

Teaching Handoffs & Transitions:



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Quality & Safety Educators Academy

Objectives

- Describe transitions of care as a competency with observable milestones for internal medicine and pediatric residents
- Prioritize handoff & transitions curricula within your residency program
- Develop strategies for implementing these educational activities and assessing trainees in the area of transitions

Calls to Improve Handoffs



The Joint Commission, 2006

Handoffs became a
National Patient Safety Goal

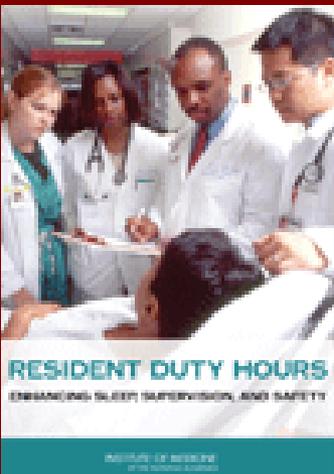
World Health Organization, 2006

Handoffs one of the “high 5s” for safety



Institute of Medicine 2008

Teaching programs "should train residents
in how to hand over their patients using
effective communications"



ACGME Requirement



- Education in handoffs is required by the ACGME for all accredited programs.
 - VI.B.2. “Sponsoring institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.”
 - VI.B.3. “Programs must ensure that residents are competent in communicating with team members in the hand-over process.”

The Internal Medicine Reporting Milestones and the Next Accreditation System

11. Transitions patients effectively within and across health delivery systems. (SBP4)

Critical deficiencies			Ready for unsupervised practice	Aspirational
<p>Disregards need for communication at time of transition</p> <p>Does not respond to requests of caregivers in other delivery systems</p>	<p>Inconsistently utilizes available resources to coordinate and ensure safe and effective patient care within and across delivery systems</p> <p>Written and verbal care plans during times of transition are incomplete or absent</p> <p>Inefficient transitions of care lead to unnecessary expense or risk to a patient (e.g., duplication of tests readmission)</p>	<p>Recognizes the importance of communication during times of transition</p> <p>Communication with future caregivers is present but with lapses in pertinent or timely information</p>	<p>Appropriately utilizes available resources to coordinate care and ensures safe and effective patient care within and across delivery systems</p> <p>Proactively communicates with past and future caregivers to ensure continuity of care</p>	<p>Coordinates care within and across health delivery systems to optimize patient safety, increase efficiency, and ensure high quality patient outcomes</p> <p>Anticipates needs of patient, caregivers, and future care providers, and takes appropriate steps to address those needs</p> <p>Role models and teaches effective transitions of care</p>
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Comments:

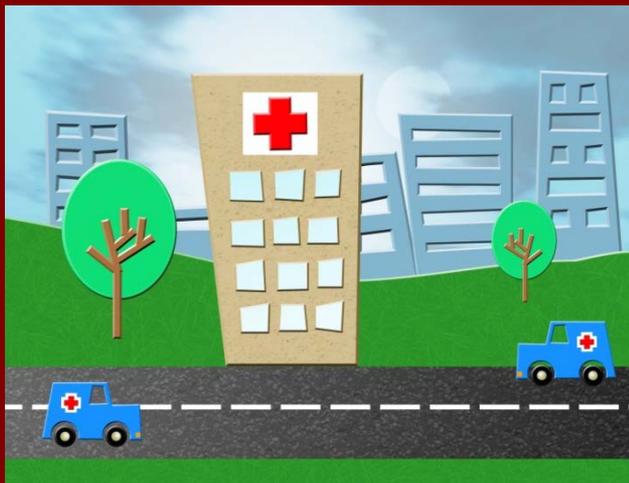
Example subcompetency for systems-based practice.

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Taxonomy of Hospital Handoffs

Extra-hospital handoffs

- Admission
 - ED to floor
- Discharge
 - Home or SNF, rehab
- Inter-hospital transfer



Intra-hospital handoffs

- Shift change
 - with the sender returning
- Service change
- Service transfer
 - Escalation or de-escalation of care (in and out of ICU)
 - Different specialty (med-surgery, OR to PACU)

Which Box Would You Check?

- Shift-shift handoff curriculum and assessment tools fully implemented in my program
 1. Looking to refine/improve
 2. Thinking about other types of transitions to teach

- Handoff curriculum just getting started; little to no assessment yet

- Pre-contemplative or contemplative stage

Introductions

- Who are you?
- Are you currently teaching or evaluating handoffs/transitions in your institution?
 - If no, do you have a plan to get started?
 - If yes, where do you want to go next and how will you prioritize ?



Curriculum Development

Kern's 6-Steps

- p General needs assessment
- p Targeted needs assessment
- p Goals and Objectives
- p Educational Strategies
- p Implementation
- p Evaluation and Feedback



- Do you feel confident that you have the critical data you need to assume care of these patients overnight?
 - “Um... No”
- Why wasn't she NPO for her procedure?
 - “It was on my sign out sheet but she didn't get to it and the nurse never paged her..”
- “Why couldn't the nurse get a hold of the covering intern?”
 - “Well, services just switched so it was a new NF and



Targeted Assessment and Approach

- ❑ **Pre-curriculum assessment:**
 - Survey
 - Verbal sign-out skills
 - Written sign-out skills
 - Validity of sign-out sheets
- ❑ **Curriculum implementation:**
 - Didactic and small group practice sessions
- ❑ **Post-curriculum assessment:**
 - Survey
 - Verbal sign-out skills
 - Written/typed sign-out skills
 - Validity of sign-out sheets

Gakhar and Spencer; Academic Medicine; 2010



Curriculum Recommendations

□ Structure

- Face to face, uninterrupted, bidirectional, verbal and written/electronic
- Standardized content and process (choose your mnemonic)
- Unambiguous and factually correct data

□ Education

- Formal didactics and interactive training
- Practice—new skills can't be memorized; Active learning

□ Evaluation

- Sustainable, Usable*
- Senior supervision enhances safety; attendings even better
- Confidence/self-perceived won't cut it



Our Curriculum

Didactic: 30 minutes

- Lit review on dangers of incomplete sign-out
- Teach critical content
- Present sign-out mnemonic
- Role-play- too little, too much, nuance, gossip
- Demonstrate examples of complete and incomplete sign-out sheets
- Introduce electronic sign-out system

Small-group practice: 30min

- Faculty role-play; Feedback
- Facilitated by CMR & faculty
- Interns “sign-out” patients; receive feedback from peers and facilitator
- Feedback to “giver” and “receiver”
- Reminder cards with the description of the SIGN-OUT mnemonic distributed to interns



Methods: SIGN-OUT” mnemonic

- **S**: Sick/DNR
- **I**: Identification Data
- **G**: General Hospital Course
- **N**: New Events of the Day
- **O**: Overall Health Status
- **U**: Upcoming Possibilities
- **T**: Tasks
- **?**: Any Questions



Verbal Sign-out Evaluation

	Pre*	Post**	p - value
S: Sick/DNR	16%	54%	<0.001
I: Identification data	26%	97%	<0.001
G: General hospital course	92%	100%	<0.02
N: New events	39%	95%	<0.001
O: Overall health	21%	87%	<0.001
U: Upcoming possibilities	37%	89%	<0.001
T: Tasks	50%	93%	<0.001

