

# EXPECTED FELLOW MINIMUM LEVEL OF SUPERVISION AT GRADUATION FOR THE COMMON PEDIATRIC SUBSPECIALTY ENTRUSTABLE PROFESSIONAL ACTIVITIES



Richard B. Mink MD MACM, Alan Schwartz PhD, Bruce Herman MD, David Turner MD, Diane Stafford MD, Cary Sauer MD MSc, Angela Myers MD MPH, Jennifer Kesselheim MD EdM, Deborah Hsu MD EdM, Pamela High MD, Patricia Chess MD, Jeanne Baffa MD and Carol Carraccio MD MA for the SPIN Steering Committee

Harbor-UCLA Medical Center, Torrance, CA; Univ of Illinois College of Medicine at Chicago, Chicago, IL; Univ of Utah, Salt Lake City, UT; Duke Univ Hospital, Durham, NC; Boston Children's Hospital, Boston, MA; Emory Univ, Atlanta, GA; Children's Mercy Hospital, Kansas City, MO; Boston Children's Cancer & Blood Disorders, Boston, MA; Baylor College of Medicine, Houston, TX; Brown Univ, Providence, RI; Univ of Rochester, Rochester, NY; Alfred I. duPont Hospital for Children, Wilmington, DE and American Board of Pediatrics, Chapel Hill, NC

## Introduction

- There are 7 Entrustable Professional Activities (EPAs) common to all pediatric subspecialties (table).
- These provide an opportunity to assess fellow performance and set standards.
- The Subspecialty Pediatrics Investigator Network (SPIN) previously developed 5 point level of supervision scales for each EPA .
- Still unknown are the minimum supervision levels required for graduation from fellowship and the relative importance of each EPA in making the graduation decision.

## Objectives

For each of the 7 EPAs, to determine the opinion of fellowship program directors (FPD) about

1. the minimum level of supervision a fellow must achieve to complete fellowship and
2. whether a fellow should be allowed to graduate if this level is not met.

## Methods

- An anonymous survey was sent through APPD's Longitudinal Educational Assessment Research Network (LEARN) to all FPDs of ACGME accredited fellowships for subspecialties with American Board of Pediatrics certification.
- For each EPA, the survey asked FPDs
  - 1) to identify the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship
  - 2) if a fellow did not achieve at least this minimal level, would he/she still be allowed to graduate

## Methods

- The goal was to have 75% of all FPDs in each subspecialty participate.
- The 10th percentile was set as the minimum level meaning that 90% of FPDs believed a fellow must achieve that level or higher to graduate.
- An answer of "no" to question #2 was used to indicate the importance of the EPA in the graduation decision
- Statistical analysis used Friedman rank sum test and Spearman's rho.
- Analyses were corrected for multiple comparisons.

## Results

- Overall response rate was 82% (660/802)
- All subspecialties except one (which had a response rate of 67%) met the participation goal.
- The expected minimum level of supervision at graduation differed ( $p < 0.05$ ) across the 7 EPAs (figure 1).

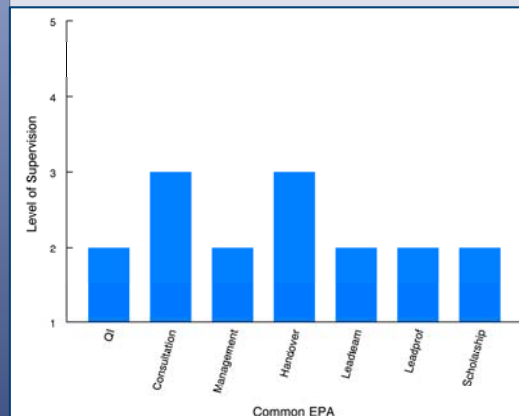


Figure 1. The minimum level of supervision required for graduation for each of the common EPAs.

## Results

Common EPAs and descriptions of the identified minimum level of supervision for graduation.

APPLY PUBLIC HEALTH PRINCIPLES AND IMPROVEMENT METHODOLOGY TO IMPROVE CARE FOR POPULATIONS, COMMUNITIES, AND SYSTEMS (QI)	
2	Trusted to contribute with <b>direct supervision and coaching</b> as a member of a collaborative effort to improve care at the institutional level
PROVIDE FOR AND OBTAIN CONSULTATION WITH OTHER HEALTH CARE PROVIDERS CARING FOR CHILDREN (Consultation)	
3	Trusted to execute with <b>indirect supervision</b> and discussion of information conveyed for <b>selected simple and complex cases</b>
CONTRIBUTE TO THE FISCALLY SOUND AND ETHICAL MANAGEMENT OF A PRACTICE (Management)	
2	Trusted to perform with <b>direct supervision and coaching</b> with supervisor verifying work product for accuracy
FACILITATE HANDOVERS TO ANOTHER HEALTHCARE PROVIDER (Handover)	
3	Trusted to execute with <b>indirect supervision</b> with verification of information after the handover for <b>selected simple and complex cases</b>
LEAD AN INTERPROFESSIONAL HEALTH CARE TEAM (Leadteam)	
2	Trusted to lead with <b>direct supervision and coaching</b>
LEAD WITHIN THE SUBSPECIALTY PROFESSION (Leadprof)	
2	Trusted to contribute to advocacy and public education activities for the subspecialty profession with <b>direct supervision and coaching</b> at the institutional level
ENGAGE IN SCHOLARLY ACTIVITIES THROUGH THE DISCOVERY, APPLICATION, AND DISSEMINATION OF NEW KNOWLEDGE (Scholarship)	
2	Trusted to develop and conduct scholarly activities with <b>direct oversight and frequent coaching</b>

- Whether a fellow would be allowed to graduate if the minimum level was not achieved also differed across EPAs ( $p < 0.05$ ; figure 2).

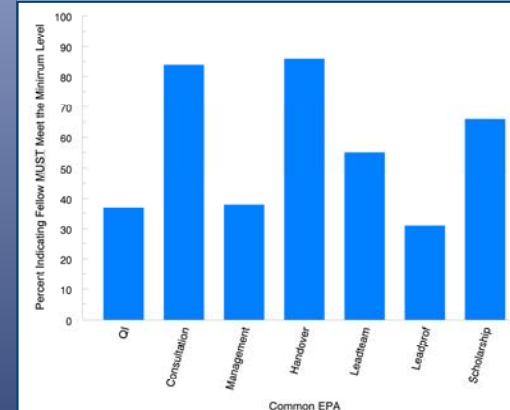


Figure 2. FPDs that responded "no" when asked if a fellow would be allowed to graduate if the minimum level of supervision for the EPA was not achieved.

## Results

- For the Management EPA, there was a weak ( $p < 0.05$ ) correlation between minimum level of supervision with FPD understanding of EPAs ( $r^2 = 0.14$ ) and with participation in SPIN's previous EPA study ( $r^2 = 0.16$ ).
- Minimum level of supervision was not associated ( $p > 0.05$ ) with number of fellows in the program, years as a FPD or whether EPAs were currently being used in the fellowship.

## Conclusions

- There are differing expectations for the minimum level of supervision required for graduating fellows across the common pediatric subspecialty EPAs with several requiring direct supervision and coaching.
- The relative "importance" of the EPAs in making the graduation decision are also different.
- Further study is required to determine if fellows are meeting these expected levels and to understand the differences in importance of the EPAs among the subspecialties.

## 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: Diane Stafford & Tandy Aye; GI: Cary Sauer; Hematology-Oncology: 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

## Acknowledgements

- Special thanks to Alma Ramirez, BS and Beth King, MPP
- Supported by the American Board of Pediatrics Foundation