATIVE FOR IMPROVING HEALTH CARE OUTCOMES AND PHYSICIAN WELLNESS

NCC 104

John D. Mahan, MD, Nationwide Children's Hospital/OSU, Columbus, OH, Heather A. McPhillips, MD, Seattle Children's Hospital/University of Washington, Seattle, WA, Scott Holliday, MD, Suzanne Reed, MD, Rajesh Donthi, MD, Nationwide Children's Hospital/OSU, Columbus, OH, Richard P. Shugerman, MD, Seattle Children's Hospital/University of Washington, Seattle, WA

EI is a valuable quality in healthcare professionals, leading to better patient trust, team cohesiveness, increased adaptability to stress and improved performance. Originally EI was thought to consist of innate traits; more recently evidence reveals that EI can be developed in individuals, including physicians. The core domains of self-awareness, self-management, social awareness, social management and motivation comprise a useful construct for EI. Effective methods for cultivating EI in physicians are still unclear, but many of these qualities can be improved with coaching. EI development should ultimately benefit patient outcomes. We have partnered with the Hay Group to conduct a variety of EI assessments of our residents. Methods to develop EI in students/residents are still in early stages of development but show promise. Longitudinal EI studies in residents suggest the developmental nature of these qualities. This workshop is designed to help program and clerkship directors, coordinators and faculty better understand EI and EI assessment. Participants will initially complete a Hay EI assessment and then score their own inventory to better appreciate EI and this tool. The science underlying the components and significance of EI will then be defined through presentation/group discussion. Workshop leaders will then present 3 activities derived from their experience with their own trainees: 1) EI - self-analysis and understanding - an interactive leader/resident group discussion based on EI concepts and trainees' results, 2) Understanding EI and Resiliency - presentation and group discussion for residents and 3) Individualized EI Coaching - one on one sessions developed by psychologists and educators in the program. Participants will then self-select into small groups organized around developing activities for EI assessment and education with students and/or trainees at their own programs. Groups will present their work followed by general discussion to summarize and identify common themes and opportunities for implementation.

Workshop 60: MOODLE: DISCOVER OPEN SOURCE COURSE MANAGEMENT SOFTWARE FOR MEDICAL EDUCATION

RNH Ryman 1

Serkan Toy, PhD, Children's Mercy Hospital & University of Missouri, Kansas City, Missouri, Kadriye O. Lewis, EdD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio

E-learning has become a popular form of delivering instruction in medical education. However, not all online courses are created equally. A simple collection of PowerPoint presentations and reading materials on a given topic may not suffice to facilitate meaningful learning. Effective online courses promote social discourse while allowing learners to co-create knowledge as part of a learning community. It is important for educators to utilize a reliable and flexible platform that supports good practices for designing quality online courses. Over the last decade, Moodle, an Open Source Course Management System, has emerged as a viable tool for the task. Moodle as a collaborative workspace provides a host of web 2.0 technologies in a single environment (Blogs, Chats, Forums, Wikis, etc.). These tools help to create a learner-centered environment by allowing users to interact and collaborate with each other. This workshop will showcase the basics of setting up and navigating a Moodle course site. Participants will learn how to design their online course using best practices in a Moodle platform as well as how to facilitate effective collaboration and communication using various Web 2.0 tools available within Moodle. The workshop will also provide hands-on experience and will discuss strategies for using resources, files, folders, and links to websites in a Moodle course; managing course communications; promoting online discussions; and other collaborative activities.

Workshop 61: "MORE THAN JUST A NUMBER": STANDARDIZED NARRATIVES AS AN ALTERNATIVE TO RATING SCALES

NCC 208

Michael S. Dell, MD, Case Western Reserve University School of Medicine, Cleveland, OH, Stacey Bernstein, MD, University of Toronto, Toronto, Ontario, Starla Martinez, MD, Northeast Ohio Medical University, Akron, OH, Martha Wright, MD, Rainbow Babies & Children's Hospital, Cleveland, OH

RATIONALE Clinical evaluations for medical students and residents have routinely taken the form of itemized rating scales. Many educators have questioned this deconstructionist approach and the assumption that scores on isolated aspects of practice, in aggregate, amount to an accurate overall assessment of clinical competency. At some level, clinical competency includes the ability to integrate multiple skills into an effective overall performance, and this integrative feature may be lost in itemized scales. Narrative descriptions of clinical performances may capture some of the important nuances lost in rating scales. Moreover, there is evidence to suggest that despite the subjective nature of performance narratives, interpretation of these data may be fairly consistent across groups of academic physicians, making it a useful adjunct in standard setting for students and residents. **OBJECTIVES** By the end of this workshop, participants will (1) appreciate the role of narrative descriptions as an alternative to rating scales in the assessment of clinical competency, (2) be able to apply narrative information toward standard setting and (3) develop plans for integration of narrative data into resident and student evaluations. **METHODS/CONTENT** The workshop will begin with a brief overview of the literature on the comparative advantages of rating scales vs. narrative evaluations. The workshop is based on work published by Regehr, et al [Acad Med 2012; 87:419-27]. In the first phase of this study, attending physicians at academic hospitals were interviewed regarding resident performance on clinical rotations. The narrative data from these interviews were used to create standardized narrative profiles. The workshop will then recreate the second phase of the study by asking participants to review the standardized profiles individually, before working in groups to develop consensus around relative ranking of these profiles. Finally, participants will discuss ideas for the practical application of narrative evaluations toward assessment of clinical competency within their own programs.

- **Workshop 62: TEAM BASED LEARNING: AN ACTIVE LEARNING STRATEGY FOR ALL LEVELS OF LEARNERS**
- **NCC 110-111**
- *Priya Garg, MD, Floating Hospital for Children at Tufts Medical Center, Boston, MA, Dorene Balmer, PhD, RD, Baylor College of Medicine, Texas Children's Hospital, Houston, TX, Julia Aquino, MD, Floating Hospital for Children at Tufts Medical Center, Boston, MA, Andrew Mutnick, MD, Columbia University School of Medicine, Linda R. Tewksbury, MD, NYU School of Medicine, New York, NY*
- Team Based Learning (TBL) is a learner centered, instructor led, learning strategy that has been used in undergraduate medical education, as well as a variety of other disciplines. TBL provides frequent opportunities for students to enhance learning (as evidenced by better test performance and positive behavior change), as they talk and listen to peers to arrive at consensus decisions. Our institutions implemented TBL in two settings: pediatric clerkship teaching sessions and residency board review sessions. Both sessions emphasize immediate feedback and peer discussion facilitated by senior residents/faculty to improve learner participation and performance. Our workshop will begin with a broad overview of TBL and its three essential components: Preparation, Readiness Assurance and Application of Concepts. We will give a brief summary of published data regarding the effectiveness of TBL and the formats of our TBL teaching sessions, including how we have used TBL to teach core pediatric board review topics while allowing students and residents to equally participate and contribute. The core of the workshop will simulate a TBL session using the principles which underlie TBL (e.g. readiness to learn, immediate feedback). In this simulation, we will organize participants into diverse groups. We will ask them to engage in an individual readiness test, followed by small group discussion and application exercises using immediate feedback cards. We will share examples of question types used in our clerkship and board review sessions and tools used to facilitate the conference. After completion of the simulated TBL session, we will ask the group to reflect on their experience and create an implementation plan for using TBL at their home institution.

- **Workshop 63: WHAT TO EXPECT WHEN YOU'RE EXPECTING: PREPARING FOR AN LCME SITE VISIT**
- **NCC 209**
- *Marlo M. Eakes Meyer, University of Virginia, Charlottesville, VA, Deborah Hernandez, University of Texas Health Science Center at Houston, Houston, TX*
- Rationale: Preparing for an LCME site visit can be a massive undertaking, requiring the input of educators from all parts of the medical school and usually taking a year or more. Many clerkship administrators harbor uncertainty about their roles in the process. This workshop will identify significant ways clerkship administrators can contribute to their school's efforts and work towards a successful site visit.
- Objectives: This workshop will offer a hands-on approach to navigating the practicalities of getting ready for a successful LCME visit. At the end of this workshop, participants will 1) Be provided the LCME site visit guidelines and have highlighted which areas administrators have a role in or should be aware of, 2) Discuss common challenges and strategies to handle an LCME visit successfully, and 3) Apply knowledge regarding the LCME site visit process in planning their own site visit. Participants will leave the workshop with tools and confidence in their approach to an LCME site visit.
- Methods and Content: Methods employed will be part lecture based, reviewing LCME standards applicable for Clerkship Administrators/Coordinators, and part small group problem solving and discussion. The content covered will include case studies of previous successful and unsuccessful site visits, problem solving tactics and LCME standards.

- **11:30am-1:30pm APPD/COMSEP Combined Research Platform Presentations with Boxed Lunch**
- **RNH East/Center Ballrooms**

- **Platform Presentation 1**
- **SUB-INTERN AND INTERN PERFORMANCE LEVEL ON PEDIATRIC MILESTONES**
- *Teri Turner, MD, MPH, MEd, Baylor College of Medicine, Houston, TX, Patricia Hicks, MD, MHPE, Children's Hospital of Philadelphia/ Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Kathie Rose, Stephen Clyman, MD, National Board of Medical Examiners, Philadelphia, PA, Alan Schwartz, PhD, University of Illinois at Chicago, Chicago, IL, Sue Poynter, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, Hilary Haftel, MD, MHPE, University of Michigan, MI, Jeanine C. Ronan, MD, Children's Hospital of Philadelphia/ Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Linda Waggoner-Fountain, MD, MEd, University of Virginia, Charlottesville, VA, Grace Caputo, MD, MPH, Phoenix Children's Hospital/Maricopa Medical Center, Phoenix, AZ*
- Background: Beginning July 2013, each pediatric residency program will begin to assess its trainees using a set of 21 ACGME-chosen Pediatrics Milestones (PMs). Since 2011 there has been research collaboration between APPD LEARN and the NBME to study the PMs. Objective: To assess the achievement of a pilot sample of sub-interns and pediatric interns on a circumscribed set of nine PMs and to compare the performance levels of the two groups. Methods: Beginning July 2012, data from six separate training programs across the country (Baylor College of Medicine, Children's Hospital of Philadelphia, Cincinnati Children's Hospital, Phoenix Children's Hospital, University of Michigan, and the University of Virginia) were collected. Each month 1-2 sub-interns and 1-2 interns from each program are observed using two structured clinical observation (SCO) tools. Each learner is also assessed by multiple health care team members using a multi-source feedback (MSF) instrument.

These data are compiled and provided to the study site as a “dashboard” of the learner’s performance aggregated into specific Milestones. A faculty member at the institutional site uses these data to inform judgment about where the learner has currently progressed along the continuum of each of the 9 PMs. Feedback is provided to the learner and the faculty completes an aggregate report of all observational data which is summarized as a performance level for each of the 9 PMs. Results: See the table below for results of the initial data. Conclusions: Both sub-interns and interns were judged to be at the same developmental level for the 9 PMs. Based on early data, no statistical significant difference in level of PM achievement was noted between the two learner levels. Further investigation is needed to determine what additional factors are associated with these findings and if there is variation among the different clinical sites. Further rater education on the use of PMs for evaluation may be warranted. Additional standardized methods may also need to be developed to train and calibrate raters for achievement of high interrater and intrarater reliability.

Platform Presentation 2

DOES THE QUANTITY AND QUALITY OF COMMENTS PROVIDED ON INTERN AND SUB-INTERN PEDIATRICS MILESTONES ASSESSMENT INSTRUMENT VARY BASED ON ROLE OF THE RATER?

Rebecca Tenney-Soeiro, MD, Children’s Hospital of Philadelphia/Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Jeanine C. Ronan, MD, Children’s Hospital of Philadelphia/Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, Anna K. Weiss, MD, MSc, Children’s Hospital of Philadelphia, Philadelphia, PA, Dawn Young, MEd, Children’s Hospital of Philadelphia, Philadelphia, PA, Stephen G. Clyman, National Board of Medical Examiners, Philadelphia, PA, Alan Schwartz, PhD, University of Illinois at Chicago and Director, APPD LEARN, Chicago, Illinois, Kathleen M. Rose, National Board of Medical Examiners, Philadelphia, PA, Patricia J. Hicks, MD, MHPE, President APPD, Children’s Hospital of Philadelphia/Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA

Purpose/Objective: To compare the quantity and type of faculty, senior resident and nurse comments submitted on intern and sub-intern Pediatrics Milestones (PM)-based structured clinical observations (SCOs) and multi-source feedback (MSF) surveys.

Background: All Pediatric residency programs are required to assess trainees using PMs, beginning in July 2013. Rater comments are a meaningful source of formative feedback, yet little is known about the variation in quantity and nature of comments provided by raters with different inpatient roles, utilizing the PMs for assessment by direct observation.

Methods: De-identified comments from faculty, resident and nurse raters of SCO and MSF APPD LEARN-NBME pilot study surveys were collected from one study site. MSF observation period duration was recorded for each MSF survey.

Analysis: Comparison of word count of text comments was analyzed by rater role using Chi Square; duration of observation for MSFs was similarly analyzed. Using a grounded theory approach, qualitative analysis began with data immersion to generate codes; a constant comparative analysis was used with 4 coders reviewing and analyzing themes as they emerged. Frequency of themes presented by rater role and type of assessment survey was determined for each learner type.

Results: Sixteen weeks of data were collected for 8 interns and 5 sub-interns, representing comments from 53 faculty, 26 nurse and 24 resident MSF and SCO surveys. Despite no significant differences in the number of MSF surveys submitted [faculty (20) v. nurse (22)] nor in the number of reported days of observational opportunities for those assessments ($p < 0.001$), nurses provided 46.5% more text comments than faculty. For both interns and sub-interns, themes dominating nurse feedback were teamwork and family communications. Mechanics of organization, prioritization and preparation and non-specific descriptors dominated faculty and resident comments for these same learner groups. Non-specific feedback comments, such as “good job” were common in faculty ratings of interns and sub-interns and infrequently written by nurses and residents. All raters commented on trustworthiness attributes. **Conclusions:** PM assessment of sub-interns and interns utilizing direct observation of behaviors can provide rich formative feedback from a variety of rater roles, with nurses providing greater quantity and specificity in feedback comments, especially regarding teamwork and family communications.

Platform Presentation 3

A MILESTONES FRIENDLY CLINICAL REASONING ASSESSMENT TOOL

Matthew B. McDonald, MD, Robert S. McGregor, MD, Darshita Bhatia, MD, Blair Dickinson, MD, Elizabeth Maxwell, MD, Nicholas Dawlabani, MD, E. Douglas Thompson, MD, St. Christopher’s Hospital for Children, Drexel University, Stacy A. McDonald, PhD, Holy Family University, Sarah S. Long, MD, St. Christopher’s Hospital for Children, Drexel University, Philadelphia, PA

Background: Clinical reasoning is a complex interplay of knowledge, context and experience that affects the progression from data acquisition to diagnosis. Assessment of this complex process is challenging. The Pediatric Milestones Project employs a developmental approach to pediatric education and evaluation. Recognizing key clinical features, applying semantic qualifiers and honing diagnostic hypotheses anchors the Milestones continuum. We hypothesized that clinical reasoning could be taught and learners evaluated in an interactive, case-based clinical reasoning session. **Objective:** Establish the validity and reliability of a new clinical reasoning assessment tool. **Methods:** We created an educational session dedicated to clinical reasoning using cases to target key features in the history, examination or laboratory results. Case evolution is interrupted at time points to assess learners’ expansive, reductive and contextual reasoning in writing. A six-item assessment tool was created specifically to evaluate the learners’ ability to formulate an early differential diagnosis, a clinical summary and a final, prioritized diagnosis(es) list. Three raters independently and blindly scored each clinical summary using the assessment tool. The best possible score was 12 (0-2 for each item). To enable longitudinal analysis, unique identifiers were assigned to each learner.

- Learners included residents (n=25) and medical students (MS)(n=13). Consent was obtained. A two-way random model
- Intraclass Correlation Coefficient (ICC) was used to assess inter-rater reliability. Independent samples t-tests were used to
- compare the scores across learning levels. Results (first evaluation only): Thirty-eight written clinical summaries were included
- in analyses. The ICC indicated strong inter-rater reliability (ICC = .72). The clinical reasoning tool distinguished between
- levels of learner (concurrent validity). The resident scores (M=7.6 SD=2.12) were higher than MS (M=4.28 SD=1.84), $p<.001$.
- Scores for PL3s (M=9.33 SD=1.08) were higher than PL1s (M=6.16, SD=1.12), $p<.001$. Conclusion: Clinical reasoning can be
- evaluated quantitatively and reliably using this tool.

Platform Presentation 4

HANDOVER EVALUATION: A VALIDATION STUDY

Lisa E. Leggio, MD, Georgia Health Science University, Augusta, GA, Deborah S. Richardson, PhD, Georgia Health Sciences University, Augusta, GA

Goal: To evaluate the validity of a Handover Evaluation tool designed to assess verbal handover competency of students and residents in a clinical setting.

Background: Although there is an extensive literature about the importance of effective handovers, there are few validated tools to measure verbal handover competence in a clinical setting. Yet, poor handovers increase costs and errors and decrease patient satisfaction. Farnan et al developed a Handoff CEX to use in a simulated exercise. Their tool was recently validated for use by nurses in the clinical setting. We modified their Handoff CEX tool to reflect components of verbal handovers identified in the literature: Content, Clinical Judgment, Organization/Communication, Professionalism, and Setting.

Methods: Seven trained pediatric faculty raters observed 15 pediatric interns and 17 senior medical students during 138 clinical handovers on the inpatient ward. Learners were observed during the first and last quarters of their internship and the first and last weeks of their Sub-I. The study was supported by a grant from Sarkin-COMSEP and was reviewed and approved by Georgia Health Science University's Institutional Review Board.

Analysis: Cronbach's alpha was calculated to assess internal consistency; intraclass correlation coefficients assessed inter-rater reliability. Evidence of construct validity was provided by a comparison of scores of more and less experienced learners. (i.e., interns and students) using Mann-Whitney-Wilcoxon tests.

Results: Ratings of all components of the handover evaluation demonstrated adequate internal consistency: Content ($\alpha=0.84$), Clinical Judgment ($\alpha=0.76$), Combined Content and Clinical Judgment ($\alpha=0.89$), and Total score ($\alpha=0.92$). All individual items were highly correlated with the "Overall" question ($r=0.86$, $p<0.0001$). Interns scored higher than students on all dimensions ($p<0.05$). Students' Clinical Judgment scores improved during the Sub-I (First Week $\mu=5.48$; Last Week $\mu=6.21$, $p=0.028$).

Conclusions: The Handover Evaluation tool has good internal consistency and construct validity. This tool can be used to train students and residents and evaluate their handovers with the goal outcome of fewer errors and better patient satisfaction.

More validation studies are needed as competency-based assessments are developed.

Platform Presentation 5

2011 DUTY HOUR REGULATIONS: PEDIATRIC RESIDENT PERSPECTIVES

Sarah B. Whittle, MD, Pediatric Fellow, Texas Children's Hospital/Baylor U, Houston, Texas, Brian C. Drolet, MD, Resident, Dept. of Plastic Surgery, Rhode Island Hospital, Staci A. Fischer, MD, DIO/Rhode Island Hospital, Adam Pallant, MD, PhD, Pediatric Residency Director, Hasbro Children's Hospital, Providence, RI

Methods: Designated Institutional Officials at all 682 ACGME-accredited institutions were contacted and asked to distribute an anonymous, electronic survey to all residents at each sponsoring institution. The survey was administered to 1709 pediatric residents at 47 institutions between December 2011 and February 2012. **Results:** A large, demographically representative sample of residents (n= 590) was identified as training in pediatrics. A majority of residents reported no improvements in patient safety (53.2%) and availability of supervision (77.9%), while most felt that work schedules (55.3%) and preparation for senior roles (57.9%) are worse. Quality of life for interns was generally reported as improved (52.9%), while quality of life of senior residents seems to be worse (57.4%). A majority of residents report increased handoffs (84.7%) and a shift of junior responsibilities to senior residents (72.7%). Finally, a majority (59.7%) of residents report work-hour noncompliance, and nearly 40% report both duty hour falsification and 80-hour work week overage. **Conclusions:** Overall, pediatric residents disapprove of the 2011 ACGME duty hour regulations (57.1%). Some consequences of these regulations appear to be a shift of intern responsibility to senior residents, as well as a decreased level of preparedness for more senior roles. Furthermore, patient safety, availability of supervision and resident quality of life seem to be unimproved or worse. Finally, noncompliance and violation of duty hours regulations appear to be prevalent issues. **What this study adds:** This is the first study to evaluate the perceived impact of new 2011 ACGME regulations on resident education and quality of life, as well as safety and quality of patient care.

Platform Presentation 6

EVALUATING MEDICAL STUDENTS' ORAL CASE PRESENTATIONS DURING A PEDIATRIC CLERKSHIP IMPROVES THEIR SUBSEQUENT PRESENTATIONS: RESULTS OF A MULTI-CENTER RANDOMIZED CONTROLLED TRIAL

Colin M. Sox, MD, MS, Boston University School of Medicine & Boston Medical Center, Boston, MA, Gabriela Vargas, Boston University School of Medicine, Boston, MA, Mike Dell, MD, Case Western Reserve University, Cleveland, OH, Carrie A. Phillipi, MD, Oregon Health & Science University, Portland, OR, Linda O. Lewin, MD, University of Maryland School of Medicine, Baltimore, MD

Background: Oral case presentation is a critical skill medical students must learn during clinical clerkships. The ideal means of teaching this skill remains unknown.

Objective: To determine if participating in a structured presentation evaluation session early in pediatric clerkships with faculty using either a simple or detailed evaluation form improves medical students' subsequent oral case presentations.

Methods: We conducted a single-blinded randomized controlled trial (RCT) with 3 study-arms: (1) a control group, (2) a "simple" intervention group, and (3) a "detailed" intervention group. Subjects in both intervention groups had presentations formally evaluated by faculty within 10 days of beginning the clerkship, while controls did not. Presentations in the "simple" group were evaluated using a single-item scale, while those in the "detailed" group were evaluated using a validated 18-item evaluation form created with support from COMSEP. The study population included medical students rotating in third-year pediatric clerkships over a 1-year period at Boston University School of Medicine, University of Maryland School of Medicine, Oregon Health & Science University, or Case Western Reserve University School of Medicine. The primary outcome was the overall quality of students' presentations assessed at the end of the clerkship by faculty blinded to randomization status. Data analyses were conducted using t-tests and chi-square tests.

Results: 391 students at 4 medical schools participated in this study; 138 in the "simple" intervention group, 122 in the "detailed" intervention group, and 127 controls. The mean presentation quality at clerkship end was higher in the "detailed" group than in controls (6.36 vs. 5.83; $p < 0.003$), while there was no significant difference in presentation quality between the "simple" and control groups (6.04 vs. 5.83; $p < 0.23$). More students in both intervention groups felt their ability to give effective presentations improved during the clerkship ("simple" = 94.3%; "detailed" = 95.0%) than controls (82.7%; $p < 0.004$ & 0.001 , respectively).

Conclusion: This multi-center RCT demonstrates that delivering feedback on students' presentations early in pediatric clerkships using a detailed evaluation form improves the quality of their subsequent presentations.

1:45pm-3:45pm

APPD Pediatrics Milestones Wrap-Up Session **NCC 206**

This is a chance to wrap-up any lingering questions about the milestones. Questions/comments submitted during the meeting, open microphone questions, and concerns arising from the various forums during the meeting will be discussed by APPD milestones leaders and participants.

APPD Pediatric Global Health Educators Regional Meetings **RNH Ryman Room**

All those interested in global health education are welcome to attend. The focus of this meeting will be to provide a space for global health educators within the various regions to meet and discuss possible regional collaborations.

MPPDA MEETING SCHEDULE

TUESDAY, APRIL 9, 2013

7:00am-1:00pm	AMPPA TAGME exam (prior appointment necessary) RNH Jazz	
	Pre-Course: Preparing Med-Peds for the Next Accreditation System	
7:30am-6:00pm	MPPDA Registration 4th Floor Mezzanine	
8:00am-3:00pm	Pre-Course RNH Belmont 3+2	
8:00am-10:00am	Mapping Milestones to EPAs <i>Mike Aylward, University of Minnesota</i> <i>Brad Benson, University of Minnesota</i>	
10:00am-10:15am	Break	
10:15am-11:45am	Portfolios: Purpose, Content and Logistics: Exploring One Powerful Tool for Assessment <i>Sandi Moutsios, Vanderbilt University</i> <i>J.R. Hartig, University of Alabama</i>	
12:00pm-1:00pm	Lunch	
12:00pm-4:00pm	AMPPA Coordinators' Meeting	
1:15pm-3:00pm	The Clinical Competence Committee for Med-Peds: The Who? What? When? Where? And How? Panel Discussion <i>Mike Aylward, University of Minnesota</i> <i>Brad Benson, University of Minnesota</i> <i>Sandi Moutsios, Vanderbilt University</i> <i>J.R. Hartig, University of Alabama</i> <i>Russ Kolarik, University of South Carolina Greenville</i> <i>Donald W. Brady, DIO, Vanderbilt University - Moderator</i>	
3:30pm-5:00pm	Committee Meetings Accreditation Committee Curriculum Committee Recruiting Committee Research Committee Transitional Care Committee	RNH Rock & Roll RNH Classical RNH Rhythm & Blues RNH Gospel RNH Bluegrass
5:00pm-7:00pm	Welcome Reception/Poster Session RNH Ryman	
7:00pm-10:00pm	Dinner at Sandi Moutsios's Home Transportation provided via Gray Line Charter Bus. Bring your dinner ticket with you and board in front of the Renaissance at 6:15-6:30pm	

WEDNESDAY, APRIL 10 2013

7:00am-10:00am	Registration RNH MCBR Foyer	
7:00am-8:00am	Continental Breakfast RNH Music City BR Foyer	
8:00am-5:00pm	General Session RNH Music City BR	
8:00am-8:20am	Welcome and New Program Director Introductions <i>Russ Kolarik, MD, MPPDA President-Elect, University of South Carolina, Greenville</i>	
8:20am-8:50am	Presidential Address <i>Michael Lukela, MD, MPPDA President, University of Michigan Hospital and Health Systems</i>	
8:50am-9:30am	Improving Medical Knowledge and Board Performance for Med-Peds Residents <i>Caroline Mueller, MD, University of Cincinnati Medical Center, Sam Borden MD, Baystate Medical Center</i>	
9:30am-9:45am	Break	
9:45am-11:00am	Workshop Sessions	
	101. Demystifying the Budget Process: A Practicum on How to Set up a Med-Peds Budget <i>Holly Perzy, Metro Health</i>	NCC 109
	102. Working with Categorical Program Directors: Independence vs. Collaboration <i>Jennifer Parker University of Nebraska</i> <i>Michael Lukela University of Michigan</i>	NCC 201
	103. Creating a Transitional Care Resident Elective <i>Alda Gonzaga UPMC</i> <i>Reed Van Deusen UPMC</i> <i>Russ Kolarik University of South Carolina Greenville</i>	NCC 208
	104. Private Sessions Q&A Sessions with RRC Members – by appointment <i>Felicia Davis and Caroline Fischer</i>	NCC 108
	105. Association of Med-Peds Administrators <i>Kelly Barnes, Brooke Austin, and Mary Sarah Thanas</i>	RNH Belmont 3
11:00am-11:15am	Break	
11:15am-12:15pm	Distinguished Lecture: Med-Peds: Return on the Investment <i>Barbara L. Schuster, MD, MACP, GRU/UGA Medical Partnership</i>	

12:15pm-1:15pm	MPPDA Lunch and Business Meeting Secretary-Treasurer Report NMPRA Update AMPA Update 2013 Walter Tunnessen Award MPPDA Election Results AAP Med-Peds Section Update
1:15pm-1:30pm	Break
1:30pm-2:30pm	RRC Update Presentation for Med-Peds Programs <i>Felicia Davis and Caroline Fischer</i>
2:30pm-3:30pm	Panel Discussion: American Board of Internal Medicine, American Board of Pediatrics, Residency Review Committees Moderator: <i>Russ Kolarik, MD, University of South Carolina, Greenville</i> <i>William F. Iobst, MD, American Board of Internal Medicine</i> <i>Felicia Davis, Residency Review Committee, Associate Executive Director for Internal Medicine</i> <i>Gail McGuinness, MD, American Board of Pediatrics</i> <i>Caroline Fischer, Residency Review Committee for Pediatrics</i>
3:30pm-3:45pm	Break
3:45pm-4:30pm	Next Steps for the NAS: Sharing Resources, Tools, and Experiences within the MPPDA <i>Sandi Moutsios, MD, Vanderbilt</i> <i>Brad Benson, MD, University of Minnesota School of Medicine</i> <i>Mike Aylward, MD, University of Minnesota School of Medicine</i>
4:30pm-5:00pm	MPPDA Mission, Actionable Items, and Future Directions Russ Kolarik, MD, MPPDA President-Elect, University of South Carolina School of Medicine Greenville
7:00pm-10:00pm	MPPDA Dinner <i>Sambuca Restaurant</i> 601 12th Ave S Nashville, TN 37203 (615) 248-2888 The Music City Circuit's Green Route can provide free transportation to the restaurant from the hotel. The Music City Circuit is a free tourist bus system that runs every 15 minutes to all the hot spots downtown. It picks up right in front of the Renaissance Hotel and drops off in front of Sambuca.

POSTER SESSION DETAILS

Friday, April 12, 3:45 - 5:45 pm

RNH Grand Ballroom Foyer

Please note that posters will be on display from 10:30 am-3:45 pm

APPD POSTERS

Research Posters

A1) LONGITUDINAL SUBSPECIALTY CLINICS IN A RESIDENCY PROGRAM

Stephen Barone, MD, Steven and Alexander Cohen Children's Medical, New Hyde Park, New York

BACKGROUND: The 2013 RRC guidelines allow residents the option to switch from a ½ day general pediatric clinic to a ½ day subspecialty clinic during their PGY3 year. Many program directors are concerned about this potential decrease in general pediatric ambulatory experience. At CCMC, residents during their PGY2 & PGY3 year are assigned to a full day longitudinal ambulatory experience. This is divided between a ½ day general pediatric clinic and a ½ day subspecialty clinic of their choice. **METHODS:** A survey was conducted via Survey Monkey, in 2012, of residents who graduated between the years 2006-12 to evaluate their attitudes towards this ambulatory curriculum. **RESULTS:** 179 residents responded to the query. 79% of residents elected to participate in an additional ½ day subspecialty clinic and 21% elected a full day general pediatric clinic. When they selected their clinic 35% of PGY2 residents were sure of their future goals, and 38% rated them as probable. After one year in the subspecialty clinic 52% of residents were sure of their career goals and 11% had changed their goals. 23% of residents switched their clinics between their PGY2 & PGY3 year. 64% of residents pursued a fellowship in field of their PGY3 clinic. 33% of residents did not pursue a particular subspecialty because of an unfavorable opinion of the field after their clinic experience. 69% of residents felt their specialty clinic training had an extremely or very important effect on their decision to pursue subspecialty training. 24% of residents would have not chosen their subspecialty if it was not for the clinic. 20% of residents felt they would have made a wrong decision in regards to a career choice if a clinic was not offered. Given the choice between a ½ day general pediatric clinic for three years with an additional ½ day subspecialty clinic for two years vs. a ½ day general pediatric clinic for 2 years followed by a ½ day subspecialty clinic in their PGY3 year, 79% of residents choose the former. **CONCLUSIONS:** A two year ½ per week subspecialty clinic, in a resident's field of choice, aids them in making a correct career choice.

