The Subspecialty Pediatrics Investigators Network is surveying fellowship program directors about level of supervision for the Pediatric Subspecialty Entrustable Professional Activities or EPAs.

EPAs describe the essential, routine tasks that a practicing subspecialist is expected to perform. Assessment of competencies requires direct observation of specific abilities. EPA entrustment levels are based upon both prior observation and the overall "gestalt" in determining the degrees of supervision a trainee requires. There are 7 EPAs common to all the pediatrics subspecialties and 3-6 specific to your subspecialty. You will be asked to identify the minimum level of supervision for all of the common EPAs that a fellow should achieve to successfully complete fellowship, as well as those specific to your subspecialty. In addition, because there are differences among the EPAs, we want to determine how important achievement of this minimum level is in determining whether a fellow can graduate and at what level a subspecialist would be considered entrustable. Assignment of a minimum level of supervision should be based upon what you would TRUST a fellow to do, not what you actually observe him/her to do. By entrustable, we mean when the subspecialist should be able to perform most, but not necessarily all, of the functions described by the EPA, resulting in a safe and effective outcome. The survey should only take about 10 minutes to complete.

Your participation in this study is voluntary. No identifying information about you will be included in the research data. If you have questions about the study, you can contact Alan Schwartz, at 312-996-2070 or alansz@uic.edu. If you feel you have not been treated appropriately, you can contact the UIC IRB at 312-996-1711.

Your opinion is extremely important as this information may be used to inform standards for satisfactory completion of fellowship. At the time of graduation, the American Board of Pediatrics currently asks fellowship program directors to verify that their fellows have achieved satisfactory performance in the six domains of competence. The data from this study, among others, will be helpful in the evaluation and enhancement of the process of assessment used to verify competence. There is NO requirement or ANY expectation that fellows must achieve the highest level (level 5) for any or all EPAs. We need your input to determine the minimum levels.

Press "Ctrl +" on your keyboard to increase font size of the survey on your screen.

Section A: Start

A1. Are you currently a pediatric fellowship program director?

- [ ] Yes
- [ ] No

A2. Please select your subspecialty:

- [ ] Adolescent Medicine
- [ ] Cardiology
- [ ] Child Abuse
- [ ] Critical Care
- [ ] Developmental-Behavioral
- [ ] Emergency Medicine
- [ ] Endocrinology
- [ ] Gastroenterology
- [ ] Hematology-Oncology
- [ ] Infectious Diseases
- [ ] Neonatology
- [ ] Nephrology
- [ ] Pulmonary
- [ ] Rheumatology

Section B: NotPD

We are currently seeking input from fellowship program directors. The survey will now exit. Thank you for your time!

Section C: Instructions

Please keep the following in mind when answering questions about the EPAs:

EPA levels of supervision are based upon trust. You do not necessarily have to see a fellow perform the functions to trust them to do so. The assignment level of supervision should be based upon most, but not necessarily all, of the functions The first question of the survey asks you to identify the minimum level of supervision that you EXPECT a fellow to achieve at the completion of fellowship. Since the functions of each EPA are different, the second question is focused on whether you would allow a fellow to graduate even if he/she does not achieve this expected minimum level. The third question asks about entrustment, that is, at the level at which a practicing subspecialist (not a trainee) should be able to perform most, but not necessarily all, of the activities described by the EPA, resulting in a safe and effective outcome.

Section O: Cardiology1

ACQUIRE THE IMAGING SKILLS REQUIRED FOR ALL ASPECTS OF PEDIATRIC AND CARDIOLOGY CARE

The functions required of this activity include:

Learning the technical skills to perform and interpret transthoracic echocardiograms on children and young adults with both normal and abnormal anatomy and function. Acquiring the professional skills and knowledge to interpret and/or perform fetal and transesophageal echocardiograms, and cardiac MRI examinations on patients with normal hearts and on children and young adults with congenital or acquired heart disease. Becoming proficient at disseminating results of these studies to patients, families, referring physicians and health care professionals. Demonstrating the highest principles and practices while performing, interpreting and communicating imaging studies on children.

O1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- ☐ Level 1: Trusted to observe only
- ☐ Level 2: Trusted to perform and interpret the imaging study with DIRECT supervision and coaching
- ☐ Level 3: Trusted to perform and interpret the imaging study with INDIRECT supervision for most simple and some complex cases
- ☐ Level 4: Trusted to perform and interpret the imaging study with INDIRECT supervision but may require discussion for a few complex cases
- ☐ Level 5: Trusted to perform and interpret imaging studies independently without supervision

O2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate?