*Pre= pre-curricular; **Post=post-curricular



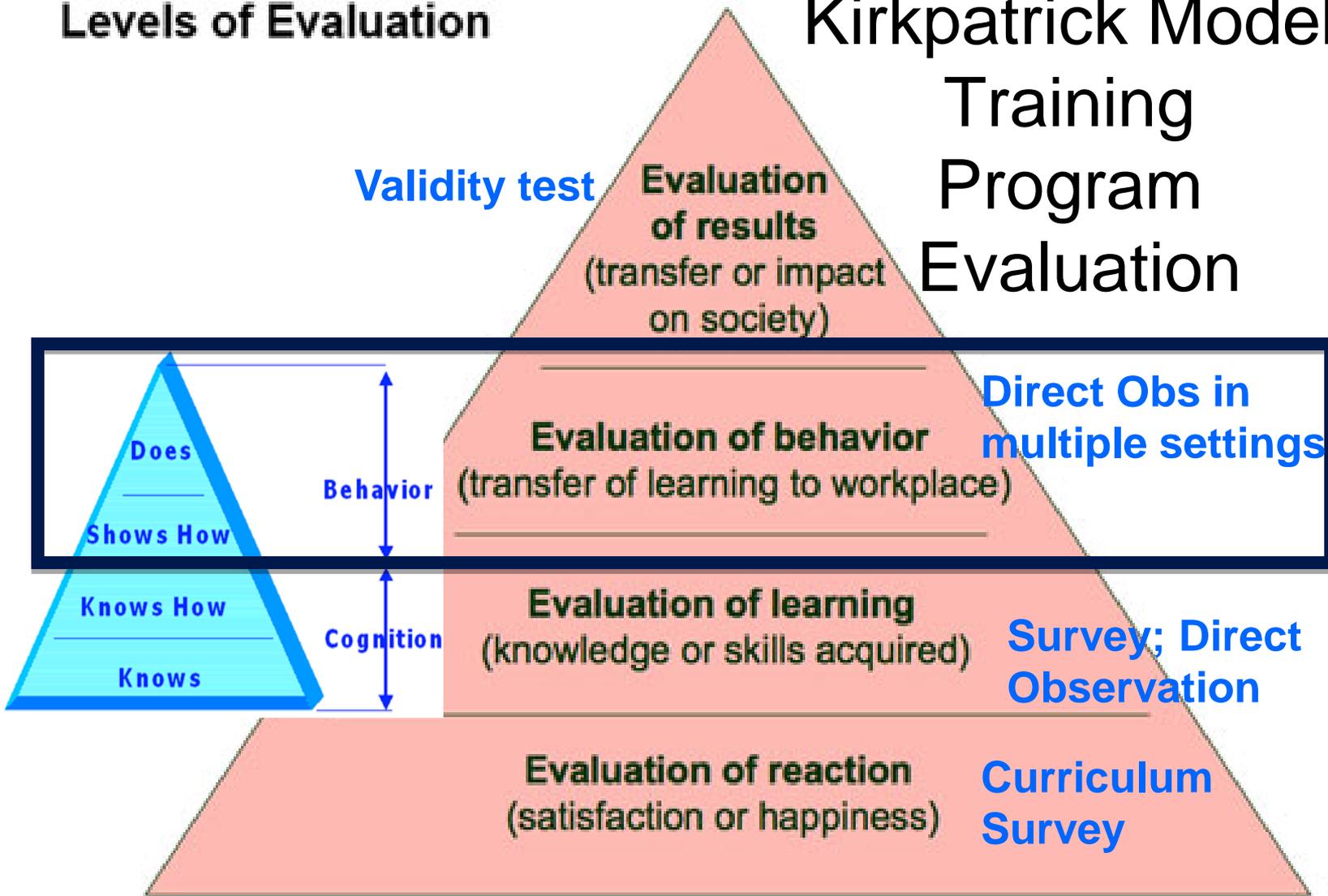
Bottom Line

- ❑ Deficiencies in sign-out skills are prevalent among house-staff
- ❑ Interns may not be aware that they are giving an inaccurate or incomplete sign-out
 - So avoid confirming competency with self-assessment
- ❑ Deficiencies in sign-out skills can be identified and corrected by gathering data about current practices and implementing a formal sign-out curriculum



Levels of Evaluation

Kirkpatrick Model Training Program Evaluation



Kirkpatrick, D. L. (1994). Evaluating Training Programs. San Francisco: Berrett-Koehler Publishers, Inc

So then what happened.....

- ❑ The chief resident went on to do a renal fellowship
- ❑ The interns continued to get their sign-out curriculum at orientation
- ❑ We stopped evaluating their verbal skills and sign-out sheets as chiefs (and APDs) had new projects
- ❑ We went backwards



What We Learned

- What worked?
 - Standardized templates and Process
 - Electronic/feasibility
 - Evaluation tool
 - Curriculum
- Needed sustainability
 - Man/womanpower
 - Resident/Chief buy-in
 - PD support/Administrative support
 - Culture change



Where we are now....

- ❑ Orientation- All interns taught
 - Via didactic on importance, content, +/- examples
 - Verbal sign-out using the Yale “SIGN-OUT” mnemonic
 - Online sign-out template on intranet for all teams
- ❑ Faculty role-play; intern simulation/practice with feedback
- ❑ Annual TOC Seminar including handoffs (reinforcement!)
- ❑ Developed handoffs task force: residents, CMR, admin, APD
 - Went to meeting with sample evaluation tools and asked:
 - ❑ Who, when, how often, by whom, where, with what?
 - The residents and the chiefs made the call



Our process...

- ❑ Seniors use departmental standardized rating forms to evaluate verbal sign-out and sign-out sheets providing immediate feedback to interns (giver and receiver)
- ❑ Once interns “graduate”; have a final CMR evaluation using the handoffs mini-cex which will go in their file to document residents’ competence in handoffs



Who, when, how often, by whom, where, with what?

Where	By Whom	Frequency	Follow-up	“Graduate”	Final Chief Eval
Inpatient GIM	Teaching Senior	1/week x 4 weeks	2/month x1	4/6 acceptable	Once with mini- cex
MICU	Teaching Senior	2x/month	2/month x1	3/4 acceptable	Once with mini- cex
Night Float to Morning Team	MOD + Chiefs	2/week x2		3/4 acceptable	Once with mini- cex



Needed sustainability

- Man/womanpower
 - Seniors– formative feedback; low stakes; numbers
 - Chiefs- higher stakes; fewer observations
- Resident/Chief buy-in
 - Make them part of the process in all aspects
- PD support/Administrative support
 - Administrator helps to track, page, spread the word
- Culture change
 - Patient safety rotation; deliver curriculum again...
 - PS residents were already observing sign-out process



What Else is Out There?

Med Ed Portal

- ❑ An Interactive Workshop to Increase Resident Readiness to Perform Patient Hand-offs (IPASS)
- ❑ Emergency Dept: Sign-Out Pulm Embolism Simulation Case
- ❑ Teaching Video: "Handoffs: A Typical Day on the Wards"

Literature: Acad Med 2012

- ❑ Patient Handoff: Comprehensive curricular blueprint for resident education to improve continuity of care: Wohlauer et al.
- ❑ Handoffs in the era of duty hours reform: a focused review and strategy to address changes in the ACGME Common Program Requirements: DeRienzo et al. *

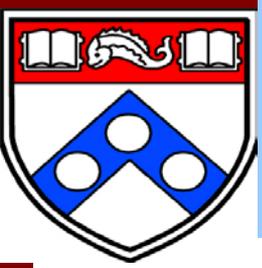


Example of a verbal handoff by using the I-PASS mnemonic.

Sample Verbal Handoff

I	Illness Severity	OK, this is our sickest patient, and he's full code.
P	Patient Summary	AJ is a 4-year-old boy with a history of ex 26-week gestation admitted with hypoxia and respiratory distress secondary to a left lower lobe pneumonia. He presented with cough and high fevers for 2 days before admission, and on the day he presented to the emergency department he had worsening respiratory distress. In the emergency department, he was found to have an Na of 130, likely secondary to volume depletion versus syndrome of inappropriate secretion of antidiuretic hormone. He received a fluid bolus and was started on O ₂ at 2.5 L. He is on Ceftriaxone.
A	Action List	Please look in on him at approximately midnight and make sure his vitals are unchanged and his oxygen saturation is stable. Check to determine if his blood culture is positive tonight.
S	Situation Awareness and Contingency Planning	If his respiratory status worsens, please get another chest radiograph to determine if he is developing an effusion.
S	Synthesis by Receiver	OK, so AJ is a 4-year-old ex-premie admitted with hypoxia and respiratory distress secondary to a left lower lobe pneumonia on Ceftriaxone, O ₂ , and fluids. You want me to check on him at midnight to make sure he's stable and check his blood culture. If his respiratory status worsens, I will repeat a radiograph to look for an effusion. I think I have it.