Competency	Intern (n=42)	Sub-internal (n=20)	p
PC-1: Gather essential and accurate information about the patient	5.3 (1.9)	4.8 (0.9)	.61
PC-2: Organize and prioritize responsibilities to provide patient care that is safe, effective, and efficient	5.1 (1.8)	4.9 (1.0)	.93
ICS-4: Work effectively as a member or leader of a health care team or other professional group	5.5 (1.8)	5.2 (1.3)	.74
PPD-1: Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors	5.9 (1.6)	5.3 (1.6)	.30
PPD-2: Use healthy coping mechanisms to respond to stress	6.0 (1.5)	5.6 (0.9)	.53
PPD-5: Demonstrate trustworthiness that makes colleagues feel secure when one is responsible for the care of the patient	5.9 (1.9)	5.7 (1.5)	.94
Professionalism: Professionalization	6.2 (1.8)	6.1 (1.4)	.70
Professionalism: Professional conduct	6.4 (1.6)	6.1 (1.5)	.89
Professionalism: Humanism	6.3 (1.5)	6.3 (1.5)	.98

Means and standard deviations of milestone ratings on a 9-point (1-9) category rating scale. P values from 2-way (rank x competency) multivariate analysis of variance.

• A2) ASSESSING THE EFFICACY OF PEDIATRIC INTERN HAND-OFF TRAINING

• *Dana W. Ramirez, MD, Children's Hospital of the King's Daughters, Rebecca C. Britt, MD, Eastern Virginia Medical School, Mark W. Scerbo, PHD, Brittany Anderson-Montoya, Old Dominion University, Norfolk, Virginia*

• Introduction: In 2003, the ACGME restricted resident work hours to 80 per week, significantly increasing patient hand-offs, many of which contribute to care failures. The ACGME now requires residents to be competent in handing over patients. The current study evaluated a method for training and assessing hand-offs based on a combination of formalized education and a checklist of key information to be relayed.

• Methods: Twenty-two pediatric interns were randomized into trained and untrained groups. The trained group received curriculum and the checklist. The untrained group served as the control. All interns participated in three standardized patient ED encounters and were required to hand off the patients to a standardized resident. Next, they read four written inpatient scenarios and performed a second hand-off to a standardized resident. All hand-offs were videotaped and scored by two blind raters using a 5-point Likert scale addressing six areas: organization, economy, confidence, order of presentation, seeks comprehension, professionalism.

• Results: The ratings were summed across the scales to obtain an overall hand-off score (lower scores reflect better performance). Inter-rater reliability for the scored scenarios was $\rho = .88$. A 2 training (trained, untrained) x 2 case (ED, Inpatient) mixed ANOVA was performed. The training effect was significant, $F(1, 20) = 71.01, p < .000$, partial $\eta^2 = .78$. The trained interns performed significantly better on patient hand-offs ($M = 9.52, SD = 2.48$) than the untrained interns ($M = 17.20, SD = 2.96$). There was also a significant effect for case, $F(1, 20) = 7.37, p < .05$, partial $\eta^2 = .27$; the ED cases ($M = 12.34, AD = 4.69$) resulted in better performance than the inpatient cases ($M = 14.39, SD = 4.86$).

• Conclusion: A standardized training protocol for improving intern hand-offs was created using a combination of traditional lecture and a checklist. Results indicate that formal structured training can improve the quality of intern hand-offs. We are currently evaluating our method across all levels of pediatric residents.

• A3) CLINICIAN, EDUCATOR, ADMINISTRATOR AND RESEARCHER: WHAT IS THE IDEAL ROLE FOR A PEDIATRIC CHIEF RESIDENT? BRIDGING THE GAP BETWEEN PERSPECTIVE AND PRACTICE

• *Karen L. Bauer, MD, Audrey E. Hall, MD, Elizabeth B. Morey, MD, Lucile Packard Children's Hospital at Stanford, Palo Alto, CA, Becky L. Blankenburg, MD, Lucile Packard Children's Hospital at Stanford, Palo, California, Raymond R. Balise, PhD, Stanford University, Stanford, California*

• Background: The role distribution of pediatric chief residents varies greatly among different programs, with great discrepancy in the balance of clinician, educator, administrator, research and quality improvement roles. It is unclear if this discrepancy is the result of differing goals of the program directors' and chief residents' or rather the result of long-standing program expectations. In 2011, Dabrow et al. found that the chief resident role was primarily administrative, but found that both program directors (PD) and chief residents (CR) valued clinical and educational roles more highly. We hoped to expand upon these findings by seeking to quantify the percentage time spent in these different roles, and compare the actual distribution of these roles to the ideal distribution, as viewed by PD and CR. Objectives: The purpose of this study is to better understand how chief resident time is allocated among clinical, educational, administrative, research and quality improvement roles. Further, we hope to delineate chief residents' and program directors' perceptions of the importance of these roles for a chief resident, and further evaluate if there is agreement about the ideal distribution of these different roles. Methods: In January 2013 through February 2013, we conducted an IRB-approved, APPD-approved, anonymous on-line survey of all pediatric residency program directors and current pediatric chief residents. The survey was developed using RedCap (grant support UL1 RR025744 from NIH/NCRR). Current response rates shows 119 CR responses ($n = 331, 36.0\%$ response rate) and 64 PD responses ($n = 200, 32\%$ response rate). PD responses for actual versus ideal role distribution were compared by paired t-tests, and CR responses for actual versus ideal role distribution were compared using the same statistical test. Results: Both CR and PD think that the overall time spent in an administrative role should significantly decrease, on average by about 10-20% of total time (CR & PD: $p < 0.0001$). Both groups also think that clinical (CR: $p < 0.0001$, PD 0.0050 and research time (CR & PD: $p < 0.0001$) should increase. CR and PD agreed that the current time allotted for quality improvement work is sufficient (CR: $p = 0.0719$, PD: 0.0292). However, CR wanted more educational time (CR: $p < 0.0001$), while PD thought that the allotted time was appropriate (PD: 0.1948). Conclusions: There appears to be overall agreement among pediatric program directors and chief residents that administrative time should decrease, allowing for more involvement in clinical and research work. Further thought must take place at a national level regarding how to automatically build in more clinical, educational and research protected time into the chief resident job description in order to prevent administrative tasks from being the dominating role.

• A4) A RANDOMIZED CONTROLLED PILOT CURRICULUM TO IMPROVE RESIDENT EDUCATION ON THE CARE OF CHILDREN WITH SPECIAL HEALTHCARE NEEDS (CSHCN)

• *Jori F. Bogetz, MD, Julia M. Gabhart, MD, Caroline E. Rassbach, MD, Rebecca Blankenburg, MD, MPH, David A. Bergman, MD, Stanford University/Lucile Packard Children's Hospital, Palo Alto, CA*

• Background: In July, the ACGME will require pediatric residents to provide a medical home focusing on care coordination and longitudinal management of CSHCN. This requires innovative educational strategies to improve patient care and function with reduced resident clinical hours. Objective: To assess the feasibility, acceptance and outcomes of a resident curriculum on the management of CSHCN. Methods: From March-July 2012, pediatric resident volunteers were randomized to intervention ($n = 10$) and control ($n = 10$) groups. Randomization was chosen to demonstrate learning beyond baseline experiences provided by a tertiary hospital training program. Each intervention group resident was paired with a faculty mentor and CSHCN/family for a

4 month period. CSHCN were selected after meeting pre-set inclusion/exclusion criteria. The curriculum was developed after a thorough literature review and included: 1) Regular communication with the family; 2) Home visit; 3) Creation of a Contact Tree for access to care; Goal Keeper to articulate patient goals; and a Plan of Care; 4) Participation in technical competency lectures. Retrospective pre- and post attitudes, confidence, and knowledge were collected from the intervention group and controls. The intervention group data were analyzed using the Wilcoxon signed rank test. One-way ANOVA was used to analyze the change between the intervention group and controls. Results: 100% of intervention residents recommended the program to colleagues and continued after the pilot's end. 37.5% spent <1 hour/week on the program, 50% spent 1-5 hours, and 12.5% spent 6-10 hours. 70% communicated with their family at least monthly. 85% completed all major Toolkit items and residents attended an average of 31% of lectures. Residents in the intervention group had statistically significant improvement in their confidence; Figure 1. Other measures were not statistically significant. Conclusion: This curriculum is feasible and acceptable and shows a change in participating residents' confidence with respect to their care of CSHCN in relation to controls. Larger, multi-center studies of longer duration are needed to demonstrate further changes in learner and patient outcomes.

Figure 1: Pediatric Resident's Retrospective Pre/Post Confidence Data

	Mean Score Control Group (n=4)		Difference Control Group	Mean Score Intervention Group (n=8)		Difference Intervention Group	p value Intervention Group	p value Control vs. Intervention Group
	Pre	Post		Pre	Post			
Comparing BEFORE and AFTER, how has participation in the program impacted your confidence in handling the following situations . . .								
Understand a child with special needs within the context of their own home.	2.5	3.25	0.75	2.75	4	1.25	0.0156	0.26
Understand how a child with special needs might impact the lives of their family.	3.25	3.75	0.5	3.25	4.25	1	0.0156	0.066
Establish a set of goals for a special needs child with their family.	2.75	3	0.25	2.625	4	1.38	0.0156	0.042
Create a plan of care for your medically complex patients.	3	3.5	0.5	2.75	3.875	1.12	0.0078	0.07
Help a family navigate the healthcare system.	2.75	3.25	0.5	3	3.875	0.87	0.0313	0.321
Find community resources that might benefit a child with special needs.	2.5	3	0.5	2.375	3.5	1.125	0.0156	0.145

A5) RESIDENTS' REPORTS ON THE IMPACT OF THE 2011 ACGME STANDARDS: WORK TO DO BEFORE REALIZING THE INTENDED NON-HOURS CHANGES?

Daniel J. Schumacher, MD, MEd, Boston Combined Residency Program in Pediatrics, Boston, MA, Mary Pat Frintner, MSPH, American Academy of Pediatrics, Elk Grove Village, IL

BACKGROUND: Several changes in Accreditation Council on Graduate Medical Education (ACGME) requirements were implemented in July 2011. These new standards address areas including supervision, transitions of care, patient safety, resident well-being and education, and clinical responsibilities (including workload). **OBJECTIVE:** Examine 2012 graduating pediatric residents' perceived impact of the 2011 ACGME standards. **METHODS:** National, random sample survey of 1,000 graduating pediatric residents in 2012; n = 624 (62% response rate). Residents were asked how 12 aspects of their working and learning environments had changed with the 2011 ACGME standards. **RESULTS:** Over half of residents felt continuity of care, senior resident workload, intern education, and handoffs had worsened with the new requirements, see Table. More than half also reported that 4 aspects had not changed, including supervision and quality of care. Intern workload and well-being were the only topics the majority of residents felt had improved. **DISCUSSION:** In the year following implementation of the 2011 ACGME standards, graduating pediatrics residents report no change or worsening in several non-hours related areas that comprise a large focus of the new requirements. The only areas these graduates noted improvement in is intern workload and well-being. However, they felt this was accompanied by a detriment to intern education. **CONCLUSION:** While more study is needed to determine actual changes that have occurred, this study of residents' reports raises potential concern for how well the non-hours related requirements have been realized since implementation in 2011.

Table: Resident Perception of Changes in the Working and Learning Environment with 2011 ACGME Standards, n=607

Aspect	Improved, %	No Change, %	Worse, %
Continuity of Patient Care	10	23	67
Senior Resident Work Load	7	30	63
Intern Education	18	23	59
Patient Handoffs	16	29	55
Medical Errors	9	72	19
Resident Supervision	21	69	10
Senior Resident Education	9	61	31
Quality of Patient Care	13	59	28
Senior Resident Well-Being	11	46	43
Program Morale	16	42	43
Intern Work Load	57	24	19
Intern Well-Being	51	26	24

- **A6) DO YOU SEE WHAT I SEE? THE USE OF GUIDED REFLECTION TO ENHANCE RESIDENT SELF-ASSESSMENT**
- *Shari A. Whicker, EdD, MEd, Aditee P. Narayan, MD, MPH, Kathleen A. McGann, MD, Duke University Medical Center, Durham, NC, James E. Bartlett II, PhD, North Carolina State University, Raleigh, NC*
- Communication is an essential competency that spans the continuum of medical education, but trainees do not always have accurate insight into their Communication Skills (CS) competence. Studies have shown that low performers overestimate their abilities while high performers underestimate. Our study sought to determine if the use of video-guided reflection of their performance would improve the accuracy of residents self-assessment in CS. A non-experimental, cross-sectional research design was implemented, using a purposeful sample of pediatric residents.
- Each resident participated in a video recorded scenario in which they broke bad news to a set of standardized patient parents (SPP). Immediately after the scenario, the residents were asked to independently self-assess their performance using the Breaking Bad News Assessment Schedule (BAS). The SPPs were also asked to assess each residents performance. Two-four weeks following the initial self-assessment, residents participated in a video-guided reflection of their CS and re-self-assessed based on this reflection.
- Analysis has thus far been completed on the accuracy of the independent self-assessment. On a 90-point scale, SPP scores ranged from 29.00-88.00 with a mean of 59.96 (sd 10.86). Resident self-assessed scores also varied considerably, though by a narrower margin, ranging from 37.00-75.00 with a mean of 54.53 (sd 8.81). Self-assessment scores did not correlate with SPP scores ($r=.13, p=.11$).
- Initial findings support Kruger and Dunnings (1999) self-assessment framework. Residents who were scored by the SPPs to have the least CS competence overestimated their performance, residents in the middle tertile were generally accurate in their self-assessments, and those in the top tertile underestimated their performance.
- The analysis suggests residents need additional support in order to increase their ability to self-assess their CS. Post-video-guided reflection data has been collected and is currently being analyzed. These results will inform whether video-guided reflection improves residents ability to accurately self-assess their CS.
-
- **A7) THE "ZING FACTOR" - FACTORS USED BY FACULTY TO IDENTIFY THE BEST PEDIATRIC RESIDENTS.**
- *Glenn Rosenbluth, MD, University of California San Francisco, Emily Stumpf, MS, MPH, MPA, Bridget O'Brien, PhD, Christine Cho, MD, MPH, MEd, University of California San Francisco, San Francisco, CA*
- Purpose: To identify traits and behaviors which pediatrics faculty identify in the best residents, and to understand how faculty make assessments based on these elements. Background and Significance: Educational programs find it challenging to differentiate the quality of residents. Our reviews of evaluation comments suggest that faculty use different standards when evaluating residents, and these standards do not consistently map to items on evaluation forms. One way of improving assessment systems is by reaching consensus on the traits and behaviors that are (or should be) present in the best residents.
- Methods: A trained interviewer conducted semi-structured interviews with Pediatrics faculty at UCSF and Childrens Hospital and Research Center Oakland until content saturation was achieved. Faculty were asked to describe specific traits present in residents they identify as the best, to discuss whether these traits are teachable or innate and the predictive value of these traits for future success. Interviews were recorded and transcribed. We used an iterative, inductive approach to generate a coding scheme and identify common themes. Two authors independently coded transcripts and discussed differences to reach consensus. Results: We conducted 23 interviews. Based on review of the transcripts we identified 7 categories of traits/behaviors: Medical Knowledge and Clinical Skills; Professionalism; General/Personality; Energy; Team-related behaviors; Self-related behaviors and skills; Patient-related behaviors. Most interviewees focused on traits like passion, enthusiasm, maturity, and reliability. Faculty rarely mentioned exam scores or intelligence as key traits. Discussion: Faculty identified many traits and behaviors in the residents they define as best, and there was incomplete overlap with the ACGME competencies. This information can help guide evaluation strategies. Next steps are look for commonalities and differences based on faculty demographics, and to consider faculty in other specialties.
-
- **A8) ASSESSING ACCESS TO EMOTIONAL/MENTAL HEALTH CARE IN PEDIATRIC RESIDENTS**
- *Melissa M. Cellini, MD, University of Rochester, Rochester, NY, Janet R. Serwint, MD, Johns Hopkins University School of Medicine, Baltimore, MD, Linda H. Chaudron, MD, MS, Constance D. Baldwin, PhD, Aaron K. Blumkin, MS, Peter G. Szilagyi, MD, MPH, University of Rochester Medical Center, Rochester, NY*
- Background: Residency is a stressful period, and trainee burnout has been associated with reduced empathy and professionalism and increased medical errors. The ACGME requires that programs provide assistance services to residents, but does not specify structure or content. The types of emotional and mental health support residents need and have available are unknown. Objectives: Describe the support that pediatric residents perceive they are offered for mental health needs and identify barriers to their access to and use of these services. Methods: We distributed an online survey to all 424 categorical pediatric residents in 9 ACGME-accredited residency programs in NYS. Results: The 227 respondents (54%) were evenly distributed across training levels and programs; gender distribution was similar to national levels. Most residents reported times of feeling mental exhaustion (92%), physical exhaustion (95%), burnout (67%), and stress (98%) and between 22% and 53% reported feeling these symptoms often or almost always. One fourth agreed that their stress level raised concerns for clinical depression or anxiety. Few residents ranked program leaders (7%) and mentors (10%) as likely sources of emotional support; most likely sources were family, non-medical friends, and other residents. Over 50% of residents did not know if their program offered referrals for mental health care, had a clear policy for assistance, or knew about resources available to residents. Only 45% stated that their program provided education on resident mental health, while 66% were interested
-

in knowing more about available resources. Barriers preventing residents from seeking mental health care were inflexible schedules, guilt about burdening colleagues, fear of a confidentiality breach, and difficulty identifying services. Conclusion: Many pediatric residents experience significant emotional and mental health problems, but few seek or know about support through residency programs. Programs should identify residents' emotional and mental health needs and enhance their support through education and programmatic guidelines.

A9) HAND-OVERS IN PEDIATRIC RESIDENCY PROGRAMS

Melissa Held, MD, Edwin Zalneraitis, MD, Connecticut Children's Medical Center, Hartford, CT

Background: In July 2012, the ACGME stated that pediatric residency programs must ensure and monitor effective, structured hand-over processes. Our aim was to examine if changes had occurred from 2011 to 2012 with regards to pediatric programs' implementation of hand-over education, feedback and barriers to effective hand-overs. Methods: A follow up survey to the one sent January 2011 was sent electronically to APPD members in fall 2012. One Program Director (PD)/designee was asked to complete the survey. The follow-up survey asked many of the original questions and also queried about feedback frequency and subI education in hand-overs. PDs were asked about main concerns with regard to hand-overs. The study was approved by our institution's IRB and the APPD. Results: Response rates were 58% (2011) and 50% (2012-prelim). In 2012, only 1/3 report a curriculum with goals, objectives and assessment tools. Major barriers to effective hand-overs include: interruptions (76% 2011, 48% 2012), no standard verbal format (35% 2011, 17% 2012), lack of feedback on hand-overs (35% 2011, 57% 2012), and lack of supervision (12% 2011, 28% 2012). In 2012, 50% of programs report hand-overs as protected time but with interruptions and 45% report hand-overs as not protected. For subIs, 52% are trained in hand-overs by role-modeling and 33% have no training. PDs report their main concerns with hand-overs are: not enough feedback (65%), lack of supervision (55%), and patient safety/medical errors (51%). Discussion: Despite the 2012 ACGME mandate on hand-over curricula and evaluation, only 34% report a robust hand-over curriculum. PD concerns with hand-overs changed from "too many interruptions" and "lack of a standard format" to a "lack of feedback and "lack of supervision." As compared to 2011, interruptions are reported less of a concern despite 95% of hand-over sessions having interruptions despite being "protected" or are not protected. Role-modeling continues to be the major way in which all learners are trained in hand-overs. There are significant areas for improvement in the education and assessment of learners in hand-overs.

A10) RECOGNITION AND MANAGEMENT OF MISSING CONTENT AND UNCERTAINTY IN TRANSITIONS OF PATIENT CARE

Patricia J. Hicks, MD, MHPE, Children's Hospital of Philadelphia/U Pennsylvania, Anna K. Weiss, MD, MSc, Children's Hospital of Philadelphia, Philadelphia, PA, Alan Schwartz, PhD, Dept of Medical Education/U of Illinois at Chicago, Chicago, Illinois

Background: Effective handovers of care allow the receiver to construct a complete mental model of a patient's current status and anticipated events. Recipients of such handovers should feel that no essential content has been omitted and should have little uncertainty about that content. We set out to determine the degree to which a patient's care team recognized receiving intern missing handover content and intern uncertainty about that content. Methods: Over a 3-month period, night-shift interns, their SRs and their nursing colleagues completed anonymous surveys on 9 patient cases per week. Responses about interns' handover content and interns' uncertainty about that content were triangulated and analyzed using McNemar's Test for correlated proportions. We reviewed the type of handover content missing, perceived implications of that missing content, the presence of intern uncertainty, and actions taken in response to that uncertainty. Results: We analyzed data from 82 survey sets. Handover content was considered missing by interns and/or their SRs 33% of the time. SRs and interns agreed on the presence of missing content 74% of the time. When they disagreed, interns were 3.2 times more likely to report missing content ($p = 0.013$). Content was considered missing by interns and/or nurses 42% of the time. Nurses and interns agreed on the presence of missing content 74% of the time. When they disagreed, interns were 8.7 times more likely to report missing content ($p = 0.00015$). Intern uncertainty about handover content was reported by interns and/or their SRs 39% of the time. SRs and interns agreed on the presence of uncertainty 73% of the time. When they disagreed, interns were 4.5 times more likely to be uncertain than their SRs reported they were ($p = 0.002$). Conclusions: Supervisory residents and nurses were frequently unaware that interns felt they were missing handover content. Intern uncertainty about the nature of handover content also went underappreciated by supervisory residents and nurses, resulting in a suboptimal shared mental model of the team's patients.

A11) LEARNER FEEDBACK ON THE PEDIATRICS MILESTONES ASSESSMENT PROJECT

APPD-LEARN-NBME . Pediatrics Milestones Assessment Group,, APPD-LEARN-NBME Pediatrics Milestones Assessment Group,, Christa N. Chaffinch, MA, NBME, Philadelphia, PA, Sue E. Poynter, MD, Cincinnati Children's Hospital, Cincinnati, OH, Teri Turner, MD, MPH, MEd, Baylor College of Medicine, Houston, TX, Alan Schwartz, PhD, University of Illinois at Chicago and APPD LEARN, Chicago, IL

Background: Creation of the Pediatrics Milestones established an approach to assessing competencies based on the learner's acquisition of professional attributes, rather than yearly review and promotion. Objective: The Pediatrics Milestones Assessment Project, a research collaboration of the APPD and NBME, examines the feasibility of assessing interns' and sub-interns' inpatient performance using a subset of Pediatrics Milestones. A Learner Feedback Survey was created to determine learner satisfaction with their pilot experience regarding frequency and value of feedback received. Survey responses were studied to characterize these experiences. Methods: Surveys using frequency and agreement scales and text responses

are completed by learners at the end of their rotation. Data analysis includes learner expectations, frequency and value of feedback received, and utility of feedback for identifying improvement areas and future goals. Results & Conclusions: To date, 37 responses were received, with an expectation of about 100 by March 2013. More than 70% of learners indicated their expectations were met, but two learners indicated a desire for more in-person feedback. The frequency of real-time feedback varied based on the nature of the observation (70% on rounds; 45% taking a patient history). Nearly 97% of learners agreed/strongly agreed that end-of-month feedback was useful for creating future improvement goals. Emerging themes on learners' plans to incorporate feedback include: balance open-ended and direct questions (43%), improve communication with patients and families, particularly clarify and confirm shared understanding (46%), and thoroughness with questioning and building care plans (30%). Emerging themes for pilot improvements include: feedback should be specific, with examples of both positive and negative behaviors (30%), should come from a variety of team members (11%), and feedback sessions should be scheduled regularly (19%). Overall, learners indicate pilot participation allowed more frequent, focused feedback that proved useful in improving their current performance and constructing future improvement goals.

A12) TRENDING IN THE WRONG DIRECTION: CHANGES IN SLEEP BEHAVIORS, ATTITUDES AND KNOWLEDGE OVER TIME

Teri L. Turner, MD, MPH, MEd, Baylor College of Medicine, John A. Turner, MD, Private Practice, Diagnostic Clinic, Linzhi Xu, PhD, Mark A. Ward, MD, Baylor College of Medicine, Houston, TX

Background: Sleep deprivation among resident physicians has been the subject of much interest and debate over the last decade. Sleep knowledge and habits of residents entering training however, has not been thoroughly studied. Objective: To describe trends in sleep behaviors, attitudes, and knowledge among entering pediatric trainees prior to initial full call responsibilities over a 3 year time span. Methods: 140 interns (n= 43, 2010, n= 51, 2011, n=46, 2012) entering the BCM pediatric residency program between 2010-2012 were surveyed anonymously prior to the start of training. The survey was part of the Sleep Alertness/Fatigue Education in Residency Curriculum developed by the American Academy of Sleep Medicine. Survey questions addressed measures of daytime sleepiness, sleep behaviors, sleep attitudes and knowledge regarding sleep. Results: The mean Epworth Sleepiness Scale score has increased from 7.72 (2010) to 8.71 (2011) to 9.13 (2012). There was a statistically significant (SS) decrease ($p<0.05$) in the number of reported hours of sleep on weeknights from 2010-2012. 95% of all incoming interns in 2010 got >6 hours of sleep on weeknights compared to only 86% in 2011 and 74% in 2012 ($p<0.05$). 67% of all incoming interns in 2012 needed an alarm clock to wake up every day compared to 37% in 2011 and 5% in 2010 ($p<0.05$). The 2012 cohort was less likely to perceive that sleep loss and fatigue had a major impact on work and medical decisions ($p<0.05$). There was no SS difference in perception of the impact of sleep loss and fatigue on one's personal life. There was also no SS difference over time in the perception of effective countermeasures to sleep loss. 5 of the 15 sleep knowledge questions showed a SS decrease in correct responses over the 3 year period; none showed improvement. Conclusions: Given the trends above, education on these issues is needed. Interventions instituted at the undergraduate medical school level (or earlier) will be necessary to change the suboptimal behaviors, attitudes and knowledge that are already developed by the time residency training begins.

A13) A NATIONAL ASSESSMENT OF PEDIATRIC RESIDENT SCHOLARLY ACTIVITY

Erika L. Abramson, MD, MS, Weill Cornell Medical College, New York, NY, Monique Naifeh, MD, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, Michelle Stevenson, MD, MS, University of Louisville, Louisville, Kentucky, Linda Gerber, PhD, Weill Cornell Medical College, New York, NY, Christopher Todd, MD, Texas Tech Health Science Center, Amarillo, Texas, Emilie Henry, MD, Children's Hospital at OU Medical Center, Oklahoma City, Oklahoma, Su-Ting Li, MD, MPH, UC Davis, Sacramento, California

Background: The ACGME requires residents to participate in scholarly activity. However, there is little guidance on how to effectively integrate scholarly activity into residency. Studies indicate that few residents feel they received excellent or very good research training during residency. Objectives: To understand how pediatric residency programs are currently meeting ACGME requirements and to identify characteristics of successful scholarly activity programs. Methods: We conducted a cross-sectional survey of all pediatric residency program directors (PDs). We assessed program characteristics, resident participation in scholarly activity, infrastructure to support scholarly activity, barriers, and outcomes. Successful programs were defined as those with high rates of resident participation in scholarly activity, presentation at meetings, and publication. Results: Survey administration is in process. Currently, the response rate is 43% (86 of 199). Seventy-six percent of PDs (n = 61) reported that participation in scholarly activity was a graduation requirement. Definitions of scholarly activity were highly variable. Major barriers included lack of time for residents to participate in scholarly activity (49%, n = 37) and lack of time for faculty to mentor residents (46%, n = 36). On average, programs report that 24% of residents present their work at a regional conference, 12% present at a national or international conference, and 9% publish in a peer-reviewed journal. Only 22% of PDs (n = 22) reported being extremely or very satisfied with the quality of their program to train residents in producing scholarly activity. Multivariate regression analyses will be used to identify characteristics associated with successful programs once data collection is complete. Conclusions: Our results suggest that the experience of residents with regard to participation in scholarly activity is highly variable and the quality of training is not optimal at most programs. Understanding characteristics of successful programs can provide a roadmap and help ensure that residents are better equipped to conduct scholarly activity.

A14) PEDIATRIC RESIDENCY TO FELLOWSHIP TRANSITION: A SURVEY OF PROGRAM DIRECTORS BY THE ASSOCIATION OF PEDIATRIC PROGRAM DIRECTORS AND COUNCIL OF PEDIATRIC SUBSPECIALTIES.

Robert S. McGregor, MD, CMO, Akron Children's Hospital, Akron, OH, Richard B. Mink, MD, MACM, Harbor-UCLA Medical Center, Torrance, CA, Victoria F. Norwood, MD, University of Virginia, Charlottesville, VA, James F. Bale, MD, University of Utah, Salt Lake City, UT

BACKGROUND: Categorical pediatric residency program directors (PDs) report that residents often leave their programs early to begin pediatric fellowships. **METHODS:** The opinions of categorical residency and fellowship PDs were surveyed in 2008 using an APPD-sponsored email survey. Each survey consisted of five questions to determine the extent of the problem and to identify management strategies. **RESULTS:** Responses were received from 57% (103/182) of categorical PDs and 23% (113/491) of fellowship PDs. Categorical PDs indicated that an average of 7.7 residents entered fellowship annually and that at least one graduating resident annually/program had a conflict with the end date of residency and the start date of fellowship. Fellowship PDs reported that entering fellows also had conflicts with the start date. Most categorical PDs (57%) had management strategies to deal with residents leaving early, whereas only 32% of fellowship PDs had strategies to address late fellowship entry. Strategies of categorical PDs included scheduling vacation or flexible rotations at the end of the PL3 year. Some residency programs did not rely on PL3s during the final rotation. Management strategies of fellowship PDs consisted of later start dates or scheduling new fellows on non-clinical rotations during their first month. However, most fellowship PDs (67%) indicated that fellowship start dates were not flexible. The majority of categorical PDs and fellowship PDs favored creation of a delayed, uniform fellowship start date that could solve these issues. **CONCLUSIONS:** These data indicate that both categorical and fellowship PDs are dissatisfied with the current status of fellowship start dates and favor delaying the start of fellowship. A detailed analysis of the problem should be performed and should involve others, such as Designated Institutional Officials and PDs from other specialties, e.g., internal medicine and surgery, who are likely affected by the same issues.

