Association of Pediatric Program Directors

Fellowship Leaders Grassroots Session

Fellowship Executive Committee:
Meredith Bone, Hayley Gans, YoungNa Lee-Kim,
Lindsay Johnston, Melissa Tavarez, Jenny Duncan

APPD 2023 Annual Fall Meeting

Renaissance Arlington Capital View Hotel
Arlington, Virginia

Agenda

- Ice breaker
- EPAs and Milestones 2.0
- Well-being and transitions
- Updates and reminders
  - Rich Mink (SMERFS)
  - New study – FPD career development
  - CONNECT
- Questions

Association of Pediatric Program Directors

Ending Program leader Angst: What's Next in Pediatric Fellow Assessment

Meredith Bone, Lindsay Johnston, YoungNa Lee, Alvin Singh

APPD 2023 Annual Fall Meeting

Renaissance Arlington Capital View Hotel
Arlington, Virginia

Overview

- Review concepts of Milestones and Entrustable Professional Activities within Competency Based Medical Education
- Update on recent activities from ACGME and ABP
- Description of Subspecialty mapping project
- Example of EPAs incorporated into a fellowship Program of Assessment

CBME elements

An Outcomes Competency Framework

Progressive Sequencing of Competencies

Learning Experiences Tailored to Competencies

Teaching Tailored to Competencies

Programatic Assessement

Competency Framework: What is Milestone?

- The ACGME Milestones are descriptors of the Subcompetencies along a learning developmental continuum

ACGME

COMPETENCIES

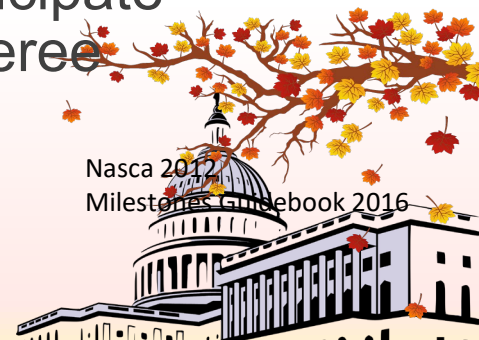
1. Medical Knowledge
2. Patient Care
3. Professionalism
4. Interpersonal Communication
5. Practice-based Learning: personal improvement
6. System-based Practice: system improvement

SUBCOMPETENCY +MILESTONE

Patient Care 1: Provide transfer of care that ensures seamless transitions

Milestone level 3: Adapts and applies a standardized template, relevant to individual contexts, reliably and reproducibly, with minimal errors of omission or commission; allows ample opportunity for clarification and questions; is beginning to anticipate potential issues for the transferee

Nasca 2012
Milestones Guidebook 2016



Competency Framework: What is an EPA?

- Framed as an observable activity or common task within a profession
- Often patient centered, such as ‘Care for Well Newborn’
- An EPA integrates multiple competencies
- Assessment of EPA asks about entrustment in level of supervision

Competencies and Milestones

EPA

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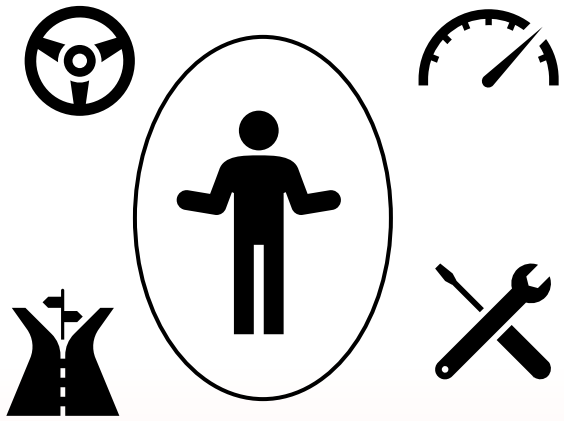
Can they control the steering wheel?

Are they able to maneuver road changes?



Can they use the gas pedal?

Can they use the turn signals?

Can they safely drive a car?

EPA and Milestones in Program of Assessment

- Observable activity goals in life-long learning
- Not meant to be direct assessment tools
- They provide common language within and across programs and organizations
- These frameworks should aid assessment for learning and guide curriculum and learning experiences

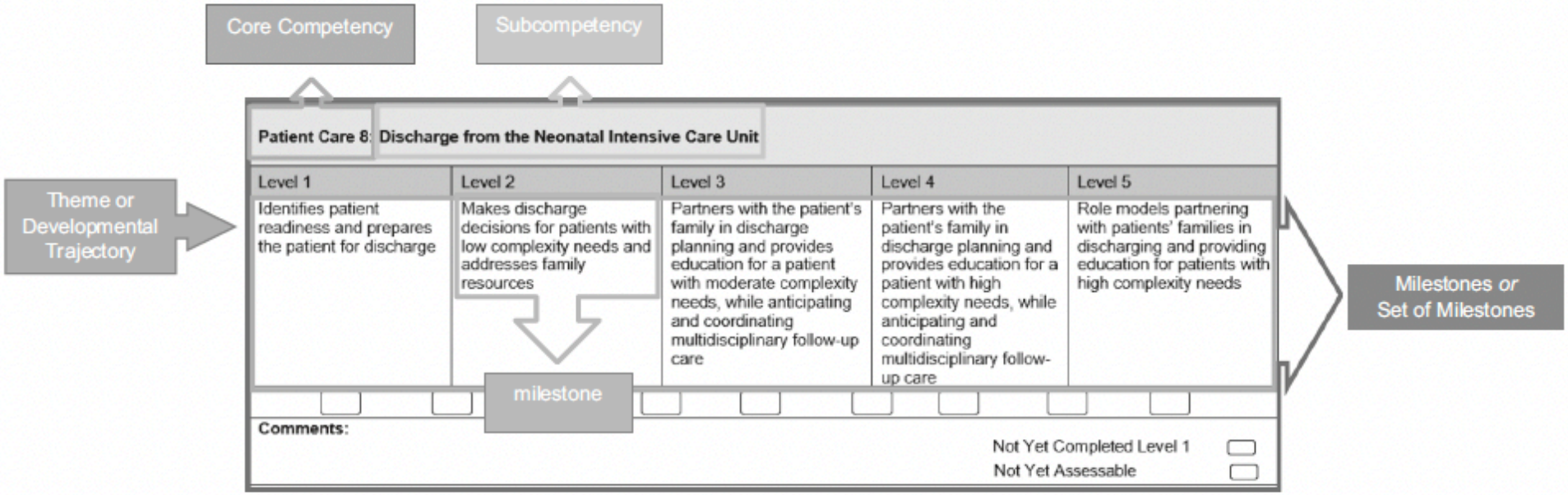
Readiness for unsupervised practice

- CBME requires agreement on what levels are minimum to graduate from supervised practice
- ACGME accredits programs, so Milestones are not used for any decisions about individual fellows. No defined level of achievement needed for graduation of a fellow
- ABP certifies individuals and currently requires "Satisfactory" competence to practice independently

Revised Milestones (AKA "2.0")

- Challenges with initial Milestones prompted specialty-specific revisions
- Differences:
  - Subspecialty-specific milestones for PC, MK
  - "Harmonized" milestones for ICS, PBLI, PROF, SBP
  - Reduced item length & complexity
  - Supplemental guide replaced footnotes
- **Initial reporting using new milestones to ACGME winter 2023**

ACGME Terminology



Definitions	
Milestones or Set of Milestones	Describes performance levels residents and fellows are expected to demonstrate for skills, knowledge, and behaviors in the six Core Competency domains
Core Competency	One of the six domains of educational and clinical knowledge, skills, and attitudes that physicians must develop for independent and autonomous practice of a specialty or subspecialty
Subcompetency	A specific content area that incorporates skills, knowledge, and/or behaviors under one of the Core Competencies
Theme or Development Trajectory	Skill, knowledge, or behavior that progresses from novice to advanced beginner to competent to proficient to expert
milestone	Significant point in development along a developmental trajectory

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Specialty-Specific Subcompetencies

Milestones 1.0	Milestones 2.0
Patient Care	Patient Care
1. Provide transfer of care that ensures seamless transitions 2. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment 3. Develop and carry out management plans 4. Provide appropriate role modeling	1. Neonatal and maternal history 2. Physical Examination 3. Organization and Prioritization of Patient Care 4. Clinical Reasoning 5. Disease Management in Neonatal Care 6. Procedures 7. Emergency Stabilization 8. Discharge from the NICU
Medical Knowledge	Medical Knowledge
1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems	1. Neonatal-Perinatal Medical Knowledge 2. Diagnostic Evaluation
Interpersonal and Communication Skills	Interpersonal and Communication Skills*
N/A	1. Complex Communication with Patients' Families around Serious News

*A novel milestone, Complex Communication Around Serious News, was added as a NPM specialty-specific skill for Interpersonal and Communication Skills.