- ☐ Yes
- ☐ No

O3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to perform and interpret the imaging study with DIRECT supervision and coaching ☐
- Level 3: Trusted to perform and interpret the imaging study with INDIRECT supervision for most simple and some complex cases ☐
- Level 4: Trusted to perform and interpret the imaging study with INDIRECT supervision but may require discussion for a few complex cases ☐
- Level 5: Trusted to perform and interpret imaging studies independently without supervision ☐

Section P: Cardiology2

CARE FOR PATIENTS WHO REQUIRE CATHETER BASED INTERVENTIONS

The functions required of this activity include:

Acquiring the skills and knowledge required to perform a thorough pre-catheterization assessment including detailed review of the medical history, current condition, physical examination, and relevant diagnostic studies. Knowing the risks and benefits specific to the full spectrum of cardiac catheterization procedures and of potential non-cardiac catheterization options for optimal patient management. Becoming skilled at the interpretation of the hemodynamic and angiographic data. Becoming proficient in communicating the intent and risks of the procedure as well as the results of the procedure to patients, families, and professional colleagues.

P1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to provide care with DIRECT supervision and coaching ☐
- Level 3: Trusted to provide care with INDIRECT supervision for most simple and some complex cases ☐
- Level 4: Trusted to provide care with INDIRECT supervision but may require discussion for a few complex cases ☐
- Level 5: Trusted to provide care independently without supervision ☐

P2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate?

- Yes ☐
- No ☐

P3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to provide care with DIRECT supervision and coaching ☐
- Level 3: Trusted to provide care with INDIRECT supervision for most simple and some complex cases ☐
- Level 4: Trusted to provide care with INDIRECT supervision but may require discussion for a few complex cases ☐
- Level 5: Trusted to provide care independently without supervision ☐

Section Q: Cardiology3

DIAGNOSIS AND MANAGEMENT OF PATIENTS WITH ARRHYTHMIAS AND CONDUCTION ABNORMALITIES

The functions of this activity may include:

Obtaining essential information and testing: ECG, exercise testing, Holter monitoring, event recording and indications for EP testing. Acquiring the professional skills and knowledge to interpret these tests with comprehensive differential diagnoses. Becoming proficient at treating electrical abnormalities and knowing when to consult EP experts. Communicating these options effectively with patients, families, referring physicians and health care professionals.

Q1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to diagnose and manage patients with DIRECT supervision and coaching ☐
- Level 3: Trusted to diagnose and manage patients with simple arrhythmias and conduction abnormalities with INDIRECT supervision but may require direct supervision for patients with complex or life-threatening arrhythmias or conduction abnormalities ☐
- Level 4: Trusted to diagnose and manage patients with INDIRECT supervision but may require discussion for a few complex cases ☐
- Level 5: Trusted to manage patients independently without supervision ☐

Q2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate?

- Yes ☐
- No ☐

Q3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to diagnose and manage patients with DIRECT supervision and coaching ☐
- Level 3: Trusted to diagnose and manage patients with simple arrhythmias and conduction abnormalities with INDIRECT supervision but may require direct supervision for patients with complex or life-threatening arrhythmias or conduction abnormalities ☐
- Level 4: Trusted to diagnose and manage patients with INDIRECT supervision but may require discussion for a few complex cases ☐
- Level 5: Trusted to manage patients independently without supervision ☐

Section R: Cardiology4

DIAGNOSE, INITIALLY MANAGE AND REFER CHILDREN WITH ADVANCED OR END STAGE HEART FAILURES AND/OR PULMONARY HYPERTENSION TO EXPERTS FOR MEDICAL THERAPY, ECMO, VENTRICULAR ASSIST DEVICES AND/OR CARDIAC TRANSPLANTATION

The functions of this activity may include:

Performing a comprehensive evaluation for the etiologies of heart failure and pulmonary hypertension including clinical and laboratory assessment, noninvasive, invasive and genetic testing. Demonstrating expertise in the interpretation of hemodynamic testing and the implications for therapeutic intervention. Initiating targeted treatment for heart failure and for pulmonary hypertension. Understanding when to refer these patients to heart failure or pulmonary hypertension experts for advanced therapies for disease refractory to medical therapy, including ECMO, assist devices, and heart and/or lung transplantation. Counseling patient and families regarding prognosis and treatment options. Coordinating multidisciplinary care with other subspecialties such as neonatal or critical care, cardiothoracic surgery, genetics, respiratory care, nursing, social work and child life. Participating in the cardiac care of a patient before, during and after transplantation

R1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching ☐
- Level 3: Trusted to diagnose and manage with INDIRECT supervision for stable cases but may require direct supervision for patients with acute exacerbation or acute instability ☐
- Level 4: Trusted to execute with INDIRECT supervision for most cases but may require discussion for select cases or at critical points in care ☐
- Level 5: Trusted to diagnose and manage independently without supervision ☐

R2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate?

