

# ESTABLISHING A MEDICAL EDUCATION RESEARCH NETWORK FOR THE PEDIATRIC SUBSPECIALTIES

Richard B. Mink MD MACM, Carol L. Carraccio MD MA, Alan Schwartz PhD, Christiane E. Dammann MD, Pamela C. High MD, Jennifer Kesselheim, MD EdM, Kathleen McGann MD and Bruce E. Herman MD for the Subspecialty Pediatrics Investigator Network (SPIN)

Harbor-UCLA Medical Center, Torrance, CA; American Board of Pediatrics, Chapel Hill, NC; University of Illinois College of Medicine at Chicago, Chicago, IL; Tufts Medical Center, Boston, MA; Brown University, Providence, RI; Boston Children's Hospital, Boston, MA; Duke University Hospital, Durham, NC and University of Utah, Salt Lake City, UT

## Introduction

- The challenge to meaningful research in medical education is the need for large sample sizes so that innovative approaches can be adequately assessed
- Trainees also need to be evaluated in different educational settings to understand what functions well in which environment and why or why not
- Data obtained from studies of resident education may not be applicable to fellows since faculty have more longitudinal experiences with fellows
- There is a need to develop a medical education research network to improve the education and assessment of pediatric subspecialty trainees

## Objective

The objective was to create a pediatric subspecialty medical education research network that could be used to establish best practices in the education and assessment of pediatric fellows.

## Methods

- The Subspecialty Pediatrics Investigator Network (SPIN) was conceived as a collaborative effort of CoPS, APPD LEARN, the ABP and the APPD Fellowship Committee
- Goal was to take advantage of the expertise of each group
- Each subspecialty identified up to 2 representatives
  - these individuals, along with the organizational leaders, comprised the SPIN Steering Committee

## Methods

Specific roles were defined for each group:  
CoPS

- supervise recruitment of programs via subspecialties
- maintain list of participating programs
- coordinate IRB application (especially to identify programs from same institution)
- point of contact for subspecialties
- prepare data for presentations
- organize calls and meetings

APPD LEARN

- assist with IRB application
- assist with creation of learner identifiers
- develop web-based data collection tools
- manage and “cleanup” data
- perform data analysis

Subspecialty Representatives

- recruit programs within their subspecialty
- provide instruction to programs about study and data entry
- assist with IRB submission
- assist with program compliance with data collection

ABP

- provide expertise regarding study question and design

APPD Fellowship Executive Committee

- assist with subspecialty recruitment
- disseminate information
- All stakeholders provided input into study design
- In its initial project, SPIN conducted a study evaluating entrustment decisions for the common pediatric subspecialty Entrustable Professional Activities (EPAs)
  - goal of  $\geq 20\%$  program participation for each subspecialty
  - data collected in the fall 2014 & spring 2015

## Results

**Table 1. Summary of Participation in the EPA Study**

Study Participation	Fall 2014	Spring 2015
Institutions	78	81
Programs (n)	208	209
Subspecialties with Program Participation $\geq 20\%$ (%)	79	79
Total Number of Fellows	1011	1036
1 <sup>st</sup> year fellows (n)	352	369
2 <sup>nd</sup> year fellows (n)	332	336
3 <sup>rd</sup> year fellows (n)	327	331

- All 14 pediatric subspecialties with ABP certification contributed data
- Most subspecialties met the criteria for  $\geq 20\%$  participation of programs in the subspecialty (table 1)
- Data from a large number of fellows, representing all 3 years of fellowship, were obtained

**Table 2. Participation of individual subspecialty programs in the EPA Study\***

Subspecialty Participation	Fall 2014	Spring 2015
Adolescent Medicine	10 (36%)	11 (39%)
Cardiology	14 (25%)	12 (21%)
Child Abuse	10 (40%)	10 (40%)
Critical Care	24 (38%)	21 (33%)
Developmental & Behavioral	17 (46%)	18 (49%)
Emergency Medicine	19 (26%)	19 (26%)
Endocrinology	12 (18%)	14 (21%)
Gastroenterology	11 (19%)	10 (18%)
Hematology-Oncology	14 (20%)	13 (19%)
Infectious Diseases	14 (23%)	16 (26%)
Neonatology	33 (34%)	35 (36%)
Nephrology	7 (16%)	6 (13%)
Pulmonary	12 (23%)	13 (25%)
Rheumatology	11 (32%)	11 (32%)

\*percentage based upon number of ACGME accredited pediatric subspecialty fellowships in 2015