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Harmonized Subcompetencies

Milestones 1.0	Milestones 2.0
Systems-Based Practice	Systems-Based Practice
1. Work effectively in various healthcare delivery settings and systems relevant to their clinical specialty 2. Coordinate patient care within the healthcare system relevant to their clinical specialty 3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate 4. Work in inter-professional teams to enhance patient safety and improve patient care quality 5. Participate in identifying system errors and implementing potential systems solutions	1. Patient Safety 2. Quality improvement 3. System Navigation for Patient-Centered Care – Coordination of Care 4. System Navigation for Patient-Centered Care – Transitions in Care 5. Population and Community Health
Practice-Based Learning and Improvement	Practice-Based Learning and Improvement
1. Identify strengths, deficiencies, and limits in one's knowledge and expertise 2. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement 3. Use information technology to optimize learning and care delivery 4. Participate in the education of patients, families, students, residents, fellows, and other health professionals	1. Evidence-Based and Informed Practice 2. Reflective Practice and Commitment to Personal Growth
Professionalism	Professionalism
1. High standards of ethical behavior, which includes maintaining appropriate professional boundaries 2. Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients 3. Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients 4. The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty	1. Professional Behavior 2. Ethical principles 3. Accountability/Conscientiousness 4. Well-being
Interpersonal and Communication Skills	Interpersonal and Communication Skills
1. Communicate effectively with physicians, other health professionals, and health-related agencies 2. Work effectively as a member or leader of a health care team or other professional group 3. Act in a consultative role to other physicians and health professionals	1. Family-Centered Communication 2. Interprofessional and Team Communication 3. Communication within Health Care Systems 4. *Complex Communication with Patients' Families around Serious News

*Created specifically for Neonatal-Perinatal Medicine Milestones 2.0.

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Milestones Version 1.0…

	Level 1	Level 2	Level 3	Level 4	Level 5	N/A
28. Provide leadership that enhances team functioning, the learning environment and/or health care system/environment with the ultimate intent of improving care of patients*	â€¢ Does not define/clarify roles and expectations for team members â€¢ Team management is disorganized and inefficient â€¢ Interacts with supervisor(s) in an unfocused and indecisive manner â€¢ Open communication is not encouraged within the team â€¢ Team members are not given ownership or engaged in decision-making â€¢ Manages by mandate â€¢ Unable to advocate effectively for the team with faculty, staff, families, patients, and others	â€¢ Interactions suggest that there are roles and expectations for team members, but these are not explicitly defined â€¢ Manages the team in a somewhat organized manner â€¢ Interacts with supervisor(s) in a somewhat focused but poorly decisive manner â€¢ Begins to encourage open communication within the team â€¢ Sometimes engages team members in decision-making processes â€¢ Manages most often through direction, with some effort towards consensus building â€¢ Attempts to advocate for the team with faculty, staff, families, patients, and others	X â€¢ Provides some explicit definition to roles and expectations for team members â€¢ Manages the team in an organized manner. Interactions with supervisor(s) are focused and decisive in most cases â€¢ Open communication within the team is routinely encouraged â€¢ Team members are routinely engaged in decision-making and are given some ownership in care â€¢ Usually manages through consensus-building and empowerment of others, but sometimes reverts to being directive â€¢ Advocates somewhat effectively for the team with faculty, staff, families, patients, and others	â€¢ Routinely clarifies roles and expectations for team members â€¢ Manages the team in an organized and fairly efficient manner â€¢ Interactions with supervisor(s) are focused and decisive â€¢ Creates a foundation of open communication within the team â€¢ Team members are expected to engage in decision-making and are encouraged to take ownership in care â€¢ Utilizes a consensus-building process and empowerment of others, only in rare instances becoming directive â€¢ Advocates effectively for the team with faculty, staff, families, patients, and others	â€¢ Routinely clarifies roles and expectations for team members â€¢ Team management is organized and efficient. Interacts with supervisor(s) in a focused and decisive manner â€¢ Creates a strong sense of open communication within the team â€¢ Team members routinely engage in decision-making and are expected to take ownership in care â€¢ Consensus-building and empowerment are the norm â€¢ Proactively and effectively advocates for the team with faculty, staff, families, patients, and others. Inspires others to perform	

… to Milestones Version 2.0

Systems-Based Practice 3: System Navigation for Patient-Centered Care – Coordination of Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists the various interprofessional individuals involved in the patient's care coordination	Coordinates care of patients in routine clinical situations, incorporating interprofessional teams with consideration of patient and family needs	Coordinates care of patients in complex clinical situations, effectively utilizing the roles of interprofessional teams, and incorporating patient and family needs and goals	Coordinates interprofessional, patient-centered care among different disciplines and specialties, actively assisting families in navigating the health care system	Coaches others in interprofessional, patient-centered care coordination
☐	☐	☐	☐	☐ ☐ ☐ ☐ ☐
Comments: Not Yet Completed Level 1 ☐				

https://www.acgme.org/globalassets/pdfs/milestones/neonatalperinatalmedicinemilestones2.0.pdf

Supplemental Guide

Patient Care 5:
Milestones 1.0: Patient Management
Overall Intent: To lead the health care team in the creation of a comprehensive, patient-centered management plan based on multiple patient factors, including social factors and varied patient backgrounds, regardless of complexity

Milestones 2.0: Disease Management in Neonatal Care
Overall Intent: To independently assess and manage critically ill patients

Milestones 1.0 Developmental Levels	Milestones 2.0 Developmental Levels	Examples of Fellow Performance in Supplemental Guide for Milestones 2.0
Level 1 *Reports management plans developed by others*	**Level 1** *Develops and implements care plans for patients with a low level of acuity/complexity*	• Creates and executes care plan for a late preterm infant with hypoglycemia • Formulates and manages a care plan for a late preterm infant with respiratory failure requiring CPAP
Level 2 *Participates in the creation of management plans*	**Level 2** *Develops and implements care plans for patients with a high level of acuity/complexity*	• Creates and executes care plan for evolving pulmonary hypertension in an infant with meconium aspiration syndrome • Formulates and manages a care plan for an infant with severe anemia, born to a mother recently immigrated from Nigeria, and orders blood smear to be reviewed by a hematopathologist
Level 3 *Develops an interdisciplinary management plan for common and typical diagnoses*	**Level 3** *Coordinates and implements multidisciplinary care plans for patients with a high level of acuity/complexity*	• Collaborates with cardiology, cardiovascular surgery, palliative care, and family members to manage heart failure in a patient with trisomy 18 and a large ventricular septal defect (VSD) • Identifies acute pneumoperitoneum in an unstable pre-term infant and coordinates care between surgery, anesthesia, and nursing to prepare for emergent surgery
Level 4 *Develops and implements informed management plans for complicated and atypical diagnoses, with the ability to modify plans as necessary*	**Level 4** *Manages patients with multiple levels of acuity/complexity while anticipating future needs and minimizing long-term consequences*	• Promotes early extubation, optimal nutrition, and family-centered care for extremely preterm infants to decrease rates of bronchopulmonary dysplasia • Recognizes and mitigates family transportation barriers so they can provide kangaroo care, while maximizing non-pharmacologic comfort measures to optimize neurodevelopmental outcomes
Level 5 *Serves as a role model and coach for development of management plans for complicated and atypical diagnoses, with the ability to modify plans as necessary*	**Level 5** *Role models and coaches others in the management of patients requiring complex multidisciplinary care, while anticipating future needs and minimizing long-term complications*	• Supports colleagues with moral distress caring for an infant with uncertain long-term prognosis whose family has requested heroic measures; identifies a medical home for the infant upon discharge • Coaches a junior fellow through the care, communication, and management of an infant being decannulated from extracorporeal membrane oxygenation (ECMO) due severe intracranial hemorrhage and aids in the development of a long-term care plan
Assessment Models or Tools	• Direct observation • Multisource feedback • Simulation	
Notes or Resources	• ABP. Entrustable Professional Activities for Subspecialties. https://www.abp.org/content/entrustable-professional-activities-subspecialties). Accessed 2022. Note: Use the neonatal-perinatal medicine-specific entrustable professional activities. • Dukhovny D, Pursley DM, Kirpalani HM, Horbar JH, Zupancic JA. Evidence, quality, and waste: solving the value equation in neonatology. *Pediatrics*. 2016 Mar;137(3):e20150312. doi: 10.1542/peds.2015-0312. Epub 2016 Feb 10. PMID: 26908677. • Ferreira A, Ferretti E, Curtis K, Joly C, Sivanthan M, Major N, Daboval T. Parents' views to strengthen partnerships in newborn intensive care. *Front Pediatr*. 2021 Sep 27;9:721835. doi: 10.3389/fped.2021.721835. PMID: 34646796; PMCID: PMC8504452. • Goldstein RF, Malcolm WF. Care of the neonatal intensive care unit graduate after discharge. *Pediatr Clin North Am*. 2019 Apr;66(2):489-508. doi: 10.1016/j.pcl.2018.12.014. Epub 2019 Feb 1. PMID: 30819350. • Harrison H. The principles for family-centered neonatal care. *Pediatrics*. 1993 Nov;92(5):643-50. PMID: 8414850.	