A15) UNSETTLING SITUATIONS IN THE PEDIATRIC INTENSIVE CARE UNIT: A CURRICULUM FOR IMPROVING RESIDENT CONFIDENCE AND COMPETENCE WHEN NEGOTIATING CHALLENGING ENCOUNTERS

Melissa J. Sacco, MD, University of Virginia Children's Hospital, Charlottesville, VA, Khaliah A. Johnson, MD, Children's Healthcare of Atlanta, Atlanta, GA, Nicole A. Shilkofski, MD, Lewis H. Romer, MD, Janet R. Serwint, MD, The Johns Hopkins University School of Medicine, Baltimore, MD

BACKGROUND Past research has shown that residents rotating through the Pediatric Intensive Care Unit (PICU) feel unequipped to manage 3 unsettling situations: angry parents, acute de-compensation of a previously healthy patient, and conflict between provider teams. There is a dearth of residency curriculum designed to address the management skills for these situations. **OBJECTIVE** To implement and evaluate the impact of a PICU based, experiential curriculum on resident knowledge, behavior, and competence when negotiating unsettling situations. **DESIGN/METHODS** The curriculum included four small group sessions presenting strategies for managing unsettling situations and a systematic self-care plan. Study design was a modified, randomized controlled trial with residents randomly assigned by month to either the intervention group (experiential curriculum plus standard) or to the control group (standard curriculum). Participants completed pre and post surveys to assess knowledge, attitudes, and behavior regarding unsettling situations. Residents participated in 2 simulated unsettling situations, with blinded standardized patients and blinded clinician observers scoring their performance on a standardized check list. IRB approval was obtained. **RESULTS** Fifty-two residents were approached; 50 consented and were randomized during the 2011-12 academic year. Residents exposed to the curriculum were more likely to agree/strongly agree that they would use a standardized approach to managing unsettling situations (85% vs 31%) and were more likely to voluntarily engage in difficult situations (95% vs 78%). There was a trend towards intervention residents performing better on standardized checklist compared to control group residents. Additional data analysis on performance scoring is underway. **CONCLUSION** Creating and implementing an experiential curriculum in the PICU not only improved resident confidence regarding managing unsettling situations, but indicated a trend toward improved resident competence in negotiating these scenarios.

A16) PEDIATRIC PROGRAM DIRECTOR PERCEPTIONS OF 2011 DUTY HOUR REGULATIONS

Brian C. Drolet, MD, Mamoon T. Khokhar, MD, Brown University / Rhode Island Hospital, Providence, Rhode Island, Sarah B. Whittle, Texas Children's Cancer and Hematology Centers, Houston, TX, Adam Pallant, MD, PhD, Brown University / Hasbro Children's Hospital, Providence, RI

Objective: To determine pediatric program director perceptions of the 2011 ACGME Common Program Requirements. **Methods:** All program directors (PDs) in pediatrics (n = 181) were identified from the ACGME database. An extensive search was performed to obtain individual contact information for each PD; functional e-mails were identified for 164 (89.0%). After Institutional Review Board approval, three individualized e-mail requests were sent asking each PD to complete a 32-question anonymous, electronic survey. Independence of mean proportions was established by non-overlapping 99% confidence intervals. **Results:** A total of 151 responses were obtained (92.1% survey response). The majority of respondents were between 40 and 60 years old (62.9%) with nearly half new to their position, reporting 0 to 5 years experience as a PD (48.3%). Most programs (41.7%) ranged from 30 to 49 residents and were primarily affiliated with an academic medical center (75.5%). Pediatric PDs reported approval for nearly all individual aspects of the 2011 ACGME Common Program Requirements (Table 1) with the exception of 16-hour shifts for interns (72.2% disapprove). Regarding the impact of the new standards, many areas were reportedly unchanged, however a substantial number of PD report worsened resident education (74.7%) and preparation for senior roles (79.9%) as well as diminished resident ownership of patients (76.8%) and continuity of care (78.8%). Finally,

there was a reported increase in PD workload (67.6%) and use of physician extenders (62.7%). Conclusions: Pediatric program directors report numerous negative consequences of the 2011 Common Program Requirements. These include worsened resident education and preparation to take on more senior roles, as well as diminished responsibility and continuity of care. Although they support individual aspects of duty hour regulation, most pediatric program directors (71.3%) say there should be fewer of these regulations. As leaders in graduate medical education, program directors must act to address the reported negative impacts on resident training and patient care.

Table 1: Summary of survey showing percentage of respondents (99% confidence interval)			
	<u>Disapprove</u>	<u>Neutral</u>	<u>Approve</u>
Direct supervision of PGY1	8.1% (6.2-9.3)	15.2% (15.2-16.8)	76.7% (76.7-78.6)
80 hour work week	9.8% (7.9-11.2)	16.8% (16.8-18.4)	73.4% (73.4-75.4)
1 day off in 7	2.6% (1.1-3.3)	9.7% (9.7-11.0)	87.8% (87.8-89.2)
16 hour PGY1 shifts	71.6% (70.0-73.6)	14.6% (14.6-16.2)	13.8% (13.8-15.4)
24+4 hour senior resident shifts	26.8% (24.6-28.8)	25.2% (25.2-27.1)	48.0% (48.0-50.2)
8 hours off between shifts	10.8% (8.8-12.2)	18.9% (18.9-20.6)	70.3% (70.3-72.4)
Night shift frequency (<7 consecutive days)	15.0% (13.0-16.6)	14.5% (14.5-16.0)	70.5% (70.5-72.6)
OVERALL IMPRESSION	25.5% (23.2-27.4)	27.9% (27.9-29.9)	46.7% (46.7-48.9)
How have the following been impacted by 2011 Common Program Requirements?	<u>Worse</u>	<u>Unchanged</u>	<u>Improved</u>
Patient safety	36.2% (35.1-38.4)	57.0% (57.0-59.2)	6.8% (6.8-7.9)
Quality of patient care	45.8% (44.7-48.0)	48.2% (48.2-50.4)	6.1% (6.1-7.1)
Resident education	64.8% (63.6-67.0)	26.7% (26.7-28.7)	8.4% (8.4-9.7)
Resident board/in-service scores	22.0% (21.1-23.9)	73.6% (73.6-75.5)	4.4% (4.4-5.4)
Resident quality of life	17.6% (15.4-19.3)	32.8% (32.8-35.0)	49.5% (49.5-51.8)
Resident fatigue	9.9% (7.7-11.2)	54.4% (54.4-56.6)	35.7% (35.7-37.9)
Resident preparation for more senior roles	73.2% (72.6-75.1)	25.0% (25.0-26.9)	1.8% (1.8-2.4)
Education vs service balance	25.0% (23.4-26.9)	60.9% (60.9-63.1)	14.1% (14.1-15.7)
Resident ownership of patients	78.6% (77.9-80.4)	19.0% (19.0-20.8)	2.4% (2.4-3.1)
Continuity of care	82.0% (81.1-83.7)	13.6% (13.6-15.1)	4.4% (4.4-5.3)
	<u>Decreased</u>	<u>Unchanged</u>	<u>Increased</u>
Number of patient's seen/operative cases	47.6% (46.8-49.9)	48.7% (48.7-51.0)	3.7% (3.7-4.5)
Supervision of residents	5.1% (3.0-6.1)	62.0% (62.0-64.2)	32.8% (32.8-35.0)
Frequency of hand-offs/signout	2.4% (0.9-3.1)	9.7% (9.7-11.0)	88.0% (88.0-89.4)
Program director workload	0.5% (0.0-0.9)	25.6% (25.6-27.6)	73.8% (73.8-75.8)
Physician extender (NP, PA) coverage	0.2% (0.0-0.4)	38.4% (38.4-40.6)	61.4% (61.4-63.6)
Bold indicates statistically significant majority response by non-overlapping 99% CI.			

A17) ASSESSMENT OF PEDIATRIC RESIDENT KNOWLEDGE AND SKILLS IN EVIDENCE-BASED MEDICINE

Jamie Macklin, MD, Nationwide Children's Hospital/OSU, David Way, MEd, The Ohio State University College of Medicine, Rajesh R. Donthi, MD, Nationwide Children's Hospital/Doctors Hospital, Alex T. Rakowsky, MD, Elise D. Berlan, MD, MPH, Nationwide Children's Hospital/OSU, Columbus, OH

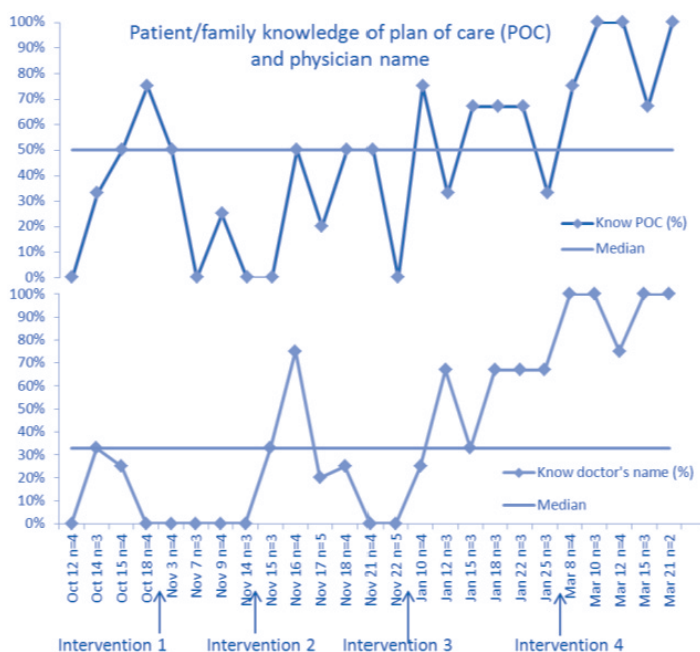
Objective: Our objective was to validate an EBM assessment instrument, originally developed by Chernick et. al. as a measure of baseline EBM knowledge and skills prior to significant changes to our curriculum. Methods: We adapted the Chernick instrument to assess our pediatric residents' experience and comfort with EBM, self-reported EBM-related behaviors, and EBM knowledge. The knowledge section required residents to construct clinical questions, to locate and identify best practices from the research literature, and to apply EBM concepts to patient care. Residents from 3 training programs (IM/Peds, Categorical Peds, and Dual Peds) completed the assessment. We evaluated the scale properties of the instrument using factor analysis and Cronbach's Alpha reliability analysis. We validated the scoring rubric using multiple judges to score the knowledge portion of the test. We also assessed the instrument's validity by comparing knowledge scores to experience and level of training. Results: Of 132 residents surveyed, we received 113 fully completed (85.6%) and 9 partially completed assessments (6.8%). The factor and reliability analyses confirmed 3 hypothesized scales (Comfort, Behavior, and Knowledge). Inter-rater reliability between judges was high (ICC2,2=0.974). Items were free of floor or ceiling effects. We found that self-reported EBM behaviors increased with comfort level ($p<0.01$) and that comfort level increased with EBM experience ($p<0.05$). EBM knowledge scores increased with prior EBM experiences ($p<0.05$) but were not different across levels of training. Conclusions: We were able to verify the hypothesized structure of the EBM assessment instrument developed by Chernick et. al. The instrument worked well in our environment and possesses the psychometric properties to be used by a broader audience. We were unable to show discriminate validity, i.e. that knowledge increases with years of residency training and experience. We believe that this may be due to increasing amounts of time devoted to EBM education at the undergraduate medical education level.

QI Posters

A18) RESIDENT USE OF WHITEBOARDS AND A COLLABORATIVE ADMISSION PROCESS IMPROVES PATIENT/FAMILY COMMUNICATION AND KNOWLEDGE

Amanda J. Rogers, MD, Children's Hospital of Wisconsin, Medical College of WI, Laura Norton, MD, Children's Hospital of WI/Medical College of WI, Milwaukee, WI, Jennifer Di Rocco, DO, University of Hawaii, John A. Burns School of Medicine, Honolulu, HI, Lauren Giuliani, BA, CLSSBB, Mary Beth Miranda, RN, MS, Children's Hospital of WI, Milwaukee, WI

Background: Lack of communication between the health care team and families leads to misunderstanding and frustration. While this is challenging anywhere, an academic center with providers at different levels of training adds an extra element of difficulty. Our NRC Picker Patient Experience Surveys show that families are overwhelmed by information presented at admit and are unable to remember key facts. This contradicts Joint Commission requirements that they know who their physician is and be included in developing the plan of care (POC). Better communication is needed to improve families' understanding of their hospitalization. Aim: Increase the percent of families who know their POC and physician's name over a five month time period. Methods: Current state analysis and five PDSA cycles were conducted. The primary outcome of family knowledge was measured via resident administered surveys asking if families knew their POC and physician's name. In cycle one, emails were sent asking residents to write this information on whiteboards in patient rooms. In cycle two, signs were posted reminding them to use whiteboards. In cycle three, team members met with residents to explain the rationale behind whiteboards. In cycle four, prompts were added to whiteboards. In cycle five, a collaborative admission process began where the nurse and resident presented the POC together and wrote on whiteboards. Lessons learned from each cycle were incorporated into the next cycle's plan. Results: 40% of families knew the POC and 15% knew their physician's name prior to any intervention. After cycle four, 88% knew the POC and 95% knew the physician's name. Cycle five is in process and data will be presented in April. Conclusion: Documenting the POC and physician name on whiteboards significantly increases family knowledge of this vital information. Adding prompts to whiteboards helps sustain this process. Next steps include analyzing the effect of a collaborative admission process. A multidisciplinary team may allow for an even more powerful impact on communication and understanding.



A19) IMPLEMENTATION OF A PEER-DEVELOPED ORIENTATION BUNDLE TO IMPROVE INTERN SATISFACTION IN THE NEONATAL INTENSIVE CARE UNIT

Sarah Spencer Welsh, MD, Nathan J. Rodgers, MD, MHA, Karen James, MD, Eric M. Heinert, DO, Reed Evers, MD, University of Rochester, Rochester, NY

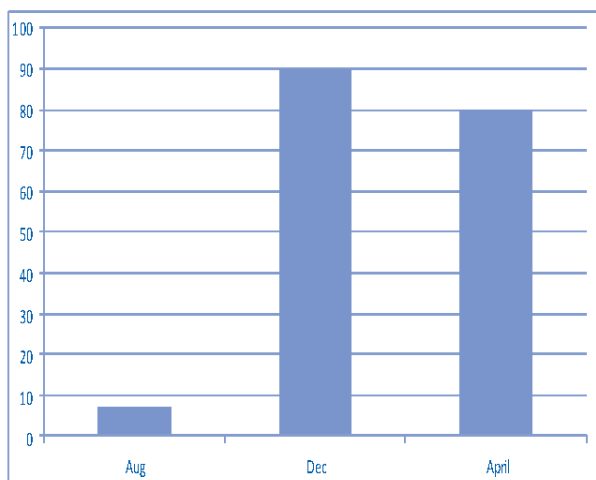
Background: Rotating in the neonatal intensive care unit (NICU) can be an intimidating experience for the pediatric intern, who typically has little or no previous exposure to neonatology. There is a steep learning curve in an environment of high intensity and unique vernacular. In our residency program, there was no standardized approach to interns' NICU orientation, resulting in variable experiences and intern dissatisfaction with their orientation and training. Aim: Intern satisfaction with NICU orientation, as measured by a greater than 50% proportion of "mostly" or "completely" satisfied ratings, will improve from the 2011-12 to 2012-13 academic years after the implementation of a bundle of newly developed peer-to-peer orientation materials. Methods: The first part of the quality improvement project (based on a PDSA cycle) involved a needs assessment (Plan) by surveying 2011-12 interns on their overall level of satisfaction with NICU orientation and familiarity with specific tasks and expectations in the NICU. We also asked interns and NICU leadership how the orientation process

could be improved. Using this information, we created 5 peer-to-peer materials (Do): two videos of mock rounds and of the physical space, two sets of slides on how to pre-round and order parenteral nutrition, and a document highlighting common NICU terms and equations. This orientation bundle was introduced to the 2012-13 interns prior to their first NICU rotation. We then surveyed each intern as they completed their initial NICU rotation (Study). Interns rated the effectiveness of the new orientation materials, their familiarity with specific tasks and expectations, and their overall satisfaction with orientation. Statistical analysis was performed within and between groups using the Chi-square test. Results: The survey response rate consisted of 60% (9/15) of interns in 2011-12 and 64% (9/14) of interns in 2012-13. Results reveal a trend towards improved overall satisfaction with orientation ($P = 0.056$), with 7/9 of 2012-13 interns responding "mostly satisfied" as opposed to 7/9 of 2011-12 interns responding "not at all", "slightly" or "neutral". There was a significant improvement in understanding specific terminology and calculations ($P = 0.015$) and an overall trend toward improvement in presenting patients, placing orders, understanding roles on rounds and knowing the physical space. Conclusion: With the development and implementation of a NICU peer-to-peer orientation bundle, interns reported greater overall satisfaction with their orientation experience and improved familiarity with specific tasks and expectations. Future plans to continue improving the orientation process (Act) may lead to better intern performance within the rotation. The next cycle will examine NICU leadership perception of improvement in intern performance and include plans for an intensive shadowing experience prior to the rotation.

A20) QI PROJECT: BULLYING

Jennifer DiPace, MD, Melanie Wilson-Taylor, MD, Jennie Ono, MD, Weill Cornell Medical College/NYPH-Cornell, Alexis Feuer, MD, NYPH-Cornell, New York, NY

Background ¶The 2008-2009 School Crime Supplement indicates that, nationwide, 28% of students in grades 6-12 experienced bullying ¶Children and adolescents bullied have a higher incidence of anxiety, depression and psychiatric/psychosocial impairment. **Aim Statement** ¶By June of 2012, 90% of patients ages 6-15 will have an annual bullying screen. ¶Those patients with a positive bullying screen will have a mental health screening. **Process Measures** ¶95% patients with positive assessment will undergo mental health screen. ¶95% patients with positive assessment will receive parental/patient education. ¶95% patients with positive assessment will be referred to social work as needed. **Tool Used** ¶PDSA cycle used based on prior experience, ability to handoff project between residents, and iterative nature of project **Participants** ¶12 senior residents at NYPH-Weill Cornell who had continuity clinic at the Helmsley Tower 5 general pediatrics practice and their mentors. Residents chose project topic and devised, planned, implemented and evaluated each step. The project was then presented at year's end to the department with 4 other QI projects. **CYCLE ONE: IDENTIFYING RESOURCES:** multiple on line resources, telephone referral services and other resources were identified by the residents. **PROVIDER EDUCATION** ¶Reminders to RGP resident physicians to discuss bullying during well child visits. ¶Realization of lack of validated screening tool for bullying. ¶Compilation of screening questions from AAP and other sources proposed to aid screening while maintaining resident autonomy. **BASELINE DATA COLLECTION** ¶14 charts reviewed during August ¶2/14 addressed bullying (14%) **CYCLE TWO: DOCUMENTATION** ¶Goal: Prompt providers to screen at each visit ¶Epic drop-down question in the progress notes for all children aged 6-18 to ask if Bullying screen positive or negative ¶Added to WCC 6-8 year old, WCC 9-11 year old, and adolescent templates ¶Development/Behavior plan section for all WCC visits for patients between 6 and 18 years old. **CHART REVIEW** ¶20 charts reviewed during December ¶18/20 addressed bullying (90%) **CYCLE THREE: PARENT RESOURCE SHEET** developed **CYCLE FOUR: CREATE AND DISSEMINATE A CLINICAL PRACTICE ALGORITHM** ¶A work-flow model was instituted for all positive assessments ¶Positive bullying assessment à Mental Health Screen + Education à assess safety ¶If concern for safety or need for Mental Health Referral à SW consultation + Education ¶Summary email with suggested screening questions and clinical algorithm sent to all residents **CHART REVIEW** ¶20 charts reviewed during April ¶16/20 addressed bullying (80%) 2 positive (100% education provided) ¶16/20 addressed mental health (80%) 1 positive (100% education provided and mental health referral) **CONCLUSIONS** By increasing resident awareness and implementing a standardized process by which we screen for bullying, we observed a substantial and sustained increase in the percentage of well visits where bullying was addressed. For those patients who screened positive, educational materials were provided and the need for mental health referral was identified.

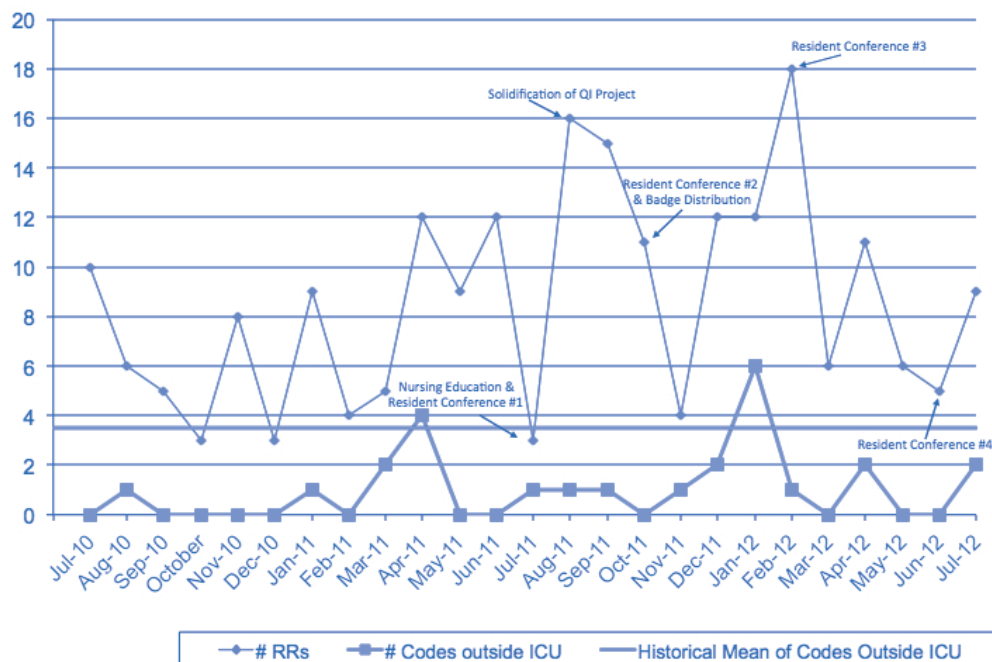


A21) FORMAL RAPID RESPONSE EDUCATION FOR HOUSESTAFF INCREASES AWARENESS AND UTILIZATION: A RESIDENT LED QUALITY IMPROVEMENT INITIATIVE

Elizabeth B. Morey, MD, Karen L. Bauer, MD, Audrey E. Hall, MD, Lucile Packard Children's Hospital at Stanford, Palo Alto, CA, Raymond R. Balise, Ph.D., Stanford University, Stanford, CA, Kit Leong, RHIT, CPHQ, Lynda Knight, RN, MSN, CCRN, CPN, Lauren Destino, MD, Lucile Packard Children's Hospital at Stanford, Palo Alto, CA

Background: The use of RR (Rapid Response) teams in hospitals began in response to the Institute for Healthcare Improvements (IHI) 100,000 Lives Campaign. Subsequently, Sharek et al. demonstrated a reduction in codes outside the ICU by 71% and mortality by 18% in the two years following RR team implementation at Lucile Packard Children's Hospital (LPCH). However, use of RRs may decline without continued education, especially with rapid housestaff turnover at academic centers. **Aim:** During the 2011-2012 academic year at LPCH, the third-year residency class implemented formal resident RR education as a Quality Improvement (QI) project with the aim of increasing the number of RRs to ultimately reach the IHI's recommendation of 20-25 per 1000 discharges. **Methods:** Four pediatric-resident conferences were dedicated to RR education over a 12 month period including review of RR criteria, discussion of specific cases for application, and the presence of RR leadership. In addition, badge cards containing helpful information related to RRs were distributed, and all residents received the ongoing RRT data through the residency blog. Run charts were maintained including number of RRs and codes outside the ICU. In addition, residents were surveyed pre/post intervention regarding education received and RRs called. It should also be noted that nurses received education and badge cards, in tandem, through efforts within the QI department. **Analysis:** In August 2010-June 2011 (pre-intervention), there were 7.33 RRs per 1000 discharges, which increased in August 2011-June 2012 (post-intervention), to 10.94 per 1000 discharges ($p=0.006$). Resident surveys showed lack of formal training decreased from 48.4% pre-intervention to 5.7% post-intervention ($p<0.001$). Number of self reported RRs called by residents increased from 34.4% pre- to 61.5% post-intervention ($p=0.005$). **Conclusion:** RR education of housestaff contributed to RR usage within the hospital. In order to sustain and augment progress, forthcoming, all applicable hospital staff and residents will perform resident developed annual computer module dedicated to RR re-education to ensure ongoing utilization.

Rapid Responses (RR) & Codes Outside the ICU July 2010-July 2012



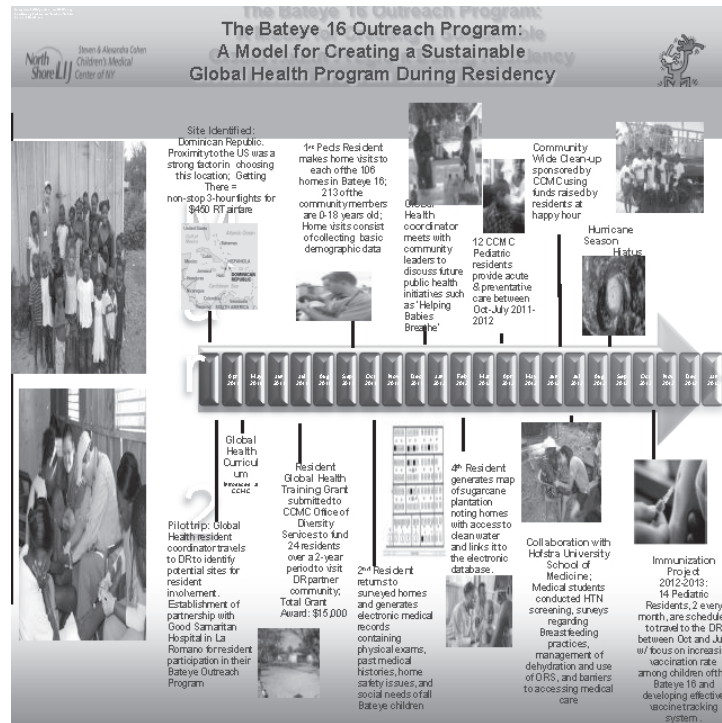
Descriptive Posters

A22) A MODEL FOR CREATING A SUSTAINABLE GLOBAL HEALTH PROGRAM DURING RESIDENCY

Nancy Palumbo, MD, Stephen Barone, MD, Shaanan Myerstein, MD, Steven and Alexandra Cohen Children's Medical Center, New Hyde Park, NY

BACKGROUND: Short term international medical missions, despite their intentions, may provide value for the trainees without meeting the local community needs and provide temporary, short-term therapies that fail to address the root causes of their health care issues. The aim of the CCMC Global Health Program was to address the ongoing problem of short term medical trips by sending residents throughout the year, in consecutive rotations, to the same community. **METHODS:** The CCMC program provided care to Haitian children, with limited access to health care, living on a sugar cane plantation (bateye) in the Dominican Republic. Twelve residents from CCMC traveled to Bateye 16 for two weeks, of every month, during the academic

year. 213 children received an initial history, physical examination and social needs assessment. In addition, the residents have provided ongoing educational sessions to the children and families. **RESULTS:** Pediatric residents created a medical record for each child which is longitudinal in nature. These records were a valuable resource to subsequent residents and other health care providers. The residents initiated and continue to participate in ongoing projects which included waste management, clean water supply, child safety and vaccine delivery. In a survey of our residents 87.5% agreed/strongly agreed that the experience in the DR improved their overall pediatric training. 100% believed that they are now more culturally competent and 87.5% reported that they will now practice more cost-effective medicine. **CONCLUSIONS:** Residents who participated in our global health program were able to establish services which are ongoing and will have a long term positive effect on the children in Bateye 16. Unlike many global health resident experiences, in which the care provided is episodic, this program provides longitudinal care of a cohort of children. The program also was an invaluable experience for the residents. The CCMC global health program provides a model which both trains residents in global health medicine and establishes a "medical home" for their patients.



A23) PREPARING A PEDIATRIC RESIDENCY PROGRAM FOR A PROLONGED DISASTER: LESSONS LEARNED FROM SANDY

Stephen . Barone, MD, Stephen Barone, MD, Ariel Brandwein, MD, Michael Castaldo, MD, Tiffany Schumaker, DO, Laura Stasiuk, DO, Nancy Palumbo, MD, Steven and Alexandra Cohen Children's Medical Center of New York, New Hyde Park, NY

Background: The frequency of natural disasters requires disaster preparedness for residency training programs. Hurricane Sandy was a sentinel event that exposed the need to establish a thorough pre-disaster plan that would help organize and mobilize a large residency program. This paper describes the process which was used to establish hospital preparedness and continued care of pediatric patients while also ensuring the safety of house staff during hazardous times. **Objective:** The purpose of this paper is to highlight the strengths and weaknesses of the protocol enacted in response to Hurricane Sandy. This experience enabled us to create a disaster preparedness action plan which ensures that a large pediatric program can continue to provide essential services to the community in a safe and orderly manner. **Design/Methods:** In anticipation of Hurricane Sandy residents were emailed a detailed plan which described the residency program's expectations. To maintain multiple levels of contact, residents were instructed that communication would occur via pagers, cell phones and emails. The aim was to staff the hospital at 150% for 48 hours. All residents reported before the storm. In order to provide services during a prolonged emergency, residents worked 12 hours shifts and rested between shifts. Staffing needed to be increased in anticipation of having to care for patients transferred from other institutions. An attempt to establish appropriate sleeping arrangements was made. Residents who lived within walking distance were encouraged to house those that lived off site and were enlisted as the program's "back up calls". A formal debrief occurred following the storm. **Results:** The training program staffed the institution at 150%, maintained uninterrupted patient care and ensured the safety of the house staff. However a number of deficiencies were noted. These included: Inadequate sleeping accommodations, lack of command center communication with training program leadership, lack of a user friendly current list of residents' addresses, lack of a "hospital go bag", carpool strategy and a telephone tree. Subsequent to the hurricane a comprehensive resident disaster preparedness manual was created. **Conclusions:** Sandy highlighted the importance of establishing a thorough plan that would serve as a

template for universal disaster preparedness for a pediatric residency program. This should be established by all residency training programs.

