

# Leaving On A Jet Plane

Milestones and EPAs in  
The NAS (Next Accreditation System)

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# Learning Objectives

- Description of the current evaluation system and future evaluation system
- Illustrate the use of milestones and EPAs in the evaluation of trainees
- Prioritize milestones for a EPA

# Current Evaluation System

## **6 Core Competencies**

Patient Care

Medical Knowledge

Professionalism

Practice Based Learning and Improvement

Interpersonal and Communication Skills

System Based Learning

# A Tale of 2 Residents

## **Medical Knowledge – Scale of 1-9**

1 = Limited knowledge of basic and clinical sciences. Does not understand complex relations. Minimal interest in learning.

9= Exceptional knowledge of basic and clinical sciences; comprehensive understanding of complex relationships, works to enhance knowledge through independent reading.

# A Tale of 2 Learners

## Resident A

Received an average of an 8 in medical knowledge on evaluations. Wants to go into GI.

## Resident B

Received an average of 8 in medical knowledge on evaluations. Not sure what he wants to do, but likes inpatient medicine.

**Who is the more advanced learner?**

# Medical Knowledge

Scale of 1-9

1 = Limited knowledge of basic and clinical sciences. Does not understand complex relations. Minimal interest in learning.

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# A Tale of 2 Residents

## Resident A

Received an average of 8 in medical knowledge on evaluations

***- PGY3 resident who is graduating next month and starting a hospitalist job while applying for GI***

## Resident B

Received an average of 8 in medical knowledge on evaluations

***-PGY1 resident evaluation after 1<sup>st</sup> month of residency***

# Questions for you?

- Who is ready to practice independently?
- Who do you think is ready to care for your mom without any supervision?



# A Tale of Two Other Learners

- Student 1- Can recognize numbers up to 20 and can count up to 10 without help. Enjoys coloring with crayons and watching Sesame Street
- Student 2- Can do advanced algebra and use integration to solve complex math problems. Enjoys texting on cell phone and watching Breaking Bad

**Who is the more advanced learner?**

**Observed Measurable Behaviors!**

# NAS (Next Accreditation System)

July 1<sup>st</sup>, 2013

How are Residency and Fellowship Programs going to be accredited?

ACGME Developed System- Input from several groups

July 1<sup>st</sup>, 2013- 7 core specialties (internal medicine)

July 1<sup>st</sup>, 2014 - ALL Residents and Fellowships

# NAS

- 1) Enhance the ability of peer-review system
- 2) Accreditation based on educational outcomes
- 3) Reduce current Administrative Burden

Nasca T.J., Philibert I., Brigham T., Flynn T.C. N  
England Journal of Medicine 2012; 366:1051-  
1056

# NAS

1) Enhance the ability of peer-review system

**2) Accreditation based on educational outcomes**

**Competency-Based Medical Education**

3) Reduce current Administrative Burden

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# Competency-Based Medical Education

- An outcome-based approach to the design implementation, assessment and evaluation of a medical education program using an organizing framework of competencies

# ACGME General Competencies

Patient Care

Medical Knowledge

Professionalism

Practice Based Learning and Improvement

Interpersonal and Communication Skills

System Based Learning

# Concepts

- **Competency**<sup>\*</sup>: an ***observable*** ability of a health professional, integrating multiple components such as knowledge, skills, values and attitudes
- **Competent**<sup>\*</sup>: ***Possessing the required abilities*** in all domains in a certain context at a defined stage of medical training
- **Competence**<sup>^</sup>: Competence entails more than the possession of knowledge, skills, and attitudes; it requires one ***...to apply these [abilities]*** in the clinical environment to achieve optimal results

# Competenglish

- Competency – the thing(s) they need to do
- Competent – can do all of the things
- Competence – does all of the things consistently, adapting to contextual and situational needs



# Patient Care: Performing an LP

## COMPETENT

Washes hands  
Performs time out  
Identifies landmarks  
Obtains CSF

## COMPETENCE

Maximizes comfort and safety  
Teaches and supervises LPs for junior members

Possesses  
insufficient skills

Novice

Adequate skills,  
Enough to get by

Master  
Exceptional skill

# Milestone

- **Observable** developmental steps moving from Novice to Expert
- Milestones identify the discrete knowledge, skills, and attitudes expected of learners as they progress through training.
- Organized under 6 domains of clinical competency

# IM Curricular Milestones

142 developmentally based, specialty specific achievements that residents are expected to demonstrate at established intervals as they progress through training. **All are linked to specific competencies.**