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Looking to the future… incorporating EPAs

- EPA
  - Entrustable Professional Activities
  - … or "Everyday Pediatrician Activities"
- Similar to Milestones, includes general and specialty-specific EPAs
- ABP plans to include in certification decisions by 2028
  - Data gathering by ABP will likely begin earlier
  - Many programs are using EPAs in assessments currently

EPA examples

Provide Consultation to Other Health Care Providers Caring for Children and Adolescents and Refer Patients Requiring Further Consultation to Other Subspecialty Providers if Necessary

EPA: Use Population Health Strategies and Quality Improvement Methods to Promote Health and Address Racism, Discrimination, and Other Contributors to Inequities Among Pediatric Populations

EPA: Lead an Interprofessional Health Care Team

Other content provided:

- Description and Fundamental Activities
- Mapping to Domains of Competence and Competencies within each domain
- Context

https://www.abp.org/sites/abp/files/pdf/epa-all-subs-1.pdf

EPA Assessment Scale

Supervision Scale for This EPA

1. Trusted to observe only
2. Trusted to execute with direct supervision and coaching
3. Trusted to execute with indirect supervision and discussion of information conveyed for selected simple and complex cases
4. Trusted to execute with indirect supervision and may require discussion of information conveyed but only for selected complex cases
5. Trusted to execute without supervision

    5a. Not yet ready to also supervise others in the execution of this EPA*

    5b. Also trusted to supervise others in the execution of this EPA*

    **Where supervision means: Ability to assess patient and learner needs ensuring safe, effective care and further trainee development by tailoring supervision level for this EPA*

Considerations for Fellowship Programs

- Near future
  - New milestones initial reporting this winter
  - Considerations:
    - Different assessment mechanisms?
    - Changes to CCC process?
- Longer term
  - Optimizing assessment of both milestones and EPAs
  - Considerations:
    - Adjustment of assessments to incorporate EPAs?
    - Faculty development needed for assessors or CCC?
    - Assistance from the ABP in this process!

The Future of EPAs

- EPAs create a framework for lifelong learning that can be used from the beginning of training until the end of practice
- EPAs are now aligned and connected with all ABP assessments
  - In-training exams, initial certification exams, MOCA Peds,
- CBME and EPAs will be part of initial certification decision making by 2028

Connecting Milestone Ratings to EPA Assessments

- Ongoing studies show easily reproducible relationship between Milestone ratings and EPA level of supervision
- These data have been used to create equations that will allow programs to assess EPAs and prepopulate suggested Milestone rating

- Goal of mapping is to more easily link assessed EPA to milestone or vice versa

EPA to Milestone Mapping

- An EPA might map differently based on context

- Expert consensus: each **subspecialty** created a team
  - **Step 1**: map milestones to EPAs
  - **Step 2**: map EPA LOS levels to milestones ratings

Hematology-Oncology (Step 1)

HEMATOLOGY-ONCOLOGY EPAS

EPA 1: Manage Patients with Hematology-Oncology Conditions, Whether Acute or Chronic, Simple or Complex, in an Ambulatory, Emergency, or Inpatient Setting

- PC 1: History and Physical Examination
- PC 2: Organize and Prioritize Patient Care
- PC 3: Clinical Reasoning
- PC 4: Patient Management
- MK 1: Oncology
- MK 2: Hematology
- MK 3: Bone Marrow Transplant/Cellular Therapy
- MK 4: Diagnostic Evaluation

EPA 2: Enroll and Treat Patients on Clinical Research Trials

- PC 4: Patient Management
- PBLI 1: Evidence-Based and Informed Practice
- P 2: Ethical Principles
- ICS 1: Patient- and Family-Centered Communication
- ICS 4: Complex Communication Around Serious Illness/Difficult Conversations

Hematology-Oncology (Step 1)

COMMON SUBSPECIALTY EPAS

EPA 1: Provide Consultation to Other Health Care Providers Caring for Children and Adolescents and Refer Patients Requiring Further Consultation to Other Subspecialty Providers if Necessary

- PC 3: Clinical Reasoning
- PC 4: Patient Management
- MK 1: Oncology
- MK 2: Hematology
- SBP 3: System Navigation for Patient-Centered Care – Coordination of Care
- ICS 2: Interprofessional and Team Communication
- ICS 3: Communication within Health Care Systems

EPA 2: Contribute to the Fiscally Sound, Equitable, and Collaborative Management of a Health Care Workplace

- SBP 6: Physician Role in Health Care Systems
- PBLI 1: Evidence-Based and Informed Practice
- P 3: Accountability/Conscientiousness
- ICS 3: Communication within Health Care Systems

Hematology-Oncology (Step 2)

Patient Care 4: Patient Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Participates in the creation of management plans	Develops management plans for routine diagnoses, with guidance Adjusts management plans according to guidelines, toxicities, patient preferences, and goals, with guidance	Develops and implements management plans for routine diagnoses Adjusts management plans according to guidelines, toxicities, patient preferences, and goals in routine circumstances	Develops and implements management plans for complex diagnoses Adjusts management plans according to guidelines, toxicities, patient preferences, and goals in complex circumstances	Serves as a role model and coach for development and adjustment of management plans for complex diagnoses

LOS 1 ☐ ☐ LOS 2 ☐ LOS 3 LOS 4 LOS 5 ☐ ☐

Final Mapping

HEMO EPA 1: Manage Patients with Hematology-Oncology Conditions, Whether Acute or Chronic, Simple or Complex, in an Ambulatory, Emergency, or Inpatient Setting

HEMO EPA 2: Enroll and Treat Patients on Clinical Research Trials

HEMO EPA 3: Provide a Medical Home for Patients with Hematologic, Oncologic, or Stem Cell Transplant Needs

HEMO EPA 4: Introduce and Facilitate the Integration of Palliative Care for Patients with Advanced Disease

HEMO EPA 5: Demonstrate Competence in Performing and Interpreting Common Procedures of a Pediatric Hematologist/Oncologist

HEMO EPA 6: Facilitate the Transition of Care

CSS EPA 1: Provide Consultation to Other Health Care Providers Caring for Children and Adolescents and Refer Patients Requiring Further Consultation to Other Subspecialty Providers if Necessary

Hematology-Oncology (Step 2)

Medical Knowledge 1: Oncology				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic knowledge of specialty disorders	Applies basic knowledge of specialty disorders to routine patient presentations	Demonstrates expanded knowledge of specialty disorders and applies to routine patient presentations	Applies expanded knowledge of specialty disorders to complex patient presentations	Serves as a role model, drawing from a breadth of medical knowledge that spans the continuum of routine to complex patient presentations
LOS 1		LOS 2		LOS 3	LOS 4	LOS 5		

Final Mapping

HEMO EPA 1: Manage Patients with Hematology-Oncology Conditions, Whether Acute or Chronic, Simple or Complex, in an Ambulatory, Emergency, or Inpatient Setting

CSS EPA 1: Provide Consultation to Other Health Care Providers Caring for Children and Adolescents and Refer Patients Requiring Further Consultation to Other Subspecialty Providers if Necessary

Hematology-Oncology (final)

subspecialty	specific_or_common	epa_number	epa_level	PC1	PC2	PC3	PC4	PC5	MK1	MK2	MK3	MK 4
HEMO	Specific	1	1	0	0	0	0		1	1	1	1
HEMO	Specific	1	2	1	1	1	2		2	2	2	2
HEMO	Specific	1	3	2	2	3	3		3	3	3	3
HEMO	Specific	1	4	3	2.5	3.5	3.5		3.5	3.5	3.5	3.5
HEMO	Specific	1	5	4	3.5	4	4		4	4	4	4

Adolescent Medicine (final)

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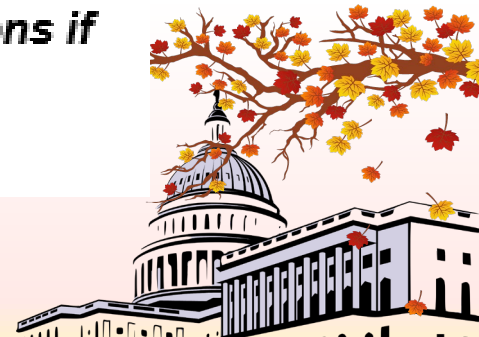
EPA 1: Provide Care for Adolescent and Young Adult Patients with Acute Physical and Mental Health Issues

1. **Trusted to observe only**
   [PC1-0; PC2-0; PC4-1; MK1-0; MK2-0; PBLI1-1; ICS1-0; ICS5-0]
2. **Trusted to provide care with direct supervision and coaching**
   [PC1-1.5; PC2-1; PC4-2; MK1-1.5; MK2-1; PBLI1-1.5; ICS1-1.5; ICS5-1.5]
3. **Trusted to provide care with indirect supervision and discussion of case details for most simple and some complex cases, *but needs direct supervision and coaching for most complex cases***
   [PC1-3; PC2-2.5; PC4-3; MK1-2.5; MK2-1.5; PBLI1-3; ICS1-2.5; ICS5-3]
4. **Trusted to provide care with indirect supervision but may require discussion of case details for a few complex cases**
   [PC1-3.5; PC2-3.5; PC4-3.5; MK1-3; MK2-3; PBLI1-3.5; ICS1-3.5; ICS5-3.5]
5. **Trusted to provide care without supervision *knowing they would ask questions if needed***
   [PC1-4; PC2-4; PC4-4; MK1-3.5; MK2-4; PBLI1-4; ICS1-4; ICS5-4.5]



EPA-Milestone Mapping Tool

- There is an online tool being created by ABP, awaiting all mapping to be completed.