Starmer A J et al. Pediatrics 2012;129:201-204



Penn Handoff Curriculum for Internal Medicine Interns

**Less handoff errors +
Culture of safety re:
handoffs**

**Evaluation
of results**
(transfer or impact
on society)

Evaluation of behavior
(transfer of learning to workplace)

Evaluation of learning
(knowledge or skills acquired)

Evaluation of reaction
(satisfaction or happiness)

Direct Observation:
1. Peer Evals
2. Resident Evals
3. New: e-handoff skills

Intern Orientation:
Didactic w/ videos +
Simulated Handoff

Feedback –
formal & informal

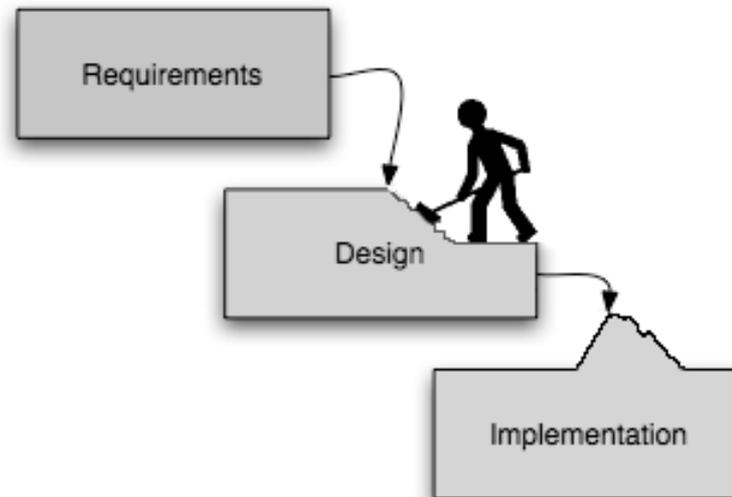
TMI?

- Overreliance on signouts for other work
 - Become unnecessarily long “shadow chart”
 - Often becomes a personal tracker of information
 - “cognitive artifact” like a grocery list
- Loses its primary function for the receiver
 - Information overload



Moving Towards Implementation

- ❑ The curriculum tools exist; evaluation tools exist
- ❑ How will YOU implement, how will you sustain your curriculum and learner assessments

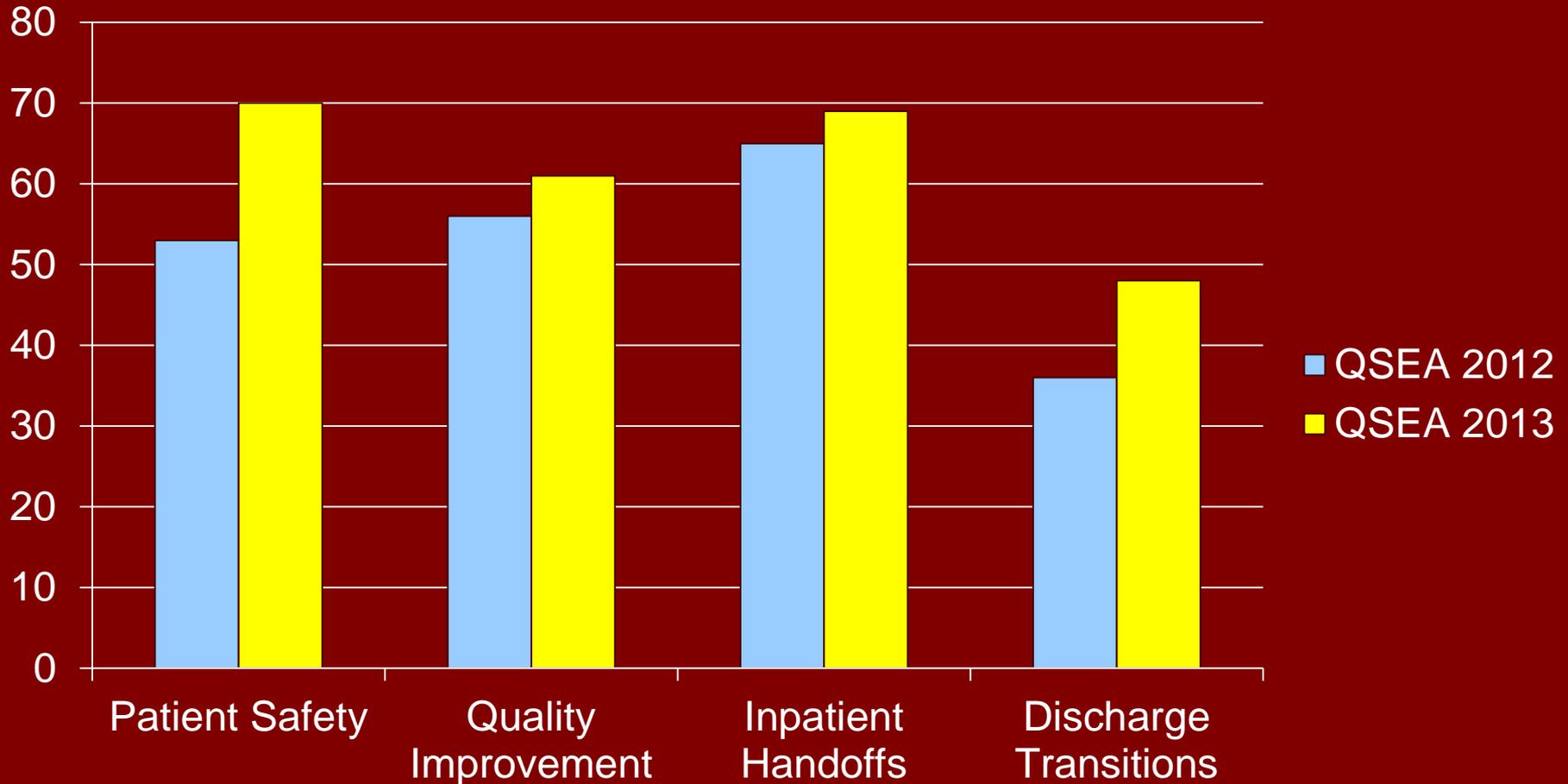


Small Group Activity #2

1. General and targeted needs assessment
 2. Goals and Objectives
 3. Educational Strategies
 - 4. Implementation**
 - 5. Evaluation and Feedback**
- Adapting our examples and tools, how will you evaluate handoffs back home?
 - Who?
 - During what rotations?
 - By whom?
 - How many times?
 - With what?
 - Anticipated barriers?
 - How will you overcome them?



Percent of Your Residency Programs Teaching the Following Topics



Is Coordinating a Safe Hospital Discharge a Resident “Competency”?



The “million dollar question”

Transitions in Care as an EPA

Three major components:

1) Inpatient shift handoffs

2) Hospital discharge transitions

- Transitions knowledge and experiences
- Discharge summary skills
- Discharge coordination & communication skills

3) Handoff of an outpatient panel at end of residency

Penn's Discharge Transitions Curriculum

Intern year

- Interprofessional Safe Discharge Curriculum (orientation)
- Home Visit and SNF Visit (intern ambulatory curriculum)
- Discharge Summary Skills (2nd half of intern year)

PGY-2 Year

- Discharge Summary Skills (part 2)

PGY-3 Year*

- Communication and coordination with interprofessional discharge care team (hospitalist discharge rounds)

** new, curriculum design & evaluation in progress*

AGH TOC/Hospital Discharge Curriculum

Orientation

- Sign-out expectations
- Small group practice
- Review DCS expectations
- Documentation handbook

**CM D/C
and
TOC
Noon Conf**

Bounceback M&M

Evaluation

- Pre/Post at TOC seminar
- Evaluate D/C summaries using home grown tool
- Evaluate TOC document

TOC Seminar

- Review sign-out skills
- Small group case studies on TOC
- Define/discuss elements of safe TOC
- DCS mnemonic
- Communication mishaps**

**CM
Director
Leads
am
report**



Outpatient Clinic Transitions



Development of a Structured Year-End Sign-Out Program in an Outpatient Continuity Practice

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BACKGROUND: In an effort to prevent medical errors, it has been recommended that all healthcare organizations implement a standardized approach to communicating patient information during transitions of care between providers. Most research on these transitions has been conducted in the inpatient setting, with relatively few studies conducted in the outpatient setting.

tasks after the year-end resident clinic transition. Further efforts should be made to improve residents' competency with regard to sign-outs in the ambulatory setting.

KEY WORDS: patient safety; transfer of care; handoff; sign-out; continuity of care.

J Gen Intern Med 28(1):114–20

Some Final Tips for Getting Started in Teaching Transitions

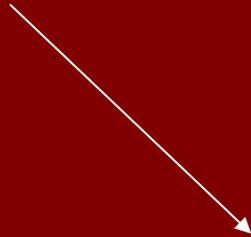
- Align your teaching efforts with others who care about this topic:
 - Your Department and/or Division Leadership
 - Program Directors and GME Office
 - Other Faculty in your group
 - Quality & safety leadership
 - Nurses, pharmacists, social workers
- Move beyond knowledge to skills/behaviors

OK, But How Do I Change Culture?

