

---

# Balancing Education and Service in Pediatric Residency Training: Results of a National Survey

Jennifer Kesselheim MD, MEd, Alan Schwartz PhD,  
Debra Boyer, MD on behalf of the APPD-LEARN Study  
Group on Service and Education

Association of Pediatric Program Directors  
March 31, 2016  
New Orleans, Louisiana



# Background

---

- **Service often identified as a virtue but controversy as to its role in training**
- **ACGME questions trainees on the balance of service and education**
- **Definitions of service and education differ amongst program directors and trainees**
  - Education definition more consistent
  - Service definition often variable
- **Service and education most often considered as mutually exclusive**
  - Kesselheim and Boyer suggested a more blended model

Galvin. JGME. 2012

Smith DE. Journal of Surgical Education. 2012

Kesselheim J, Boyer D. Acad Med 2014

# Objectives

---

- **Define service and education**
- **Delineate how each contribute value to training**
- **Measure perceptions of service and education in specific clinical scenarios**

# Methods: APPD LEARN

---

- **APPD LEARN network comprises 65% of pediatric residency programs in the United States**
  - 15 programs participated
  - 6 of 8 APPD geographic regions represented
- **Program directors, associate program directors and residents from each program participated**

# Methods: Survey Instrument

---

- **Online survey instrument containing 4 domains and 27 items**
  - Perceptions of service and education in the program
  - Definitions of service and education and the value attributed to each
  - Ratings of service and education intrinsic to 12 common pediatric training scenarios
    - Vignettes based on previous qualitative work
    - Each rated on two separate 7-point Likert scales assessing educational value and service content
  - Demographics

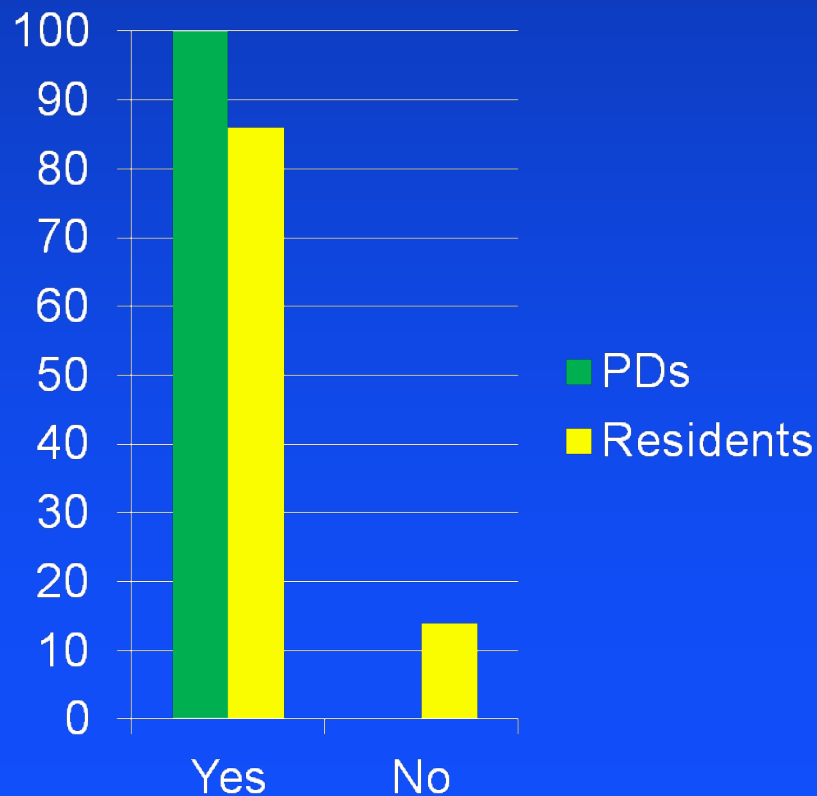
# Response Rate and Demographics

---

- **Completed surveys**
  - 34 PDs (100%)
  - 359 residents (45%)
- **Resident response rate varied by program**
- **PDs**
  - Mean age 42 years (SD 16.5)
  - 20 female (59%)
  - Mean of 5.7 years in role as PD (SD 4.6, range 0-17)
- **Residents**
  - Mean age 29.1 years (SD 4.9)
  - 269 female (74%)
  - Even distribution of post-graduate year:
    - 116 PGY1
    - 105 PGY2
    - 119 PGY3
    - 7 PGY4

# Perceptions of Service and Education in the Training Program

Do you believe that service can, in the absence of formal teaching, be educational?



How often has your education been compromised by excessive service obligations?