- Yes ☐
- No ☐

R3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching ☐
- Level 3: Trusted to diagnose and manage with INDIRECT supervision for stable cases but may require direct supervision for patients with acute exacerbation or acute instability ☐
- Level 4: Trusted to execute with INDIRECT supervision for most cases but may require discussion for select cases or at critical points in care ☐
- Level 5: Trusted to diagnose and manage independently without supervision ☐

Section S: Cardiology5

DIAGNOSIS AND MANAGEMENT OF CONGENITAL OR ACQUIRED CARDIAC PROBLEMS

The functions required of this activity may include:

Obtaining an appropriate and complete history and physical examination. Ordering appropriate diagnostic testing in a cost effective manner. Understanding the importance of a thorough family history and utilizing genetic testing where appropriate and cost effective. Understanding the unique cardiovascular anatomy and physiology. Developing an appropriate, prioritized differential diagnosis. Developing a management plan that incorporates medical therapy, interventional catheter procedures and surgical intervention as appropriate. Communicating with and counseling the family regarding immediate, mid- and long-term management. Coordinating care with interdisciplinary management teams including the primary care physician, subspecialty consultants, nursing, nutrition and social services as needed.

S1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- Level 1: Trusted to observe only ☐
- Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching ☐
- Level 3: Trusted to execute with INDIRECT supervision for most simple and some complex cases ☐
- Level 4: Trusted to execute with INDIRECT supervision but may require discussion for a few complex cases or at critical points ☐
- Level 5: Trusted to execute independently without supervision ☐

S2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate

- Yes ☐
- No ☐

S3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

- ☐ Level 1: Trusted to observe only
- ☐ Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching
- ☐ Level 3: Trusted to execute with INDIRECT supervision for most simple and some complex cases
- ☐ Level 4: Trusted to execute with INDIRECT supervision but may require discussion for a few complex cases or at critical points
- ☐ Level 5: Trusted to execute independently without supervision

Section T: Cardiology6

DIAGNOSIS AND MANAGEMENT OF PATIENTS WITH ACUTE CONGENITAL OR ACQUIRED CARDIAC PROBLEMS REQUIRING INTENSIVE CARE

The functions required of this activity may include:

Evaluating and treating neonates, infants and older pediatric patients with critical structural cardiac diseases. Evaluating and treating neonates, infants and older pediatric patients with other forms of critical cardiac disease. Providing direct care or consultation to those responsible for primary care for cardiac patients with illnesses of non-cardiac origin. Providing consultation to those caring for postoperative cardiac patients. Functioning as a member of a multidisciplinary team demonstrating professionalism and excellent communication skills.

T1. For this EPA, what do you believe is the MINIMUM level of supervision a fellow must achieve to successfully complete fellowship?

- ☐ Level 1: Trusted to observe only
- ☐ Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching
- ☐ Level 3: Trusted to diagnose and manage with INDIRECT supervision for most simple and some complex cases
- ☐ Level 4: Trusted to diagnose and manage with INDIRECT supervision but may require discussion for a few complex cases
- ☐ Level 5: Trusted to execute independently without supervision

T2. For this EPA, if a fellow <u>did not</u> achieve at least this minimal level of supervision, would you still allow him/her to graduate?

- ☐ Yes
- ☐ No

T3. For this EPA, what is the LOWEST level in which you would consider that a practicing subspecialist (and not necessarily a trainee) should be able to perform most of the activities described above resulting in a safe and effective outcome?

Level 1: Trusted to observe only ☐

Level 2: Trusted to diagnose and manage with DIRECT supervision and coaching ☐

Level 3: Trusted to diagnose and manage with INDIRECT supervision for most simple and some complex cases ☐

Level 4: Trusted to diagnose and manage with INDIRECT supervision but may require discussion for a few complex cases ☐

Level 5: Trusted to execute independently without supervision ☐

Section BX: Demographics

BX1. **How long have you been a program director, in years? (If you have not been a program director for a full year yet, enter 0)**

BX2. **How many fellows are currently enrolled in your program in total (all years of fellowship)?**

BX3. **Please rate your understanding of EPAs**

- ☐ Unfamiliar
- ☐ Basic understanding
- ☐ In-depth understanding
- ☐ Expert

BX4. **Are you currently using EPAs to evaluate your fellows?**

- ☐ Yes
- ☐ No

BX5. **Did you participate in the previous SPIN EPA study entitled "Assessing the Association between EPAs, Competencies and Milestones in the Pediatric Subspecialties?"**

- ☐ Yes
- ☐ No