Tools



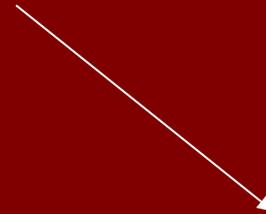
Curriculum & Assessment
are powerful tools to
change culture



Behavior



Attitudes

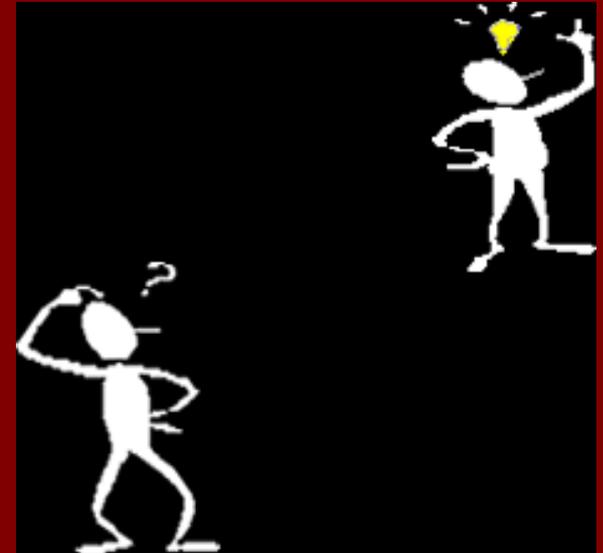


CULTURE

“...that which we
repeatedly do”
-Aristotle



Questions or Ideas?



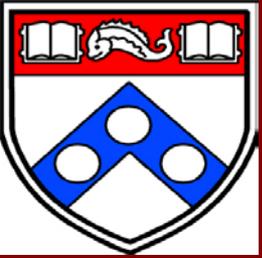
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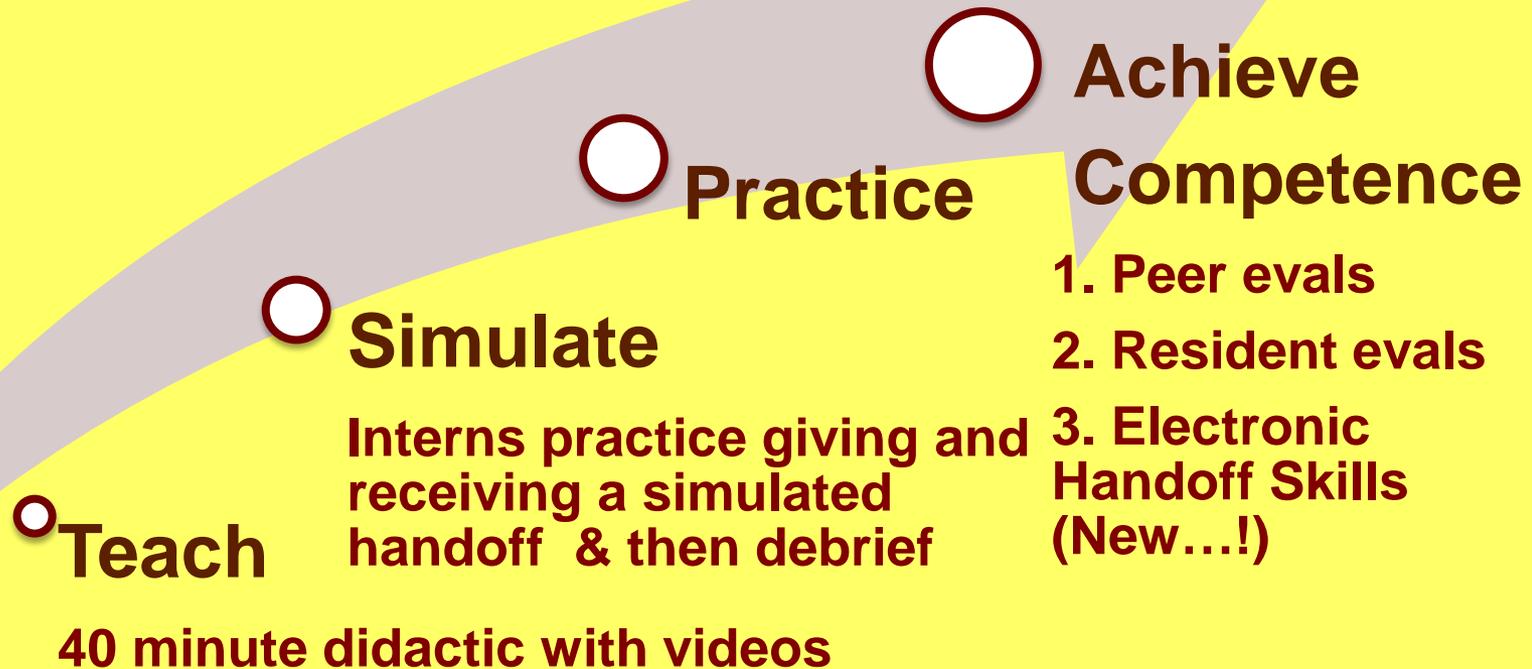
Abby Spencer

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Extra slides



Penn Handoff Curriculum for Internal Medicine Interns



Transitions are not Taught

“At most institutions, faculty relegate the subject of transitional care to the depths of the hidden curriculum in medicine.

Although it is rarely explicitly taught, there exists an expectation that trainees should not only “pick it up” but also acquire a degree of expertise as they move through training...”

Written Handoff Behaviors are Harder to Change!

	Intervention	Control	p Value
	% positive rating	% positive rating	
Verbal Handoff Score*	79.6%	69.1%	p< .01
Written Handoff Score	86.1%	83.6%	NS
Overall Handoff Score	82.6%	75.6%	p<.05

* Current baseline exam & meds reviewed improved most significantly

Safe Transitions

Knowledge

Skills

Attitudes

“Know”

“Do”

“Feel”

Curriculum

Hidden Curriculum

Culture

Next Steps

- New forms for observing admit handoffs from NF to day team; MOD to accepting teams....
- Call for end of year impromptu faculty observations of interns on service
 - Once they're competent, do they keep it up?
- Better use of the patient safety resident for this?



Tracking....

INTERN	Inpatient Medicine Teaching Service				MICU		Night Float		FINAL EVAL	complete
	#1	#2	#3	#4	#1	#2	#1	#2		
ABBADI, DEEPIKA	30-Jan				24-Jan				30-Jan	X
ALDWEIB, NAEL	2-Feb								20-Feb	
ARABI, SYEDA									6-Mar	
BAGWAN, NASREEN									13-Jun	
BARWANI, JHARNA	27-Jan	5-Feb	13-Feb						13-Feb	X
BHIMJI, KARISHMA					23-Jan	25-Jan			23-Jan	X
CHANIARA, AMULKUMAR	24-Jan	29-Jan					14-Jan		28-Feb	



Milestones and EPA's: See it to believe it!