- Evaluation systems (e.g., New Innovations) may have this capability to set up mapping.

Mapping Milestones and EPAs

Alvin Singh, MD, Erin Khan, MD
Pediatric Pulmonology Fellowship Director
Children's Mercy – Kansas City
APPD Fall Meeting

My Journey: Aspects to Consider

Fellowship director, program

- New, established
- Keeping faculty engaged
- Timing

Institution's GME

- Evaluation Process
- Type, which milestones, settings, platform

Extent of Resources

- ACGME, ABP
- Institution's GME

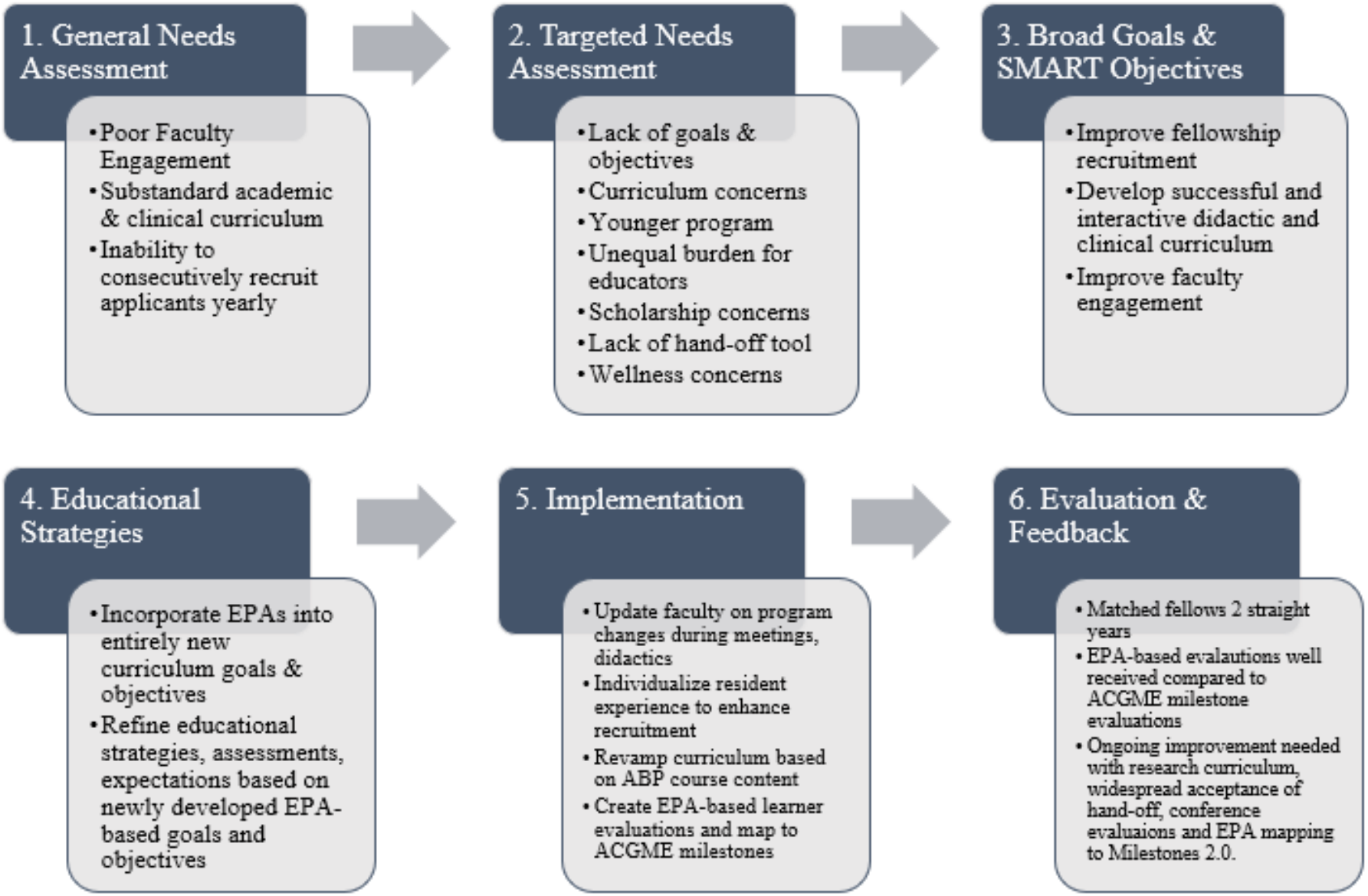
Circumstances

Started in 2021

- 1st fellow graduated in 2018

Current program not ideal

- Necessitated complete overhaul
  - Goals & Objectives
  - Academic & Clinical Curriculum
  - Evaluations
    - Different settings, types
  - Basically Everything
    - Ensure continuity



https://doi.org/10.1002/ppul.26581

EPA 1: Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting

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Supervision Scale for This EPA

1. Trusted to observe only
2. Trusted to execute with direct supervision and coaching
3. Trusted to execute with indirect supervision and discussion of information for most simple and some complex cases
4. Trusted to execute with indirect supervision but may require discussion of information for a few complex cases Trusted to execute without supervision
5. Trusted to execute without supervision

Description of the Activity

Children with acute complex respiratory illness pose a challenging but critical activity for the pulmonologist. This professional activity requires management of the patient with complicated or unusual respiratory disease and the patient with underlying complex multisystem disease. It requires engaging in sound clinical reasoning that drives the development of an appropriate differential diagnosis and workup and placing the patient at the center of all management decisions by engaging in bidirectional communication with patients and parents to provide patient and family centered care.

The specific functions which define this EPA include:

1. Utilizing specialized knowledge and experience to diagnose and determine the optimal course of treatment for acute manifestations of complex respiratory disease
2. Addressing comorbidities that often present in complex patients, particularly those affected by the acute process. This includes case management issues such as special resources required during and post- acute phase of illness
3. Coordinating care with the interdisciplinary health care team
4. Managing uncertainty (your own as well as that of the patient and family) as much of the care for these patients is not known or determined clearly by the existing evidence

Curricular Components That Support the Functions of EPA 1: Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting

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1. Utilizing specialized knowledge and experience to determine the optimal course of treatment for acute manifestations of complex respiratory disease
    - Recognizes the presence of impending respiratory failure in patients using clinical and laboratory data and identifies disorders in gas exchange and acid-base
    - Synthesizes clinical and laboratory findings into a unified diagnosis for simple and complex patients with acute respiratory disease
    - Determines the level and site of care required to support the patient (i.e., home, emergency department, intensive care unit)
    - Outlines and efficiently manages the therapeutic treatment plan including medications (oral and aerosolized), chest physiotherapy, and oxygen therapy
    - Knows the indications for and effectively manages invasive and noninvasive mechanical ventilation
    - Knows the indications for and accurately interprets laboratory, pulmonary function testing, imaging, and invasive procedures (including bronchoscopy) in the management of patients with acute respiratory diseases
    - Anticipates and manages complications of the disease process and therapy
    - Identifies and applies key evidence-based guidelines to the care of patients with acute manifestations of complex respiratory disease

Entrustable Professional Activities
EPA 1 for Pediatric Pulmonology

EPA 1: Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting

1. Utilizing specialized knowledge and experience to diagnose and determine the optimal course of treatment for acute manifestations of complex respiratory disease
2. Addressing comorbidities that often present in complex patients, particularly those affected by the acute process. This includes case management issues such as special resources required during and post- acute phase of illness
3. Coordinating care with the interdisciplinary health care team
4. Managing uncertainty (your own as well as that of the patient and family) as much of the care for these patients is not known or determined clearly by the existing evidence

EPA	Objectives	Educational Strategy	Assessment & Evaluation	Expectations	ACGME Milestone Mapping
Peds Pulm EPA 1 Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting	Utilizing specialized knowledge and experience to determine the optimal course of treatment for acute manifestations of complex respiratory disease	Inpatient service Outpatient clinic(s) Elective Experiences Pulmonary Didactics	Direct Observation Faculty Feedback CCC evaluations	Fellows participate in both inpatient and outpatient clinical experiences Fellows manage patients with increasing autonomy and decreasing faculty oversight.	PC 2, PC3, PC 6, PC 7 ICS 3, ICS 5 SBP 5 PPD 8
	Addressing comorbidities that often present in complex patients, particularly those affected by the acute process. This includes case management issues such as special resources required during and after the acute phase of illness	Inpatient service Outpatient clinic(s) Elective Experiences	Direct Observation Faculty Feedback 360 evaluations	Fellows act in a consultative role and provide timely referrals to other disciplines when necessary.	
	Coordinating care with the interdisciplinary health care team	Inpatient service Outpatient clinic(s) Elective Experiences	Direct Observation Faculty Feedback 360 evaluations Self-Assessment	Fellows actively participate in various clinical settings with a focus on interdisciplinary care, such as multi-disciplinary clinics (CF, muscle-nerve, PH, Trach-Vent, etc)	
	Managing uncertainty (your own as well as that of the patient and family) as much of the care for these patients is not known or determined clearly in the evidence	Inpatient service Outpatient clinic(s) Elective Experiences	Direct Observation Faculty Feedback Semi-Annual Reviews Self-Assessment	Fellows will provide education and appropriate counselling to families. Fellows will seek out in-depth resources when faced with uncertainty.	