## **Examples in Patient Care:**

6 months of training- Acquire accurate and relevant history from the patient in an efficiently customized, prioritized, and hypothesis driven fashion

30 months of training- Role model gathering subtle and reliable information from the patient for junior members of the health care team

Curricular Milestones in Medical Knowledge	Time
Understand the relevant pathophysiology and basic science for common medical conditions	6
Demonstrate sufficient knowledge to evaluate common ambulatory conditions	12
Demonstrate sufficient knowledge to evaluate common ambulatory conditions	18
Demonstrate sufficient knowledge to diagnose and treat undifferentiated and emergent conditions	18
Demonstrate sufficient knowledge to provide preventive care	18
Demonstrate sufficient knowledge to identify and treat medical conditions that require intensive care	24
Demonstrate sufficient knowledge to evaluate complex or rare medical conditions and multiple coexistent conditions	36
Understand the relevant pathophysiology and basic science for uncommon or complex medical conditions	36
Demonstrate sufficient knowledge of socio-behavioral sciences including but not limited to health care economics, medical ethics and medical education	36
Understand indications for and basic interpretation of common diagnostic testing, including but not limited to routine blood chemistries, hematologic studies, coagulation studies, arterial blood gases, ECG, chest radiographs, pulmonary function tests, urinalysis and other body fluids	12
Understand indications for and has basic skills in interpreting more advanced diagnostic tests	18
Understand prior probability and test performance characteristics	18

# Entrustable professional activities (EPAs)

The specific knowledge, skills and attitudes acquired over the course of training that society and our profession believe are critical to performing as a physician. EPAs are defined by milestones in each competency.

# An Entrustable Professional Activity

- Part of essential work for a qualified professional
- Requires specific knowledge, skill, attitude
- Acquired through training
- Leads to recognized output
- Observable and measureable, leading to a conclusion
- Reflects the competencies expected
- EPAs together constitute the core of the profession

Cate et al.

*Acad Med* 2007; 82: 542-4713

# Entrustable Professional Activities

“... identify the critical activities that constitute a specialty ... the activities of which we would all agree should be only carried out by a trained specialist.”

Cate et al.

*Acad Med* 2007; 82: 542-47

# EPA- Entrustable Professional Activities

1. **Manage care of patients with acute common diseases across multiple care settings.**
2. **Manage care of patients with acute complex diseases across multiple care settings.**
3. **Manage care of patients with chronic diseases across multiple care settings.**
4. **Provide age-appropriate screening and preventative care.**
5. **Resuscitate, stabilize, and care for unstable or critically ill patients.**
6. **Provide perioperative assessment and care.**
7. **Provide general internal medicine consultation to nonmedical specialties.**
8. **Manage transitions of care.**
9. **Facilitate family meetings.**
10. **Lead and work within interprofessional health care teams.**
11. **Facilitate the learning of patients, families, and members of the interdisciplinary team.**
12. **Enhance patient safety.**
13. **Improve the quality of health care at both the individual and systems level.**
14. **Advocate for individual patients.**
15. **Demonstrate personal habits of lifelong learning.**
16. **Demonstrate professional behavior.**

\*\*\*\*Entrustable is NOT a real English word, but ACGME has decided to use it anyways!!\*\*\*\*



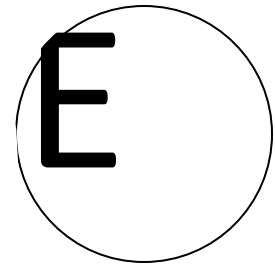
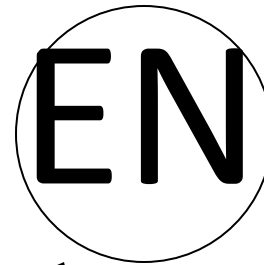
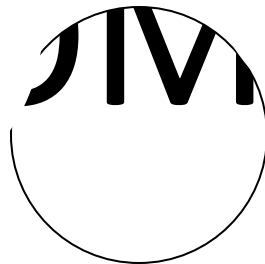
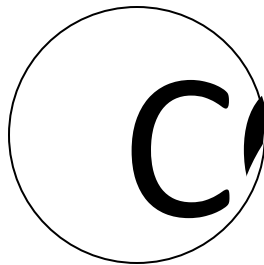
# EPA- Entrustable Professional Activities

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**EPA: Leads and works in professional teams**

Actively seeks feedback (18 mos)



Recognizes when to seek help (6 mos)



Considers alternative solutions provided by other team members (12 mos)

Modifies plan based on course and data (24 mos)



Negotiates patient-centered care (36 mos)

**Caverzagie**

# Hands on Training

- 1) As an individual you will rank milestones for one EPA –10 minutes
- 2) As a group of 4-5 you will discuss your milestone rankings and generate a group ranking- 20 minutes
- 3) Large group discussion- Each group will discuss its rankings

# Ranking

How would you rank the milestones in terms of importance, from your viewpoint.