QSEA Breakout Group



Objectives

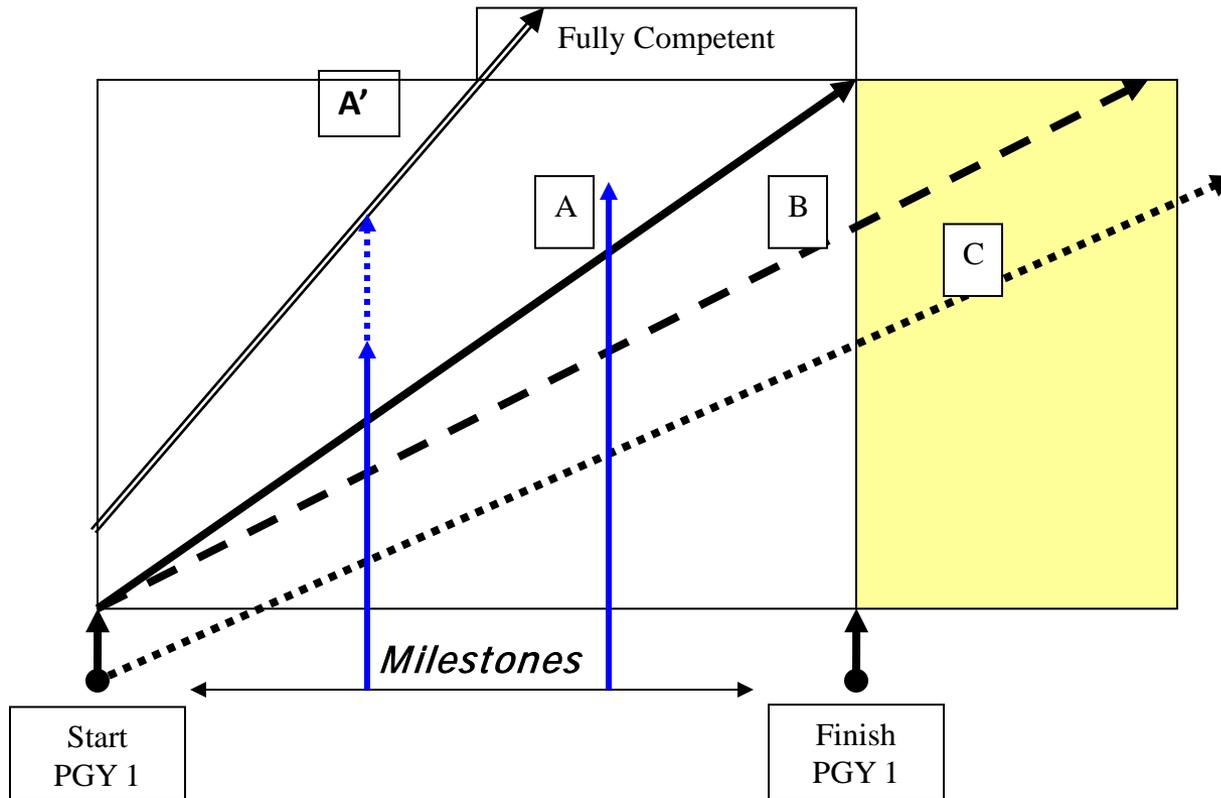
- Define the terms milestones, entrustable professional activity (EPA) as they relate to competency based medical education.
- Understand how milestones and EPAs fit into the ACGME's Next Accreditation System(NAS)
- Apply the AAIM 3 step process for building milestone based assessments to QI or Safety related curriculum
- Discuss pearls and pitfalls of implementing milestone based assessments into your program.

	TRADITIONAL TIME/PROCESS BASED	COMPETENCY BASED MEDICAL EDUCATION
Driving force: curriculum	Content-knowledge acquisition	Outcome-knowledge application
Driving force: process	Teacher	Learner
Path of learning	Hierarchical (Teacher→Learner)	Non-hierarchical (Teacher↔Learner)
Responsibility: content	Teacher	Student and Learner
Assessment tool	Proxy	Authentic (mimics real tasks of profession)
Setting for evaluation	Removed (gestalt)	Direct observation
Evaluation	Norm- referenced	Criterion- referenced
Timing of assessment	Emphasis on summative	Emphasis on formative

Milestones

Observable developmental steps that describe progression from a beginning learner to the expected level of proficiency at the completion of training.

Milestones and Trajectories



Lucey and Boote

Charting the Road to Competence: Developmental Milestones for Internal Medicine Residency Training

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DAVOREN A. CHICK, MD

ERIC HOLMBOE, MD

GREGORY KANE, MD

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WILLIAM LOBST, MD

Abstract

Background The Accreditation Council for Graduate Medical Education (ACGME) Outcome Project requires that residency program directors objectively document that their residents achieve competence in 6 general dimensions of practice.

Intervention In November 2007, the American Board of Internal Medicine (ABIM) and the ACGME initiated the development of milestones for internal medicine residency training. ABIM and ACGME convened a 33-member milestones task force made up of program directors, experts in evaluation and quality, and representatives of internal medicine stakeholder organizations. This article reports on the development

“competency” level in the 5-step progression by the completion of residency. The task force also developed general recommendations for strategies to evaluate the milestones.

Discussion The milestones resulting from this effort will promote competency-based resident education in internal medicine, and will allow program directors to track the progress of residents and inform decisions regarding promotion and readiness for independent practice. In addition, the milestones may guide curriculum development, suggest specific assessment strategies, provide benchmarks for resident self-directed assessment, and assist remediation by

ACGME Competency	Developmental Milestones Informing ACGME Competencies	Approximate Time Frame Trainee Should Achieve Stage (months)	General Evaluation Strategies	
Clinical skills and reasoning <ul style="list-style-type: none"> ▪ Manage patients using clinical skills of interviewing and physical examination ▪ Demonstrate competence in the performance of procedures mandated by the ABIM 	Historical data gathering		Standardized patient Direct observation	
	1. Acquire accurate and relevant history from the patient in an efficiently customized, prioritized, and hypothesis driven fashion	6		
	2. Seek and obtain appropriate, verified, and prioritized data from secondary sources (eg, family, records, pharmacy)	9		
	3. Obtain relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated, and detailed information that may not often be volunteered by the patient	18		
	4. Role model gathering subtle and reliable information from the patient for junior members of the health care team	30		
<ul style="list-style-type: none"> ▪ Appropriately use laboratory and imaging techniques 	Performing a physical examination		Standardized patient Direct observation Simulation	
	1. Perform an accurate physical examination that is appropriately targeted to the patient's complaints and medical conditions. Identify pertinent abnormalities using common maneuvers	6		
	2. Accurately track important changes in the physical examination over time in the outpatient and inpatient settings	9		
	3. Demonstrate and teach how to elicit important physical findings for junior members of the health care team	18		
	4. Routinely identify subtle or unusual physical findings that may influence clinical decision making using	30		



**Entrustable
Professional
Activities**

Good Assessment Practice

- What is the most valid assessment construct for a medical trainee?
- What is the best scale to measure it?



ten Cate

Do I trust this trainee...?

...to get good outcomes?

Crossley J, Johnson G, Booth J, Wade W. **Good questions, good answers: construct alignment improves the performance of workplace-based assessment scales.** Med Educ. 2011 Jun;45(6):560-9.

ten Cate O, Scheele F. **Competency-based postgraduate training: can we bridge the gap between theory and clinical practice?** Acad Med. 2007 Jun;82(6):542-7.

Entrustable Professional Activities

Activities that the public entrusts all physicians are capable of doing.

1. Are part of essential professional work in given context.
2. Must require adequate knowledge, skill, and attitude.
3. Must lead to recognized output of professional labor.
4. Should be confined to qualified personnel.
5. Should be independently executable.
6. Should be executable within a time frame.
7. Should be observable and measurable in its process and outcome (well done or not well done).
8. Should reflect one or more competencies.