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EPA	Objectives	Educational Strategy	Assessment & Evaluation	Expectations	ACGME Milestone Mapping
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	Addressing comorbidities that often present in complex patients, particularly those affected by the acute process. This includes case management issues such as special resources required during and after the acute phase of illness	Inpatient service Outpatient clinic(s) Elective Experiences	Direct Observation Faculty Feedback Chart Review Case-Based Review 360 evaluations CCC	Fellows act in a consultative role and provide timely referrals to other disciplines when necessary.	
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	Managing uncertainty (your own as well as that of the patient and family) as much of the care for these patients is not known or determined clearly in the evidence	Inpatient service Outpatient clinic(s) Elective Experiences	Direct Observation Faculty Feedback Case-Based Review Semi-Annual Reviews Self-Assessment	Fellows will provide education and appropriate counselling to families. Fellows will seek out in-depth resources when faced with uncertainty.	

https://doi.org/10.1002/ppul.26581

Faculty Considerations

Faculty communication important	Program overhaul • Changes in curriculum, conferences, evaluations
Reviewed Milestones	What they are/are not Importance of sub-competencies
Introduced EPAs	Differ from Milestones Based more on "Gestalt/Traditional" assessments from faculty
How both work together for complete evaluation of the learner	

Created New Evaluation

- Based on EPA's
  - Mapped to subcompetency milestones
    - Pediatric SUBspecialties
- Each Question
  - Individual EPA
- Done in New Innovations

	Forms		
Peds Sub-specialty EPA 11 - Lead Within the Subspecialty Profession How confident are you that currently, the fellow can demonstrate life-long learning and leadership within the specialty of pediatric pulmonology?	2	Mapped	Actions
Peds Sub-specialty EPA 10 - Engage in Scholarly Activities Through Discovery, Application, and Dissemination of New Knowledge Based on your observations, discussion and chart review, do you trust the fellow to use and refer to evidence and scholarly products to communicate management plans and potential benefits for patients?	2	Mapped	Actions
Peds Sub-specialty EPA 9 - Facilitate Handovers to Another Health Care Provider Either Within or Across Settings Based on your observation, feedback and handout review, how much do you trust the fellow to accurately and effectively facilitate patient handovers in the inpatient setting?	1	Mapped	Actions
Peds Sub-specialty EPA 8 - Lead an Interprofessional Health Care Team Based on your observations and discussions, how much do you trust the fellow to lead an interprofessional health care team [consultation team, multidisciplinary team]?	2	Mapped	Actions
Peds Sub-specialty EPA 7 - Use Population Health Strategies and Quality Improvement Methods to Promote Health and Address Racism, Discrimination, and Other Contributors to Inequities Among Pediatric Populations Based on your observations and discussions, do you trust the fellow to seek out quality improvement or health promotion strategies in addressing inequities to achieve improved health outcomes for all children?	1	Mapped	Actions
Peds Sub-specialty EPA 6 - Contribute to the Fiscally Sound, Equitable, and Collaborative Management of a Health Care Workplace Based on your observations, discussions and chart review, how much do you trust the fellow to demonstrate an awareness of financial practices that affect the workplace?	2	Mapped	Actions
Peds Pulm EPA 5: Demonstrate Competence in Performing the Common Procedures of the Pediatric Pulmonary Subspecialist Based on your observations, feedback and chart review, how much do you trust the fellow to demonstrate competence in performing and interpreting common pulmonary procedures and tests?	2	Mapped	Actions
Peds Pulm EPA 4 - Manage the Use of Supplemental Respiratory Equipment Such as Oxygen, Ventilators, and Airway Clearance Devices Based on your observations, feedback and chart review, what is your level of trust of the fellow to manage the appropriate use of supplementary respiratory equipment?	2	Mapped	Actions
Peds Pulm EPA 3 - Demonstrate Competence in Communicating a New Diagnosis of a Life Altering Disease Using a Patient and Family Centered Approach Based on your observations, feedback and chart review, did you trust the fellow to demonstrate competence in communicating a new diagnosis of a life altering disease to a patient and their family?	2	Mapped	Actions
Peds Pulm EPA 2 - Manage Patients with Complex Chronic Respiratory Disease Through All Settings and Phases of Life Based on your observations, feedback and chart review, how much did you trust the fellow to manage patients with chronic respiratory disorders in the ambulatory setting?	2	Mapped	Actions
Peds Pulm EPA 1 - Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting Based on your observations, feedback and chart review, how much did you trust the fellow to manage patients with acute respiratory disorders in an inpatient consultative role?	1	Mapped	Actions

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EPA 1: Based on your observations, feedback and chart review, how much did you trust the fellow to manage patients with acute respiratory disorders in a consultative role?

Mapping

ACGME Milestone Mapping
PC 2, PC3, PC 6, PC 7
ICS 3, ICS 5
SBP 5
PPD 8

☐ PC1. Provide transfer of care that ensures seamless transitions						
☑ PC2. Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment	1	2	3	4	5	
☑ PC3. Develop and carry out management plans	1	2	3	4	5	
☐ PC4. Provide appropriate role modeling						
☑ MK1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems	1	2	3	4	5	
☑ SBP1. Work effectively in various health care delivery settings and systems relevant to their clinical specialty	1	2	3	4	5	
☑ SBP2. Coordinate patient care within the health care system relevant to their clinical specialty	1	2	3	4	5	
☐ SBP3. Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate						
☐ SBP4. Work in inter-professional teams to enhance patient safety and improve patient care quality						
☐ SBP5. Participate in identifying system errors and implementing potential systems solutions						
☐ PBLI1. Identify strengths, deficiencies, and limits in one's knowledge and expertise						
☐ PBLI2. Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement						
☐ PBLI3. Use information technology to optimize learning and care delivery						
☑ PBLI4. Participate in the education of patients, families, students, residents, and other health professionals	1	2	3	4	5	
☐ PROF1. Professional Conduct : High standards of ethical behavior which includes maintaining appropriate professional boundaries						
☑ PROF2. Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients	1	2	3	4	5	
☑ PROF3. Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients	1	2	3	4	5	
☐ PROF4. The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty						
☑ ICS1. Communicate effectively with physicians, other health professionals, and health-related agencies	1	2	3	4	5	
☑ ICS2. Work effectively as a member or leader of a health care team or other professional group	1	2	3	4	5	
☑ ICS3. Act in a consultative role to other physicians and health professionals	1	2	3	4	5	

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COMPETENCY DOMAIN	SUBCOMPETENCY NUMBER	PAGE IN PEDIATRIC MILESTONES PROJECT BOOKLET	SUBCOMPETENCY
Patient Care (PC)	1 3	11	Provide transfer of care that insures seamless transitions
	2 6	18	Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment
	3 7	21	Develop and carry out management plans
	4 12	32	Provide appropriate role modeling
Medical Knowledge (MK)	2	40 & 53	Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems
Systems-Based Practice (SBP)	1	85	Work effectively in various health care delivery settings and systems relevant to their clinical specialty
	2	87	Coordinate patient care within the health care system relevant to their clinical specialty
	3	90	Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
	5	94	Work in inter-professional teams to enhance patient safety and improve patient care quality
	6	96	Participate in identifying system errors and implementing potential systems solutions
Practice- Based Learning and Improvement (PBLI)	1	40	Identify strengths, deficiencies, and limits in one's knowledge and expertise
	4	49	Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
	7	56	Use information technology to optimize learning and care delivery
	9	61	Participate in the education of patients, families, students, residents, and other health professionals

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Subcompetencies for Reporting of Milestones to ACGME: Pediatric Subspecialties*

Professionalism (PROF)	2	80	Professional Conduct: High standards of ethical behavior which includes maintaining appropriate professional boundaries
	5 (PPD**)	111	Trustworthiness that makes colleagues feel secure when one is responsible for the care of patients
	6 (PPD)	116	Provide leadership skills that enhance team function, the learning environment, and/or the health care delivery system/ environment with the ultimate intent of improving care of patients
	8 (PPD)	119	The capacity to accept that ambiguity is part of clinical medicine and to recognize the need for and to utilize appropriate resources in dealing with uncertainty

Interpersonal and Communication Skills (ICS)	3	69	Communicate effectively with physicians, other health professionals, and health related agencies
	4	71	Work effectively as a member or leader of a health care team or other professional group
	5	74	Act in a consultative role to other physicians and health professionals

*GRAY shaded competencies indicate milestones also to be reported by General Pediatrics Residency Programs
**Personal and Professional Development

Instructions:

Please fill out the following evaluation after your week of inpatient/consultation service with the fellow. Please give examples whenever possible and explain if "not applicable".

If unclear about grading scale, please remember the O-Score Entrustability Scale [https://www.royalcollege.ca/rcsite/cbd/cbd-tools-resources-e].

1. *Only as an observer - "I had to do"*
2. *With Direct Supervision - "I had to talk them through"*
3. *With Indirect Supervision - "I had to prompt them from time to time"*
4. *Independently - "I needed to be in the room just in case"*
5. *Instructor/Junior Colleague - " I did not need to be there"*

...less

1* **Peds Pulm EPA 1 - Manage Patients with Acute Complex Respiratory Disease in an Ambulatory, Emergency, or Inpatient Setting**

Based on your observations, feedback and chart review, how much did you trust the fellow to manage patients with acute respiratory disorders in a consultative role?