- Please rank each milestone on a scale of 1-7
- 7 is the most important milestone
- 1 is the least important milestone

**7 =most important, 1 = least important**

**1**

EPA: Manage care of patients with acute common diseases in the inpatient setting

Imagine an intern on the wards in December.

Your job as an evaluator is to demonstrate progress using milestones to achieve this EPA

# Areas of Uncertainty: When, Where, What, Who?

- 1) In the course of training **when/where** is the best opportunity to assess the chosen milestones?
- 2) **What** existing assessment(s) can be used or modified to capture resident performance of the chosen milestones? Do we need new assessment tools?
- 3) Can a particular milestone that is assessed in one EPA also be used to inform assessment of another EPA (and vice versa)?
- 4) **Who** can best perform this assessment? Will we capture assessment in varied clinical contexts?

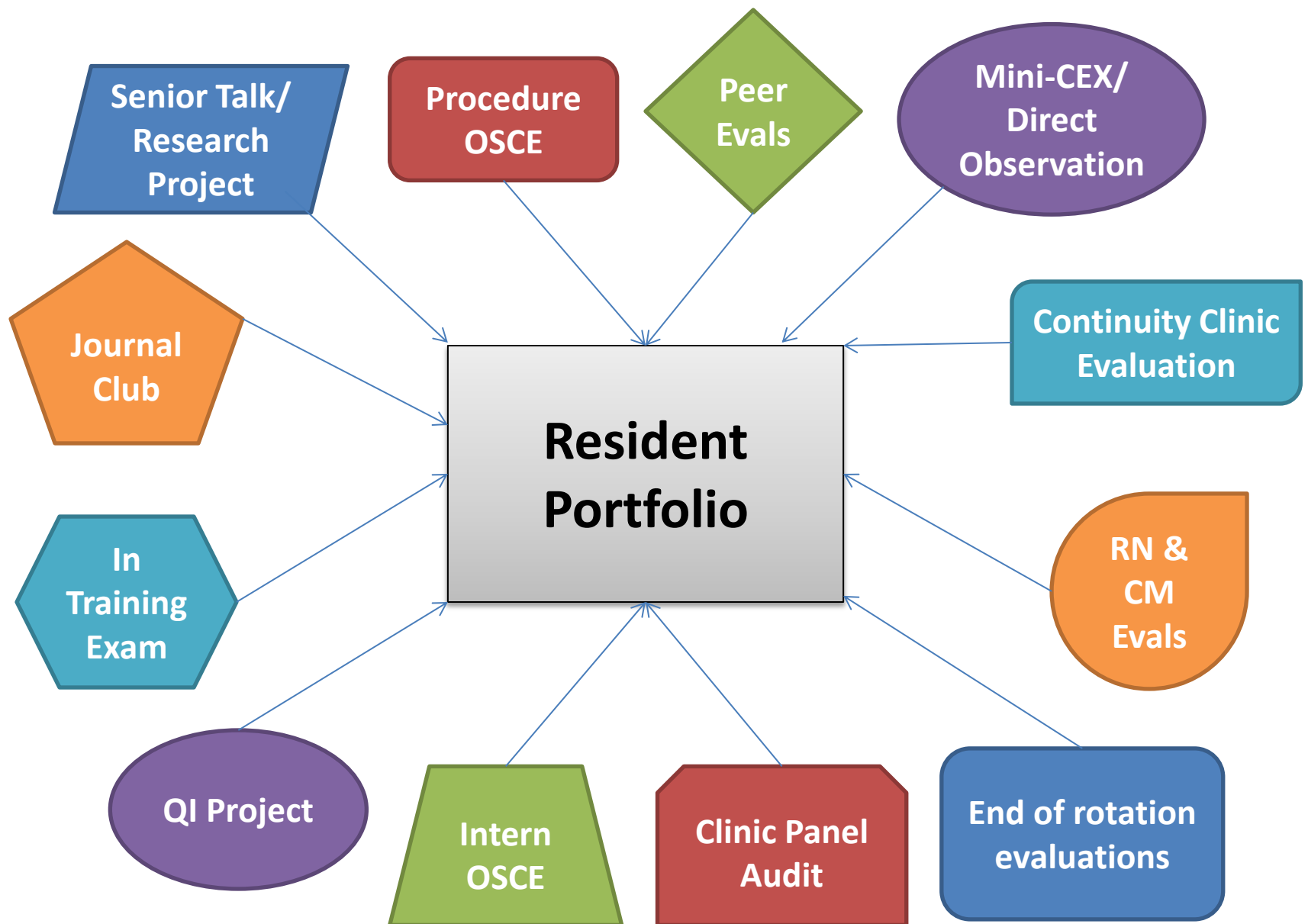
# Where are we going at BU?

