

DO FELLOWSHIP PROGRAM DIRECTORS AND CLINICAL COMPETENCY COMMITTEES AGREE IN FELLOW ENTRUSTMENT DECISIONS?

Richard B. Mink MD MACM, Carol L. Carraccio MD MA, Bruce E. Herman MD, Tandy Aye MD, Jeanne M. Baffa MD, Patricia R. Chess MD, Jill J. Fussell MD, Cary G. Sauer MD MSc, Diane E. Stafford MD, Prina Weiss MD and Alan Schwartz PhD for the Subspecialty Pediatrics Investigator Network (SPIN)

Harbor-UCLA Medical Center, Torrance, CA; American Board of Pediatrics, Chapel Hill, NC; University of Utah, Salt Lake City, UT; Stanford University, Stanford, CA; Jefferson Medical College/duPont Hospital for Children, Wilmington, DE; University of Rochester, Rochester, NY; University of Arkansas for Medical Sciences, Little Rock, AZ; Emory University, Atlanta, GA; Boston Children's Hospital, Boston, MA; Yale-New Haven Medical Center, New Haven, CT and University of Illinois College of Medicine at Chicago, Chicago, IL

Introduction

- Throughout fellowship, Fellowship Program Directors (FPD) assess fellow performance, including their required level of supervision
- Clinical Competency Committees (CCC) now also evaluate fellow progress
- Unlike in residency, members of the CCC and the FPD both have extensive longitudinal interactions with most, if not all, fellows
- As a result, assignment of the required level of supervision would be expected to be similar

Hypothesis

We examined the association of the entrustment levels determined by the FPD with that of the CCC for 6/7 common pediatric subspecialty Entrustable Professional Activities (EPAs), hypothesizing that there would be a strong correlation and minimal bias between their judgments

Methods

Study Network

- Study utilized the Subspecialty Pediatrics Investigator Network (SPIN)
- Network links the 14 pediatric subspecialty fellowship program director organizations
- SPIN subspecialty representatives recruited programs to participate

Data Collection

- One week before CCC meeting, FPDs assigned level of supervision for each fellow for the 6 common pediatric subspecialty EPAs (Fig 1)
- Then, at the CCC meeting, CCC assigned a level of supervision for each fellow for the 6 EPAs
- FPD reported whether he/she was a CCC member
- Data collection in fall 2014 & spring 2015

Methods

Fig. 1 Common Pediatric Subspecialty EPAs	Abbreviation
Apply public health principles and improvement methodology to improve care for populations, communities, and systems (QI)	Pubhealth
Provide for and obtain consultation from other health care providers caring for children	Consultation
Contribute to the fiscally sound and ethical management of practice (e.g., through billing, scheduling, coding, & record keeping practices)	Management
Facilitate handovers to another health care provider	Handover
Lead and work within interprofessional health care teams	Leadteam
Lead within the subspecialty profession	Leadprof
Engage in scholarly activities through the discovery, application, and dissemination of new knowledge	Not evaluated in this study

Level of Supervision Scales

- Supervision scales with five levels were created and subsequently validated in the study
- Scales were developed to be consistent with current approach to fellow supervision
- No faculty development provided

Data Analysis

- For each EPA, the correlation between FPD and CCC assessments was analyzed with Spearman rho
- Group correlations were compared with Chi-Square
- Bias was calculated as CCC minus FPD values

Results

Fig 2. Study Participation	Fall 2014	Spring 2015
Number of Programs	208	209
Fellows (n)	1040	1058
FPD member of CCC	598	594
FPD not member of CCC	442	464

Results

Fig. 3 Correlation of FPD/CCC assignment of level of supervision

EPA	Period	FPD on CCC	FPD Not on CCC
		Rho	Rho
Pubhealth	Fall	0.70	0.63
	Spring	0.79	0.64
Consultation	Fall	0.77	0.70
	Spring	0.82	0.76
Management	Fall	0.74	0.64
	Spring	0.77	0.61
Handover	Fall	0.80	0.63
	Spring	0.81	0.70
Leadteam	Fall	0.79	0.62
	Spring	0.80	0.75
Leadprof	Fall	0.74	0.61
	Spring	0.74	0.56

- In both periods, the correlation for FPD not on the CCC was slightly lower ($p < 0.001$) compared with FPD on the CCC (Fig 3)