The Fellow is trusted to participate in this activity

Only as an observer	With direct supervision	With indirect supervision	Independently	As an instructor of junior colleagues	Did not observe
○	○	○	○	○	○

Comment

2* **Peds Pulm EPA 2 - Manage Patients with Complex Chronic Respiratory Disease Through All Settings and Phases of Life**

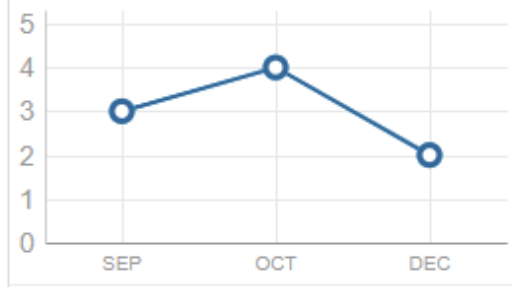
Based on your observations, feedback and chart review, how much did you trust the fellow to manage patients with chronic respiratory disorders in the ambulatory setting?

The Fellow is trusted to participate in this activity

Only as an observer	With direct supervision	With indirect supervision	Independently	As an instructor of junior colleagues	Did not observe
○	○	○	○	○	○

PC1. Provide transfer of care that ensures seamless transitions

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates variability in transfer of information (content, accuracy, efficiency, and synthesis) from one patient to the next; makes frequent errors of both omission and commission in the hand-off	Uses a standard template for the information provided during the hand-off; is unable to deviate from that template to adapt to more complex situations; may have errors of omission or commission, particularly when clinical information is not synthesized; neither anticipates nor attends to the needs of the receiver of information	Adapts and applies a standardized template, relevant to individual contexts, reliably and reproducibly, with minimal errors of omission or commission; allows ample opportunity for clarification and questions; is beginning to anticipate potential issues for the transferee	Adapts and applies a standard template to increasingly complex situations in a broad variety of settings and disciplines; ensures open communication, whether in the receiver- or the provider-of-information role, through deliberative role, through deliberative inquiry, including read-backs, repeat-backs (provider), and clarifying questions (receivers)	Adapts and applies the template without error and regardless of setting or complexity; internalizes the professional responsibility aspect of hand-off communication, as evidenced by formal and explicit sharing of the conditions of transfer (e.g., time and place) and communication of those conditions to patients, families, and other members of the health care team
○	○	○	○	○	○	○	○	○



AVG	PEER	PRIOR
3.33	3.33	N/A

View Details

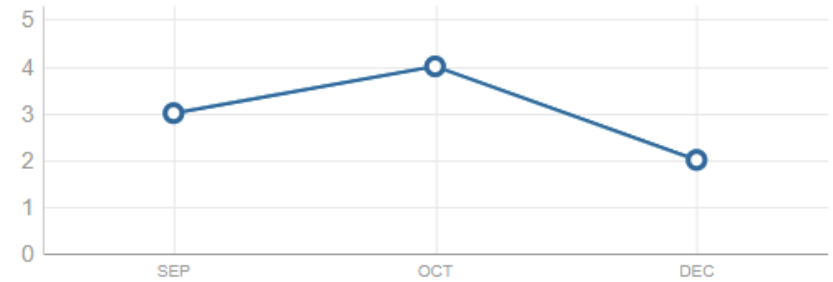
View summary

« Previous Next »

PC1. Provide transfer of care that ensures seamless transitions

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates variability in transfer of information (content, accuracy, efficiency, and synthesis) from one patient to the next; makes frequent errors of both omission and commission in the hand-off	Uses a standard template for the information provided during the hand-off; is unable to deviate from that template to adapt to more complex situations; may have errors of omission or commission, particularly when clinical information is not synthesized; neither anticipates nor attends to the needs of the receiver of information	Adapts and applies a standardized template, relevant to individual contexts, reliably and reproducibly, with minimal errors of omission or commission; allows ample opportunity for clarification and questions; is beginning to anticipate potential issues for the transferee	Adapts and applies a standard template to increasingly complex situations in a broad variety of settings and disciplines; ensures open communication, whether in the receiver- or the provider-of-information role, through deliberative role, through deliberative inquiry, including read-backs, repeat-backs (provider), and clarifying questions (receivers)	Adapts and applies the template without error and regardless of setting or complexity; internalizes the professional responsibility aspect of hand-off communication, as evidenced by formal and explicit sharing of the conditions of transfer (e.g., time and place) and communication of those conditions to patients, families, and other members of the health care team
○	○	○	○	○	○	○	○	○

☐ Not yet assessable



AVERAGE	RESPONSES	PRIOR REVIEW
3.33	6	N/A
3.33 Peer	4 Evaluators	

Notes

CCC Resident

New note

Milestone-Based Surveys

- "Ask a lot of questions without addressing the only real questions: 1) does the trainee have the professional tools (knowledge and clinical skills), people skills and personal skills (professionalism, integrity, etc.) to do the job."
- "A lot of questions."
- "I would not say it was great, but was fine…"
- "Too many questions with too many details"
- "It is too detailed if you need to complete several ones of those multiple times a year."
- "It takes a lot of time."
- "Most often, I did not read the entire prompts and just guessed on where I felt the learner may have been based on a general assessment."
- "Often I would not read the specific milestones and go off of gestalt. In addition, despite lengthy explanations of what the milestones are, it was difficult to apply concrete examples."

EPA-Based Surveys

- "Allows for gestalt type of evaluation from faculty. Room for comments helps to provide examples."
- "It too was fine, not great. I doubt there is an ideal. Some fellows will easily fit categories and others not so much."
- "I am not sure if I had to fill this form before. Looking at it, it seems straight to the point and less time consuming."
- "I feel like this allows me to actually evaluate the learner, instead of just clicking boxes. I can dedicate time to providing meaningful feedback."

Thoughts and Questions
avsingh@cmh.edu

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THOUGHTS

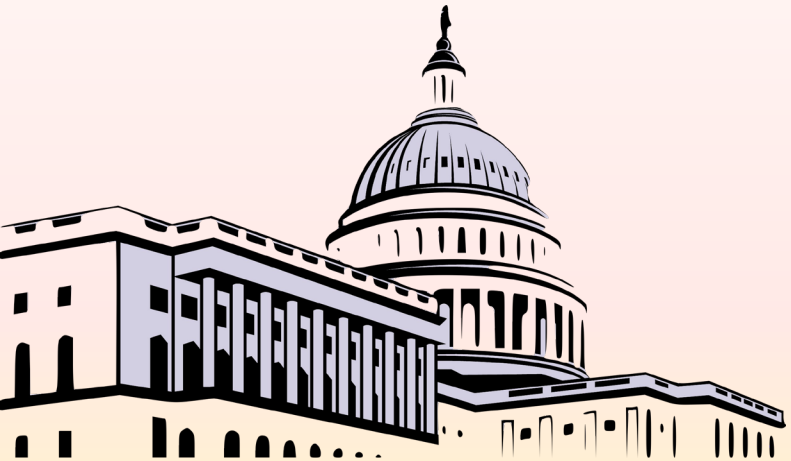
- Seems well received by faculty
  - Less "survey burden"
- Ongoing process
  - Change questions
    - Faculty feedback
  - Map milestones with presentation evals
    - Medical knowledge, communication, professional development

QUESTIONS

- Not very "reproducible"
  - Matching "specific functions" w sub-competencies
    - Used at institution, program
- Milestones 2.0
  - GME using for residents
  - Guidelines to map to 1.0 – Peds Supplemental Guide on ACGME website

Well-being during Transitions

Jenny Duncan, M.D.
Melissa Tavarez, M.D.
Hayley Gans, M.D.