A24) AN INNOVATIVE APPROACH TO RESIDENT SCHEDULING IN THE ERA OF DUTY HOUR REGULATIONS

Bethany Stafford-Paul, MD, Eyal Ben-Isaac, MD, Matthew Keefer, MD, Michelle Thompson, MD, Children's Hospital Los Angeles, Los Angeles, CA

An Innovative Approach to Resident Scheduling in the Era of Duty Hour Regulations
Introduction: The latest ACGME duty hour guidelines have resulted in the creation of a variety of patient coverage models amongst training programs. Many have adopted a day/night call schedule to comply with the guidelines. Our residency program designed and piloted a number of call models before finalizing the current model in use at Children's Hospital Los Angeles which adheres to the 16-hour consecutive duty hour mandate while preserving continuity of patient care and emphasizing patient ownership by interns.
Methods: We implemented a schedule with sequentially assigned intern roles (Long Call, Overnight Call, Post Call, Cross Cover, Clinic) and later sought feedback from housestaff, nursing staff, families, and faculty. In response we reordered the sequence of the intern roles and added a short call assignment (see table). By adjusting the sequence of calls, interns are now able to be physically present on rounds post-call to discuss their own admissions, affording greater opportunities for patient and faculty interaction, continuity of care, and education. With the revised model, the interns are able to follow the majority of their patients' hospital course. The adjustment groups the interns busier call days together, thus providing several days for the individual's census to decline before his/her overnight call; this reduces the number of patients the team must cross cover thereby reducing the number of hand-offs.
Observations: Seven months after the implementation of this model, interns were asked to comment on its advantages and disadvantages. Eighteen of our 28 interns completed the anonymous survey (64%). All respondents noted the greatest advantage was the ability to round with the primary attending on each new admission.
Conclusions: In the era of duty hour regulations, residency training programs may benefit from development of alternative call models designed to preserve both the important education that occurs in the first 24 hours following a patient's admission and continuity of patient care.

Intern Role	Responsibilities	Hours
Long call	Admits patients during day	7am - 7:30pm
Short call	Admits first patient if arrives before 3:30pm, and attends to patients	7am - afternoon
Clinic intern	Attends to patients and then attends continuity clinic	7am - afternoon
Overnight call	Admits patients and cross covers patients overnight	7:30pm - 11:30am (next day)
Post-call (overnight from previous night)	Attends work/teaching rounds, presents newly admitted patients on rounds, and then transfers care of patients	Morning until 11:30am

A25) EFFECTS OF A FORMAL CURRICULUM ON STANDARDIZING SIGNOUTS AMONGST INTERNS

Jane H. Oh, M.D., Eyal Ben-Isaac, M.D., Children's Hospital Los Angeles, Los Angeles, CA

Effects of a Formal Curriculum on Standardizing Signouts Amongst Interns
Jane Oh, MD. Eyal Ben-Isaac, MD. Background: Recent ACGME guidelines reduced intern calls from 30 to 16 hours, leading to an increase in patient handoffs. However, no standardized method of signout is taught prior to residency. Precourse surveys in 2010-2011 showed that only 18% of incoming interns received formal teaching on signouts in medical school. Of these, only 7% could recall what was taught. There was wide variability in the components they thought were important in a signout.
Aim: A full-day curriculum teaching a standardized method of signout during orientation week would help interns communicate clinical information in an organized, efficient manner, with fewer errors during transfer of care. The goal is for 85% of interns to retain this information throughout the year.
Methods: The curriculum was comprised of two half-day portions: 1) A didactic session teaching the signout model. A mnemonic ABCDE was created to incorporate the key components of every handoff: Admission reason, Baseline status, Current status and Change to prior interventions, Discharge Criteria, Expect for tonight. These components were then organized into a systems-based signout model. 2) Small group session where the interns practiced the signout model with sample cases, and received immediate feedback.
Results: 100% of the interns found the course helpful and were able to organize signouts in a system-based manner immediately after the course. However, on 3-month follow-up surveys, only 45% of interns were able to recall the important components. Therefore, follow-up sessions were initiated along with direct-observation of handoffs in 2012, extending the curriculum over the entirety of intern year. Data is currently being collected on retention and adherence to the standardized handoff method.
Conclusion: A formal curriculum to teach a standardized manner of signout is helpful to interns and initially increases the consistency of patient information between multiple caretakers. However, frequent follow-up and reinforcement is needed early on to help with adherence.

• A26) INTERACTIVE ELECTRONIC INDIVIDUALIZED LEARNING PLANS

• *Sophia P. Gladding, PhD, Ann Fandrey, Emily C. Borman-Shoap, MD, John S. Andrews, MD, University of Minnesota, Minneapolis, MN*

• The individualized learning plan (ILP) is designed to help learners develop self-regulation skills central to the ACGME competency of practice-based learning and improvement and provide the foundation for lifelong learning. While the potential of ILPs is great, implementation is often challenging. Residents may perceive ILPs as an administrative task rather than an educational activity and rarely return to them after initial completion. In light of these challenges, we designed an interactive ILP for our 2011-12 intern class using the Moodle platform. The goals of the project are to increase resident engagement with their ILP and to create an on-going dialogue between residents and program advisors about their development as pediatricians. The ILP site contains modules for each rotation that cue the learning experience by describing the rotation and listing goals and objectives. During the first week of each rotation, residents complete a self-assessment in that rotation's key knowledge and skill areas. Residents then identify 1-2 learning goals for the rotation and a plan for achieving them. Using Moodle, residents submit their ILP to their program advisor. Their advisor then provides online feedback to the resident. For their semi-annual reviews, residents complete a brief report in which they document progress towards each of their learning goals, referencing aggregated prior ILP responses and feedback. To evaluate this new approach, we measured multiple outcomes including ILP completion rate, time spent on Moodle as a measure of engagement and resident feedback. During 2011-12, the overall completion rate was 97%. Residents spent an average of 17 minutes on each rotation's ILP activities. Advisors spent on average 8 minutes per advisee providing feedback each rotation. In a content analysis of the residents' written comments about their ILPs, we identified four themes. Residents: 1) valued the specific feedback from their advisors, 2) appreciated the on-going dialogue with their advisor about their progress, 3) felt ownership of their learning, and 4) expressed benefit from focusing on expectations, preparation and goals for each rotation.

• A27) BLOCK EDUCATION - WHAT'S WORKING?

• *Julie M. Bennett, MD, Sophia Gladding, PhD, Jonathan Koffel, MS, Emily Borman-Shoap, MD, University of Minnesota, Minneapolis, MN*

• Background: In an era with restricted duty-hours, increasing clinical demands and workload, it is difficult to find devoted time for resident education. With many programs moving to a block session from the traditional daily conference schedule, it is imperative to ensure that residents are engaged in presentation style to optimize knowledge acquisition. The goal of this study was to examine different interactive educational tools used at one institution to determine which were most valuable to residents and what qualities contributed to the success of that tool. Methods: Cross-sectional survey of one hundred and eight pediatric and internal medicine-pediatric residents on their opinion of the interactive tools that had been used in previous block education sessions. The survey asked questions about specific methods including introspective activities such as pre and post-testing and audience response, and small group activities such as discussion groups, instructor-lead groups, and Jeopardy. Results: Forty-five (42%) residents responded to the online survey. Fifty nine percent of residents preferred small group activities compared to 41% who preferred introspective activities with Jeopardy (31%) and audience response (31%) the most highly rated. Qualities of the introspective tools that were specifically highlighted related to self-evaluation. Residents indicated that getting immediate feedback and assessment of their own knowledge were more useful than external factors such as comparison to peers or discussion with presenter. Residents found small group activities most successful when the scenario was problem-based, with collaboration and interaction among the entire group. Overall, 96% of residents felt that the change to a block education session has been positive, with 4% indicating they were neutral about this change. Conclusions: Gearing interactive tools towards learning style has engaged residents to participate in the block education curriculum. Interactive tools should be engaging, problem-based and provide self-assessment for the learner. These techniques will likely improve their long term knowledge acquisition, however further studies are needed.

• A28) USING CME AS A MODEL FOR INDEPENDENT ONLINE LEARNING FOR PEDIATRIC RESIDENTS

• *Miriam Saad, MD, Carolyn Wilhelm, MD, John S. Kim, MD, Stephanie Johns, MD, Linda O. Lewin, MD, Ronald San Juan, MD, Erin Giudice, MD, University of Maryland, Department of Pediatrics, Baltimore, Maryland*

• Background: Residents in training are expected to balance clinical practice with medical education and board exam preparation. With the changes in duty hour regulations in 2011, residency programs needed to decrease the amount of time residents are in the hospital, and therefore, time they can spend in scheduled didactic teaching sessions. We changed the scheduled resident conferences from twice to once daily and created a self-directed learning framework to supplement in-person teaching sessions. The program was modeled after traditional continuing medical education (CME), with a clear, point-driven system of required and optional learning activities. Our purpose was to determine if this CME-type program would lead to maintenance of total resident learning time despite restrictions in duty hours and secondarily improve in training exam (ITE) and pediatric board exam scores. Methods: CME requirements were determined based on the number of conference hours lost plus the hours residents were expected to spend on self-directed learning. All required learning activities and options for self-directed learning were placed on our residency Blackboard site for access from any computer. Pediatric chief residents and education department leaders tracked activity completion. Residents were surveyed about their completion of required activities compared to the prior year, when these same activities were highly encouraged. Results: Residents reported completing significantly more of the following activities each month ($p < 0.05$): (1) reading Pediatrics in Review articles (3.0 vs. 1.7), (2) completing PREP questions (16.0 vs. 11.3), and (3) completing more self-directed activities (5.5 vs. 3.5). Conclusions: Replacing one of two daily educational sessions with self-directed activities modeled after CME programs, making them easily

available, and tracking and reporting their completion led to more self-directed learning activities in our residents. Ultimately, ITE and board exam scores will be used to assess the success of this learning model.

A29) CHANGING THE QUALITY IMPROVEMENT CULTURE: A RESIDENT DRIVEN FOCUS ON SYSTEM AND PROCESS IMPROVEMENT

Jason W. Custer, MD, Erin Giudice, MD, University of Maryland, Baltimore, MD, Linda O. Lewin, MD, University of Maryland, Baltimore, MD

Introduction: Residents and bedside nurses are the front line providers best able to identify system errors and are often key participants in the cases of adverse events. This front line experience can be harnessed into an instructive format in order to improve the quality and efficiency of care and avoid health care related errors. We designed a resident driven multi-disciplinary taskforce to engage in systems improvement and outcomes were presented in grand rounds. Design: The pediatric clinical quality taskforce was made up of pediatric residents from each stage of training as well as nursing representation from each care area. This group was tasked with the identification of system and process gaps leading to system errors, inefficiencies and adverse events. A comprehensive understanding of the entire system of care was established, along with solutions to system errors and inefficiencies. Findings from the taskforce were presented in grand rounds by pediatric residents. Through participation residents were evaluated on several of the core competencies including: practice based learning and improvement, system based practice, interpersonal and communication skills and professionalism. Outcomes: During the first year of implementation of this new program seven key systems errors were identified and presented to the department. Each presentation started with an illustrative case presentation and was followed by a detailed system discussion. Multiple disciplines participated in the discussion describing their interactions and impact within the larger health care organization including pharmacy, nutrition, radiology and laboratory managers. A survey of the department showed that 94% felt that the presentations were helpful in enhancing the understanding of problems in the system. Those responding felt that the taskforce raised awareness of the larger organization in which care is delivered and how to best approach and improve system problems and inefficiencies. Through this process the residents have become more actively engaged in looking for solutions in everyday practice.

A30) BRINGING EVERYONE ON BOARD: A FACULTY DEVELOPMENT PLAN FOR IMPLEMENTATION OF THE NEXT ACCREDITATION SYSTEM

Ellen K. Hamburger, MD, Dewesh Agrawal, MD, Aisha B. Davis, MD, Mary Ottolini, MD, George Washington University, Washington, DC

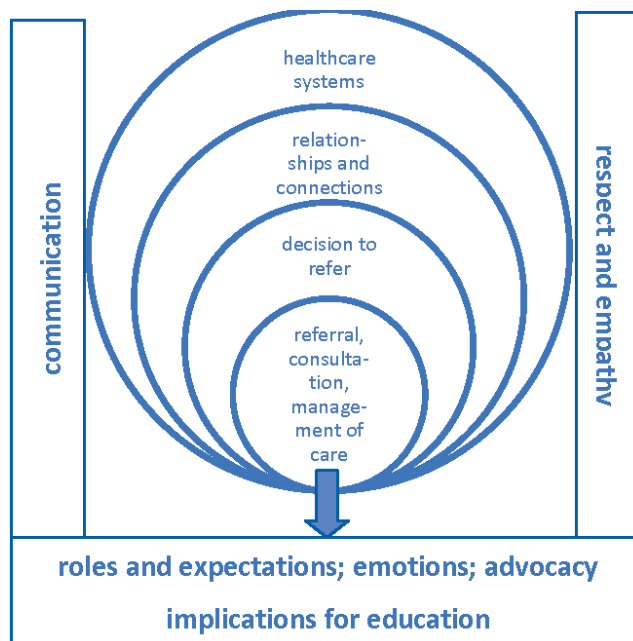
To meet the ACGME mandate for Phase 1 Specialties to begin Milestone assessments by July 2013, Children's National Medical Center (CNMC) Department of Medical Education designed and implemented a department-wide faculty development strategy supported by a web-based program linking milestones to readily measured nested EPAs (nEPAs). All divisions involved in resident education were engaged in re-writing resident rotation objectives as nEPAs and creating evaluation plans to align with the Next Accreditation System (NAS). The rationale for the plan was to create faculty buy-in, encourage development of tools by content experts, and support division champions by providing faculty development tailored to their identified division needs. The plan has 4 components: 1) Two mandatory workshops for 30 faculty education leaders representing each division. Workshop 1: introduce the concepts of milestones, EPA's and the web-based tracking program. Participants learn how to transform the current long lists of learning objectives into common or rotation-specific nEPAs. The nEPAs are activities essential to general pediatric practice that are observable and measurable during a rotation. Participants then work with peer coaches in small groups to draft nEPAs. Workshop 2: working in the same format, participants determine validated methods and tools to assess the nEPAs. 2) Workshop participants vet their work at their division meetings and submit refined nEPAs and assessment strategies to the Vice Chair for Medical Education. 3) Education leaders provide follow-up coaching, edit nEPAs, and link them to subcompetencies and assessment tools in the web-based tracking tool. 4) Education leaders provide tailored faculty development for individual divisions to train faculty to use the NAS to teach and assess residents. CNMC faculty comprise the Department of Pediatrics of the George Washington University School of Medicine. Once the NAS is fully established for the pediatric residency program, faculty will adapt their work for fellowship programs.

A31) A QUALITATIVE RESEARCH FOUNDATION FOR RESIDENCY CURRICULUM ON THE REFERRAL/CONSULTATION PROCESS

Janice L. Hanson, PhD, J. Lindsey Lane, BM BCh, University of Colorado School of Medicine, Aurora, CO, Mary C. Ottolini, MD, MPH, George Washington University School of Medicine, Claire Boogaard, MD, Jessica Weisz, MD, Children's National Medical Center, Ellen K. Hamburger, MD, George Washington University School of Medicine, Washington, DC

Background: Medical education aims to ensure that graduates provide quality patient care in the context of a medical home. The referral/consultation process is integral to this and has been identified as an essential entrustable professional activity (EPA). Skills needed, however, are not defined or included in pediatric curricula. This study uses qualitative methods to describe the experience of parents, primary care providers, and pediatric specialists in referral/consultation. Results will form the basis of a pediatric residency curriculum and assessment. Methods: We gathered a purposeful sample of primary care providers, pediatric specialists, and parents who have experienced referral and consultation at academic health centers, sampling for maximum diversity and continuing until reaching saturation of themes. We collected data through focus groups with semi-structured interview guides, audiotaping and transcribing data. The constant comparative method of qualitative analysis identified codes, themes and grounded theory, with triangulation among 4 investigators. Results: 6 focus groups

included 10 primary care providers, 5 subspecialists and 15 parents from community practices and an academic health center. Themes (in *italics*) include decision to refer, made in the context of health care systems, communication, respect and empathy, relationships and connections. The referral process evokes emotions and advocacy among parents and providers and creates role definitions and expectations. Implications for education arise from each theme. Discussion/conclusions: In these preliminary findings, clear descriptions of competencies for a referral/consultation EPA emerge in each theme to guide the development of education and assessment. Data collection and analysis will continue at a second academic health center until saturation occurs there also, sampling from primary care providers, a broad selection of pediatric specialists, and parents in a variety of healthcare settings. The study will result in broadly transferable insights about referral and consultation and a practical guide to curriculum development.



A32) MIDWEST CONSORTIUM OF GLOBAL CHILD HEALTH EDUCATORS: LOCAL COLLABORATION TO OPTIMIZE GLOBAL EDUCATION

Nicole E. St Clair, MD, Medical College of Wisconsin/Children's Hospital of, Milwaukee, WI, Cynthia R. Howard, MD, MPH, University of Minnesota, Minneapolis, MN, Jacquelyn Kuzminski, MD, Medical College of Wisconsin/Children's Hospital of, Milwaukee, WI, Sabrina Butteris, MD, Laura Houser, MD, University of Wisconsin School of Medicine & Public, Madison, WI, Charles Schubert, MD, Cincinnati Children's Hospital, Cincinnati, OH, Mike B. Pitt, MD, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL

Background: Due to growing interest, pediatric residency training programs are developing curriculum and training opportunities specific to global health. Prior to 2012, there were no standardized recommendations for global child health curriculum, resulting in fragmented training efforts that were largely dependent on local expertise at each program. Methods: In 2009, global child health educators from Case Western Reserve University, Cincinnati Children's Hospital, Mayo Clinic, Medical College of Wisconsin, Northwestern University, University of Minnesota, and University of Wisconsin developed the Midwest Consortium of Global Child Health Educators with a mission to advance the science and implementation of global child health training through regional multi-institutional collaboration and scholarly output. The Consortium meets annually, and facilitates additional communication through collaborative workshops, publications and presentations. Results: The following accomplishments were achieved through collaborative efforts: (1) competency-based objectives were adapted at each institution; (2) knowledge assessments were developed (anticipated multi-institutional rollout in 2013); (3) curriculum resources were shared; (4) APPD global health workshops were led by consortium members; (5) consortium members assumed national leadership roles pertaining to global health education, including within the APPD Global Child Health Educators Association (GCHEA, 2011); (6) a shared article was published; and (7) simulation curriculum and facilitator training were developed for implementation and evaluation at each program (anticipated rollout 2013). Conclusion: In our experience, regional collaboration improved the capacity of each respective institution to develop innovative educational tools, establish standards for curriculum, and optimize global health education in pediatric residency training. This model has the potential to be highly effective and warrants replication at other institutions that are committed to advancing the field of global child health.

A33) INTEGRATING GLOBAL HEALTH INTO RESIDENCY EDUCATION: A SCALABLE MODEL

Rachel R. Johnson, M.D., Medical College of Wisconsin, New Berlin, WI, Nicole St. Clair, M.D., Jaquelyn Kuzminsky, M.D., Medical College of Wisconsin, Wauwatosa, Wisconsin

Background: The Pediatric Global Health Program at the Medical College of Wisconsin founded a 3-year Pediatric Residency Global Health Track in 2010, and has spent the last three years optimizing the experience. Methods: The mission was to prepare pediatric trainees to engage sustainably in global health endeavors. 6-8 intern applicants are accepted annually. Initial requirements consisted of participation in quarterly journal clubs, attendance at 18 noon conferences over a 3 year period, completion of a project, and participation in a global health elective. Allowances were made to accommodate resident work hours and clinical duties. Members were paired with global health advisors to create individual learning plans. Results: In the 3 years since inception, the Track enrolled 23 Pediatric and Internal Medicine-Pediatric residents. The following additions have been made: (1) junior members are paired with senior resident mentors (2) journal clubs have increased to monthly frequency and include resident leadership; (3) senior resident projects have included a CATCH grant-funded educational project on a Native American reservation, development of a grant-funded tele-medicine program in Belize, and creation of a resident-medical student partnership to deliver monthly health education to children at a local NGO; (4) partnerships have been formed with global health elective sites in Belize and Uganda; and (5) Track residents have assumed leadership roles pertaining to curriculum development. Conclusion: This Pediatric Global Health Track has grown rapidly in participation and productivity. The model is successful in engaging trainees in global health opportunities within their residency framework, and is scalable for other programs. Future goals of the Track include development of a local-global elective, creation of a pre-travel orientation course, implementation of simulation-based curriculum, improved evaluation of the Track, assessment of the role the Track plays in resident recruitment, Track member representation in residency leadership, promotion of scholarly projects, and development of bidirectional global training partnerships.

A34) BOARD EXAMINATION SIMULATION EXERCISE: AN INNOVATIVE APPROACH TO BOARD PREPARATION IN PEDIATRICS RESIDENCY TRAINING

Keely G. Smith, MD, University of Texas Medical School at Houston, Houston, TX, Rajesh R. Donthi, MD, Nationwide Children's Hospital/Doctors Hospital, Rebecca Wallihan, MD, Nationwide Children's Hospital, Columbus, OH, Monaliza S. Evangelista, MD, University of Texas Medical School at Houston, Houston, TX, John D. Mahan, MD, Nationwide Children's Hospital/OSU, Columbus, OH

Objective: Our 2 programs developed and implemented a Board Examination Simulation Exercise (BESE) in Fall 2011 required for all Pediatrics and Medicine/Pediatrics residents to help residents acquire pediatric knowledge required for passing their initial GPCE through guided team based study that included frequent practice testing and feedback. Residents were divided into teams to compete for the highest score. We proposed that 1) team-based learning would motivate residents to study and perform at their best and 2) residents would gain experience in test taking and value feedback on their knowledge in different subject areas. Methods: ABP Content Outline was divided into 23 sections in the academic year in 2 wk blocks. Each section averaged 4.35% of the exam (range 3-6%). Residents received a reading list specific to each topic. Residents had a 2 wk study period for each section; a timed 25 minute online exam of 20 ABP-style questions was administered at end of each 2 wks. Residents were divided into teams with equal PG-Y distribution. Teams competed for highest overall score with monetary prizes awarded to the winning team. Results: Resident participation was below the goal of 70%. Completion rates per class ranged from 47.4 to 70%. Average correct scores per class ranged from 54.4 to 60.9%. Resident satisfaction was highly variable: only 23.6% felt BESE caused them to increase studying for Boards. 47.2% were somewhat/highly motivated by the financial rewards; only 27.1% were positively motivated by team competition. 75% valued having the answers for a limited time after the test for feedback and learning. Conclusions: The Team Based Approach to Board Preparation was not motivating for our residents. They did value feedback on knowledge in different subject areas. Repeating BESE annually will allow residents to track their performance in different subjects over time. During our 2nd year we find more acceptance of the improved process; residents now compete as individuals, answers are provided for a limited time, and completion rates have improved.

A35) ASSESSMENT AND SELF-ASSESSMENT OF PEDIATRIC RESIDENT HANDOVER SKILLS

Rajesh R. Donthi, MD, Nationwide Children's Hospital/Doctors Hospital, John D. Mahan, MD, Nationwide Children's Hospital/OSU, Sarada Eleswarpu, BA, The Ohio State University College of Medicine, Heather Miller, BS, Nationwide Children's Hospital, Emily Patterson, PhD, The Ohio State University College of Medicine, Columbus, OH

OBJECTIVE: In accordance with ACGME requirements on Transitions of Care, our program developed and implemented a Handover curriculum and pilot assessments. Primary objective: characterize resident handover communication behaviors. Secondary objective: characterize the pattern of interns self-assessment in the context of the ABP/ACGME Milestone "Provide transfer of care that ensures seamless transitions." METHODS: Handover education/reinforcement and self-assessment of new interns occurred within 2 weeks in July. A 5P/3-Way Handover assessment tool was developed in which the 5Ps are Patient, Problem, PMHx, Plan, and Precautions, with specifics including emphasis of ill patients, general course, active problems, new events, exam findings, tasks with rationale, and contingency planning with rationale. 3-Way communication includes reviewing concerns by the outgoing provider and the opportunity for questions from the incoming provider. Videos of actual patient handovers in June through August 2012 were analyzed using this tool. RESULTS: In 105 assessments, average item completion ranged from 99 to 1%. Categories with the highest rates of completion were patient identification (99%), meds/allergies (87%), details of course (86%), review of diagnoses (85%), and listing of tasks (70%). Categories with the lowest

rates of completion were rationale for contingencies (1%), outgoing trainee requests review (3%), rationale for tasks (4%), and list of contingencies (19%). 56% of all interns rated themselves in the middle milestone scale: 54% of these agreed or strongly agreed that they understood the 5Ps, but 36% felt they were effective in providing a handover. 29% of all interns rated themselves at the 2nd stage: 27% of these interns agreed or strongly agreed that they understood the 5P's, but 7% of this same group felt they were effective. **CONCLUSIONS:** This is a descriptive study characterizing observed handover communication behaviors and ratings of self-assessment and self-effectiveness by new interns who had received a single dose of handover education. These results will inform future targeted education and feedback.

A36) INITIAL EVALUATION OF A LONGITUDINAL EVIDENCE-BASED MEDICINE CURRICULUM FOR PEDIATRIC RESIDENTS

Rachel Boykan, MD, Maribeth Chitkara, MD, Catherine Messina,, Stony Brook Long Island Children's Hospital, Stony Brook, NY

Background: Evidence-based medicine (EBM) has traditionally been taught in the context of journal club. Research suggests that teaching EBM in an integrated and longitudinal format may improve practical application. In 7/ 2010, we initiated a 3-year curriculum with a redeveloped series on critical appraisal, and introduced the use of a Critically Appraised Topic (CAT) presentation in place of journal club. In the first year, interns complete six small-group sessions (PICO question formation, searching, and critical appraisal), with independent practice. In the second year, residents present a critically appraised topic (CAT). During the last year of the curriculum, senior residents precept year-one sessions and CAT presentations. For this study, we present data on the first two cohorts completing the first year of the curriculum. Methods: All pediatric residents were eligible for inclusion. Prior to the study and at completion of the first year, each participant completed an EBM review quiz containing 13 matching, 5 true/false and 4 short-answer questions. For Cohort 1, results were compared to a control group of residents who had not participated in the curriculum. Results: Cohort 1: The participant group (n=9) scored higher overall (p= 0.15) compared to controls (n=8). Participant scores were significantly higher than control scores on the short-answer questions (mean = 3.8 +/- 0.4 vs. 3.2 +/- 0.5, p=0.03). Cohort 2: Participant scores (n=12) showed improvement from 10.4 (pre-) to 13.3 (post-), p=0.01. Mean matching questions scores showed significant improvement from 6.9 to 9.1, p=0.02. The true/false and short answer questions improved from 3.8 to 4.5, p=0.09. Conclusions: Data from a second cohort of residents completing the curriculum's first year show improvement similar to that seen in the pilot and first cohort, reinforcing our prior conclusions that teaching EBM in a small group and integrated fashion may improve knowledge of EBM and its clinical application. Further data collection will continue to inform this curriculum's success.

A37) RETHINK JOURNAL CLUB: YEAR TWO OF AN EBM CURRICULUM FOR PEDIATRIC RESIDENTS

Maribeth Chitkara, MD, Rachel Boykan, MD, Catherine Messina, PhD, Stony Brook Long Island Children's Hospital, Stony Brook, NY

Evidence-based medicine (EBM) has traditionally been taught in the context of journal club. Research suggests that teaching EBM in an integrated format may improve practical application. In 7/2010, we initiated a 3-year curriculum with a redeveloped series on critical appraisal and use of a Critically Appraised Topic (CAT) presentation in place of journal club. For this study, we present data from the second year of the curriculum. Curriculum Design: Pediatric residents prepared CAT presentations on a clinical question of their choice. Each conducted a literature search to identify 4-5 relevant articles with guidance from EBM faculty and a medical librarian. Residents presented their appraisal of the literature, formulated a clinical bottom line and made recommendations for practice. Presenters also prepared a summary abstract for publication in an online CAT bank. Study Methods: CAT session attendees evaluated the presentations with a survey using a scale of 1 (strongly agree) to 5 (strongly disagree). Presenters also completed a self-reflection to assess their confidence with EBM principles. Faculty attitudes were surveyed before and after the implementation of the CAT format, using a scale of 1 (never) to 5 (all the time). Results: Six CAT sessions were evaluated by 12-23 attendees per session. Attendees (n= 91) all agreed or strongly agreed that sessions were well presented and relevant (ave score=1.43, SD 0.12-0.28). Comments included "very organized", "informative", and "interesting." Presenters felt the sessions were worthwhile and their practice of medicine would change as a result (ave score=2, SD 0.6-1.6). Faculty felt that residents selected more relevant articles (3.5 v. 4.3, p=0.01), and were better able to critically appraise the literature (3.3 vs 4, p=0.02). Conclusions: Results from the first cohort completing Year Two of an EBM curriculum reinforce the improvement seen in the first two cohorts from Year One (presented separately). These data suggest that teaching EBM in an integrated fashion may improve its use in clinical practice. Further evaluation will inform this curriculum's success.

A38) REQUIRED LEVEL-SPECIFIC SIMULATION TRAINING: IS IT FEASIBLE?

Shannon E. Scott-Vernaglia, M.D., Lindsay P. Carter, M.D., Garrett C. Zella, M.D., Ariel S. Frey-Vogel, M.D., M.A.T., MassGeneral Hospital for Children, Boston, MA

The ACGME has tasked residencies to move beyond exposing trainees to educational opportunities and provide structured teaching and assessment of competency in areas essential to independent practice. Residents must be directly observed and taught as they develop the knowledge, skills, and attitudes expected of independently practicing physicians. While residents are observed in a variety of settings, the actual cases observed are variable. Standardized simulation is a means for priming residents to absorb immediate, relevant, critical teaching. Because typical mock codes are team-based, trainees who are quieter/more junior may opt to be less involved. This feasibility project aimed to standardize the teaching and assessment of residents' competency through level-specific, longitudinal simulations. Methods: For the 2011-2012 academic year, core faculty

developed 6 cases around the assessment and management of important pediatric illness presentations. Topics were chosen by consensus to be relevant to the day-to-day work of PGY-1 residents, but also essential to ultimately being considered competent for independent practice. Cases were tested with residents having just completed the PGY-1 year. All 15 PGY-1's were scheduled for directly observed performance in the standardized simulations over the year. A pair of interns working through 2 cases allowed faculty to focus on individuals' skills, rather than on functioning as part of a team. Teaching built on their experience in the cases. Results: We ran 93% of scheduled cases. On an annual survey, 87% of PGY-1 residents responded to a question about the value of 19 different teaching/learning opportunities. Longitudinal simulation ranked 2nd, with 82% rating it 4 or 5 on a 5-point Likert scale. Faculty reported feeling more able to assess strengths and areas for improvement. All agreed to continue participating. Conclusions: It is feasible to develop a program that provides standardized teaching through faculty-led simulation. Longitudinal, standardized simulation is a tool to consider as programs move toward teaching, and ultimately assessing, core competencies.