- Several short evaluations vs. one large end of rotation evaluation
- Increased role of direct observation
- How do we make sure each resident achieves each milestone?

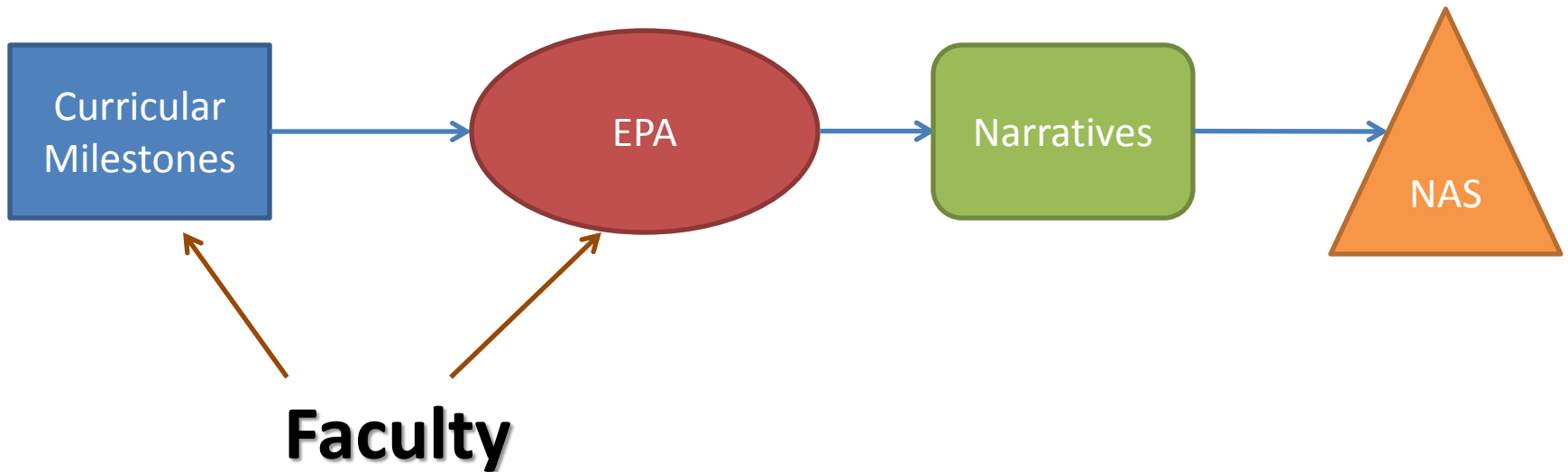


## Night Float Chart Audit

<b>History</b>		
<input type="checkbox"/> major elements missing	<input type="checkbox"/> major elements present	<input type="checkbox"/> major elements and subtle historical points
<b>Examination</b>		
<input type="checkbox"/> major elements missing/incorrect	<input type="checkbox"/> major elements present	<input type="checkbox"/> major elements and subtle findings elicited, appropriate maneuvers performed
<b>Data</b>		
<input type="checkbox"/> major elements missing/incorrect	<input type="checkbox"/> major elements present, however, too much or too little information	<input type="checkbox"/> All relevant data included
<b>Clinical Reasoning</b>		
<input type="checkbox"/> major elements missing or unclear or incorrect	<input type="checkbox"/> Basic diagnostic tests appropriately interpreted. Clinical reasoning reasonable overall for patient's central problem, some element of differential may be missing	<input type="checkbox"/> Advanced tests correctly interpreted. Physical exam and tests support diagnosis, clear clinical reasoning, recognize disease presentations that deviate from common patterns
<b>Patient Management</b>		
<input type="checkbox"/> Unsafe or incorrect management	<input type="checkbox"/> Appropriate plan for patients with common and complex conditions. Recognize situations that need urgent or emergent care	<input type="checkbox"/> Appropriate and timely interventions/additional tests for patients with complex and rare conditions, apply guidelines/EBM to patient



# The BIG picture



Thank You!