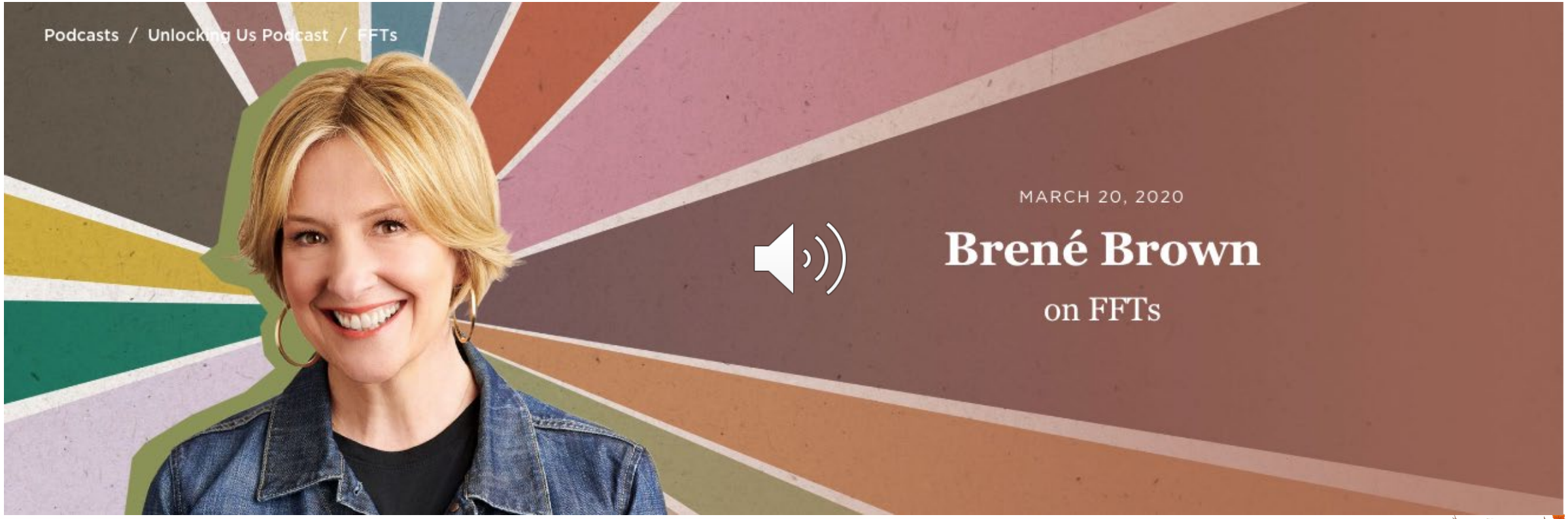
APPD 2023 Annual Fall Meeting

Renaissance Arlington Capital View Hotel
Arlington, Virginia

Learning Objectives

- Identify common challenges that trainees experience during transitions that impact their well-being
- Develop strategies to address transition challenges during different stages of training
- Connect with fellowship leader colleagues

Being New



Brene Brown, Unlocking Us

Table Discussions – 10 minutes

- Identify 2 potential challenges with that transition
- Develop at least 1-2 strategies to address each challenge
- Table topics
  - New to fellowship (include same vs. different institution)
  - Transition from year 1 – 2
  - Transition from year 2 – 3
  - Preparing for faculty transition

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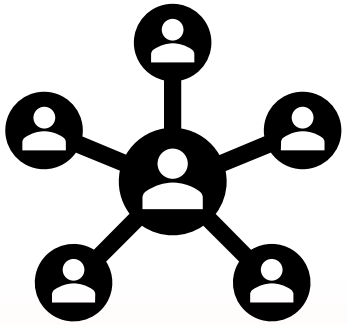
Supporting Transitions into Fellowship

APPD 2023 Annual Fall Meeting

Professional Identify Formation

- How do I make sense of who I am and my personal attributes?

- How do I relate to the values & attitudes of my chosen profession?



Mount GR, et. al. Academic Medicine,. 2022

Imposter Phenomenon

- Feelings of inadequacy that persist despite evident success
- Transitions are notable culprits in triggering self-doubt
- Zoom out to get a more complete picture

Transitions – Brene's FFT strategies

Name It

Normalize It

Put in Perspective

Reality Check Expectations

Self-Compassion

Mindfulness

Common Humanity

Self-kindness

Live Your Values

In a world where you can choose to have your life be about something, what do you choose?

Transition Resources

- GME Well-being website - resources, counseling, interest groups
- Housing spreadsheet
- Recommended healthcare providers
- Childcare information
- Life in STL – fun, food, groceries, things to do etc…
- NEW – IMG wellness initiative
  - Connecting with each other
  - Specific resource needs: taxes, SSNs, driver's license and more

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Supporting Transitions from year to year

APPD 2023 Annual Fall Meeting

Transitions from 1st to 2nd Year

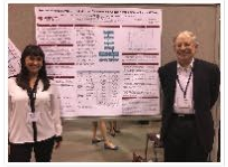
- 3 year fellowships: majority of programs in Peds are 3 years
- Fellowships < 3 yo: fellows are confronted with many of the challenges all at once which amplifies the stressors
- Unique features:
  - Starting scholarship: for some this is first 'rigorous" and "long" project.
    - Renews feelings of inadequacy which occurred at beginning of clinical year
      - Starting at the beginning again….
        - Given the rapidity of the "steep learning curve" there is rarely time for recovery and true reflection
        - Many fellows feel more lost given lack of experience and require more support than "expected by years of training"

Scholarship Toolkit

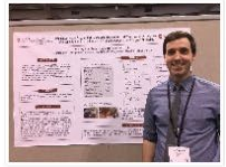
Pediatrics Fellow Scholarship Toolkit

Created by Christopher J Leydig, last modified by Allison J Guerin on Aug 28, 2020

Scholarship Timeline



Types of Scholarship

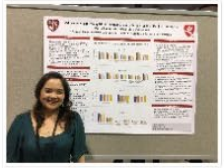


Finding a Mentor

SOC Guidelines

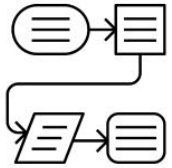
Scholarship Curriculum

ABP Scholarly Work Product



Grants & Fellowships

Professional Development Opportunities



Pre-Award Process for External Grants

National Institutes of Health

Training Grant Resource Guide

Pediatrics Fellow Scholarship Toolkit - Pediatrics: Fellow Scholarship Toolkit - Medwiki (stanford.edu)

Scholarship Toolkit

Types of Scholarship

Created by Sarina Tom, last modified by Allison J Guerin on Aug 22, 2020

Advocacy & Community Engagement

Advocacy research focuses on improving population health through policy changes that are the result of complex advocacy efforts. Information exchanges among researchers, advocates, and policymakers are paramount to policy interventions to improve health outcomes.

Basic Science

Basic science research encompasses familiar scientific disciplines such as biochemistry, microbiology, physiology, and pharmacology, and their interplay, and involves laboratory studies with cell cultures, animal studies or physiological experiments.

Biotechnology & Pharmaceutical Industry Research

Bioscience research that encompasses the discovery, development, production, and marketing in the pharmaceutical and biotechnology industries, including clinical trials and regulatory compliance.

Clinical Research

Clinical research is intended to produce knowledge valuable for understanding human disease, preventing and treating illness, and promoting health. Clinical research embraces a continuum of studies involving interactions with patients, diagnostic clinical materials or data, or populations.

Global Health

Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide.

Health Services Research

Health services research is a multidisciplinary field of inquiry that examines access to, and the use, costs, quality, delivery, organization, financing, and outcomes of health care services to produce new knowledge about the structure, processes, and effects of health services for individuals and populations.

Health Technology Innovations

Health technology innovations is the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures, and systems developed to solve a health problem and improve the quality of lives.

Improvement Science

The concept of improvement science recently emerged to provide a framework for research focused on healthcare improvement. The primary goal of this scientific field is to determine which improvement strategies work as we strive to assure effective and safe patient care.

Medical Education

Medical education research aims to advance the knowledge, skills, and professionalism of medical students, residents, and fellows by understanding and evaluating educational ecosystems.

Clinical Research

Created by Allison J Guerin, last modified on Nov 11, 2020

Table of Contents

Definition

Clinical research is a component of medical and health research intended to produce knowledge valuable for understanding human disease, preventing and treating illness, and promoting health. Clinical Research embraces a continuum of studies involving interactions with patients, diagnostic clinical materials or data, or populations in any of the following categories: (1) disease mechanisms (etiopathogenesis); (2) bi-directional integrative (translational) research; (3) clinical knowledge, detection, diagnosis and natural history of disease; (4) therapeutic interventions including development and clinical trials of drugs, biologics, devices, and instruments; (5) prevention (primary and secondary) and health promotion; (6) behavioral research; (7) health services research, including outcomes, and cost-effectiveness; (8) epidemiology, including health disparities and health equity; and (9) community-based and managed care-based trials.

Source: NIH

Resources

Below are resources specific to scholarship in clinical research:

MCHRI Clinical Research Resources

A list of resources available at Stanford to support clinical research.

Stanford Clinical Research Support Office (CRSO)

The Clinical Research Support Office (CRSO) provides operational, informatics, regulatory, and other needed support for the execution of studies at Stanford Children's Health.

Essentials of Clinical Research Course

The Essentials of Clinical Research course is designed for faculty and staff engaged in clinical research at Stanford and will consist of 10 sessions. The course introduces attendees to basic principles of clinical research design, including biostatistics; design and interpretation of diagnostic and predictive test studies; required and desired elements of clinical trial protocols. The course will also introduce regulatory aspects of clinical research conduct and oversight. Good Clinical Practice (GCP), and ethical dimensions of clinical research.

Spectrum: Stanford Center for Clinical & Translational Research

Spectrum bridges the translational spectrum from basic research to public health. As one of Stanford's 19 designated independent labs, centers, and institutes, Spectrum provides a physical and intellectual intersection between schools and

Faculty Researchers

Some clinical researchers in F

Sharon F. Chen
Clinical Associate Professor, I
sfchen@stanford.edu

Valerie Chock
Associate Professor, Neonata
vchock@stanford.edu

Hayley Gans
Clinical Professor, Infectious I
hagans@stanford.edu

Susan Hintz
Professor, Neonatal & Develc
srhintz@stanford.edu

Henry Lee

Grants & Fellowships

Please see our Grants & Fellowships page for information regarding grant listservs, as well as Stanford and external grants open to most areas of scholarship.