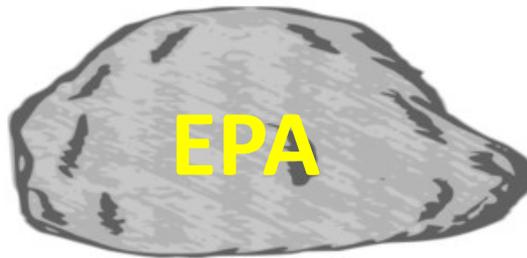


Entrustable Professional Activities



Interpret EKG

Rotation Specific



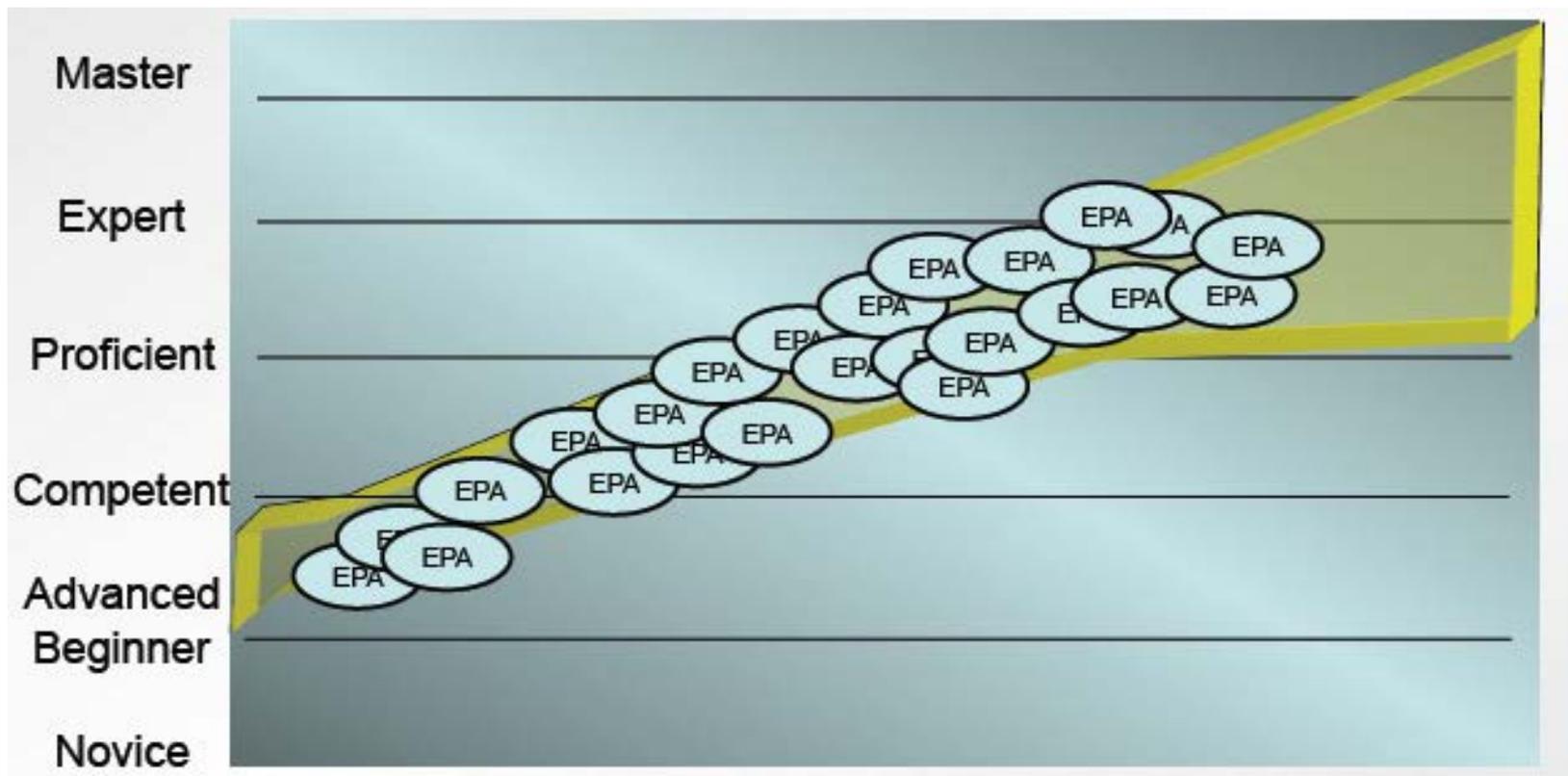
Manage ACS



Resuscitate, stabilize, and care for unstable or critically ill patients.

End-of-training

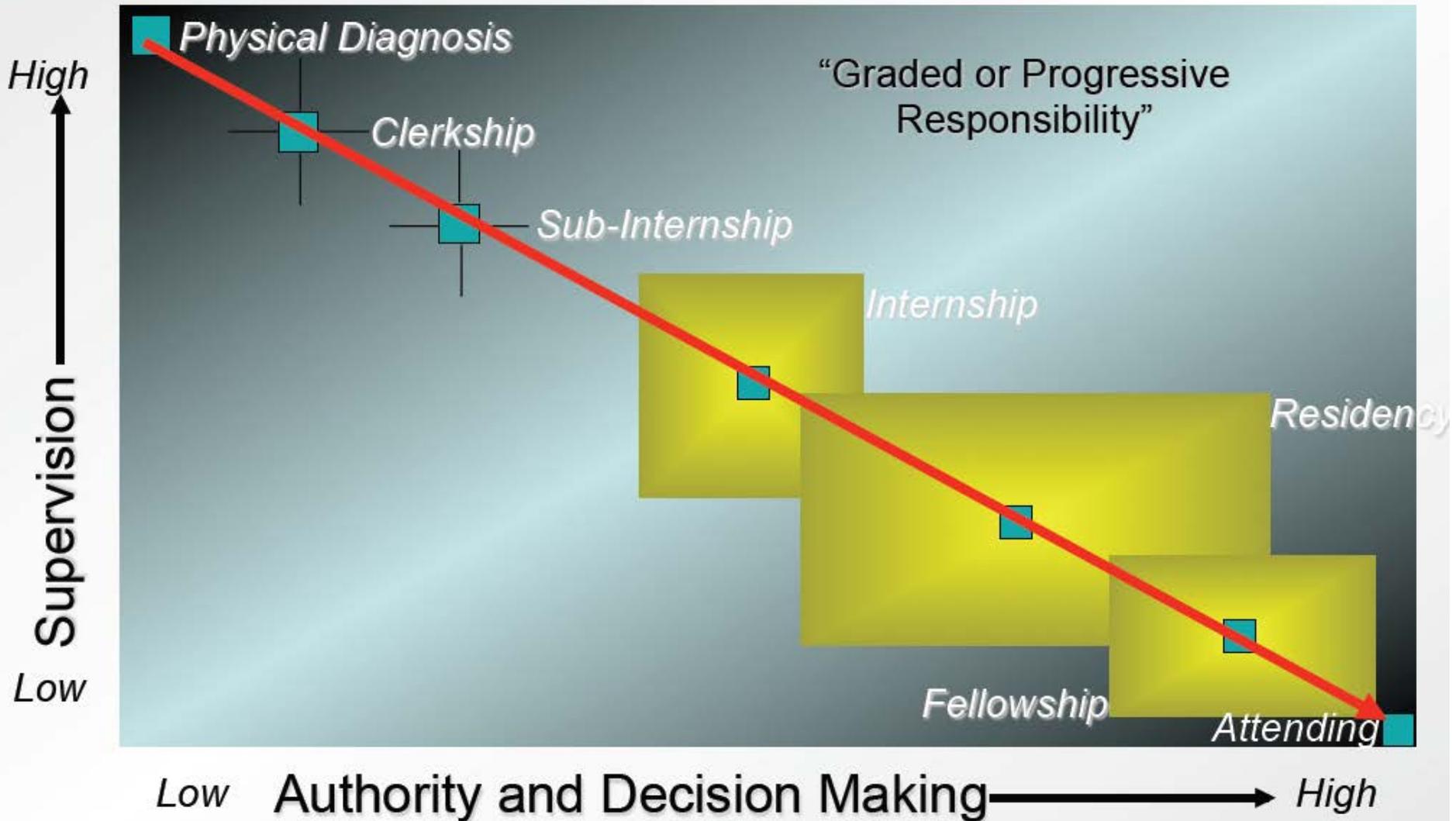
The Goal of the Continuum of Professional Development



Nasca, T. Presented at the June 2012 ACGME conference, accessed on 2/15/13
<http://www.acgme-nas.org/>