A39) "SKYPE ROUNDS:" A NIGHT CURRICULUM FOR PEDIATRIC RESIDENTS

Ariel S. Frey-Vogel, MD, MAT; Garrett Zella, MD, Shannon E. Scott-Vernaglia, MD, MassGeneral Hospital for Children, Boston, MA

Background: The 2011 ACGME work hour requirements have led to a system of day and night teams while requiring that night teams have a curriculum. Many hospitals, however, do not have in-house faculty for teaching at night. We created an innovative nighttime curriculum through the use of "Skype Rounds" (SR). Methods: Our night team consisted of 1 junior resident and 2 interns who worked together over 2 sets of 5 consecutive nights per 2-week rotation. Using Skype, the residency program leaders each called the night team one evening per week to conduct SR. Two nights per week, the team presented a clinical case of interest. One night per week, the team discussed conducting a quality improvement (QI) project. The team reviewed the elements of a QI cycle, chose a systems issue that would benefit from a QI intervention, collected background data, created a proposal for a QI cycle, and presented their work to the residency program. Residents were surveyed on their satisfaction with SR as an educational tool. Results: SR allowed the residents to present clinical cases to program directors, giving the team dedicated faculty teaching and the faculty access to residents' clinical reasoning. SR also allowed the residents to think through how to apply the QI cycle. Examples of QI issues the residents targeted include acetaminophen standardized dosing problems and missed home medications in the emergency department. Residents were asked how valuable SR were for their education on a Likert scale of 1-7 with 7 being the highest. More than 60% of responding residents rated SR from 5-7 for the following measures: granting access to an (associate) program director at night (95%), creating an educational opportunity at night (91%), increasing their understanding of QI projects (73%), helping them think through a clinical case (68%), and increasing their ability to complete QI projects (64%). Seventy-three percent of residents rated SR from 5-7 for overall value. Conclusions: SR successfully created a venue for faculty mentored educational activities at night and provided program leadership an opportunity to evaluate resident thought processes.

A40) A TEMPLATE FOR DEVELOPING INDIVIDUALIZED CURRICULA

Kelly Wu, MD, Laura Koenigs, MD, Baystate Medical Center, Springfield, MA

As per the Common Program Requirement in Pediatrics, residents must have a "minimum of six educational units of an individualized curriculum. The individualized curriculum must be determined by the learning needs and career plans of the resident and must be developed through the guidance of a faculty mentor." In an effort to formally integrate these new requirements into our existing curriculum, we developed a career and learner-specific Individualized Curriculum Guide (ICG) with input from faculty leaders. The goal of the ICG is to assist residents in learning more about a given career pathway, identifying a mentor, and constructing an individualized curriculum specific to their career choice and learning objectives. To facilitate development of ICGs for all fields within pediatrics, we devised a generic template to be used by faculty for constructing ICGs for specific career pathways. The ICG template calls for 1) a description of the specialty, 2) a list of recommended rotations, 3) available day-to-day learning opportunities, 4) formal courses that would enhance resident experiences, 5) a list of relevant conferences and organizations and 6) contact information for physicians/mentors. The template is supplemented by a sample ICG for palliative care provided to faculty for reference purposes. The Palliative Care ICG includes experiences such as rotating with the genetics team, working with hospice nurses, participating in ethics committee meetings and taking an online course in cultural awareness. A unique aspect of this approach to individualized curricula is the emphasis on complementary learning outside of the usual training program: classes at a local college, experience in associated fields, longitudinal involvement with patient support groups, working with other departments within the hospital, etc. At the same time, each resident's specific learning needs are highlighted so as to provide high impact, tailored educational experiences. With the use of this framework for individualized curriculum development we expect richer advising, better understanding of particular career paths, and better preparation for a resident's next career step.

A41) MEDICAL EDUCATION AS AN ELECTIVE ROTATION AND SCHOLARLY CONCENTRATION FOR PEDIATRIC RESIDENTS

Janene H. Fuerch, M.D., Veena V. Goel, M.D., Ian Chua, M.D., Elizabeth Mannino-Avila, M.D., Catharyn Turner, M.D., Chad McCarthy, M.D., Pearl Chang, M.D., Elizabeth Stuart, M.D., MSED., Lucile Packard Children's Hospital at Stanford, Rebecca Blankenburg, MD, MPH, Lucile Packard Children's Hospital, Palo Alto, CA

Background: There is a growing number of clinician-educator faculty at academic medical centers. While many residency programs provide teaching opportunities, trainees interested in medical education need to develop additional abilities

(e.g. curriculum development, educational scholarship) to advance as future clinician-educators, but few formal curricula exist. **Design/Methods:** A medical education rotation was created as a core component of a medical education scholarly concentration, part of a broader goal to promote scholarship among pediatric residents at our institution. The rotation was led by our pediatric clerkship and residency program directors. Participants were 7 second and third year residents. The first week focused on principles of curriculum design (performing a needs assessment, creating educational objectives, choosing educational strategies, evaluating learner performance). On the first day, residents chose an educational topic to which they could apply these concepts during the course. The second week focused on scholarship in medical education (types of scholarship, scholarly projects, educator portfolios). Daily lunchtime talks by clinician-educators were incorporated to educate residents about careers in academia. We assessed the rotation's effectiveness with a questionnaire that reported changes in knowledge, confidence (paired t-tests), and overall utility of the curriculum (qualitative comments). **Results:** Significant improvements in residents' confidence in all objectives ($p < 0.05$) and knowledge about curriculum and educational scholarship (mean 1.1/4 pre, 4/4 post; $p < 0.05$). Residents reported that the rotation fostered peer mentorship and helped them develop their own projects and future career paths. **Conclusion:** Our medical education rotation effectively taught residents the fundamentals of curriculum development and empowered them to initiate scholarly projects that are now in process. Future plans include monthly meetings for longitudinal follow-up and mentorship, and development of an advanced 2-week elective with a focus on scholarship in medical education.

A42) EMPOWERING OUR RESIDENTS TO TEACH THROUGH A NEW CURRICULUM

Audrey S. Dickan, MD, Vasudha L. Bhavaraju, MD, Phoenix Children's Hospital/Maricopa Medical Center, Phoenix, AZ

Background: Residents are often asked to teach students, residents, patients, and families. This occurs from the bedside to Grand Rounds. Yet, many residents feel hesitant to teach. In a needs-assessment survey, only half of our PL1s and PL2s felt comfortable teaching ($N=32$). While 97% felt that curriculum on teaching is a valuable component of a residency program, only 12.5% had any training in medical school on teaching. Residents identified topics for a Residents as Teachers (RAT) curriculum and strong teaching faculty to present them. **Methods:** Using survey information, a RAT curriculum was developed by our curriculum committee during the 2011-12 academic year, which included 4 interactive, residency-wide conferences: Teaching Patients and Families in The Hospital and Clinic Settings, Teaching Residents and Students in the Hospital and Clinic Settings, Different Teaching Techniques: The 5 Minute Blurb, Senior Morning Report, The Formal Conference, and The Problem Learning Encounter: Engaging the Difficult Learner. Other topics were addressed in bi-monthly individual class sessions, such as Integrating Medical Students for PL-1s, Leading Family Centered Rounds for PL-2s, and Understanding Learning Styles for PL-3s. **Results/Conclusion:** After each conference, residents were asked to complete an evaluation. Overwhelmingly, the feedback was positive and attendance was high. All PL-2 residents surveyed after the first 3 conferences ($N=15$) found them to be valuable, especially teaching to different levels of learners in a variety of settings. Residents gave suggestions on future RAT topics, such as adult learning theory and capturing teachable moments. We are shaping these sessions into a 2 year rolling curriculum to ensure each resident can attend each during their 3 years. We plan to conduct a follow up survey of residents at the end of this academic year to assess whether they continue to find this type of instruction beneficial and valuable to their training.

A43) MORBIDITY AND MORTALITY CONFERENCES: AN OPPORTUNITY FOR CHANGE

Lauren Destino, MD, Stanford University, Palo Alto, CA, Shilpa J. Patel, MD, University of Hawaii, Honolulu, HI

Morbidity and Mortality Conferences: An Opportunity for Change. Lauren Destino, MD; Madelyn Kahana, MD; Shilpa Patel, MD
BACKGROUND: Little has been published regarding the use of Morbidity and Mortality Conferences (MMCs) in Pediatrics. MMCs have recently been utilized in other fields as a forum to address quality improvement and patient safety (QI/PS) issues, diverging from the traditional view of an MMC where the focus was on individual fallibility and medical decision-making. **OBJECTIVES:** To implement a MMC for pediatric residents in a large academic childrens hospital that focuses heavily on a systems-based practice (SBP), practice-based learning (PBL). Changes in attitudes surrounding MMCs and medical errors before and after conference attendance were measured. **METHODS:** General pediatric residents prepared and presented a newly established MMC as part of a rotation in QI/PS starting in 2/2010. The residents used the Johns Hopkins Learning by Defects Tool to systematically explore the cases. Following the MMC, action items generated by the residents were explored and acted upon. A pre- and post-implementation attitudes survey was performed with each MMC and one year apart. **RESULTS:** Discussions during the MMC were focused on a systems-based approach and led to multiple action items. In addition, several attitudes regarding MMC and errors improved with statistical significance. Residents viewed the conference as valuable, felt they better understood the factors contributing to QI/PS, and felt they had a role to play in QI/PS at the hospital. **DISCUSSION:** MMCs provide a unique opportunity in residency to not only provide education on and engagement in QI/PS, but also expose residents to real-time SBP and PBL. The MMC allows faculty to assess the resident competencies of patient care and medical knowledge, interpersonal and communication skills, and SBP and PBL. A resident-run MMC can also lead to changes in care delivery that have the potential to ultimately improve patient outcomes as well as give residents the exposure they need for lifelong involvement in patient safety activities.

A44) A MULTIPHASIC PEDIATRIC BOARD REVIEW CURRICULUM: YEAR THREE OF A QI PROJECT

M. Jawad Javed, MD, Univeristy of Illinois College of Medicine--Peoria, Elizabeth Kramer, MD, Huaping Wang, PhD, University of Illinois College of Medicine, Peoria, Peoria, IL

Background: All pediatric residents participate in the general pediatric In-Training Examination (ITE), a self-assessment instrument used to aid in predicting a residents' ability to pass the General Pediatric Certifying Examination. Prior to the implementation of a board review QI curriculum, our pediatric residents have historically scored consistently below the national average. Aim Statement: A multiphasic comprehensive board review curriculum will significantly increase resident ITE scores. Methodology: Phase I (2009): Residents build their foundational knowledge base over an 18 month curriculum with Nelson Essentials of Pediatrics and assessing this knowledge with multiple choice questions. Correlating questions for each section are taken from PREP® The Curriculum and reviewed with residents during noon conference. Utilizing Turning Point® Audience Response System, residents answer questions and receives feedback on their performance in comparison to their peers. Phase II (2010): Residents scoring below the mean average on the ITE were given individualized learning plans to direct their study. Phase III (2011): Quarterly mock-examination assessments for all pediatric residents. Results: After the multiphasic implementation of the curriculum in the first year, mean resident ITE scores of all pediatric residents increased by nearly 78 points per resident. In 2010, individualized study plans did not alter the resident mean score from the previous year. In 2011, quarterly mock examinations were started and scores drastically improved by over 150 points per resident. Comparing the difference after Phase II and the difference after Phase III, the P value=0.073. Although a significant difference is not clearly seen in this data, this may be secondary to the small number of residents included in this data. Conclusion: Although a statistically significant improvement was not seen, the board review curriculum has shown a dramatic improvement in pediatric resident ITE performance. We hope to continue to see this trend in resident ITE performance and ultimately translation into the General Pediatric Certifying Examination.

A45) EVALUATION OF RESIDENT HANDOFFS

Suresh Nagappan, MD, Cone Health/University of North Carolina, Greensboro, NC, Kaye Gable, MD, UNC Department of Pediatrics, Greensboro, North Carolina

Accurate and effective handoffs between physicians are of paramount importance in ensuring safe, quality care for patients. Changes in resident duty hours have increased the number of transitions of care. The ACGME has established requirements for teaching transitions of care to residents. Therefore, ensuring that residents are proficient in patient handoffs is an integral part of their educational experience. A multi-center group is currently working on I-PASS, a structured mnemonic for resident handoffs (Starmer 2012): I Illness severity P Patient summary A Action list S Situation awareness/contingency planning S Synthesis by receiver Using this structure, we created a competency-based assessment tool that evaluates residents' ability to organize and prioritize patient care issues, demonstrate relevant clinical knowledge, and show professionalism in the transfer of patient care to colleagues. This tool will allow faculty to assess 8 of the ACGME pediatric milestones. Objective: In pediatric first year residents, does an ongoing interactive educational intervention result in improved quality of patient handoffs? Methods: Residents were evaluated during the evening handoff between daytime and overnight resident. The evaluation tool was a 5-question form using a 4-point likert scale. Pre-intervention: Between April and June 2012, supervising attendings evaluated the quality of resident handoffs, including prioritization, inclusion of contingency plans, and understanding by the receiver. Intervention: During resident orientation in June 2012, residents participated in an intensive workshop with role play and an introduction to the I-PASS format. At the start of each rotation, residents view 2 video clips of simulated handoffs, then rate them and discuss missing elements with faculty. Plans for further study: Each resident will be evaluated by the supervising attending twice during their rotation using the assessment tool. At the end of the rotation, each resident will anonymously evaluate any resident that he or she received handoffs from using a secure online survey. After 12 months of data collection, the pre and post intervention data will be compared.

Sign Out Intern: _____		Month/Year Rotation: _____			
		4	3	2	1
I	First patient presented	Sickest patient presented first	Complicated patient presented first but not sickest	Intern presented most recent admission first	Intern presented in order of room number
P	Patient summary	Patient summary was complete and concise with all elements	Patient summary contained all elements but was not concise and orderly	Patient chief complaint and hospital course presented	Patient summary not provided
A	Action List	All active problems discussed with specific to do list and time line for completion	Most problems communicated with some to do tasks delineated	To do tasks identified for some patients but no time lines for completion communicated	To do lists not identified
S	Situational awareness and contingency planning	All patient problems had a contingency plan identified	Most problems had contingency plans identified	Intern provided contingency plans when prompted by receiving intern	No contingency plans identified
		4	3	2	1
S	Synthesis by receiver	Receiver gave a clear summary of patient handoff/asks appropriate questions and repeated to do items	Receiver summarized to do items and	No summary provided and no questions asked	

- **A46) AN INNOVATIVE APPROACH TO RESIDENCY EDUCATION IN HEALTH CARE TRANSITIONS**
- *Janet S. Hess, MPH, Diane M. Straub, MD, MPH, Cristina Pelaez, MD, University of South Florida, Tampa, Florida*
- Evidence suggests that residents in pediatric primary care residency programs lack sufficient training in health care transitions (HCT) for adolescents and young adults (A/YA). HCT planning in clinical practice, when present at all, is often incomplete or late. In 2011, the AAP/AAFP/ACA published a Clinical Report in Pediatrics that provides explicit guidance for practice-based HCT preparation, planning and implementation among A/YA with and without special health care needs. While GME is identified in the report as an important area of need, there are currently few models for HCT resident education, and, to our knowledge, none that encompass the new guidelines. Our medical school subsequently introduced an innovative educational intervention for a combined Pediatrics and Med Peds residency program that incorporates activities and principles outlined in the Clinical Report. The multi-level intervention uses a theoretical framework to integrate adult learning and behavior change concepts with clinical quality improvement goals. This study describes program development and integration into resident training, as well as specific elements of the module. A core component is utilizing EMR and other information technology as experiential learning tools, an approach that reduces the need for time-intensive didactic instruction. The EMR prompts residents to engage patients in age-appropriate HCT discussions and activities at every well child visit for A/YA ages 12-21, and includes items that are relevant to A/YA with special health care needs. Training is supported with web-based resources from our state HCT program office and the National Health Care Transition Center. The authors will share results from an assessment of change in HCT knowledge, attitudes and practice among residents as a result of the intervention, demonstrated through EMR chart reviews and a 14-item pre/post test with controls (post-test to be administered in early 2013, 6 months after program launch). Authors will also discuss program challenges, next steps, and suggestions for replication in other residency programs.
- **A47) DESIGNING AN OBJECTIVE MMI TOOL FOR NEW RESIDENT INTERVIEWS**
- *Kami Larsen, MD, Betsy Huang, MD, University of Nevada School of Medicine, Las Vegas, NV*
- Introduction: Interviewing for new residents is a time consuming and often very subjective process which does not always lead to the most professional and qualified pediatric residents. Because faculty are not standardized in their interviewing styles we chose to alter our current interview process by designing individual questions that could then be scored on a standardized rubric to compare applicants in the most objective means possible. Our goal was to use this data to then rank candidates in the match process. Methods: Six individual case questions were written, focusing on areas of professionalism, confidentiality, systems based practice, honesty, patient care and communication. Each question was then divided into parts and a standardized scoring rubric was created for each case. Applicants gained points by hitting on important points and lost points for answering with negative or improper answers. Faculty interviewers were trained in both the concept of MMI as well as on using the rubric for scoring of their individual case. Each applicant completed 5 mini interviews during their interview day. Each faculty member interviewed with the same case for the entire interview season and scores were calculated to be used as an objective measure for ranking. Results: Weighted MMI scores were calculated for all applicants, with the highest score being 90.3 % and the lowest score being 25.8%. Despite the hopes of using this to objectively rank candidates, some candidates with higher scores were ranked lower than candidates with low scores and vice versa. It appears upon reviewing the data, the only helpful tool was in deciding which candidates not to rank, as many of the candidates scoring below a 40% have been placed on our Do Not Rank list. Discussion: Despite our best intentions to make the ranking process as objective as possible, subjective data are still being used during the ranking process.
- **A48) INDIVIDUALIZED RESIDENT EDUCATION: RESIDENT ATTITUDES AND DESCRIPTION OF A TRACK CURRICULUM**
- *Ryan S. Bode, MD, Andrea Ramirez, MD, MEd, Erin Kuroiwa, MHI, Daxa Clarke, MD, Sara Bode, MD, Brad Pasternak, MD, Dana Ursea, MD, Grace Caputo, MD, MPH, Phoenix Children's Hospital, Phoenix, Arizona*
- Residency training needs to be individualized and future career-driven. This is highlighted in the revised ACGME pediatric requirements calling for a "minimum of six educational units of individualized curriculum". Little is known about residents' attitudes regarding individualized education and the impact of its availability on the selection of a residency program and future career. An anonymous on-line survey regarding the importance of individualized education was administered to residents of a large program. 112 residents completed the survey over 2 years. 91% answered that a flexible and individualized curriculum was important in the selection of a residency program. 73% felt the need for more individualized education within current curricula. 88% indicated that the availability of a second continuity clinic which could be tailored to their career interest was important in choosing a program. 60% considered the availability of resident tracks when choosing a program. Regarding the established customized second continuity clinic within our program, 98% felt the experience better prepared them for their career. 88% felt that it would make them a more competitive candidate entering fellowship or practice. In addition to our second continuity clinic, we developed 4 tracks: Hospitalist, Ambulatory, Gastroenterology and Cardiology. Each PGY3 track consists of 3 months and includes a menu of selective rotational offerings and a requirement for a quality improvement project. 75% (41/55) of PGY3s have chosen a track. Survey and outcome data, including American Board of Pediatrics Certifying Exam score and first time pass rate and tracking of scholarly activity, are being collected. Residents clearly expressed the desire for increased flexibility in training and the importance of individualized education on the selection of a residency program and career preparation. The description of a "track" curriculum is an adaptable model of individualized education. Other models including outcome data need to be explored and shared.
-
-
-

A49) USING EDUCATION IN QUALITY IMPROVEMENT FOR PEDIATRIC PRACTICE (EQIPP) IN THE CONTINUITY CLINIC SETTING

Teresa K. Duryea, MD, Teri L. Turner, MD, MPH, MEd, Baylor College of Medicine, Houston, TX

Background: Accredited residency programs must ensure that residents systematically analyze practice using quality improvement (QI) methods. Education in Quality Improvement for Pediatric Practice (EQIPP) modules help practicing physicians learn QI basics. This study evaluated collaborative learning among residents and faculty while meeting their QI requirements concurrently by completing a group QI project. Objectives: To measure patient outcomes and provider QI skills. Methods: "EQIPP: Diagnosing and Managing Asthma in Pediatrics" was implemented in all pediatric residents' continuity clinics in 2010-2011. It is based on the Plan, Do, Study, Act (PDSA) Model for Improvement. A combination of group, self-directed, and team learning was used. Knowledge, attitudes, and confidence using QI methods were surveyed at baseline and completion. Results: Twenty-six faculty and 80 residents began the EQIPP program. The majority completed QI Basics. Of those who began, 65% of faculty completed the full program to fulfill MOC requirements. Clinical practice of site specific aims improved in all locations. Almost all (95%) understood the components of QI after completion, and confidence in one's ability to develop a clear aim statement improved. Although those who were not at all confident in collecting and gathering data decreased over time, only 10-15% reported feeling very confident with these activities in the end. Many did not have time to complete a project. Conclusions: We used EQIPP as an educational tool for residents with faculty supervision. While the majority of faculty in need of MOC successfully completed the program, it was difficult to engage others. The residents in hospital-based clinics were more likely to complete parts of the program. No residents were able to enter all data required. Measures of clinical practice improved greatly, and fundamental knowledge was gained; however, more practice is needed to improve self-efficacy. Dedicated time and physician buy-in are critical to the success of future programs.

A50) RECORDED RESIDENT TEACHING ENCOUNTERS AS A TOOL FOR RESIDENT AS TEACHER EVALUATION AND FEEDBACK

Jonathan Hron, MD, Amanda Growdon, MD, Vincent Chiang, MD, Boston Children's Hospital, Boston, MA

Background: Increasing emphasis is being placed on Resident as Teacher curricula. Most of these programs focus on basic teaching principles through didactic lectures and role-play, but few provide direct feedback on actual teaching encounters. Through faculty review of recorded resident teaching encounters, we sought to provide residents with direct feedback on their teaching skills. Methods: To evaluate resident teaching skills we modified a previously validated Clinical Teaching Effectiveness Evaluation from the Stanford Faculty Development Program. The modified evaluation consisted of 15 questions scored on a 5-point Likert scale. We recorded resident teaching encounters during case-based presentations. Experienced faculty then reviewed the recordings, scored the presenter using the modified evaluation tool and provided direct feedback. At the end, the residents were given a DVD copy of their teaching encounter. Results: To date we have recorded 22 resident teaching encounters. Eight of these encounters have been scored with an average score of 55.1 +/- 7.94 out of a possible 75 points. Participants scored highest on questions that assessed ability to create a positive learning climate (mean 4.46 +/- 0.19) and ability to promote understanding of the material (4.03 +/- 0.24). The lowest scores were on questions that assessed communication of goals (2.69 +/- 0.27) and maintaining control of the teaching session (3.13 +/- 0.62). In general, residents were uneasy about being recorded at first, but in the end found it to be a useful tool for receiving feedback on their teaching skills. Conclusions: We were able to record resident teaching encounters and provide direct feedback by experienced faculty with a modified teaching tool. Using this tool we identified possible areas of strength and weakness in resident teaching skills based on previously established domains of teaching. The biggest obstacle to feedback from the faculty to the residents was scheduling. Future directions include integration of the feedback program into residency curriculum and validation of the evaluation tool.

A51) OUR PATIENT SAFETY AND QI CURRICULUM AND ITS IMPACT ON OUR HOSPITALS JOURNEY TOWARDS A CULTURE OF SAFETY

Andrew R. Buchert, MD, Dena Hofkosh, MD, Children's Hospital of Pittsburgh of UPMC/University, Pittsburgh, PA

We recently implemented a curriculum designed to teach our residents about the principles of QI and patient safety and get them started on active and meaningful participation in QI projects and safety initiatives within our organization. As the front-line of patient care, residents are in an ideal position to identify shortcomings in the systems of care, including work-arounds, flawed processes and work-flow patterns, and errors and near-misses. We sought to develop a curriculum that would teach young physicians how to recognize and identify these shortcomings in the systems of care, as well as ways to improve them. Our goals are twofold: education of our trainees through active involvement in quality and safety within our organization, and development of our trainees into safety and quality champions who lead a culture change within our organization. Our curriculum includes small group discussions about the principles and tools of quality improvement, including root cause analysis, flow charting, and the PDSA cycle. There are also small group discussions on near-misses, error reporting, and the culture of patient safety. Ultimately, our residents at all levels of training are engaged in hands-on experience using these tools of QI to effect change, and they are empowered to recognize, report, and reduce medical errors. We implemented our curriculum in July 2010, and the following year we saw an increase in the number of error reports filed by pediatric housestaff at our institution (15 up from only 4 the previous year, a 275% increase), a trend that has continued so far this year and that we believe is a measure of success of our curriculum. Our curriculum has had positive effects on our trainees' knowledge, skills, and attitudes towards safety and quality, and it has also contributed in a positive way to our organization's journey towards a culture of safety. We believe that our curriculum is sustainable and replicable within other training programs. We will present the specifics of our curriculum as well as an evaluation of its impact on our residents and our organization.

- **A52) IMPROVING LEARNER COMPETENCE IN PRENATAL CONSULTATION**

- *Susan Izatt, MD, Duke University, Durham, NC*

- Excellent communication skills are vital to the delivery of quality care in the intensive care unit. Neonatal fellowship training has historically focused on medical knowledge and clinical care, with a limited emphasis on communication and interpersonal skills. These competencies are essential to support family-centered care, leading to improved patient care and family satisfaction. A novel curriculum was designed incorporating multiple teaching strategies to improve fellow competence in communication with families which centered on prenatal consultation. Prior to the implementation of the curriculum, limited guidance was provided on prenatal consultation within our institution. Formal preassessment of the neonatal fellows revealed mixed individual satisfaction with the prenatal consultations being provided and uncertainty about their consistency. Informal discussions revealed many qualms centering on consultation at the edge of viability, topics important to address within the prenatal consultations, and prenatal palliative care discussions. Modeling of prenatal consultation by experts was highly desired but lacking. Assessment of fellow competence by faculty during prenatal consultation was limited. The curriculum was designed to include bi-monthly small group sessions focusing on discussion of existing literature relevant to prenatal consultation, reflection on consultation experiences, and role play. An algorithm for the management of the neonate at the edge of viability was developed to provide a consistent approach to care. Faculty members modeled prenatal discussions at the bedside, with extension to prenatal palliative care consultation. Laminated index cards including national and institutional outcomes by gestation were given to the fellows to serve as a reference source. Direct observation and audio taping of prenatal consultations was initiated. Fellow satisfaction and comfort with prenatal consultation has improved after implementation of the curriculum. Preliminary assessment suggests an increase in fellow competence as demonstrated by improved consistency and approach to consultation.

- **A53) A NOVEL ONLINE MULTIMEDIA ROTATION ORIENTATION FOR PEDIATRIC RESIDENTS IN THE EMERGENCY DEPARTMENT**

- *Brad Sobolewski, MD, Javier Gonzalez del Rey, MD, Benjamin Kerrey, MD, Gary Geis, MD, Matthew Mittiga, MD, Corinne Bria, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH*

- The ACGME mandates that pediatric residents receive a structured orientation prior to each rotation that reviews goals, objectives and training level specific responsibilities. The purpose of our study is to evaluate the impact of a novel multimedia online orientation to the Emergency Department (ED) rotation for the pediatric residents at our institution. Our pediatric residents were previously oriented to the ED rotation via brief sessions prior to each academic year, a rotation website, and a succinct pre-rotation email from a chief resident. We were unable to assess how many residents read these emails nor visited the website. Residents were required to attend the yearly orientation sessions, but many would not rotate in the ED until several months later. After conducting a survey based needs assessment on prior ED orientation practices we developed a new orientation process, which consists of a three-part online multimedia package which residents are expected to view prior to beginning the rotation. Residents receive email reminders and instructions 7 days and 48 hours prior to their first shift. The website (pemcincinnati.com/orientation) includes a video introduction to the ED, Pediatric Milestones Competency based expectations and evaluation criteria pertinent to the ED clinical environment, and an orientation to the resuscitation area of our ED, with a specific focus on the resident role in performing the rapid cardiopulmonary assessment. The website includes a direct email link to enable residents to report to the rotation coordinator that they have accessed the orientation. We are assessing the impact of intervention via a prospective quasi-experimental study consisting of a mix of pretest-posttest and posttest only designs. We hypothesize that our intervention will serve as a successful orientation to the ED as measured by compliance in accessing the site, retention of relevant concepts germane to the orientation assessed by face-to-face surveys, and an increase in the proportion of residents performing a complete rapid cardiopulmonary assessment in the resuscitation area of the ED.

- **A54) A STRUCTURED CURRICULUM SIGNIFICANTLY ENHANCES RESIDENT PROCEDURE PERFORMANCE IN PEDIATRICS**

- *Candice M. Burns, MD, Kimberly A. Boland, MD, Keith P. Cross, MD, MSc, Aaron W. Calhoun, MD, University of Louisville, Louisville, KY*

- Background: Duty hour limitations and the use of intravenous line and procedural sedation teams to enhance patient safety and satisfaction have decreased resident time and opportunity for procedural experience and subsequent proficiency. We sought to fill this gap with a curriculum designed to enhance residents' knowledge base, experience, and confidence in pediatric procedures. Methods: A multidisciplinary team developed a 2 week procedure rotation consisting of simulation based didactics and dedicated time for patient encounters. Three training days at the beginning of each rotation introduced 26 pediatric procedures using videos, demonstrations, and hands-on simulation. Residents then spent the remainder of the rotation in 10 hour hospital shifts performing procedures with the IV, procedural sedation, ED, PICU and NICU teams. Pre and post rotation surveys on procedural experience and confidence, including a 20 question knowledge test, evaluated course effectiveness. Results were compared to a control group finishing their second year of residency who did not participate in the new procedure rotation. Results: To date, participants (N=8) averaged 71 procedures during the 2 week rotation, compared with an average of 39 procedures during two full years of residency among controls (N=21). Participants also had higher confidence than controls, 3.3 vs. 2.5 on a five-point scale, and better knowledge, 14.4 vs. 9.3 correct out of 20 questions (both $P < 0.005$ by Mann-Whitney). Compared to their own individual pre-rotation scores, participants showed improved knowledge (9.8 vs. 14.4 correct responses) and confidence (2.0 vs. 3.3), both with $P < 0.001$ by Wilcoxon. Conclusions: This curriculum was

developed to enhance the procedural skill set of the pediatric resident. Interns with a few months experience demonstrated procedure counts, knowledge, and confidence greater than rising third year residents on a wide range of important pediatric procedures as a result of this structured mandatory curriculum.