Additionally, fellows pursuing clinical research should consider competitive society grants.

Many fellows interested in pursuing clinical research should consider applying for NIH grants to support their fellowship years or beyond fellowship:

NIH F32 - Ruth L. Kirschstein Postdoctoral Individual National Research Service Award

NIH K - Career Development Awards

Recent Fellow Projects

Brynn Connor (Pediatric Cardiology)

- Project Title: Primary Cardiomyopathy in Marfan Syndrome: Prevalence, Associations, and Long-Term Implications
- Research Mentor(s): Tom Collins, George Lui

Brittany Navarre (Pediatric Cardiology)

- Project Title: Identification of Novel Therapeutic Targets for Pacing-Induced Cardiomyopathy: A Pilot Study in Children with Congenital Complete Atrioventricular Block
- Research Mentor(s): Sushma Reddy, Anne Dubin

Natalie Wilson (Pediatric Critical Care)

- Project Title: Measuring outcomes in critically ill children: Implementation of a provider documented outcome score as standard of care
- Research Mentor(s): Lindsey Rasmussen, Felice Su

Rachel Herdes (Pediatric Gastroenterology)

- Project Title: Utility of early weight loss medications in adolescent patients with inadequate weight loss after vertical sleeve gastrectomy: A retrospective review and pilot feasibility study
- Research Mentor(s): Janey Pratt, Marwa Abu El Haija, Matias Bruzoni, Elizabeth Shepard

Diane Hsu (Pediatric Gastroenterology)

- Project Title: Characterizing the Role of the Appendix in Children with Ulcerative Colitis
- Research Mentor(s): Dorsey Bass

Julia Marlow (Pediatric Hospital Medicine)

- Project Title: Understanding Nurse, Respiratory Therapist, and Physician Perceptions Surrounding Oxygen Use for Children Hospitalized with Acute Viral Bronchiolitis
- Research Mentor(s): Alan Schroeder

Ruby Patel (Pediatric Nephrology)

- Project Title: The Adolescent Kidney Transplant Patient and Family and Peer Relationships
- Research Mentor(s): Rachel Goldstein, Paul Grimm, Victor Carrion

Kim Piburn (Pediatric Nephrology)

- Project Title: Are highly variable tacrolimus drug levels associated with inferior outcomes in pediatric kidney transplant patients?
- Research Mentor(s): Paul Grimm, Abanti Chaudhuri, Vaka Sigurjonsdottir

Lance Nelson (Adolescent Medicine)

Transitions from 1st to 2nd Year

- Balancing clinical and scholarship demands
  - Switching from scholarship to clinical service
    - Scholarship lacks the inherent structure of clinical service and often leaves fellows lost and stressed
- Creation of "niche" within chosen subspecialty
  - Weight of decision
  - Can be true source of passion and engagement
  - Adds to professional identity

Mitigating Strategies

Scholarship Competence & PIF Formation

- Graduated autonomy on project
- Targeted curriculum: compounded stress
- Focus on increased PI through development of "niche": curriculum targeted at this passion
- Central resources with specific aid for scholarship and connectivity with the scholarship community

Balancing scholarship and clinical demands

- Peer and senior mentors and colleagues
- SOC as important bridge to mentor
- Infrastructure with timelines
  - Journey with milestons
- Discussions regarding "protected time" for scholarship

Scholarship Sucess

- Works in progress sessions
- Targeted curriculum on stats, how to: write an abstract and grant, present, publish
- Support CV, biosketch, elevator pitch,

Herchline D, et. al. JGME. 2013

Transitions from 2nd to 3rd Year

- Continued challenges with balancing clinical and scholarship demands
- Requirement for scholarship progress
  - Presenting at meetings
  - Publishing (may be first scientific paper)
- Pressure to find a job
  - For some this is first job EVER…
- Weight of becoming an attending

Mitigating Strategies

Clinical Competancy

- Increased supported competence
  - Pretending weeks
- Target areas for improvement or needed skills for job as elective time

Scholarship Sucess

- Enhanced support for project completion

Finding a job

- Peer and senior mentors and colleagues
- Support for job search
  - Required sponsorship
  - Targeted curriculum: interviewing and negation skills

Transitioning

- Start targeted communication with new position to build relationships

Herchline D, et. al. JGME. 2013

Preparing for Transition to Faculty

APPD 2023 Annual Fall Meeting

Uncertainties Unleashed: Clinical Competence

Association of Pediatric Program Directors

Imposter syndrome!

Reported more frequently by female and minority group physicians

Herchline D, et. al. JGME. 2013
Vaa Stelling BE, et. al. Academic Medicine. 2023

Uncertainties Unleashed: Job Search Process

How do I find a job?

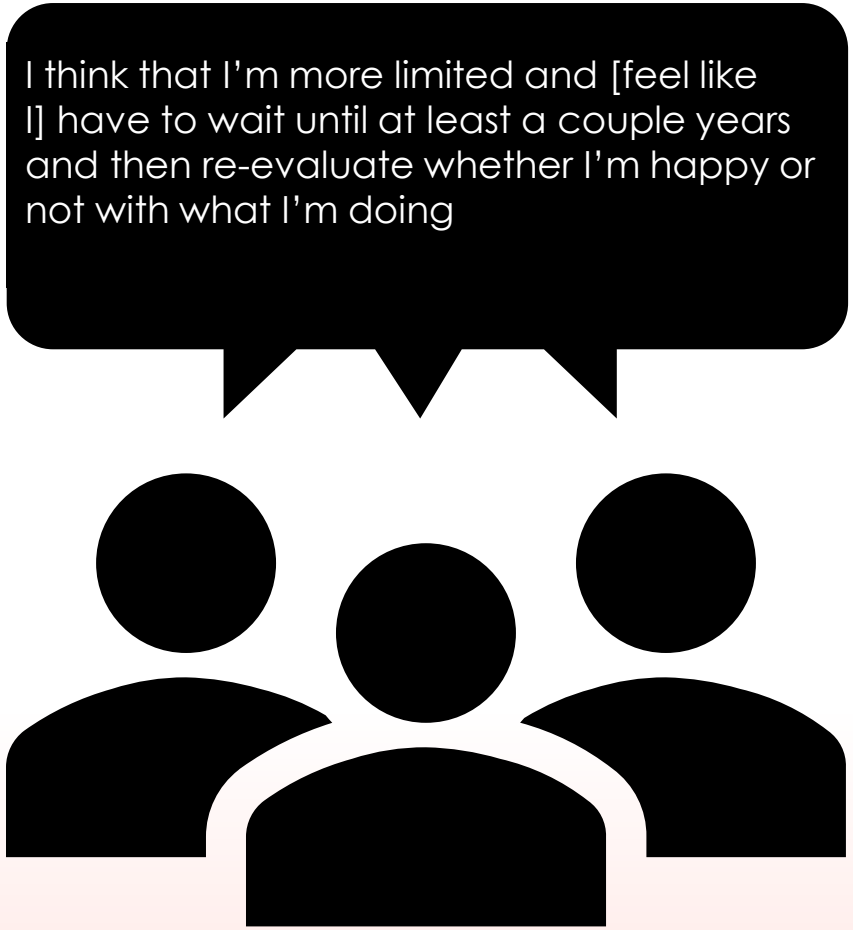
Where am I going to be living?

What will/should my job look like?

Herchline D, et. al. JGME. 2013

Uncertainties Unleashed: Career Vision & Trajectory

Association of Pediatric Program Directors



How do I balance work vs. non-work stuff?

How do I get established and develop roots?

Herchline D, et. al. JGME. 2013
Vaa Stelling BE, et. al. Academic Medicine. 2023

Mitigating Strategies

Clinical Competence & PIF Formation

- Graduated autonomy
- Reflective writing
- Interdisciplinary collaboration

Job Search Process

- Peer mentors and colleagues
- Mock interviews
- Negotiation training

Career Vision & Trajectory

- Senior Mentors and **Sponsors**
- Education in financial literacy

Herchline D, et. al. JGME. 2013

Final Thoughts

- Consider how you prepare your trainees for the many transitions they experience
- Develop means for supporting and checking in during periods of transition
- Remember the FFT strategies:
  - Name it
  - Normalize it
  - Perspective Take
  - Reality Check

Wrap Up

- Updates and reminders
  - Rich Mink (SMERFS)
  - New studies
    - FEC – sponsored by SPIN: **FPD career development** - Check your emails today!
    - FPD perspective on trainee remediation (next slide)
  - Sign up for APPD CONNECT

Supporting Subspecialty Trainees Through Remediation: The Fellowship Directors' Perspective

Association of Pediatric Program Directors

Currently recruiting for an APPD-supported study!

- Study Aims:
  - Describe the experiences of pediatric fellowship PDs with remediation
  - Describe the needs of fellowship PDs in the process of trainee remediation
  - Explore the professional & emotional impacts of remediating fellow-level trainees on fellowship PDs
- Investigators: Katherine McVety, Jerri Rose, Priya Jain & Melissa Langhan
- Study is funded by 2023 APPD Special Projects Grant
- We are recruiting PDs from all pediatric subspecialties who have had experience with fellow remediation
- Please scan our QR code if interested in learning more about participation in this national qualitative study!