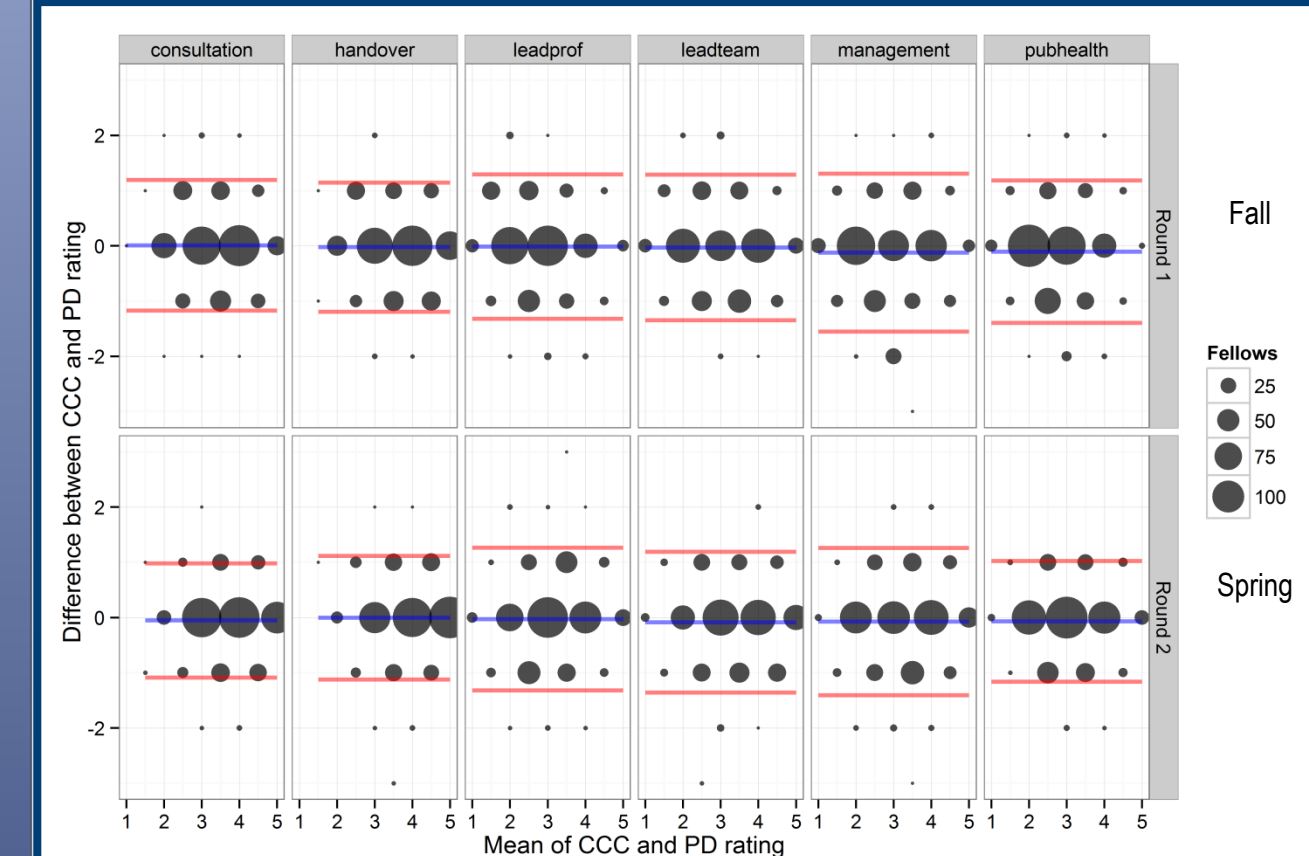


Fig 4 Bland-Altman plot showing bias for FPD on the CCC. Red lines indicate 1.96 SD from the mean difference

- Mean(95% CI) bias for the FPD on (Fig 4)/not on (Fig 5) CCC in the fall was $-0.05(-0.05$ to $-0.04)$ vs $-0.12(-0.13$ to $-0.11)$ and $-0.05(-0.05$ to $-0.05)$ vs $-0.04(-0.05$ to $-0.04)$ in the spring, respectively