A55) USING FACETIME IN TEAM BASED LEARNING FOR BOARD PREPARATION

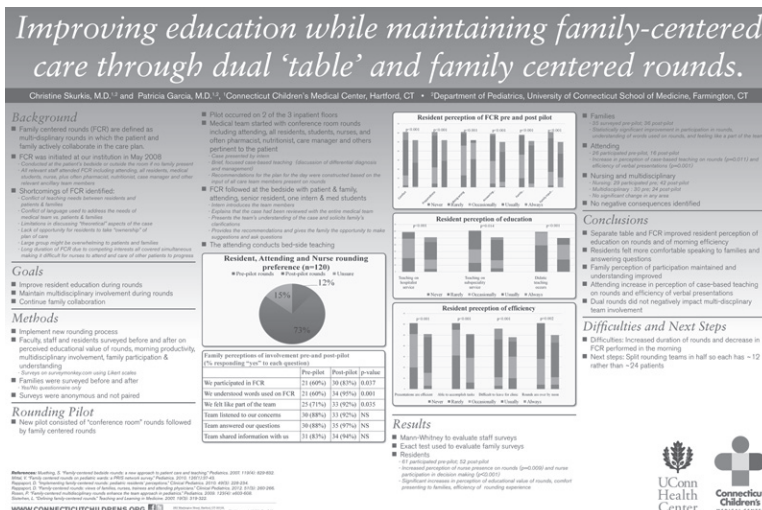
Judith L. Rowen, MD, Sharon H. Sanchez, MD, Amber R. Hairfield, MD, Univ of TX Medical Branch, Galveston, TX

Several approaches were tried to prepare our trainees for specialty certification examinations with minimal success until 2004 when Team Based Learning was adopted as the format. We recently opened an ambulatory facility 25 miles distant from the main hospital; residents assigned there were less engaged in the board review process. This year we began using iPad tablets and FaceTime communication to link team members at the two sites and have seen a great improvement in enthusiasm and energy during the weekly sessions. Team Based Learning (TBL) is an interactive, small group based instructional strategy which involves repeated iterations of a three step process: preparation, readiness assurance, and participation in content application exercises. Our Board Review meets weekly at noon. Residents prepare by reading a recent issue of Pediatrics in Review. The first week, a 15-question quiz is taken individually and as a team (individual and group readiness assurance tests, IRAT/GRAT). The next week, cases related to the reading material (application activities) are discussed. Residents stay with the same board review team throughout their three years. We purchased 8 iPads, 2 for each team. Each team has one iPad housed at the main hospital and another at the distant clinic. Residents take the IRAT individually, but during the GRAT portion or case discussions, they connect via FaceTime and communicate to come to agreement on their answer choice. Using the iPads instead of videoconferencing allows separate, simultaneous collaborations for each team. The iPad screen (with the distant residents visible) essentially becomes another member of the circle of residents working together. The technology is very easy to use. We have had very few problems occasional dropped calls, and sometimes audible feedback if the iPads are too close together. We also email radiographs and clinical images to the iPads so that the graphics appear in higher resolution than can be viewed on a paper test. This relatively inexpensive and technologically simple solution has improved engagement of residents assigned at a distant site with the educational process.

A56) FAMILY CENTERED ROUNDS AND QUALITY RESIDENT EDUCATION CAN CO-EXIST

Christine M. Skurkis, MD, Patricia Garcia, MD, MPH, UConn, Hartford, CT

Purpose/Objective: There are multiple competing interests during academic inpatient rounds (AIR), including patient care, education, communication with team members & family centered rounds (FCR). Residents, faculty, nurses and patients and families (P&F) identified short falls in our current system of bedside FCR. Education was aimed to the level of the P&F, not meeting resident needs. Rounding structure was redesigned to increase education while maintaining family and staff involvement. **Design/Methods:** The new process was designed using faculty & resident focus groups plus input from RN managers, faculty & ancillary services. Our new system includes table rounds with patient discussion & teaching, attended by residents, physicians, nurses and relevant multidisciplinary staff. After table rounds, the attending, resident and intern bedside round on each patient during which interns lead discussion with the family and incorporate their input. Our evaluation used a subjective survey, multiple Likert Scales surveys and focus groups. Input was obtained from residents, faculty, nurses, ancillary staff, and families. Pre- and post-data was also collected on duration of rounds and time spent teaching. **Results:** Numbers reflect the % of non-P&F team members who reported better or much better (n=70). 79% perceived improved quality of education. Improvements were seen in multi-disciplinary team communication (51%), quality of resident verbal presentations (66%), decreased noise (84%) and improved efficiency of rounds (46%). Overall 70% (n=66) prefer this new rounding process. 72% perceived same or improved communication with P&F. Surveys collected from families showed significant positive difference in their perception of participation in FCR and understanding of words used. **Conclusions/Discussion:** Our new rounding process improved perceptions of the educational value of AIR while maintaining the same level of family involvement. Improvements were also noted in noise reduction, efficiency, nursing involvement, medical team communication, quality of presentations and duration of rounds.



- **A57) PEDIATRICS AND PUBLIC HEALTH: A FRAMEWORK FOR SYSTEMS-BASED COMPETENCY**
- *Alice A. Kuo, MD, PhD, Wendy Slusser, MD, MS, Alma Guerrero, MD, MPH, UCLA, Los Angeles, CA*
- Background: Many child health problems such as obesity, mental health and environmental exposures require a population-based approach. Integrating clinical practice with public health principles allows for multiple levels of intervention including the child, the family and the community. Objective: To develop and evaluate a pediatric residency curriculum intervention using public health as a framework Methods: Over 50 national experts in pediatrics and public health developed a pediatric public health curriculum which is available publicly at <http://www2.aap.org/compeds/cocp/residencycurriculum.html>. During 2010-2011, 6 residency programs piloted the curriculum. Activities included determining goals and objectives for each individual program and ways to incorporate curricular experiences. An evaluation tool was developed that included questions that addressed major child public health issues, in addition to attitudes towards learning about public health and confidence in using public health-related skills. Residents at all 6 pilot sites along with 5 comparison residency programs completed the evaluation tool at the start of the pilot year and at the end of it. Results: 256 pilot and 301 comparison residents completed the pre-pilot survey, and 170 pilot and 235 comparison residents completed the post-pilot survey. Knowledge scores increased for PGY-3s in the pilot sites but did not increase in any year for the comparison sites. Confidence in public health-related skills increased in both pilot and comparison sites for PGY-1s and also increased for PGY-2s and PGY-3s in comparison sites. Attitudes did not change between comparison or pilot sites for any year. Conclusions: Increased attention has been paid to the importance of integrating public health and clinical medicine. Residency training is an important aspect of developing clinicians who know how to use public health skills in addition to their traditional clinical practice. Our curriculum pilot demonstrates that it is possible to incorporate the teaching of public health in residency training to successfully address these skills and principles.
- **A58) DEVELOPING A NOVEL MODEL FOR DECREASING EVENING SIGN-OUT INTERRUPTIONS**
- *Jeremiah Davis, MD, Charlene Wong, MD, Amber May, MD, MPH, Eric Johnson, MD, Katie Greenzang, MD, MEd, Heather McPhillips, MD, MPH, Richard Shugerman, MD, Susan Marshall, MD, Maneesh Batra, MD, MPH, University of Washington/Seattle Children's Hospital, Seattle, WA*
- Background: Handoffs are critical elements in high-quality patient care. The Joint Commission specifies that handoffs occur in a quiet location with few interruptions. This goal is challenging at evening sign-out when admissions from the Emergency Department (ED) are high. Objectives: We undertook a resident-led educational design project to decrease interruptions during evening sign-out while improving the ED admission process. Methods: Residents, chief residents and PDs met for a rapid design workshop and developed two new models for a more efficient and safer evening sign-out. The first was an Extended Coverage (EC) model with paired medical teams alternating sign-out and ED admissions. The second was a Resource Admission Facilitator (RAF) in which an extra senior resident handled admissions during sign-out. Residents were surveyed regarding their experience. Satisfaction and efficiency of sign-out were rated on a 5 point scale. Scores of 4 (somewhat agree) and 5 (strongly agree) were combined. Peer observers also monitored sign-out interruptions and gathered qualitative data through interviews. Results: Each model was trialed for 4 days in September 2012. Satisfaction with sign-out was 67% for EC versus 88% for RAF. Efficiency was rated high by 33% of EC participants versus 50% for RAF. Residents in both trials felt adequately prepared for patient care. None had concerns about patient safety as a result of incomplete sign-out. Peer observers noted a decrease in interruptions for both models compared to usual. Predominate themes from interviews on the EC model included 1) resident frustration with staying late every evening and 2) lack of knowledge for adequate cross-coverage of pages during sign-out. The predominate theme for RAF model participants was satisfaction with the ED admission coverage system. Overall, the RAF model was the preferred model. Conclusion: Increased numbers of handoffs due to shift work has made sign-out a vital safety issue. We identified a new model to decrease evening sign-out interruptions, improve sign-out efficiency and decrease ED length of stay.
- **A59) EVENT DEBRIEFING: HELPING RESIDENTS PROCESS AFTER CRITICAL EVENTS (PACE)**
- *Natasha W. Hanners, M.D., Sara L. Franzen, M.D., Bruce J. Lanser, M.D., University of Texas Southwestern Medical Center, Dallas, Texas*
- Background: Residents are involved in adverse events and patient deaths (critical events) during their time in a program. Within our large residency program, there is wide variability in awareness of resident involvement in critical events. When there is supervisor or program knowledge of a resident's involvement in such events, there is a broad range of how the critical events are processed with/by the resident. We have no formalized process of ensuring that a resident's medical questions have been adequately answered or if he/she is coping emotionally after such an event. Methods: The authors distributed a survey to the residents to assess the following factors: 1.) number of critical events; 2.) feedback and support the resident received; 3.) who delivered this feedback and support; 4.) the timeliness of the feedback and support; 5.) whether medical educational needs were met, and 6.) whether mental/emotional needs were met. Results: 40% of residents responded. Of those, 87% report experiencing a critical event. Only 68% of those received meaningful medical feedback or emotional support after the critical event. 28% reported both inadequate medical feedback and emotional support after these events. Regardless of their own experiences after critical events, 66% reported that they would like a more formalized process to help residents cope. Conclusions: Based on the results of the survey, the Process After Critical Events (PACE) program will be established, which includes the following: 1.) Identification of a group of pivotal observers who detect events warranting feedback and support to the residents; 2.) a system to notify key personnel (chiefs, mentors, program leadership) of critical events; 3.) case review and resident input leading to a feedback process plan constructed by key personnel; 4.) resident participation in the identified feedback process plan, and 5.) provision of a written summary to the resident of process findings.

A60) THE PEDIATRICS MILESTONES: OBTAINING FACULTY PERSPECTIVES THROUGH COGNITIVE INTERVIEWING

Ann E. Burke, MD, Wright State University Boonshoft SOM, Dayton, OH, Daniel J. Schumacher, MD, Boston Medical Center, Boston, MA, Shalini Forbis, MD, MPH, Adrienne Stolfi, MSPH, Wright State University Boonshoft SOM, Dayton, OH, Kadriye O. Lewis, EdD, Cincinnati Children's Hospital Medical Center / University of Cincinnati College of Medicine, Cincinnati, OH

Background: The Milestone Project is a national initiative to provide narrative descriptions of behaviors that represent the developmental progression of performance along the clinical continuum. They are based on relevant literature synthesized into a background and a series of behavioral descriptors that describe the ontogeny of each subcompetency via levels. Cognitive interviews (CI) were used as a method to study the way pediatric attendings process, understand and interpret the Milestones. Objective: To investigate, via CI, pediatric attendings understanding of the Milestones. Methods: Twenty cognitive interviews were conducted with attendings at a pediatric institution on 7 of the Milestones. Milestones were chosen for the range of complexity and length. CI were conducted in a randomized manner with the faculty. A protocol of think aloud questions and verbal probes was used. CI were transcribed and coded using a modified QAS-99 and a successive rounds of inductive and deductive methods. Results: Attendings consistently offered specific comments to improve clarity, including thoughts on the use of educational terms, support of clinical examples in the background section, and bolding of key concepts in the Milestone levels. All faculty were able to summarize the backgrounds and the developmental progression of the Milestones in their own words. Further, they identified the developmental progression of the Milestones in learners they have worked with and in themselves. Demonstrating significant understanding, attendings felt that the developmental levels had elements that may not develop together and represented a continuum rather than discrete levels. Finally, all attendings appreciated the benefit to learners of the descriptions. Conclusions: All faculty demonstrated sufficient, often quite insightful, understanding of the Milestones studied. They offered some suggestions for improvement of future iterations. These findings provide evidence that the Milestones provide an understandable framework for expectations and assessment in clinical medical education.

A61) CROSSOVER CURRICULUM

Anna Volerman, MD, Patrick Newman, MD, Zadok Sacks, MD, Niraj Sharma, MD, MPH, Harvard BWH/BCH Medicine-Pediatrics Residency, Boston, MA

Background: In the course of training, categorical pediatrics residents encounter a number of conditions that are more commonly seen in adult patients, however are still relevant to their scope of practice. Anecdotal evidence from pediatrics and medicine-pediatrics residents suggests that pediatric residents tend to feel less confident managing these conditions. A survey of categorical residents suggested significant interest in a curriculum focusing on the inpatient and outpatient management of common adult problems that pediatric residents may encounter while caring for children. Curriculum: The Crossover Curriculum was initiated during the 2011-2012 academic year and expanded during the 2012-2013 academic year. The initiative features monthly conferences utilizing a case-based approach. Each session is led by an internal medicine-pediatrics resident and features a master educator from the internal medicine department at the affiliated hospital. For each session, the relevant scientific evidence in both the adult and pediatric literature is reviewed and discussion focuses on how the evidence-based guidelines may apply to the pediatric population. Topics have included acute kidney injury, gastrointestinal bleeding, pancreatitis, pericarditis, pulmonary embolism and stroke. Result: The curriculum has been extremely well-received by pediatric residents and faculty. By participating in these sessions, residents are able to apply the information directly to patient care to improve their clinical skills and practices. In addition, the curriculum has had hospital-wide effects, such as the creation of guidelines for the management of pancreatitis. Conclusion: The Crossover Curriculum utilizes a novel approach to provide resident education and work toward improving patient care delivered.

A62) THE COMMUNITY HOSPITALIST ELECTIVE: ESTABLISHING A NOVEL EDUCATIONAL OPPORTUNITY

Theresa He, MD, FAAP, Advocate Lutheran General Children's Hospital, Park Ridge, IL

Objective: Pediatric hospital medicine is the fastest growing pediatric specialty in the US with ~3000 hospitalists now in clinical practice. The backbone of residency training takes place in tertiary care hospitals. However, few have opportunities to rotate in community hospitals. We developed a community hospitalist elective to provide this experience. Methods: Locations: The elective is based out of two community hospitals that refer in to the tertiary care hospital where the residents are based. Each hospital has a pediatric inpatient unit, ER, NICU and newborn nursery. Faculty: All precepting attending physicians have more than 3 years experience in hospital-based medicine. Rotation: The community hospitalist elective has general goals and objectives, and residents craft personalized goals as well. The rotation consists of daytime shifts and/or 24-hour in-house calls with the attendings, and hospital-wide administrative meetings. A resident is paired up with an attending in a one-on-one apprenticeship fashion. The residents evaluate and are evaluated by the hospitalists. Results: The elective was first offered starting in 2011. In the first year, 4 senior residents chose to do the elective. In the second year, 6 residents signed up for or completed the elective. Of the first cohort, 2 got jobs in hospitalist medicine, 1 will be chief resident with plans of a hospital-based medicine career and 1 will enter primary care. Resident evaluations as follows: - Availability of attending physicians: 100% excellent - Educational interaction: 60% excellent, 40% superior - Patient care-related teaching: 100% superior - Involvement as a team member: 80% superior - Overall quality: 100% superior+ Representative comments: - Excellent real world experience - Gives residents the scope of what a community hospitalist does. Conclusions: The community hospitalist elective rotation was well received. This elective provides a view of "real world medicine" and highlights the differences between academic and community hospital settings. We will continue to accrue data.

2013 COMSEP POSTER SESSION THEMES

Innovative Curricula (8)

C1) PEDIATRIC MEDICAL STUDENT SPEECH LANGUAGE PATHOLOGY AND AUDIOLOGY EXPERIENCE: AN INTER-PROFESSIONAL ENCOUNTER TO TALK ABOUT.

Erik N. Swartz, MD, MD, University of British Columbia, Richmond, BC, Canada, Andrea Gates, Richmond Health Services, Richmond, BC, Canada, Darlene Hicks, Richmond Health Services, Richmond, BC, Canada

CONTEXT/SETTING Physicians have always been dependent on our paramedical colleagues for diagnosis and treatment of many disorders. In no specialty is this more evident than Pediatrics. Unfortunately, it is rare for our trainees to gain much exposure to professions other than medicine and nursing outside of chance encounters in the hospital.

INTERVENTION Year 3 medical students in a 2-week community pediatrics rotation have been placed for one-half day at a public health centre. They spend two hours observing a speech language pathology assessment after a brief orientation. Afterwards the learners proceed to the audiology department where they observe a hearing test and are taught very basic audiogram interpretation skills.

OBSERVATIONS When students are debriefed during their end-of-rotation exit interviews they are always asked about their most important and interesting sessions. Much of the time, the speech language pathology and audiology morning is singled out as a favorite. Interestingly, students often comment on how surprised they were at the "usefulness" of the encounter.

DISCUSSION It is essential that future physicians are exposed to a wide variety of paramedical professions early in their training. A short half-day session was enough to give our students a basic appreciation of speech language pathology and audiology so that hopefully they are more comfortable with these disciplines when they graduate. In the future, we hope to reciprocate by having speech pathology and audiology students in our pediatric ambulatory clinics.

C2) A PEER-LED PEDIATRIC ELECTIVE FOR PRECLINICAL MEDICAL STUDENTS

Puja J. Umaretiya, B.S., B.S., Mayo Clinic, Rochester, MN, Ashley N. Cobb, B.S., Mayo Clinic, Rochester, MN, Erin P. O'Donnell, B.S., Mayo Clinic, Rochester, MN, Elizabeth M. Keating, B.S., Mayo Clinic, Rochester, MN, Stephanie R. Starr, B.S., Mayo Clinic, Rochester, MN, Amie E. Jones, B.S., Mayo Clinic, Rochester, MN

Background: Many preclinical medical students desire early exposure to medical specialties. A literature review suggests that these experiences are largely faculty-designed; however, medical education is trending towards incorporating peer-led learning. Due to proximity to training, a peer-designed experience may be more perceptive to the needs of participants. Additionally, students may have more time to invest in planning, leading to a more comprehensive experience. Here we report our experience with a week-long, peer-designed elective in pediatrics implemented by the Pediatric Interest Group at Mayo Medical School.

Objectives: To develop and deliver a pediatric elective for preclinical medical students that increases student interest and knowledge of pediatrics.

Methods: Annual needs assessments over three years (2010-2012) identified topics of interest to participants; these were incorporated into each week-long elective and included pediatric residency, subspecialties, research, international child health and community practice. Participants also shadowed three pediatricians in self-selected specialties to aid in career exploration. Per student feedback, the 2011 elective was modified to include workshops for child psychiatry patient interviews, a panel of parents whose children have died, and a respiratory distress simulation exercise. In response to requests for more interaction with children, the 2012 elective included an activity at a Boys & Girls Club.

Results: In a post-elective survey administered to participants from the past three years (n=73; response rate=89%), students strongly agreed with the statement "I am more interested in pediatrics because of this elective" (average rating=8.4/10). The 2011 modifications, the simulation exercise (average=9.7/10) and the parent's panel (average=9.8/10) were the two highest-rated activities in 2011 and 2012. From 2011 to 2012, average student rating of the statement "I would recommend this elective to other students" increased from 9/10 to 9.4/10, as did response to the statement "I learned useful information about pediatrics" (8.9/10 to 9.7/10).

Conclusions: Our peer-designed elective increased interest in pediatrics and connected students to pediatric service, research, and mentors. Positive responses in the post-elective survey suggest a strong desire among medical students for a comprehensive preclinical exposure to pediatrics and that this experience may influence student perspectives and future training choices.

C3) PEDIATRIC CLERKSHIP FEAR FACTOR: A SIMULATED CURRICULUM TARGETTING STUDENT PERFORMANCE ON FAMILY-CENTERED ROUNDS

Raquel G. Hernandez, MD, MPH, MD, MPH, All Children's Hospital, Johns Hopkins Medicine, St. Petersburg, FL, Brian Knox, MD, MPH, University of South Florida Morsani College of Medicine, Tampa, FL

Objective: Identify the effect of a family-centered simulated patient curriculum on medical student anxiety and performance.

Background: Family-centered rounds (FCR) are an important inpatient care construct that has improved patient satisfaction, clinical outcomes and hospital efficiency. Despite support for this care approach, students frequently report anxiety regarding performance on FCR. Use of a pragmatic yet innovative simulated curriculum that highlights key FCR aspects could promote student preparedness and optimal performance during FCR.

Methods: We report a single-blinded randomized study of an FCR simulated curriculum for third-year clerkship students.

Students were randomized to receive our "fear factor" curriculum at the start of their clerkship which included a simulated FCR inpatient encounter. Students in the non-intervention group completed the standard pre-clerkship orientation. Our measurement outcomes include: 1) Student self-reported anxiety level (State-Trait Anxiety Inventory, STAI) during FCR and 2) assessment of student performance using a modified Communication Assessment Tool (CAT). These outcomes are measured at baseline (T1), mid-point (T2) and at the end of the rotation (T3). Descriptive statistics and regression analysis will identify trends in outcomes by study group.

Results: Our study will start November 1, 2012 with data collection ongoing until the end of the 2012-13 academic year. We will compare STAI anxiety scores and modified CAT scores of 3rd year medical students (n=100). Additional results will relate to the resources needed for delivery of the curriculum.

Conclusion: Identifying methods by which student anxiety may be alleviated and performance improved during FCR is necessary. We expect that implementation of a simulated patient curriculum during the pediatric clerkship will be beneficial to students in both of these aspects.

C4) NOFFSINGER – WRITING: A LOST ART

Julie M. Noffsinger, MD, MD, University of Colorado Denver, Aurora, CO, Jennifer B. Soep, MD, University of Colorado Denver, Aurora, CO

Background: With increased utilization of the Electronic Health Record (EHR), medical students have limited opportunities to write prescriptions, and they do not observe residents or faculty writing them. We implemented a targeted approach to teach and assess this important skill in our 3rd year pediatric clerkship.

Methods: Prescription writing is listed as one of our core learning objectives for the clerkship. In orientation, we review key aspects of writing pediatric prescriptions, have each student complete a prescription for a sample patient, and remind them this is a skill they should master during the clerkship. On the last day of the rotation, the students are asked to write a prescription for amoxicillin for a sample patient given the weight of the patient, formulation, and recommended dosage. We identified five required elements of the prescription: 1) name and formulation of drug, 2) dosage and frequency, 3) route, 4) length of treatment, 5) amount to be dispensed (including refills).

Results: In the first three blocks of the year, 40 students have completed the prescription writing skill assessment. Of those, only 20% were able to correctly write out a prescription with all five of the elements. Thirty-five percent of the students missed three or more of the five required elements.

Discussion: During the exercise at orientation, students often comment that they have never written a prescription. We suspect that our intervention was ineffective because students are not given adequate opportunities to practice prescription writing during their rotations. However, even while using EHRs, providers must know how to correctly write a prescription to minimize medication errors. We need to develop additional methods to train students as well as provide more opportunities to practice writing prescriptions for them to be competent in this important skill before they become practicing physicians.

C5) MODIFYING A CHILD ABUSE CURRICULUM TO IMPROVE THIRD YEAR MEDICAL STUDENTS' ABILITY TO IDENTIFY CHILD ABUSE RISK FACTORS

Antonia Chiesa, MD, MD, University of Colorado Denver, Aurora, CO, Andrew Sirotnak, MD, University of Colorado Denver, Aurora, CO, Jennifer Soep, MD, University of Colorado Denver, Aurora, CO, Julie Noffsinger, MD, University of Colorado Denver, Aurora, CO

Background: Little has been published describing or evaluating how medical students are taught child maltreatment. In 2009, our group described a successful child abuse curriculum; however, it was noted that few students asked important social history questions during an Observed Structured Clinical Exam (OSCE). Identification of abuse is important, but screening for high risk factors is critical for prevention.

Methods: Our curriculum was modified from an on-line case/group discussion to an in-person problem-based learning (PBL) cases with faculty facilitated role play and group discussion. Performance on the OSCE checklist was compared for students in 2010 (old curriculum) and 2012 (new curriculum) using a Pearson Chi Square test (χ^2). For the new curriculum, student comfort level with child abuse issues was assessed with pre and post curriculum surveys using a 4 point Likert scale (1=strongly disagree, 4=strongly agree) and analyzed with a paired t-test. Results: After the new curriculum, there was an increased percentage of students asking about discipline (50% up from 35%; $\chi^2=4.28$, $p<0.04$) as well as other risk factors for abuse including drinking and violence (69% up from 15%; $\chi^2=49.68$, $p<.0001$). On the self-assessment surveys, there was improvement in students' perceived comfort in identifying abuse ($t=4.38$, $p<.0001$), completing a social history ($t=5.36$, $p<.0001$), and ruling out mimics of abuse ($t=6.95$, $p<.0001$). Immediately after receiving the curriculum, 98% of students agreed or strongly agreed they felt comfortable with the training they had received, but three weeks later, after completing the OSCE, only 53% of those same students agreed or strongly agreed they had adequate training in child abuse. Discussion: During PBL cases, students are able to identify child abuse risk factors and to role play taking a social history for these risk factors which seems to translate into improved performance for this skill in the OSCE. The difference in the students' perception of their adequacy of training immediately after their training compared to after the OSCE likely reflects the discomfort in addressing this difficult topic in practice.

• **C6) THE NICARAGUA GLOBAL HEALTH COURSE: DEVELOPING CORE COMPETENCIES AROUND A SHORT TERM MEDICAL TRIP**

- *Neerav A. Desai, MD, MD, Vanderbilt University, Nashville, TN, Lindy Fenlason, MD, Vanderbilt University, Nashville, TN*
- Background: Students in health care professions are eager to participate in international medical work. Short-term medical endeavors can be limited in impact and are associated with ethical risks to visiting and host groups. Global health courses can serve as a method to emphasize core competencies of medical education. The aim of this initiative was to provide a global health course that focused on global health ethics, multidisciplinary teaching and learning, care for chronic medical conditions, and cultural competence.
- Methods: The 12-week interdisciplinary course, incorporated didactic, case-based, and experiential learning in three phases: preparation, immersion, and processing and presentation. The preparation phase included weekly sessions lead by a multidisciplinary team of specialists and focused on the impacts of diabetes, cardiovascular disease, nutrition, cultural competence, and global health ethics as it pertained to Nicaraguan health care. Students designed teaching modules, skits, and handouts to engage Nicaraguan patients about care for chronic medical conditions. The 10-day immersion phase involved supervised observation and participation in pediatric and adult clinical care, and delivery of Spanish patient education sessions and educational materials. Assessment of the intervention was accomplished through student course evaluations and Nicaraguan patients and staff cultural competency surveys.
- Results: Results of Nicaraguan surveys showed 94% strongly agree that cultural sensitivity goals were attained, and 96% agreed teaching module objectives were attained. Student evaluations revealed 76% agreed that this course would stimulate pursuit of global health opportunities. Students and patients also provided practical and constructive feedback in summative questions about course outcomes.
- Conclusions: This course served as an effective introduction to global health and selected core competencies for pre-clinical students, and demonstrated that education-based interventions are an effective way to impact health of patients in a time-limited setting. This method could be implemented at other institutions to help students understand the importance of global health stewardship. Next steps include peer review of the curriculum, and improving the sustainability of the project by engaging Nicaraguan health care providers in education and collaboration.

• **C7) HAND OFF TRAINING FOR PEDIATRIC SUBINTERNS IMPROVES SKILLS**

- *Jennifer Stojan, M.D., M.D., University of Michigan Medical School, Ann Arbor, MI, Jocelyn Schiller, M.D., University of Michigan Medical School, Ann Arbor, MI, Jennifer Christner, M.D., Upstate Medical University, Syracuse, NY, Paula Ross, University of Michigan Medical School, Ann Arbor, MI, Monica Lypson, M.D., University of Michigan, Ann Arbor, MI, Sarah Middlemas, University of Michigan Medical School, Ann Arbor, MI, Patricia Mullan, M.D., University of Michigan Medical School, Ann Arbor, MI, Tom Fitzgerald, M.D., University of Michigan Medical School, Ann Arbor, MI*
- Background: Failures in communication are the leading root cause of sentinel events. Accreditors have long recognized this and mandate handoff education. The COMSEP and APPD Pediatric Subinternship (sub-I) Curriculum includes "conveying concise, pertinent information at the time of handoffs," but there is little evidence in the literature that fourth year students (M4s) are being taught handoff skills. We enhanced available resources and developed a handoff curriculum as well as provided direct observation and feedback of actual patient handoffs for M4s.
- Methods: Since the start of academic year 2012, M4s completing a pediatric inpatient sub-I at the University of Michigan participated in a 2 hour workshop on handoffs. During the sub-I, M4s were observed giving handoffs on 3 to 4 occasions by trained faculty members using an assessment tool adapted from a previously published "SIGNOUT" mnemonic. For each of the 17 items, the M4 scored 0=not done, 1= needs improvement, 2= done. Faculty, peer and self evaluations were recorded.
- Results: 19 M4s were observed giving a total of 88 patient handoffs. Preliminary data analysis revealed that performance improved with each observation: average score given by faculty on first observation = 23 (S.D. 1.92), second observation = 31 (S.D. 3.72), third observation = 32 (S.D. 2.39), fourth observation = 33 (S.D. 1.64). Further item analysis and correlations between faculty, peer and self evaluations will be available this winter. Evaluations of the workshop and feedback were overwhelmingly positive with 100% of M4s agreeing they would recommend the workshop to a peer and teaching was effective. Evaluations of the overall sub-I also trended positively, with overall quality of the rotation scoring 4.68 (S.D. 0.48) on a 5-point Likert scale compared to 4.42 (S.D. 0.55) for the two years prior, $p=0.09$. M4s specifically commented on the value of the handoff curriculum.
- Conclusions: M4 performance on giving handoffs improved with a curriculum incorporating direct observation and feedback. Further research will be necessary to assess the long-term impact of this curriculum on handoff performance.