The Continuum of Clinical Professional Development

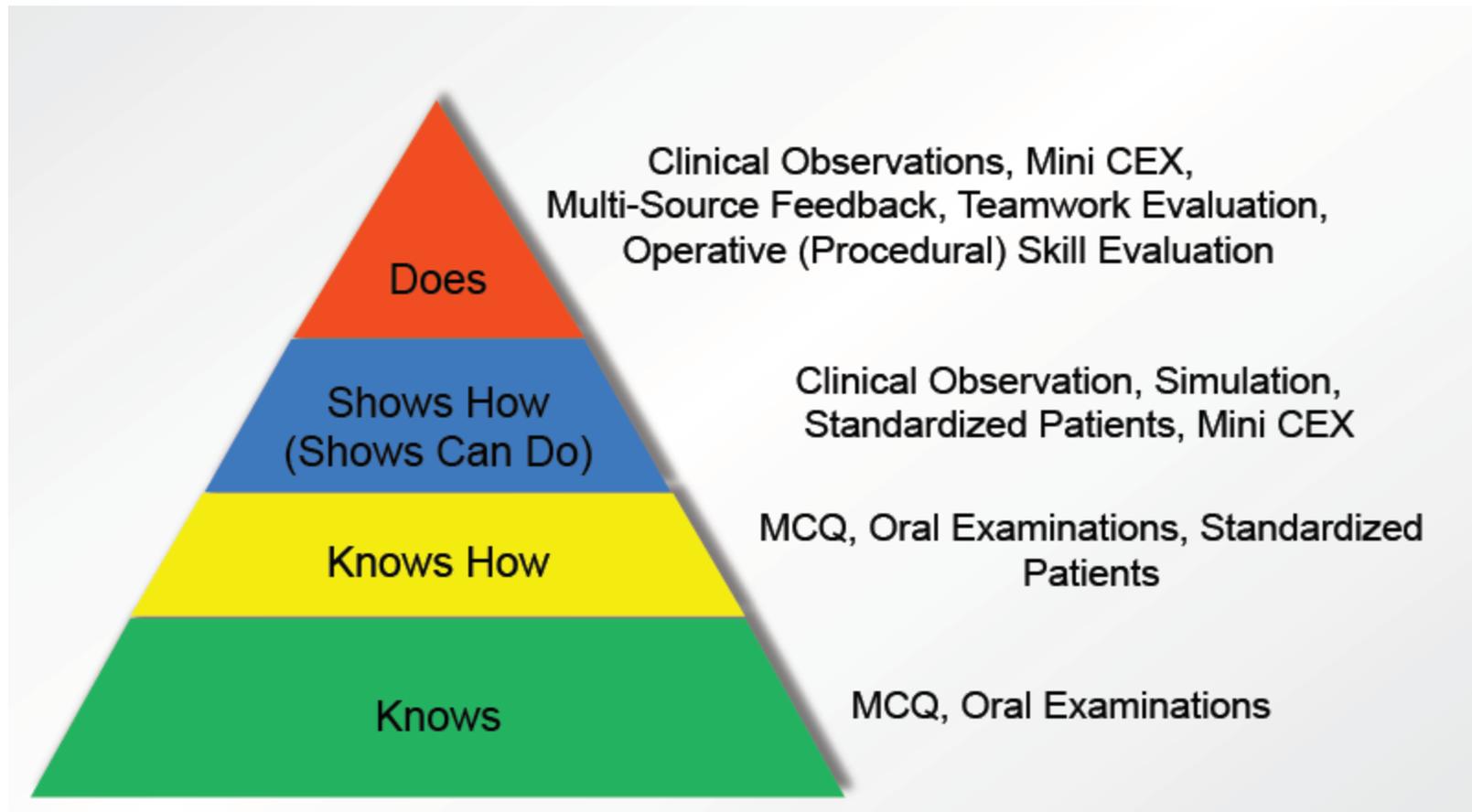
Authority and Decision Making versus Supervision



Nasca, T. Presented at the June 2012 ACGME conference, accessed on 2/15/13

<http://www.acgme-nas.org/>

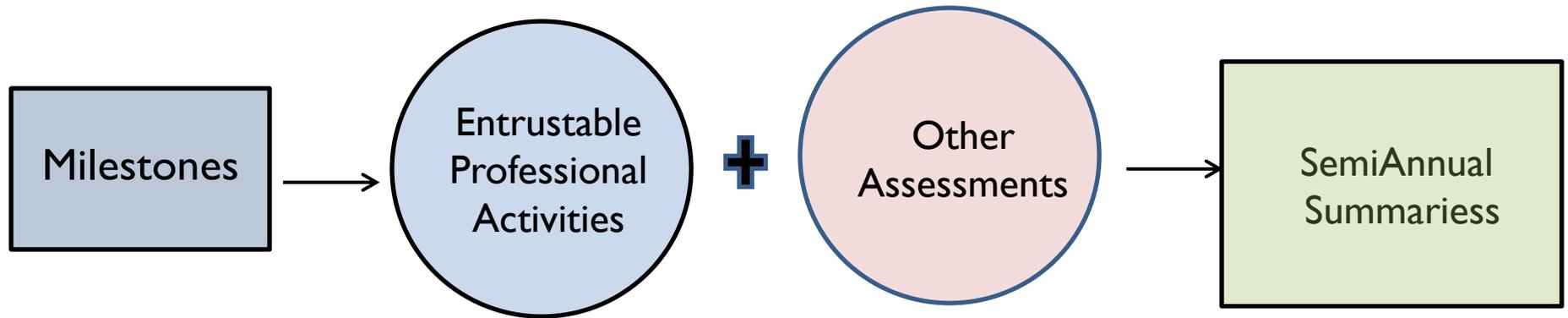
Miller's Pyramid of Clinical Competence



Miller, GE. Assessment of Clinical Skills/Competence/Performance Academic Medicine (Supplement) 1990. 65. (S63-S67)
van der Vleuten, CPM, Schuwirth, LWT. Assessing professional competence: from Methods to Programmes. **Medical Education** 2005; 39: 309–317

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Setting for evaluation	Removed (gestalt)	Direct observation
Evaluation	Norm-referenced	Criterion-referenced
Timing of assessment	Emphasis on summative	Emphasis on formative

Putting it together:



Assessing Residents

Three tools to assess residents.

EPAs

Competencies

Milestones

Assessing Residents- Example

GOOD trainees **DO**
these well.

EPAs

1. Titrate insulin
2. Manage ventilator
3. Choose antibiotics
4. Treat pain
5. Diagnose VTE
6. Manage a team
7. Share decision making
8. Hand-off properly

We see trainees DO
these things in the
clinics and wards.

Competencies

1. Patient Care
2. Medical Knowledge
3. Professionalism
4. Communication Skills
5. Systems Based Practice
6. Practice Based Learning

Yet we
measure
trainees with
these.

Curricular Milestones

PCA1	MK A1	PBLI A1	ICS A1	PF A1	SBP A1
PCA2	MK A2	PBLI A2	ICS A2	PF A2	SBP A2
PCA3	MK A3	PBLI A3	ICS A3	PF A3	SBP A3
PCA4	MK A4	PBLI A4	ICS A4	PF A4	SBP B1
PC B1	MK A5	PBLI A5	ICS A5	PF B1	SBP B2
PC B2	MK A6	PBLI B1	ICS A6	PF B2	SBP B3
PC B3	MK A7	PBLI B2	ICS A7	PF B3	SBP B4
PC B4	MK A8	PBLI B3	ICS A8	PF B4	SBP C1
PC C1	MK A9	PBLI C1	ICS B1	PF C1	SBP C2
PCC2	MK B1	PBLI C2	ICS B2	PF C2	SBP C3
PCC3	MK B2	PBLI C3	ICS B3	PF D1	SBP C4
PC C4	MK B3	PBLI C4	ICS C1	PF D2	SBP C5
PC D1		PBLI D1	ICS C2	PF E1	SBP C6
PC E1		PBLI D2	ICS D1	PF E2	SBP D1
PC E2		PBLI D3	ICS D2	PF E3	SBP D2
PC F1		PBLI D4	ICS D3	PF F1	SBP D3
PC F2		PBLI E1	ICS E1	PF F2	SBP D4
PC F3		PBLI E2	ICS E2	PF F3	SBP E1
PC F4		PBLI E3	ICS E3	PF F4	SBP E2
PC F5		PBLI E4	ICS F1	PF F5	SBP E3
PC F6		PBLI F1	ICS F2	PF F6	SBP E4
PC F7		PBLI F2		PF F7	
PC F8		PBLI F3		PF G1	
PC F9		PBLI F4		PF G2	
PC F10		PBLI G1		PF H1	
PC G1		PBLI G2		PF I1	
PC G2		PBLI H1		PF I2	
		PBLI H2		PF J1	
		PBLI H3		PF J2	
				PF K1	
				PF K2	
				PF K3	

Assessing Residents

The STRUGGLING trainee **CAN'T DO** these well.

EPAs

1. Titrate insulin
2. Manage ventilator
3. Choose antibiotics
4. Treat pain
5. Diagnose VTE
6. Manage a team
7. Share decision making
8. Hand-off properly

This is what we see them struggle with.

Competencies

1. Patient Care
2. Medical Knowledge
3. Professionalism
4. Communication Skills
5. Systems Based Practice
6. Practice Based Learning

These might point towards the reasons (and solutions) for the struggles.