Results

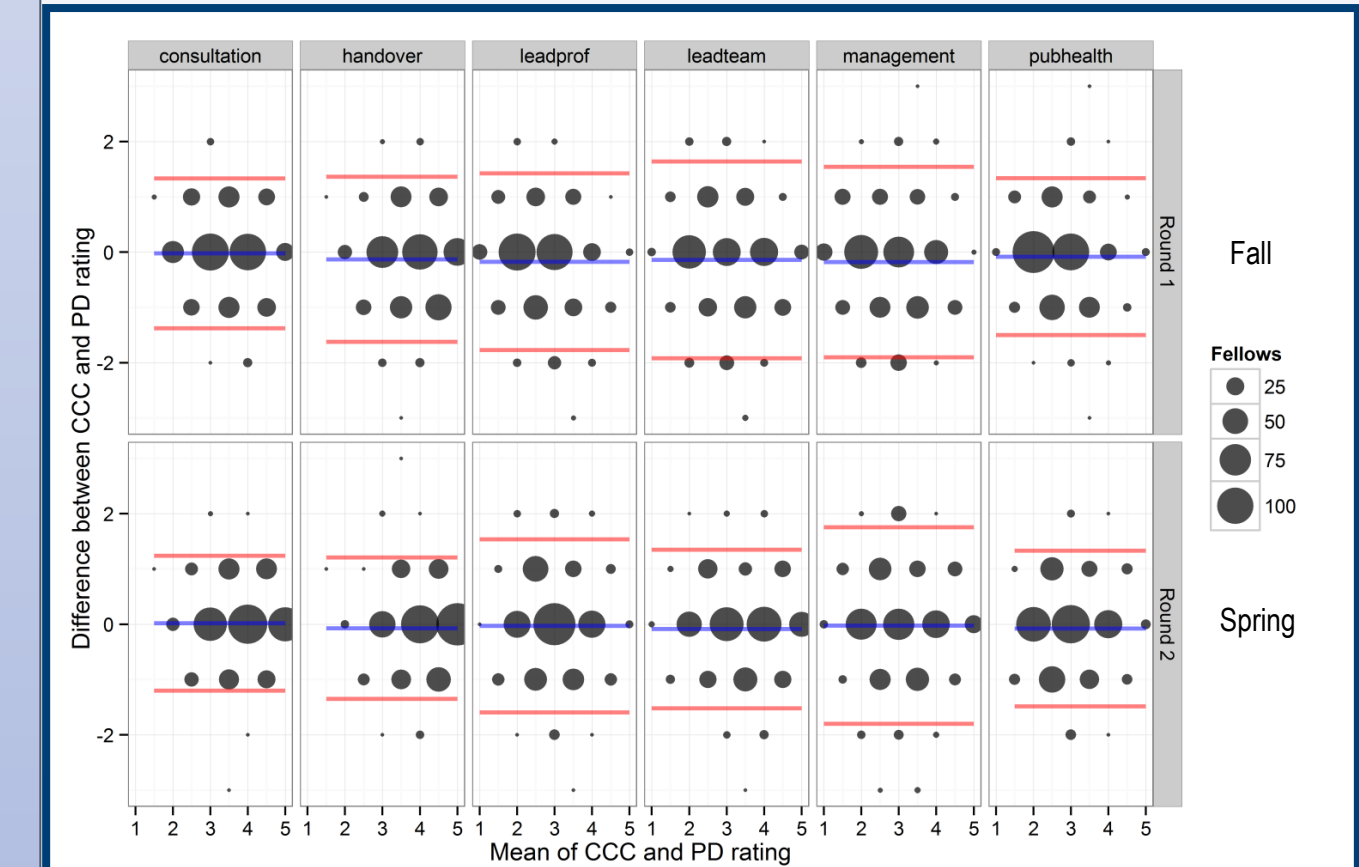


Fig 5 Bland-Altman plot showing bias for FPD NOT on the CCC. Red lines indicate 1.96 SD from the mean difference

Conclusions

- There is a strong correlation between FPD and CCC assignment of entrustment levels for these 6 common pediatric subspecialty EPAs
- Although the association is slightly weaker when the FPD is not a CCC member, since the bias is very small, this is unlikely to be important in determining fellow level of entrustment

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; Pulmonary: 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 Amirnovin, J Anders, L Armsby, N 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, R Clingenpeel, D Coury, R Cron, M Currie, D Dannaway, P Denny, 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 Jarosak, L Johnston, S Johnston, T Johnston, T Johnston, J Journeycake, A Kale, H Karpen, R Kato, J Katz, N Kelllogg, 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 Maraqa, 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, J Rosen, M Rosenberger, C Roskind, A Ross, K Rouster-Stevens, I Sami, A Savant, S Savelli, W Sayej, A Schonwald, J Schuette, 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 Stryjewski, A Talati, P Teaford, M Teshar, A Thomas, K Tieves, O Titus, R Tower, M Trent, D Vanderbilt, S van Schaik, L Varlotta, M Vasquez, K Vogt, B Voigt, P Volk, P Vuguin, E Walton, A Warwick, W Waz, J Weiner, L Weiner, T Weinstein, J Welch, L Widdice, S Witchel, M Winkler, N Yeager, K Yen, C Yost, S Yussman, A Zubrow

- Special thanks to Alma Ramirez, BS
- Financial support provided by the ABP Foundation