• **C8) SUB-I: STUDENTS UNDERGOING A BRIDGE TO INTERNSHIP: AN EDUCATIONAL MODEL**

- *Joshua D. Noe, MD, MD, Medical College of Wisconsin, Milwaukee, WI, Kris H. Saudek, MD, Medical College of Wisconsin, Milwaukee, WI, Angela Bier, MD, Medical College of Wisconsin, Wauwatosa, WI, Jane Machi, MD, Medical College of Wisconsin, Milwaukee, WI, Jennifer McCanry, Medical College of Wisconsin, Milwaukee, WI, Becky Buelow, MD, Medical College of Wisconsin, Milwaukee, WI, Alecia Huettl, MD, Medical College of Wisconsin, Milwaukee, WI, Stephen Malcom, MD, Medical College of Wisconsin, Milwaukee, WI, Matthew Gray, MD, Medical College of Wisconsin, Milwaukee, WI, Laura Norton, MD, Medical College of Wisconsin, Milwaukee, WI, Tan Wyllie, MD, Medical College of Wisconsin, Milwaukee, WI, Katie Fee, MD, Medical College of Wisconsin, Milwaukee, WI, Molly Kleiman, MD, Medical College of Wisconsin, Milwaukee, WI, Erin Shaughnessy, MD, Medical College of Wisconsin, Milwaukee, WI, Sarah*

G. Gaethke, MD, Medical College of Wisconsin, Milwaukee, WI, Sajani Tipnis, MD, Medical College of Wisconsin, Milwaukee, WI

Background: The 4th year sub-internship (Sub-I) rotation is challenging for a student as they have responsibilities of an intern. Traditionally there have been no additional preparations for medical students for their intern year beyond this. Previous studies have shown lack of self-reflection & improvement, poor organizational skills, underdeveloped professionalism, and lack of medical knowledge as the most common struggles.¹

Aims: (1) To design an effective curriculum to teach Sub-I's intern-level organization skills, professionalism, communication across audiences, & presentation skills. (2) To effectively use simulation to teach common procedures & early management of unstable patients.

Methods: A 3-step curriculum was created & given over 2 years. (1) Prior to their Sub-I, students watched an on-line video on how to sign out a patient. (2) During the first week of their Sub-I, students participated in 4 one-hour workshops teaching skills listed in Aim #1. Before and after these workshops, students answer confidence surveys to determine if the workshops increased their confidence in these skills. Paired t-test was performed if there was a statistically significant difference. (3) During the last week of their Sub-I, students underwent 5 simulations: Signing out a patient, communication across audiences, calling a consultation, performing a lumbar puncture, & resuscitating an infant in respiratory distress. After their Sub-I was complete, students completed an Likert evaluation of the curriculum. Z-test was performed to see if there was a positive response defined as "greater than neutral" to the workshops' aspects.

Results: There was a statistically significant improvement in the students' confidence in all aspects of every workshop. There was a positive response in all aspects of every simulation.

Conclusion: (1) Students' confidence for intern-level skills increases with a supplemental Sub-I curriculum. (2) Students value simulations as useful to their preparation to be an intern.

1 Lyss-Lerman, P, Teherani, A, and Aagaard, E. What training is needed in the fourth year of Medical School? Views of Residency Program Directors. *Academic Medicine*. 2009 Jul;97:823-829.

Innovative Teaching Methods (10)

C9) INTERACTIVE SPACED ONLINE EDUCATION IN PEDIATRIC TRAUMA

Rohit Sheno, MD, MD, Baylor College of Medicine, Houston, TX, Daniel Rubalcava, MD, Baylor College of Medicine, Houston, TX, Harold Sloas, MD, Baylor College of Medicine, Houston, TX, David Delemos, MD, Baylor College of Medicine, Houston, TX, Bindi Naik-Mathuria, MD, Baylor College of Medicine, Houston, TX, Linzhi Xu, MD, Baylor College of Medicine, Houston, TX, Donna Mendez, MD, Baylor College of Medicine, Houston, TX

Background: Trauma education for pediatric residents is limited and suboptimal.

Objective: Test effectiveness and acceptability of interactive, spaced education (ISE) in pediatric trauma.

Methods: Prospective, randomized trial of 40 learners (pediatric residents, fellows, pediatricians) at a Level-1 trauma hospital during 2011-2012. Instrument consisted of 48 multiple-choice questions and answer critiques in audiovisual format based on Trauma Life Support (ATLS) course. Items were divided into 2 modules (24 items each). Instrument was assessed for test-retest reliability, item difficulty and construct validity.

Consenting participants were randomized to 2 cohorts and received a 2-cycle ISE course via a web-based platform over 20 weeks. Each Module was sent as 8 spaced emails (3 questions) over 4 weeks. Percent correct answers were tabulated. First cohort answered Module A, Module B, 4-week rest period followed by Module B and Module A. Second cohort answered Module B, Module A, 4-week rest period followed by Module A and Module B. Primary outcome was difference in mean scores at 2 and 4 months for combined modules for both cohorts among participants who completed the course. T-test and Cohen's effect size were performed. Secondary outcome was an exit survey of ISE acceptability as an on-line education method.

Results: Out of 40 enrollees, 1 dropped out before start of program. Thirty-nine learners were randomized to two cohorts; 28 completed follow-up modules at 2 months and 24 completed follow-up modules at 4 months. There was a significant improvement in mean scores at 2 months [8.6 (95% CI: 4.2 - 13.1); effect size: 0.75] but non-significant improvement at 4 months [2.5 (95% CI: -3.6 - 8.6); effect size: 0.18]. Sixty percent of participants would undertake the ISE program again and recommend it to others.

Conclusions: Learning gains in online pediatric trauma education occurred short-term but were not sustained. Most prefer and recommend this form of education to others.

C10) CAN MEDICAL STUDENTS LEARN HAND-OVER COMMUNICATION THROUGH PEER AND RESIDENT FEEDBACK?

Rebecca R. Chasniovitz, MD, MD, Kaiser Oakland Pediatric Residency Program, Oakland, CA, Abhay Dandekar, MD, Kaiser Oakland Pediatric Residency Program, Oakland, CA, Margot Brown, MD, UCSF, San Francisco, California, Amy Westman, MD, Kaiser Oakland Pediatric Residency Program, Oakland, California

Communicating effectively with team members during transitions of care relates directly to an emerging entrustable professional activity (EPA) for learners across the pediatric educational continuum. However, unlike the H&P and SOAP presentations, hand-over skills are mostly learned "on the fly" rather than taught as a standard part of the medical school curriculum. Our aims were: 1) to design and implement a curriculum to teach hand-over communication skills to clinical-year medical students through the daily sign-out of their patients with regular peer and resident feedback, 2) to develop peer feedback skills to enhance lifelong learning and collaborative patient care practices, and 3) to develop a tool that may aid in assessment of the learner's abilities through milestones. Based on a needs assessment of current third-year medical students

- at UCSF, we found that most students felt that they had enough experience observing hand-offs, but not enough experience performing hand-offs. Almost one-third of students surveyed had never performed sign-out on a patient during their first four rotations of third year. Students expressed interest in receiving feedback on sign-out of their actual patients and very little interest in lecture and role-playing activities as a means of learning hand-over skills. This curriculum introduces third-year medical students to our program's standard sign-out format (PSONUT). Students apply this mnemonic daily by routinely performing sign-out on their patients during team hand-over. Senior residents provide weekly feedback using a Standardized Clinical Observation form (adapted from Shaughnessy 2011). Students rotating on the wards also perform sign-out on their patients to a group of peers, who provide feedback using the same tool. At the end of the clerkship, we evaluate students' hand-over communication skills using a hand-off OSCE (Shaughnessy 2011). This poster will highlight the specific process and tools involved, reflective comments from resident and peer observers, and preliminary data evaluating skills of students who have completed this curriculum. Finally, this poster will introduce a summative tool that attempts to map feedback back to competency domains and pediatric milestones and cultivate a linkage to entrustment of this activity.

• C11) AN INNOVATIVE TEACHING EXERCISE: A STUDENT-CREATED STUDY GUIDE TO SUPPLEMENT CLIPP CASE EDUCATION DURING THE PEDIATRIC CLERKSHIP

• *Lee T. Miller, M.D., M.D., David Geffen School of Medicine at UCLA, Los Angeles, CA, Cameron Escovedo, David Geffen School of Medicine at UCLA, Los Angeles, CA, Deborah Lehman, M.D., David Geffen School of Medicine at UCLA, Los Angeles, CA, LuAnn Wilkerson, M.D., David Geffen School of Medicine at UCLA, Los Angeles, CA*

- Rationale: The pediatric clerkship at UCLA has used CLIPP cases for the past five years to teach the COMSEP curriculum. We wanted to explore new ways to maximize the learning experience for students as they work through CLIPP cases, and to create a new tool to reinforce important concepts to prepare for the CLIPP final examination. Description: This intervention was designed to reinforce the COMSEP curriculum, by introducing a student-created study guide as a novel learning tool to complement CLIPP cases. In the existing curriculum, students enrolled in the pediatric clerkship are required to complete all 32 CLIPP cases. With this intervention, each student is now tasked with creating a multiple choice question for each of three assigned CLIPP cases. The questions must begin with a clinical vignette that asks for either the most likely diagnosis, or next best step in evaluation or management. Students are required to explain the correct answer and why other choices are incorrect. Every question is evaluated by faculty leadership, and subsequently compiled into a 75 questions practice exam, which is then made available as a study tool for students. Evaluation Plan: A cohort of 50 students at the start of the current academic year was used as a control group. A subsequent cohort of 50 total students is serving as an intervention group. We will compare exam performance of both groups, and surveys of students conducted after completing the final examination. All students are surveyed about their level of exam preparedness, as well as a self-assessment of their pediatric knowledge base. Additional questions for the intervention group will assess student views on the assignment, and the usefulness of having student-generated practice exam questions to reinforce material. Implications: This poster will share data on the students' perceived impact of this intervention, and data on student performance on the final exam, in both pre- and post-intervention groups. This may prove to be an innovative exercise for students at other schools that use CLIPP cases, and the CLIPP final examination.

• C12) AN INNOVATIVE WAY TO TEACH AND EVALUATE THE COMPETENCIES : ACGME FANTASY FOOTBALL SCORES (STUDENT CRITIQUES ON RESIDENT EDUCATION SKILLS) PROGRAM AT K HOVNANIAN CHILDREN'S HOSPITAL

• *Srividya Naganathan, MD, MD, Jersey shore University medical center, Neptune, New Jersey, Paul Schwartzberg, MD, Jersey shore university medical center, Neptune, New Jersey*

- Background: There has been an increasing emphasis on 'Resident as Teacher' and the use of ACGME competencies for evaluation. Our ACGME fantasy football SCORES program incorporates ACGME competencies into a creative new evaluation tool for medical students to evaluate our pediatric residents.
- Objectives: 1 Promote understanding of ACGME competencies among students
- 2. Motivate residents to function as better teachers.
- Methods: Pediatric clerkship blocks are set up as "fantasy football" games. Residents are divided into teams and compete against each other to accumulate points over the 6 week rotation. Medical students award points on a scale of 1-5 to residents. Students are provided with a legend on a SCORES card to link teaching events to specific ACGME competencies. At the end of each block, the team with maximum points is recognized. At the end of the year, the team accumulating highest number of points is the ACGME "Super Bowl" winner. Students complete pre and post-surveys to assess their understanding of the ACGME competencies and perception on resident teaching.
- Results: Over a 3 month period, 13 students (100%) and 19 residents (86%) participated in the survey. 62% of students felt they were more aware of the ACGME competencies at the end of their rotation. 73% of students felt the "Fantasy Football Program" made residents better teachers and is an effective way to evaluate residents in the competencies. 93% of students believed better resident teachers helped them learn better and influenced their career choices. 89% of residents felt the "Fantasy Football Program" is effective in promoting friendly competition and motivate teaching.
- Conclusion: With increasing ACGME requirements, novel approaches are needed to promote understanding and use of competencies for evaluation of students and residents. Our SCORES program showed that students are more aware of the competencies by the end of their rotation. Students and residents felt this program makes residents better teachers. More data is being collected to determine if this program can sustain significant improved teaching and understanding of ACGME competencies.

C13) IMPLEMENTATION OF A NOTE FEEDBACK EXERCISE IN A 3RD YEAR PEDIATRIC CLERKSHIP

Julie M. Noffsinger, MD, MD, University of Colorado Denver, Aurora, CO, Jennifer B. Soep, MD, University of Colorado Denver, Aurora, CO

Background:With increased use of electronic health records (EHR), there is a trend of decreased medical student documentation. In a survey of clerkship directors, only 2/3 of respondents who use EHR's allow students to write notes (Hammoud 2012). At our institution, students write notes, but they are placed in a special tab not used for billing. Student notes are not often read or used in patient care, and students rarely receive feedback on them.

Methods:In past years, medical students submitted a formal history and physical with a detailed discussion during the clerkship which was returned with written comments. This year, students were asked to print up 1-5 of their actual notes, ask for feedback from residents or faculty, and then self-reflect on their feedback. End-of-block evaluations and students' self-reflection comments were reviewed.

Results:Receiving note feedback was rated favorably with a mean of 3.74 on a 5 point Likert scale where 1=not at all useful and 5=essential. When asked about note feedback frequency, the mean this year was expectedly higher at 4.39 compared to 3.19 last year on a 5=point Likert scale where 1=Never and 5=5 or more times ($t=6.3618, p<.0001$). Comments from evaluations before mandatory note feedback included, "no one is reading them, so why are we writing them". Comments this year included, "it was essential to have the attending provide feedback on my notes". Themes identified from self-reflected learning points were note organization, history, physical exam, and clinical reasoning.

Conclusions:If medical students do not get sufficient experience and/or feedback on their notes in medical school, they will not be prepared to do so when their notes are written as practicing physicians. When medical students perceive no value to their notes, they may lose out on a sense of responsibility for their patients. Requiring note feedback is a feasible way for students to receive real-time, practical suggestions on their actual notes. In the future, we will develop a standardized rubric for giving note feedback to see if it impacts students' note writing skills.

C14) I NEVER GOT OBSERVED: COMPARISON OF TWO DIFFERENT OBSERVATION TOOLS IN A 3RD YEAR PEDIATRIC CLERKSHIP

Julie M. Noffsinger, MD, MD, University of Colorado Denver, Aurora, CO, Jennifer B. Soep, MD, University of Colorado Denver, Aurora, CO

Background: Observation is a crucial part of medical student education. As part of an initiative to increase the frequency and quality of feedback to students from direct observation, we implemented required formal observations during the clerkship. The Mini-Clinical Evaluation Exercise (mini-CEX) and the Structured Clinical Observation (SCO) are two tools available for observation of trainees.

Methods:In the 2010-2011 academic year, we required students get one mini-CEX filled out during the clerkship. In 2011-2012, we requested students complete 1-5 SCO forms. We compared data from end-of-block evaluations for the 2010-2011 (mini-CEX) year and the 2011-2012 (SCO) year using an independent t-test. Student comments were also reviewed from the evaluations. Students were asked if they received feedback as a result of the observations, rated on a 4 point Likert scale (1=Strongly Disagree and 4=Strongly Agree). They were also asked to rate the usefulness of the observations on a 5 point Likert scale (1=not at all useful and 5=essential).

Results:On average, students agreed that they received feedback as a result of the observations (mini-CEX=3.09 versus SCO=3.28, $p=0.68$). Students found the SCO significantly more useful with a mean rating of 3.28(SCO) versus 2.7(mini-CEX), $t=4.2184, df=206, p<.0001$. Comments, although rare, were mostly positive for both observation tools and included: "the structured clinical observations were an incredible resource unique to this block", and "to get direct feedback on skills is invaluable, and to have them as a requirement provided a way to be observed without being perceived as a burden".

Although some students expressed concerned about extra paperwork, no faculty complaints were received regarding the new observation requirement for either tool.

Conclusions:Requiring brief formal observations during the pediatric clerkship is a simple way to increase preceptor feedback to students. In our cohort, the SCO was rated more useful than the mini-CEX, but both tools seemed to provide an opportunity for feedback. In the future, we could explore how these observations could improve the quality of competency-based student evaluations.

C15) TEAM-BASED LEARNING IN PEDIATRIC CLERKSHIP PROMOTES SKILL ACQUISITION AND APPLICATION

Lucy Chang, MD, MS, MD, MS, NYU School of Medicine, New York, NY, Linda Tewksbury, MD, MS, NYU School of Medicine, New York, NY

Background Team-based learning (TBL) is a well-defined instructional strategy that is increasingly employed in the clinical years. Studies have shown that TBL in other core clerkships results in higher student engagement, satisfaction, and improved NBME subject examination scores. However little has been published about TBL in pediatric clerkships, notably specific team-building skills acquired and applicability to clinical settings.

Objective To assess the impact of TBL in a pediatric clerkship on students' team-building skills, ability to apply knowledge/skills to clinical settings, and overall educational experience.

Methods Four TBL modules focused on integrating basic sciences into core pediatric clinical topics have been incorporated into the pediatric clerkship since July 2011. Students completed an anonymous evaluation on TBL at end of clerkship including self-assessed team-building skills, ability to apply knowledge/skills, and educational experience on a 5-point Likert scale (strongly disagree to strongly agree, or poor to outstanding).

- Results 160/182 (87.9%) students completed TBL evaluations during period from Jan-Sept 2012 (six 6-week clerkship blocks).
- The majority of students agreed or strongly agreed that TBL improved their team-building skills including conflict resolution (79.3%), speaking up in a team setting (80.8%), developing and articulating cohesive arguments (80.0%), and supporting team members (83.8%). 83.1% agreed or strongly agreed that skills they gained in TBL helped them apply pediatric knowledge to clinical care (48.1% agree, 35% strongly agree). 79.9% agreed or strongly agreed that skills they gained in TBL can be generalized to other clinical settings (58.8% agree, 21.1% strongly agree). The overall educational experience for each module was rated as at least "very good" by > 86.9% of students with > 53.8% rating modules as excellent/outstanding.
- Conclusion TBL is an effective instructional strategy in the pediatric clerkship. Learners not only report that they improved their team-building skills but that knowledge and skills gained can be applied outside of TBL to clinical care and generalized to other clinical settings. Future studies using competency based assessments are needed to affirm these self-reported outcomes.

• C16) STUDENT DEVELOPED TEAM-BASED LEARNING IN PEDIATRIC RHEUMATOLOGY: A NOVEL METHOD FOR CURRICULUM DEVELOPMENT

• *Katie E. Jackson, MD, MD, Vanderbilt, Nashville, TN, Amy Woodward, MD, Vanderbilt, Nashville, TN, William B. Cutrer, MD, Vanderbilt, Nashville, TN*

- Background: Team-based learning (TBL) is a method of teaching that requires students come to class prepared to work in groups. This method requires active learning in an environment that is "learner-centered but instructor-led." (1)
- Objective: To evaluate a new juvenile idiopathic arthritis (JIA) TBL module, developed through collaboration by a fourth-year medical student in a "students as teachers" elective and a pediatric rheumatologist, for use in a third-year pediatric clerkship.
- Methods: The fourth-year student and pediatric rheumatologist worked together to select pre-session readings, develop a "readiness assurance test" (RAT), and design group application problems for the session. Before the session, clerkship students reviewed assigned readings and upon arrival, completed the RAT individually and subsequently in groups. Following discussion of the RAT, students worked through group problems that expanded on information to be learned. Clerkship students were surveyed about their experience with the JIA module both quantitatively and qualitatively.
- Results: A combined eighteen third-year pediatric clerkship medical students participated in two different TBL sessions. One hundred percent of these students completed a survey. Their responses demonstrated that 100% of students felt engaged in the process and 72% felt that they would retain information learned in the session. Qualitative feedback on the sessions included: "Very engaging. It kept me interested much more than simple lecture." Other students recommended decreasing the time spent on readiness quizzes or providing a short lecture on the readings prior to the team-based portion.
- Conclusions: Team-based learning is a relatively new modality that holds great promise in actively involving each student in the learning process. The TBL format was useful in providing organization to an upper level student with minimal prior experience in curriculum development. Using a student who recently completed the pediatric clerkship to develop a subsequent teaching session for other clerkship students using the TBL format was effective. Clerkship students responded positively to the introduction of the new teaching modality.
- References: 1. Koles PG, Stolfi A, Borges NJ, Nelson S, Parmelee DX. The impact of Team-Based Learning on medical students' academic performance. *Academic Medicine*. 2010; 85: 1739-1745.
- C17) 1174 – McBurney – Integrating technologies on a pediatric clerkship

• C17) INTEGRATING TECHNOLOGIES ON A PEDIATRIC CLERKSHIP

• *Patricia G. McBurney, MD, MD, Medical University of South Carolina, Charleston, SC, David M. Mills, MD, Medical University of South Carolina, Charleston, SC, Joseph V. Dobson, MD, Medical University of South Carolina, Charleston, SC*

- Introduction: Virtual patients and high-fidelity simulation-based medical education (SBME) are both attractive means of meeting pediatric clerkship goals. Our project seeks to determine the benefits of integrating virtual patients (Computer-assisted Learning in Pediatrics Program, CLIPP) with SBME.
- Methods: SBME is a subcourse of our pediatric clerkship at the Medical University of South Carolina. It consists of stations of skills training and scenarios (basic airway, intravenous access, and lumbar puncture); the full content is delivered by three pediatricians over two half-days. CLIPP cases 19, 23, and 25 are the online cases most closely matched with our stations. Students from odd-numbered rotations (about 20 students/rotation) were instructed to complete these cases before their SBME sessions while the remaining students completed them afterwards. Knowledge was measured with a multiple-choice exam immediately following SBME completion. Clinical reasoning was evaluated by testing the student's ability to form differential diagnosis lists (measured by number of items listed and items matching the expert list). Comfort with forming/discussing differential diagnoses was measured with surveys. We administered the survey and test before the first SBME session and again after the second SBME session. Data were analyzed with Student's t-test and Wilcoxon-Mann-Whitney tests. We hypothesized that students exposed to the virtual patients before SBME would have higher knowledge, clinical reasoning, and comfort.
- Results: Fifty-eight students completed CLIPP before entering the SBME. Fifty-two students were in the comparison group. There was no difference in multiple-choice exam scores (Pre-test CLIPP group mean 56.6%, non-CLIPP 56.2; p=0.8) (Post-test CLIPP group mean 80, non-CLIPP 80.1; p=0.91). There was no statistically significant difference between the groups' abilities to form differential diagnoses. We did not detect any statistically significant difference in students' comfort.
- Conclusions: Addition of CLIPP cases to the simulation sub-course at our institution did not improve student performance pre-simulation course or in post-simulation course measures. While the students required to complete CLIPP were documented having done so, we could not assess their degree of effort in reviewing the CLIPP material. Future efforts will need to account for student effort in the evaluation of integration potential.

C18) OBJECTIVE STRUCTURED TEACHING EXERCISES (OSTES) FOR FACULTY: FEASIBILITY AND ACCEPTABILITY

Cindy Osman, MD, MD, New York University, New York, NY, Lucy Chang, MD, New York University, New York, NY, Linda Tewksbury, MD, New York University, New York, NY

Background The ACGME and LCME mandate that residency programs and medical schools provide core faculty with regular faculty development on teaching. Objective Structured Teaching Exercises (OSTEs) are an innovative tool using standardized learners (SLs) to develop and assess teaching skills. Little has been published on the use of OSTEs in pediatric faculty development.

Objective 1. To design a workshop using a two-station OSTE as part of a pediatric department-wide faculty development program to enhance teaching skills. 2. To assess feasibility and acceptability of the program.

Methods A two-station OSTE was developed in consultation with faculty with OSTE expertise. In one station, faculty provided feedback to a standardized medical student, portrayed by a trained actor, with professionalism issues. In the second, faculty precepted a standardized pediatric intern, portrayed by a trained internal medicine intern, presenting a toddler with vomiting and diarrhea. Each station consisted of 10 minutes performing the assigned task, 5 minutes of written evaluation by both faculty (self-assessment) and SL using a competency-based checklist, and 5 minutes of verbal feedback by the SL. A brief didactic on giving feedback and the "one minute preceptor" and final debriefing were included. Participants completed an anonymous workshop assessment, using a Likert scale of 1 (below expectation) to 5 (exceeding expectations).

Results All 26 participating faculty completed the workshop assessment. The OSTE was rated overall as 4.9 (range 4 – 5). In the feedback station, participants graded the case and SL as realistic (4.7 each) and assessed SL feedback as helpful (4.7). In the precepting station, participants assessed the case as realistic (4.5) and the SL as realistic (4.4) but reported less helpful feedback from the intern SL (4.0). Participants rated the brief didactics and debriefing as helpful (mean 4.6, 4.7 respectfully).

Conclusion It is feasible to design and implement a workshop using OSTEs that is well-received by pediatric faculty. While residents provide for a realistic portrayal of standardized learners in an OSTE, actors are also capable of being realistically trained and may provide more honest, direct feedback.

Learner Perspectives (4)

C19) EVOLUTION IN STUDENTS PERCEIVED READINESS FOR PEDIATRIC INTERNSHIP

Ian D. Kane, MD, MD, Vanderbilt University, Nashville, TN, Amy E. Fleming, MD, Vanderbilt University, Nashville, TN, William B. Cutrer, MD, Vanderbilt University, Nashville, TN

Background: Program directors observe many interns struggling during the transition from medical school to internship (Lyss-Lerman, 2009). Different curricular approaches have been used to address these shortcomings during medical school (Teo, 2011). Students' perception of their preparation is often brought into the design of these courses; however, medical students and residents have different perceptions regarding their preparation for clinical practice (Cohen, 2006).

Objective: To assess 4th year medical students' perceived readiness for pediatric internship pre and post transition.

Design: 4th year medical students at one institution entering a Pediatrics or Medicine-Pediatrics residency were surveyed.

Questions addressed several of the ACGME competency domains: medical knowledge, patient care, and professionalism, with responses scored on a 5 point Likert scale. Questions also queried which mode of instruction students found most helpful. Follow-up surveys will be sent to students 6 months into their intern year (data will be available by January 2013).

Results to date: 21 of 25 students responded to the initial survey. Over 75% of students felt adequately prepared (score of 3+) to manage common pediatric pulmonary, cardiac, neurologic, gastrointestinal, and endocrine conditions, while only 28% felt adequately prepared to manage pediatric rheumatologic conditions. Assessment of adequate procedural skill preparation ranged from 0% (splinting) to 80% (bag-valve masking). Over 90% of students' felt adequately prepared for wards, ER, and clinic compared to 30% for the NICU. Students reported a preference for more hospital experience and feedback.

Discussion: In contrast to previous studies, our design allows each student to serve as his/her own control, highlighting the change between medical students' and interns' perception of their medical school training. Current data suggests specific gaps in medical student training including intensive care and procedural skills. Six-month data will allow comparison of the perceived curricular needs of learners at each stage.

C20) PROFESSIONAL IDENTITY FORMATION AMONG MEDICAL STUDENTS WHO VOLUNTEER AT MEDICAL SPECIALTY CAMPS

Jimmy B. Beck, MD, MD, Children's National Medical Center, Washington, DC, Terry Kind, MD, Children's National Medical Center, Washington, DC, Katherine Chretien, MD, Washington DC VA Medical Center, Washington, DC, Craig C. DeWolfe, MD, Children's National Medical Center, Washington, DC

Background: In 2010, the Carnegie Foundation issued a report emphasizing the importance of the "formation of the physician's professional identity." While medical student professional identity development is relatively unexplored in the medical literature, results from other fields (art therapy and teaching) suggest positive outcomes of service learning programs on professional identity.

Methods: Students between their 1st and 2nd year of school served as counselors for 1 week at a condition specific camp (epilepsy, heart disease, or diabetes) sponsored by Children's National Medical Center. Focus groups were held on the last day of camp for a total of 3 separate groups. Sample questions included: How do you think this week will affect your professional goals and how did this week affect you personally? Focus group data were assessed using the phenomenological tradition by two researchers trained in qualitative analysis.

- Results: All 9 students agreed to participate. Findings revealed parallels in what the students experienced and what they perceived the campers to have gained, such as leadership and communication skills, and knowledge of chronic disease. They described the experience as motivating and career reinforcing, and it helped them “move beyond the textbook.” They strengthened their professional identity by deepening their commitment to serving patients with empathy, seeing and talking to patients as people and not just diseases, and wanting to help patients’ live healthier lives.
- Conclusions: A 1 week service learning experience at a medical specialty camp may influence and strengthen the early formative professional identity of medical students. Our plans include conducting interviews with the students 6 months after their experience to explore the long-term effects of this program.

C21) MEDICAL STUDENTS' EXPERIENCES WITH ROTATING PEDIATRIC HOSPITALISTS

L. Barry Seltz, MD, MD, Children's Hospital Colorado and University of Colorado School of Medicine, Aurora, CO, Alison Montgomery, MD, Children's Hospital Colorado and University of Colorado School of Medicine, Aurora, CO, Lindsey Lane, MD, Children's Hospital Colorado and University of Colorado School of Medicine, Aurora, CO, Jennifer Soep, MD, Children's Hospital Colorado and University of Colorado School of Medicine, Aurora, CO, Janice Hanson, MD, Children's Hospital Colorado and University of Colorado School of Medicine, Aurora, CO

Background: Pediatric hospitalists, transiently working on inpatient wards, participate in a rotational approach to medical education. Effects on trainees from working with changing faculty are unknown. Our study's objective was to explore medical students' experiences working with rotating pediatric hospitalists.

Methods: Focus groups (n=3) and individual interviews (n=5) were performed with a purposeful sample (n=27) of 3rd/4th year medical students from general pediatric inpatient teams. Semi-structured interview questions focused on teaching, feedback, evaluation, and professional growth. Data were transcribed verbatim. Applying grounded theory, codes were developed using an emergent approach. At least 2 investigators coded each transcript; differences were resolved by consensus. Thematic analysis was performed until theoretical saturation.

Results: The inpatient experience for students has many interrelating pieces. Themes included learning environment, continuity, student resilience, opportunity to progress, evaluation, and physician growth. In the learning environment, students valued exposure to varying teaching/patient care styles. Opportunities to show clinical skills during a week with the attending physician were limited. Senior resident continuity was critical to student function. Students found adjusting to differing expectations of a new hospitalist stressful and an important skill. The inability to build on assessment and feedback was felt to negatively impact student evaluations and inhibit their growth into a physician.

Conclusion: Benefits to working with rotating hospitalists include exposure to varying teaching and patient care styles. Student opportunities to show clinical skills and improvement were limited. Devising practices that capitalize on positive effects of rotating hospitalists, while moderating challenges, will optimize the professional growth of students into physicians.