# Definitions of Service

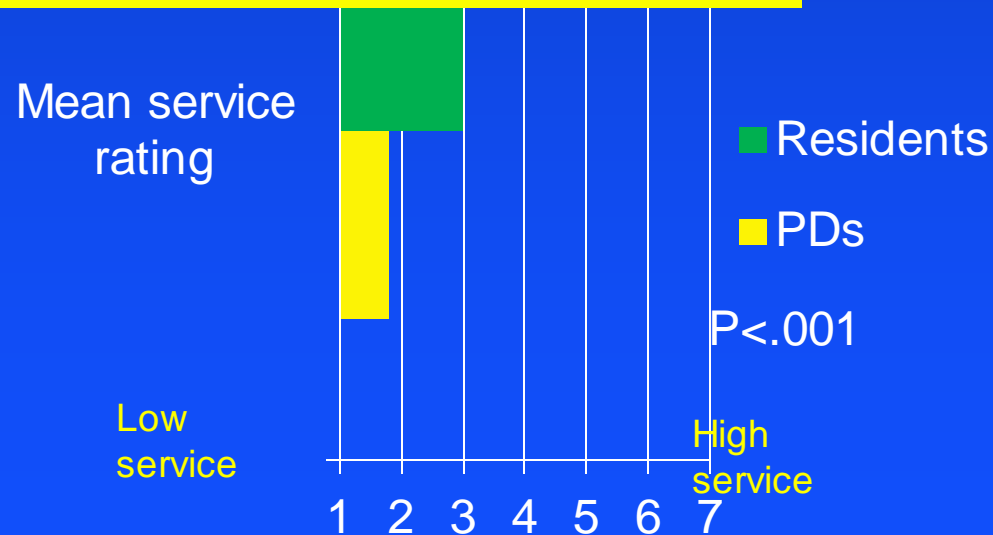
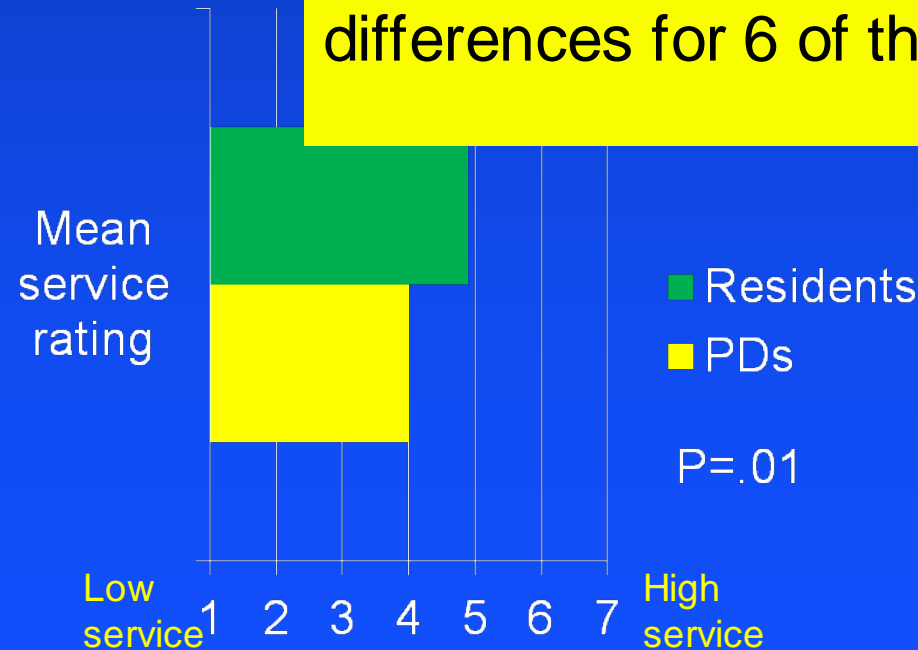
Proposed definition	% Resident endorsing definition	% PD/APD endorsing definition	p	Resident value ratings Mean (sd)	PD value ratings Mean (sd)
Volunteering in the community	82%	59%	.002	3.5 (1.1)	4.0 (1.0)
Political advocacy work	71%	66%	.54	3.0 (1.1)	3.7 (1.2)
Advocating for an individual patient	92%	84%	.17	4.4 (0.7)	4.9 (0.2)
Going above and beyond for an individual patient	91%	78%	.016	4.5 (0.8)	4.8 (0.4)
Routine patient care duties	92%	72%	<.001	4.4 (0.8)	4.8 (0.5)
Administrative tasks	76%	75%	.86	2.5 (1.0)	3.3 (1.0)



# Training Vignettes

- While working in the Emergency Department, a trainee sees a 2 year-old boy with gastroenteritis, the 6<sup>th</sup> last tv
- Twice a month in the pediatric ICU, trainees have a mock code in which they function as the team

Residents gave higher service ratings than PDs for 11 of 12 vignettes with statistically significant differences for 6 of these vignettes



# Training Vignettes

---

- Three vignettes with **high (> or =5) service ratings from both cohorts**
  - Dictating discharge summaries
  - Placing an IV
  - Coordinating a radiographic study
- Four vignettes with **high (> or =5) education ratings from both cohorts**
  - Formal teaching experiences/didactics
  - Individualized feedback on management
- Two vignettes with **moderately high (> or =4) ratings on both service AND education from both cohorts**
  - Working 5 overnights in a row to cover a general pediatric service with an attending available by phone
  - Volunteering at a school-based clinic to provide free care to the local high school children