## Results

- Neonatology and Critical Care had the highest number of programs participating (table 2)
- Developmental-Behavioral Pediatrics and Child Abuse enrolled the greatest percentage of programs (table 2)
- Overall, 27% of all ACGME accredited pediatric subspecialty programs participated
- Based upon data from the EPA study, 7 abstracts have been accepted to 3 different meetings (ACGME, APPD & PAS)

## Conclusions

- A pediatric subspecialty medical educational network, SPIN, representing all ABP-certified pediatric subspecialties, was successfully created and utilized
- This Network provides a critical infrastructure for evaluating the education of fellows and also provides a repository for data that can be utilized in further studies

## SPIN Steering Committee

Adolescent Medicine: Sarah Pitts; Cardiology: Gina Baffa; Child Abuse: Bruce Herman; Critical Care: David Turner; Developmental & Behavioral Pediatrics: Jill Fussell & Pam High; EM: Deb Hsu; Endocrinology: Dianne Stafford & Tandy Aye; GI: Cary Sauer; Heme-Onc: Jennifer Kesselheim; ID: Angie Myers & Kammy McGann; Neonatology: Christiane Dammann & Patricia Chess; Nephrology: John Mahan; Pulmonology: Prina Weiss; Rheumatology: Megan Curran; APPD LEARN: Alan Schwartz; ABP: Carol Carraccio; APPD Fellowship Committee: Bruce Herman; CoPS: Richard Mink

## Collaborators

R Abell, E Adderson, D Adkins, O Al-Ibrahim, E Alderman, C Allen, D Allen, M Amaya, R Amimovin, J Anders, L Armsby, M Atlas, M Awonuga, F Bany-Mohammed, J Barker, C Barlow, A Barnes, G Barretto, C Barron, C Bendel, J Bhatia, B Binstadt, A Blaschke, A Blaufox, B Bokor, M Bone, K Booth, D Boyer, J Brancato, S Bratton, L Brion, M Brook, P Brophy, K Bryant, K Carlson, F Carnevale, M Carney, M Caserta, J Chapman, J Clingenpeel, D Coury, R Cron, M Currie, D Dannaway, P Dennehy, C Doughty, L Doughty, A Dozor, J El Khoury, S Etheridge, F Erenberg, C Estrada, K Fairchild, A Falck, R Fastle, M Federman, H Feldman, B Felt, G Fleming, L Frank, S Friedman, J Frohna, M Fuloria, J Fuqua, H Ganz, C Garrison, M Gillam-Krakauer, J Glickstein, B Gonzalez, B Gottlieb, D Green, M Green, P Grimm, U Guillen, D Hains, M Hall, M Haller, R Harb, K Hardy, N Harik, V Havalad, V Heffner, J Helderman, M Henry, A Hergenroeder, M Hermiston, W Hoover, H Hsu, E Jacobs, J Jaroschak, L Johnston, S Johnston, T Johnston, J Journeycake, A Kale, H Karpen, R Kato, J Katz, N Kellogg, J Kiger, J Kim, O Kim, B Kinane, E Klein, S Krishnan, M Kronman, J Kugler, D Kumar, T Laskey, E Lawson, T Lee, Y Lee-Kim, M Letson, S Long, M Lowe, S Lusman, R Lutes, M Macias, L Madison, N Maraga, K Marzan, K Mason, L Matheo, C Mauras, C McAnaney, M McCabe, L McGuinn, A McQueen, J Mehta, D Meryash, K Miller, M Moffatt, Z Molle-Rios, R Mohon, R Monzavi, P Moore, K Nanda, A Narayan, E Nazarian, Y Nicolau, J Nocton, V Norwood, N Patel, J Pinheiro, J Pohl, K Potter, B Printz, R Quigley, A Rabbitt, R Rahhal, J Rama, R Ramanathan, A Rao, K Rehder, B Reinking, W Rice, Y Rivas, N Roizen, J Rose, M Rose, J Rosen, M Rosenberg, C Roskind, A Ross, K Rouser-Stevens, I Sami, A Savant, S Savelli, W Sayej, A Schonwald, J Schuettle, B Scottoline, J Sharma, T Sharma, E Shereck, K Simonsen, T Simpson, L Siqueira, A Sirotnak, N Slamon, L Smith, J Soprano, K Soren, T Stanley, S Starling, P Steuber, B Strykowski, A Talati, P Teaford, M Teshler, A Thomas, K Tieves, O Titus, R Tower, M Trent, D Vanderbilt, S van Schaik, L Variotta, M Vasquez, K Vogt, B Voigt, P Volk, P Vuquin, E Walton, A Warwick, W Waz, J Weiner, L Weiner, T Weinstein, J Welch, L Widdice, S Witcheh, M Winkler, K Yen, C Yost, S Yussman, A Zubrow

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