C22) STUDENTS PREFER HUMAN INTERACTION IN PEDIATRIC CLERKSHIP

Nirupma Sharma, MD, MD, Georgia Health Sciences University, Augusta, GA, Lisa E. Leggio, MD, Georgia Health Sciences University, Augusta, GA

Goal: To evaluate medical student preferences about the pediatric clerkship.

Background: Schools must demonstrate comparability across sites. Rapid expansion of class size and clinical sites has strained teaching capacity resulting in use of simulation and web-based learning to supplement patient care experiences. Although students are computer-savvy, it is unclear if preferences for learning modality have changed. Student preferences can inform decisions about expenditures on resources and curriculum changes.

Methods: Students enrolled in the pediatric clerkship at the Medical College of Georgia during one academic year were surveyed about preferences for learning resources. The study was approved by the Institutional Review Board. Topics included preferences about text and review books, web-based resources, lecture format, clerkship structure and orientation.

Results: Of 190 surveys, 132 (69%) were completed. When ranking mode of lecture delivery, 53.1% preferred live facilitated discussions, and 15.8% preferred live discussions with videoconferencing. Videotaped conferences, Podcasts, and web-based lectures with asynchronous participation were not ranked as highly. Students ranked options in the following order: Live facilitated discussions (2.12), live with video-conferencing (2.96), podcasts (3.26), videotaped lectures on web (3.63), web-based lectures with asynchronous participation (3.73), and other (5.24). Students prefer live orientations, but if web-based they should include audio and visual components.

Conclusions: Students prefer live interactive lectures and orientation to video-recorded or web-based presentations. Expanding schools must consider student preferences as they develop resources to maintain comparability between sites. Maintaining human interaction may require duplication of services and additional faculty development for community sites.

Assessment of Students (3)

C23) UNDERSTANDING NATIONAL BOARD OF MEDICAL EXAMINERS EXAM SCORE DISPARITIES ACROSS THE CONTINUUM

Donnita K. Pelser, BA, BA, University of Kansas School of Medicine, Wichita, KS, Mark E. Harrison, BA, University of Kansas School of Medicine-Wichita, Wichita, KS, Carolyn R. Schmidt, BA, University of Kansas, Wichita, KS

Purpose The purpose of this study is to assess the disparities in the minimum passing score for the pediatric subject exam based on a survey sent to members of COMSEP1. This data has not previously been analyzed or reported.

Background Each third year medical student is required to have a summative exam to test their knowledge in pediatrics at the

end of the rotation. Most medical institutions administer the NBME2 subject exam. Each clerkship sets a minimum score or percentile for passing the subject exam which vary greatly across the continuum whose programs must meet the requirements of the LCME3.

There are different sizes of pediatric programs across the United States and Canada. They range from small community to large university or hospital based programs. A literature search did not identify any studies seeking to quantify these differences.

By examining the survey data and displaying the disparities of minimum scores, number of clerkship weeks and enrollment of students, this project could help COMSEP members to work together to close the gaps.

Hypothesis This is a descriptive study. We anticipate finding a wide disparity in clerkship size, length, and minimum pass scores among the respondents. We hope to identify “norms” from the data to help COMSEP members compare their own clerkships to others.

Research Design Descriptive analysis of data already obtained through the annual COMSEP member survey.

Methods COMSEP sends out a member formulated survey every year. The recipients are the pediatric clerkship directors and chairs of the 138 US and 17 Canadian LCME accredited medical schools. The 2011 survey was distributed electronically in October of 2011. We had a 66% response rate to our eight questions. All identifiers will be eliminated prior to passing along the data to the statistician for analysis.

Statistical Analysis Continuous variables will be reported using means with standard deviations, unless medians are more appropriate. Categorical data will be reported as frequencies and percentages. Comparisons will be made between program size and length and minimum pass scores using independent samples t-tests.

References

1. www.comsep.org
2. www.nbme.org
3. www.lcme.org

C24) MULTI-MODAL COMPETENCY-BASED NEEDS ASSESSMENT FOR PEDIATRIC OTOSCOPY SKILLS

Caroline R. Paul, MD, MD, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, Gregory S. Rebella, MD, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, Meg G. Keeley, MD, University of Virginia School of Medicine, Charlottesville, VA

Background: The AAP/AAFP guidelines recommend that “instruction in the proper examination of the child’s ear should begin with the first pediatric rotation in medical school and continue throughout postgraduate training.” However, competency-based curricula for all learners remain limited.

Objective: For the purpose of curriculum development, a needs assessment for Pediatric Residency Interns (PI) and Emergency Medicine Residency Interns (EMI) was performed at the beginning and end of internship to identify learning needs for pediatric otoscopy including any similarities between groups of learners.

Methods: All PI (n=14) and EMI (n=6) were assessed at the beginning and end of internship with a written test which included validated images (Pediatrics, 2009) and an OSCE which evaluated technique, cerumen removal, and pneumatic otoscopy using a validated ear model (Simulation in Healthcare, 2011). A subset of PI (n=5) were also assessed with real patients using a developed checklist (Paul C. COMSEP, 2011). Two-sample t-tests were used to compare mean scores and minimum passing levels (MPL).

Results: There was no significant difference between PI and EMI in pre-intern mean written test scores (19.9 vs. 21.0; p=0.66) or pre-intern mean OSCE scores (21.4 vs. 24.0; p=0.25). For the combined group (CG) of PI and EMI, 38% and 56% achieved MPL on pre-intern and post-intern written test respectively, while no intern achieved MPL on pre-intern or post-intern OSCE. Mean gains for written test were 3% for CG (p=0.27), 3% for PI (p=0.28), and 1% for EMI (p=0.87), while mean gains for OSCE were -5% for CG (p=0.04), -3% for PI (p=0.60), and -6% for EMI (p=0.04). Mean gains were not significantly different between PI and EMI for written test (p=0.75) or OSCE (p=0.61). Mean gain for PI assessed with real patients was 1.8 (p=0.6).

Conclusions: Pre-intern assessment similarities amongst graduating medical students indicate that competency cannot be assumed per residency choice. Post-intern assessments indicate existing intern training is not sufficient. Skills regression can occur despite intern year completion. Direly needed competency-based interventions should focus on identified deficits and have broader applicability to learners of various specialties and experience levels.

C25) RELIABILITY OF A CHECKLIST USED FOR ASSESSMENT OF PEDIATRIC OTOSOCOPY SKILLS

Caroline R. Paul, MD, MD, University of Wisconsin School of Medicine and Public Health, Madison, WI, Gwen C. McIntosh, MD, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, Sarah Corden, MD, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, Richard L. Ellis, MD, University of Wisconsin School of Medicine and Public Health, Fitchburg, Wisconsin, Lori Weber, MD, Gunderson Lutheran-Pediatrics, La Crosse, Wisconsin, Gary Williams, MD, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin

BACKGROUND: Since students’ performance in real clinical settings is often evaluated by their individual attending faculty, there is a need to establish more standardized evaluation instruments for learners. Faculty participating in a pediatric otoscopy curriculum using a checklist as an evaluation measure reported that the checklist enhanced their observation of students’ skills and could be easily implemented in their clinical practices (Paul C. COMSEP, 2010)

Objective: This study was performed to assess accuracy, consistency of accuracy, and inter-rater agreement of an evaluation

- checklist for pediatric otoscopy skills.
- **METHODS:** A 12-item checklist consisting of 5 domains (discussion, equipment, distraction techniques, holding positions, and exam) was developed as an evaluation instrument for a pediatric otoscopy curriculum. Nine videos showing a physician performing the pediatric ear exam on a child in various manners were developed. Five pediatric faculty at a large teaching hospital who routinely serve as medical student preceptors were asked to view the videos and evaluate the physician performing the ear exam using the 12-item checklist. Intra-class correlation coefficient was used to assess consistency in accuracy between faculty. Kappa value was used to assess inter-rater agreement for all faculty correctly scoring items on the checklist.
- **RESULTS:** For each individual faculty, the percentage of correctly scored items on the 12-item checklist ranged between 95.4% and 97.2%. Intra-class correlation coefficient was -0.09. For all faculty combined, the mean percentage of correctly scored items for the 12-item checklist was 95.1% (13.9 SD) with the mean percentage of correctly scored items ranging between 80.6% and 100% for each individual item. Kappa value for inter-rater agreement was 0.38.
- **CONCLUSIONS:** While there was high accuracy for each individual faculty using the 12-item checklist to evaluate standardized ear exams, there was poor consistency in accuracy between faculty and only fair inter-rater agreement for all faculty correctly scoring items on the checklist. Standardized evaluation instruments such as checklists may be effective and easily implemented in a real clinical setting for the attainment of different skills. However, their reliability should be established prior to use in curricula.

Program Organization and Activities (5)

C26) PEDIATRIC MEDICAL STUDENT OUTCOMES: LONGITUDINAL CLERKSHIPS VS. TRADITIONAL BLOCK ROTATIONS

Kyra A. Len, MD, MD, University of Hawaii John A. Burns School of Medicine, Honolulu, HI, Barry M. Mizuo, MD, University of Hawaii John A. Burns School of Medicine, Honolulu, HI, Chieko Kimata, MD, Hawaii Pacific Health, Honolulu, HI

Longitudinal clinical clerkships are an innovative alternative to traditional block rotations during the third year of medical school. Literature about longitudinal clinical clerkships have shown promising outcomes including improved academic results, better continuity with patients and faculty preceptors, and enhanced patient centeredness. The University of Hawaii John A. Burns School of Medicine (JABSOM) longitudinal clerkship was first offered in 1992. The structure of JABSOM's longitudinal clerkship involves 5.5 months spent training between various medical specialties in a rural outpatient setting. A primary goal for the program has been to attract more students towards the practice of primary care. The JABSOM longitudinal clerkship has also emphasized patient centeredness and learner centeredness in the curriculum, which has been well received by students. There is a need to determine whether the longitudinal clerkship provides comparable learning outcomes to the traditional block rotation during the pediatric clerkship.

Methods: Pediatric clerkship grades, National Board of Medical Examiners (NBME) shelf examination scores, and clinical evaluations were compared between longitudinal and traditional block students from 2008-2012. The percent of students deciding to pursue pediatrics in the two groups, as well as other primary care disciplines, was also compared. Statistical analysis was performed with the t. test, Wilcoxon rank sums test, and fisher exact test.

Results: The traditional block students received higher average shelf examination scores than longitudinal students; with a mean percentage of 79.8% for traditional block students vs 75.9% for longitudinal students ($p=0.0041$). There was no difference between the overall grades received by either group. A similar proportion of students in each group chose to pursue pediatrics (10% for traditional block, 9% for longitudinal clerkship). Student selection of other primary care fields was also similar between study groups.

Conclusion: The longitudinal clerkship track did not seem to provide any advantage in persuading students to pursue pediatrics or other primary care specialties. There was no statistical difference in the overall grades received by pediatric longitudinal clerkship students and traditional block students. However, shelf examination scores were slightly lower in the longitudinal student group

C27) UTILIZING INDIVIDUALIZED LEARNING GOALS (LG) IN THE PEDIATRIC CLERKSHIP

Jennifer B. Soep, MD, MD, University of Colorado, Aurora, CO, Michelle E. Kiger, MD, University of Colorado, Aurora, CO, Tai M. Lockspeiser, MD, University of Colorado, Aurora, CO

Background: Self-directed lifelong learning is an important skill for physicians to develop to maintain competency in an ever-evolving field. Setting goals places the learner at the center of the learning process, allowing for individualization and practice in self-assessment.

Objectives: 1. Categorize LGs written by students during their pediatric clerkship based on the ACGME competencies. 2. Describe students' self-reported progress on LGs. 3. Identify barriers to meeting LGs.

Methods: 3rd year medical students were asked to develop 3 LGs during their pediatric clerkship orientation. They were given written instructions on writing LGs using the I-SMART approach (important, specific, measurable, accountable, realistic, timely) and a worksheet that guided them through identifying a goal, articulating why they selected it, developing plans for achieving it, and measuring the anticipated outcome. At the end of the rotation, students were asked to self-report their progress on meeting each LG using a 5-point Likert scale (1=no progress and 5=met my objective). They were also asked to identify challenges they faced. All LGs were reviewed by two investigators and categorized using the ACGME competencies.

Results: 45 students documented 133 LGs over 3 blocks. LGs covered all ACGME competencies except for professionalism and system-based practice: 55% patient care, 33% communication, 8% medical knowledge, 4% practice-based learning and

improvement. The majority of LGs focused on oral presentations, written notes, physical exam skills, and development of differential diagnoses. A few students identified goals that did not fit well into the competency scheme, including exploring pediatrics as a career. On average, students rated their progress toward their LGs at 4.1. Barriers to meeting goals included: difficulties asking for feedback and with patient cooperation, and lack of time, confidence, experience or opportunities to see patients that matched their goals.

Conclusions: The majority of the LGs written by 3rd year students related to patient care and communication. Students felt they made significant progress towards meeting their goals despite identifying several barriers. Next steps include assessing the quality of the LGs using a scoring rubric, determining the impact of LGs on a student's learning in the clerkship, and finding ways to overcome barriers.

C28) TITLE: YEAR II PAEDIATRIC CLERKSHIP - EXPERIENCE AT SINGAPORE DUKE_NUS SOM

Tsee Foong Loh, MBBS MMed, MBBS MMed, KK Hospital, Singapore, Singapore, Oh Moh Chay, MBBS MMed, KK Hospital, Singapore, Singapore

Background: DUKE_NUS graduate medical school was founded in 1997 as the first graduate medical school in Singapore. Collaboration between Duke University Medical School (DUMC) and Yong Loo Ling School of Medicine, National University of Singapore (YLL-NUS) resulted in a 4-year medical school program affiliated to SingHealth Cluster of medical institutions. The first year comprises of 6 courses: Molecules and Cells, Brain and Behavior, Normal Body, Body and Disease, Practice Course and Investigative Methods Tools. Students successful in the first year of basic sciences in the first year were admitted into the second year clinical clerkships consisting of Medicine, Surgery, Obstetrics and Gynaecology, Psychiatry and Neurology and Paediatrics. Paediatric clerkship was based in KK Women's and Children's Hospital. Curriculum was adapted from existing COMSEP and YLL-NUS syllabus. Objective: To report 4 years experience of second year paediatric clerkship rotation in a Singapore graduate medical school. Methods: 184 MS2 students participated in the inaugural clerkship lasting eight weeks; 4 weeks in inpatient areas (general paediatric wards, high dependency and special care nursery) and outpatient areas (general ambulatory clinics, specialist's outpatient clinics and children's emergency) each. Structured learning programs include bedside tutorials, clinical Team LEAD (CTLEAD) sessions, clinical rounds, CLIPPs and interactive sessions. Assessment tools include continual assessment, case presentations, MCQs in CTLEAD sessions, and end of term test, logbooks and SHELF examination. Feedback from students were taken final week of rotation by the School. For comparative purpose, Duke_NUS students' scores were compared with 50% percentile norms on SHELF exam. Results: All students passed the clerkship with aggregate score of 69/100 (SD 2.1). The average end of term clinical test score was 68. The aggregate SHELF score for the 4 years 72 was compared to MS2 scores in US (50percentile) 74.2 (p=NS). Mean rating by students if they felt they "learnt valuable skills that they can apply to practice of medicine was 4 (5=highest). Conclusions: The Duke_NUS paediatric clerkship was well received by the students and they performed as well as the 50% percentile of norms in USMLE SHELF exams.

C29) IMPACT OF A PEDIATRIC NIGHT TEAM EXPERIENCE ON STUDENT EDUCATION

Jocelyn H. Schiller, MD, MD, University of Michigan Medical School, Ann Arbor, MI, Max Sokoloff, , Ann Arbor, MI, John Schmidt, MD, University of Michigan Medical School, Ann Arbor, MI, Jennifer Christner, MD, Upstate Medical University, Syracuse, NY

Background: Duty hour restrictions have led to night shift rotations for residents and medical students (M3's). Studies have reported increases and decreases in teaching of M3's and quality of student experiences.

Goals: We sought to explore 1) M3s' perspectives on time allocation and the quality of their experience during night and day shifts 2) M3 performance on clerkship exam and team based learning (TBL) scores before and after implementation of the night shift rotation.

Methods: M3's (n=25) were surveyed at the end of night and day shifts using a 5-point Likert scale. M3's (n=23) participated in semi-structured focus groups; responses were independently coded, then discussed until consensus reached using constant comparative method. Exam and TBL scores were compared before and after implementation of the night rotation.

Results: The night experience was rated higher than day shifts in overall quality (4.708 vs 4.042, p= 0.002) and quality of resident teaching (4.333 vs 3.667, p<0.001). M3's spent significantly more time during night shift participating in patient handoffs and reading. Although M3's spent less time in direct patient care, they performed almost twice as many history and physical exams during night shifts (mean number per shift: 1.632 vs 0.895, p= n.s.). There was no difference in the amount of teaching received. Students strongly agreed that the night team experience added to the overall rotation (4.58, S.D. 0.6469). There was no difference in the performance on the shelf exam (mean scores: 82.32 prior year, 82.34 intervention year, p=0.98). TBL scores improved (mean scores: 89.78 prior year, 93.74 intervention year, p<0.001). Focus group themes were 1) Education 2) Culture of Medicine 3) Continuity 4) Quality of Life. During the night shift, most students reported greater amounts of teaching, patient specific education, exposure to patients on other subspecialty teams, appreciation for the resident work at night and team bonding. Students noted a loss of continuity in patient care, a change in ownership mentality and decreased quality of life during night shifts.

Conclusions: Our night experience provided an educationally rich environment that allowed for teaching, direct patient care experiences and stronger understanding of resident responsibilities.

- C30) ONE SIZE DOES NOT FIT ALL. CREATING INDIVIDUALIZED EDUCATIONAL PLANS WITHIN THE PEDIATRIC CLERKSHIP.

- Daxa P. Clarke, MD, MD, University of Arizona College of Medicine--Phoenix and Phoenix Children's Hospital, Phoenix, AZ
- Sara Bode, MD, Phoenix Children's Hospital, Phoenix, AZ, Zachary Robbins, MD, Maricopa Medical Center, Phoenix, AZ
- Lilia Parra-Roide, MD, Phoenix Children's Hospital, Phoenix, AZ, Kipp Charlton, MD, Maricopa Medical Center, Phoenix, AZ
- Grace L. Caputo, MD, Phoenix Children's Hospital, Phoenix, AZ

- Background: As third year medical students enter their clerkships, they are experiencing full time clinical medicine for the first time. During this time, not only are they learning the different aspects of clinical medicine, but they are also “trying on” each specialty for fit. Based on these experiences, the majority of students will make their decisions about residency careers.
- A typical clerkship may offer limited exposure to subspecialties within its field.

- Objective: Starting in July 2011, the Pediatrics Clerkship at the University of Arizona College of Medicine—Phoenix has chosen to individualize training for students. In addition to providing them the traditional clerkship experience, we include additional specialty experiences for each student based on potential career aspirations and interests.
-

• Description: At the start of the pediatric clerkship, each student is required to create an Individualized Learning Plan for the clerkship including future specialty consideration and career goals. Based on this information, the Clerkship Director works with the student to create a customized educational plan. Examples of individualized educational plans are: an MS3 with an interest in Intensive Care who spent 1 week of his 3 weeks of inpatient experience in the Pediatric ICU (rather than general pediatric floor); an MS3 with an interest in Pediatric Heme-Onc who did “continuity clinic” in the Heme-Onc clinic (akin to the resident continuity clinic, the student spent one afternoon/week in the Heme-Onc clinic during her Inpatient experience); an MS3 with an interest in Pediatric Anesthesia who spent one full day in the OR working with the Pediatric Anesthesiologist and learning procedures.

- Outcomes: Over the past 12 months, pediatric clerkship students have participated in individualized education in Anesthesia, Hematology/Oncology, Intensive Care, GI, Sports Medicine, Endocrinology, Breastfeeding, High Risk Homeless Youth, Cardiology, Neurology, Rheumatology, Pulmonology, Adolescent Medicine, and Emergency Medicine. Shelf exam scores and clerkship composite scores have remained comparable to previous years. In addition, students were able to complete the required patient and procedures based on COMSEP learning objectives despite the time away from general pediatrics.
- Subjectively, all students reported positive feedback about their experiences.

- Conclusion: Students in their Pediatric Clerkship have both gained more experience in subspecialties of Pediatrics and have augmented their experience of pediatrics by Individualized Education. We will continue to expand our Individualized Educational Program. As we move forward, we have plans to expand our project in which 1-2 students in each block will experience Individualized Education. Data collection will include a pre and post survey completed by the student, assessment of faculty satisfaction, and formal comparisons of shelf exam scores, clinical evaluation scores, and final clerkship grades between the students who were involved in Individualized Training and the students who completed the standard clerkship experience.

NC



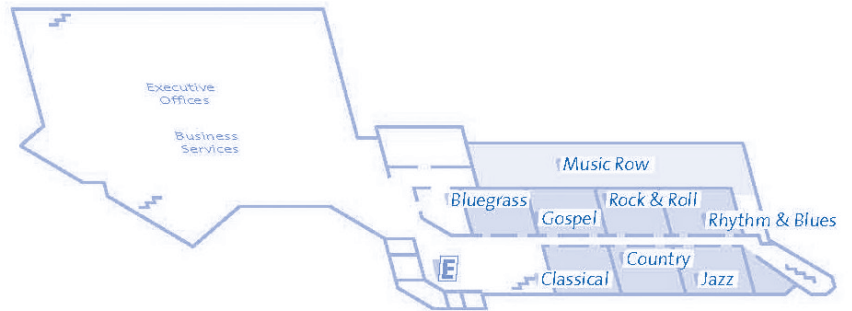
NOTES

NC

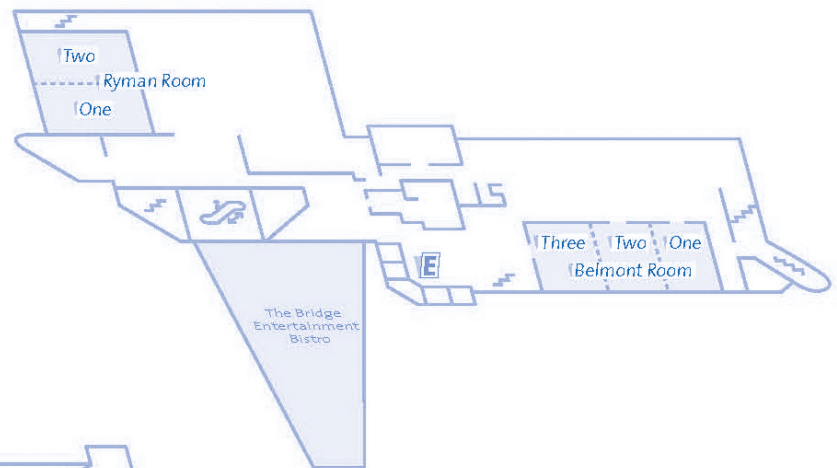
[illegible]

HOTEL FLOOR PLAN

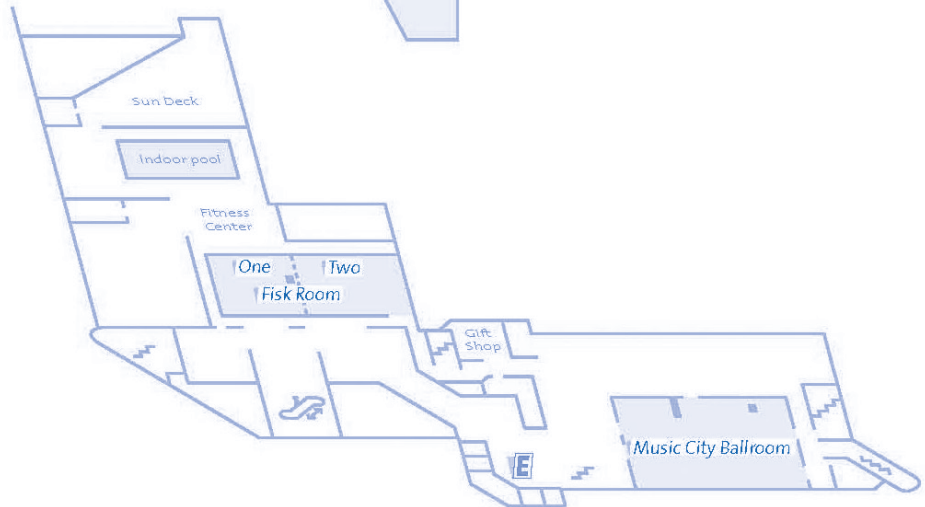
LEVEL FOUR



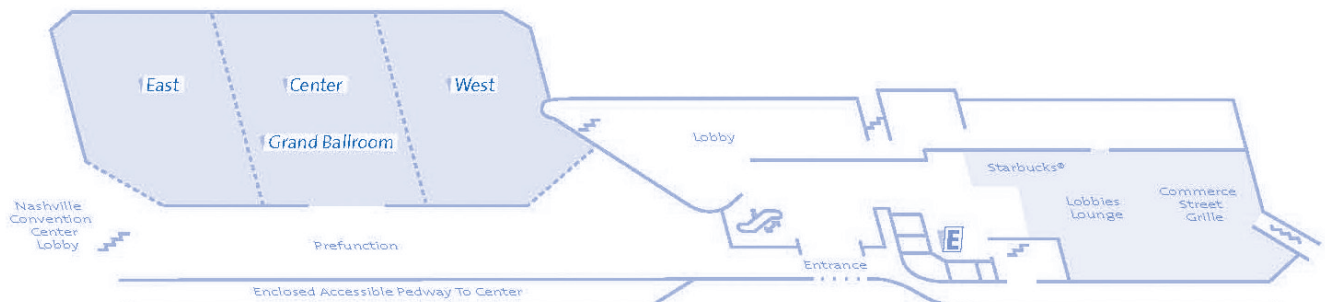
LEVEL THREE



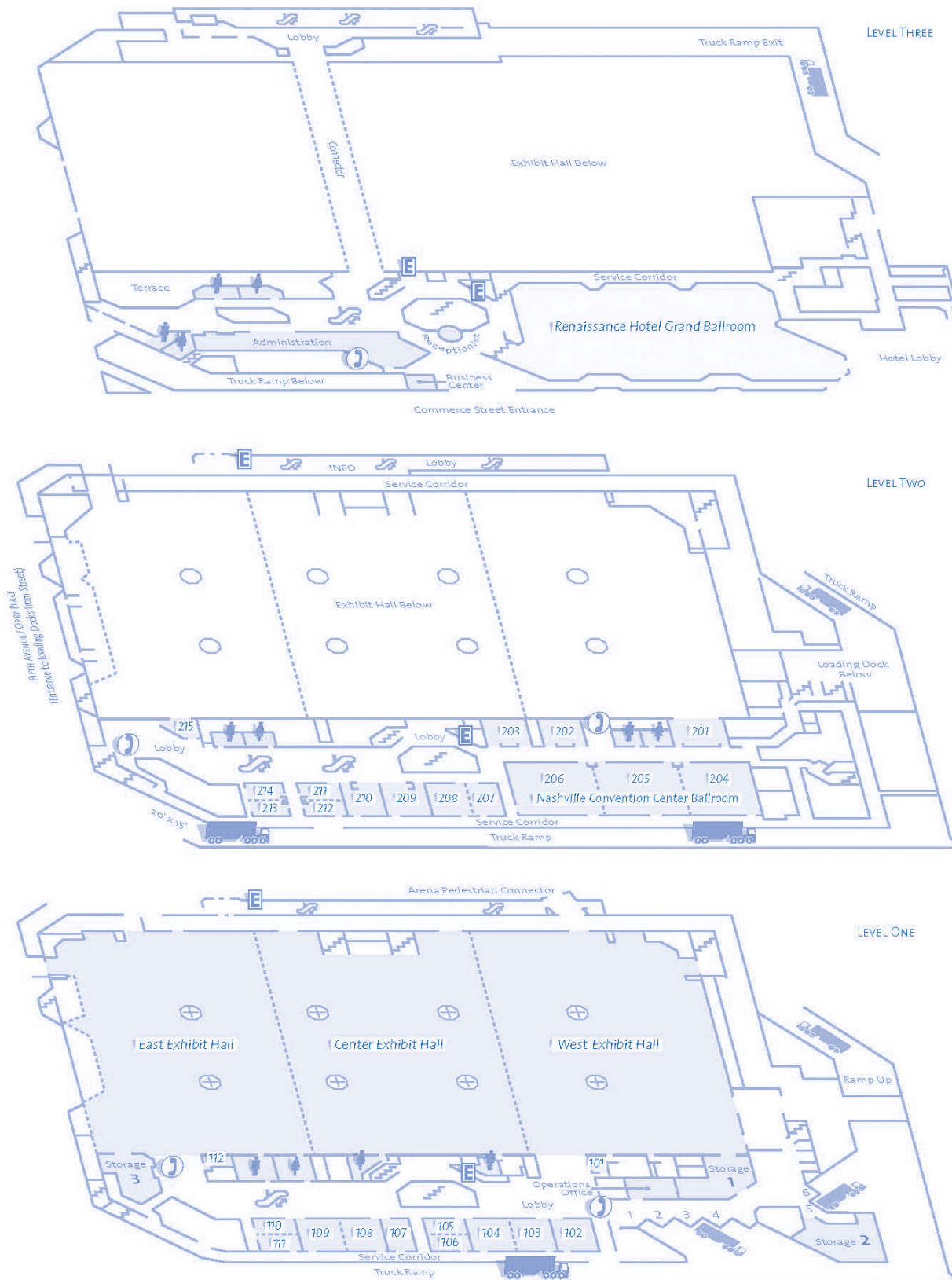
LEVEL TWO



LOBBY LEVEL



CONVENTION CENTER FLOOR PLAN



**APPD Forum for
Fellowship Directors at PAS**

May 3, 2013

Renaissance DC Downtown Hotel
Washington, DC

REGISTRATION NOW OPEN!
www.appd.org



**APPD 18th Annual
Fall Meeting**

October 2-4, 2013

Renaissance Arlington Capital View Hotel
Arlington, VA

Visit www.APPD.org this summer for
more details!

Pediatric Educational Excellence Across the Continuum (PEEAC)

October 4-5, 2013

Renaissance Arlington Capital View Hotel
Arlington, VA

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

3rd Biennial Meeting Sponsored by the
Indiana University School of Medicine in collaboration with the following:
APA, APPD, COMSEP, and CoPS

**APPD 2014
Annual Spring Meeting**

April 2-5, 2014

Hyatt Regency
Chicago, IL



**COMSEP 2014
Annual Meeting**

March 27-29, 2014

Fairmont Chateau Laurier
Ottawa, ON