# Conclusions

---

- **PDs and residents demonstrate discordant perceptions of the balance of education and service in their training programs**
  - Residents significantly more likely to perceive higher amounts of service than PDs
  - Ramifications for how PDs and residents communicate
- **Residents and PDs endorse some of the same definitions of service**
  - Advocating for an individual patient
  - Going above and beyond to care for a patient
  - Residents are more likely than PDs to also endorse routine patient care and volunteerism

# Next Steps

---

- Many forms of service add value to the training program
  - Evidenced by high value ratings for certain definitions of service
  - Some vignettes found to have high service AND high education ratings
- Propose to redirect conversation away from the balance of service and education
- Reframe as optimal integration of service and education



# Speaking of reframing....

---

- What does service mean?
  - Advocacy
  - Excellence in care
  - Working hard for the good of patients
- Need more precision on our language
- Separate term to connote “scut” or administrative duties



# Acknowledgements

---

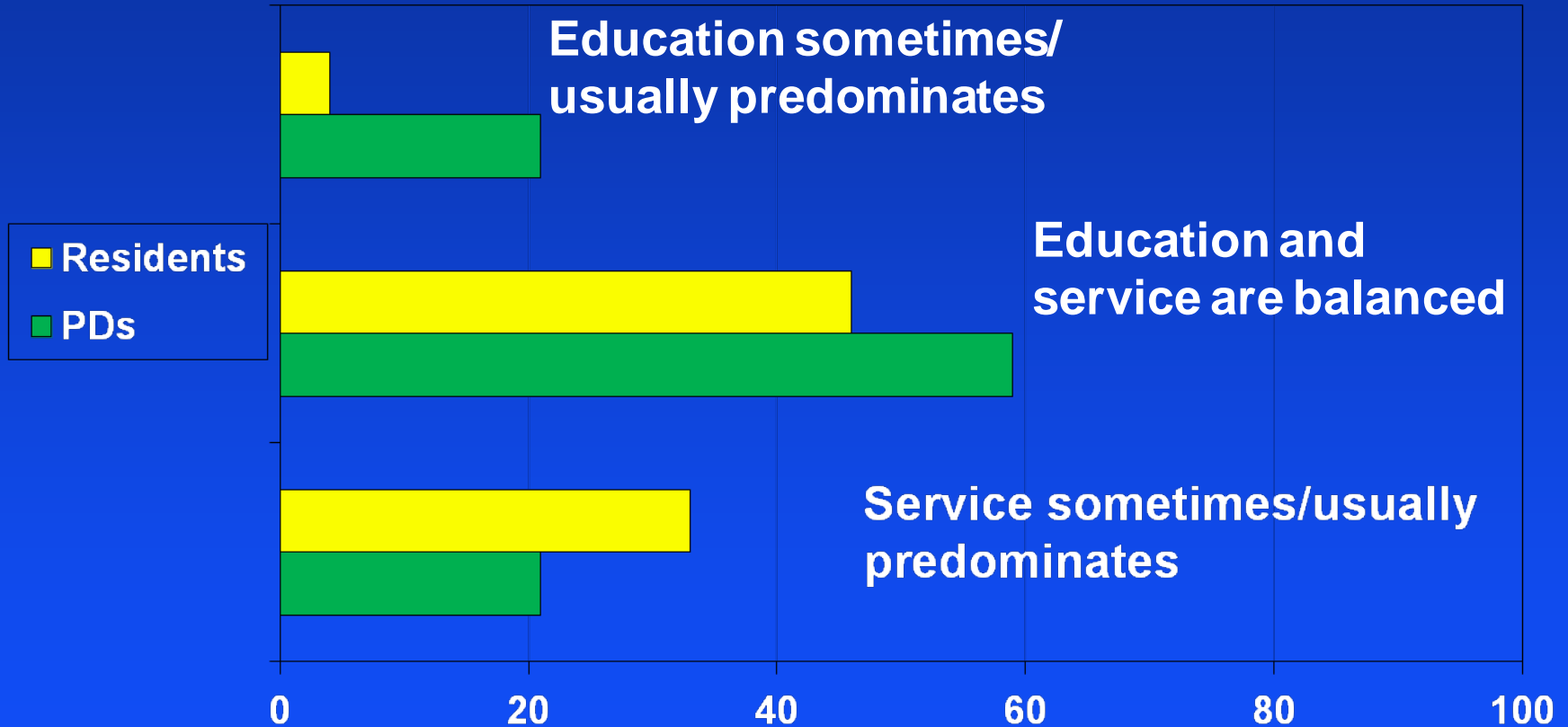
- **APPD**
- **APPD Learn**
  - Alan Schwartz, PhD
- **Team of Co-investigators**

- Stephen Barone
- Kimberly Boland
- Suzette Caudle
- Sharon Dabrow
- Alston Dunbar
- Jon Frohna
- Janara Huff
- Lisa Gilmer
- Abdulla Ghori
- Jason Homme
- Matthew Kapklein
- Nicole Paradise Black
- Richard Mazzaccaro
- Lisa McQueen
- Michele Nichols





# Perceptions of Program Balance



**Residents were more likely to report service obligations predominate (p=.04)**