Curricular Milestones

PCA1	MK A1	PBLI A1	ICS A1	PF A1	SBP A1
PCA2	MK A2	PBLI A2	ICS A2	PF A2	SBP A2
PCA3	MK A3	PBLI A3	ICS A3	PF A3	SBP A3
PCA4	MK A4	PBLI A4	ICS A4	PF A4	SBP B1
PC B1	MK A5	PBLI A5	ICS A5	PF B1	SBP B2
PC B2	MK A6	PBLI B1	ICS A6	PF B2	SBP B3
PC B3	MK A7	PBLI B2	ICS A7	PF B3	SBP B4
PC B4	MK A8	PBLI B3	ICS A8	PF B4	SBP C1
PC C1	MK A9	PBLI C1	ICS B1	PF C1	SBP C2
PCC2	MK B1	PBLI C2	ICS B2	PF C2	SBP C3
PCC3	MK B2	PBLI C3	ICS B3	PF D1	SBP C4
PC C4	MK B3	PBLI C4	ICS C1	PF D2	SBP C5
PC D1		PBLI D1	ICS C2	PF E1	SBP C6
PC E1		PBLI D2	ICS D1	PF E2	SBP D1
PC E2		PBLI D3	ICS D2	PF E3	SBP D2
PC F1		PBLI D4	ICS D3	PF F1	SBP D3
PC F2		PBLI E1	ICS E1	PF F2	SBP D4
PC F3		PBLI E2	ICS E2	PF F3	SBP E1
PC F4		PBLI E3	ICS E3	PF F4	SBP E2
PC F5		PBLI E4	ICS F1	PF F5	SBP E3

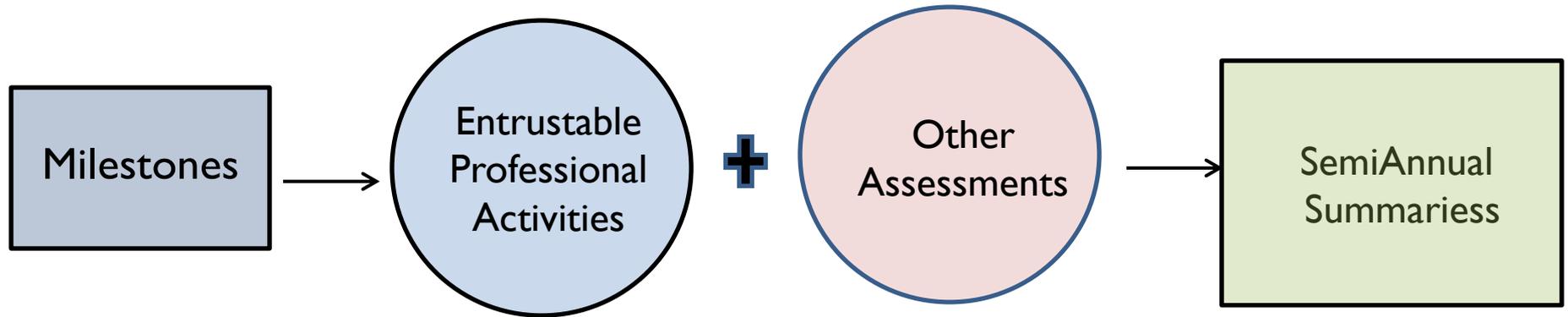
P E4

PF K1

PF K2

PF K3

Putting it together:



Semi-Annual Summaries

Clinical Competency Committee

- CCC strengths
 - synthesizes all assessments
 - Members balance with their own experience
 - “Real-time” faculty development
 - Provide “weight” when dealing with difficult trainee
- Synthesis of assessment data and reporting outcomes to ABIM and ACGME

The Internal Medicine “Reporting” Milestones

The Internal Medicine Milestone Project

A Joint Initiative of
The Accreditation Council for Graduate Medical Education
and
The American Board of Internal Medicine



American Board
of Internal Medicine®

Full document accessible at: <http://www.acgme-nas.org/assets/pdf/Milestones/InternalMedicineMilestones.pdf>

9. Recognizes system error and advocates for system improvement (SBP2)

9. Recognizes system error and advocates for system improvement. (SPB2)				
Critical Deficiencies			Ready for unsupervised practice	Aspirational
<p> Ignores a risk for error within the system that may impact the care of a patient</p> <p> Ignores feedback and is unwilling to change behavior in order to reduce the risk for error</p>	<p> Does not recognize the potential for system error</p> <p> Makes decisions that could lead to error which are otherwise corrected by the system or supervision</p> <p> Resistant to feedback about decisions that may lead to error or otherwise cause harm</p>	<p> Recognizes the potential for error within the system</p> <p> Identifies obvious or critical causes of error and notifies supervisor accordingly</p> <p> Recognizes the potential risk for error in the immediate system and takes necessary steps to mitigate that risk</p> <p> Willing to receive feedback about decisions that may lead to error or otherwise cause harm</p>	<p> Identifies systemic causes of medical error and navigates them to provide safe patient care</p> <p> Advocates for safe patient care and optimal patient care systems</p> <p> Activates formal system resources to investigate and mitigate real or potential medical error</p> <p> Reflects upon and learns from own critical incidents that may lead to medical error</p>	<p> Advocates for system leadership to formally engage in quality assurance and quality improvement activities</p> <p> Viewed as a leader in identifying and advocating for the prevention of medical error</p> <p> Teaches others regarding the importance of recognizing and mitigating system error</p>
<p>Comments:</p>				

10. Identifies forces that impact the cost of health care, advocates for, and practices cost-effective care. (SBP5)

10. Identifies forces that impact the cost of health care, and advocates for, and practices cost-effective care. (SBP3)				
Critical Deficiencies			Ready for unsupervised practice	Aspirational
<p>Ignores cost issues in the provision of care</p> <p>Demonstrates no effort to overcome barriers to cost-effective care</p>	<p>Lacks awareness of external factors (e.g. socio-economic, cultural, literacy, insurance status) that impact the cost of health care and the role that external stakeholders (e.g. providers, suppliers, financiers, purchasers) have on the cost of care</p> <p>Does not consider limited health care resources when ordering diagnostic or therapeutic interventions</p>	<p>Recognizes that external factors influence a patient's utilization of health care and may act as barriers to cost-effective care</p> <p>Minimizes unnecessary diagnostic and therapeutic tests</p> <p>Possesses an incomplete understanding of cost-awareness principles for a population of patients (e.g. screening tests)</p>	<p>Consistently works to address patient specific barriers to cost-effective care</p> <p>Advocates for cost-conscious utilization of resources (i.e. emergency department visits, hospital readmissions)</p> <p>Incorporates cost-awareness principles into standard clinical judgments and decision-making, including screening tests</p>	<p>Teaches patients and healthcare team members to recognize and address common barriers to cost-effective care and appropriate utilization of resources</p> <p>Actively participates in initiatives and care delivery models designed to overcome or mitigate barriers to cost-effective high quality care</p>
<p>Comments:</p>				

12. Monitors practice with a goal for improvement (PBLI1)

12. Monitors practice with a goal for improvement. (PBLI1)				
Critical Deficiencies			Ready for unsupervised practice	Aspirational
<p>Unwilling to self-reflect upon one's practice or performance</p> <p>Not concerned with opportunities for learning and self-improvement</p>	<p>Unable to self-reflect upon one's practice or performance</p> <p>Misses opportunities for learning and self-improvement</p>	<p>Inconsistently self-reflects upon one's practice or performance and inconsistently acts upon those reflections</p> <p>Inconsistently acts upon opportunities for learning and self-improvement</p>	<p>Regularly self-reflects upon one's practice or performance and consistently acts upon those reflections to improve practice</p> <p>Recognizes sub-optimal practice or performance as an opportunity for learning and self-improvement</p>	<p>Regularly self-reflects and seeks external validation regarding this reflection to maximize practice improvement</p> <p>Actively engages in self-improvement efforts and reflects upon the experience</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				

13. Learns and improves via performance audit (PBLI2)

13. Learns and improves via performance audit. (PBLI2)				
Critical Deficiencies			Ready for unsupervised practice	Aspirational
<p>Disregards own clinical performance data</p> <p>Demonstrates no inclination to participate in or even consider the results of quality improvement efforts</p>	<p>Limited awareness of or desire to analyze own clinical performance data</p> <p>Nominally participates in a quality improvement projects</p> <p>Not familiar with the principles, techniques or importance of quality improvement</p>	<p>Analyzes own clinical performance data and identifies opportunities for improvement</p> <p>Effectively participates in a quality improvement project</p> <p>Understands common principles and techniques of quality improvement and appreciates the responsibility to assess and improve care for a panel of patients</p>	<p>Analyzes own clinical performance data and actively works to improve performance</p> <p>Actively engages in quality improvement initiatives</p> <p>Demonstrates the ability to apply common principles and techniques of quality improvement to improve care for a panel of patients</p>	<p>Actively monitors clinical performance through various data sources</p> <p>Is able to lead a quality improvement project</p> <p>Utilizes common principles and techniques of quality improvement to continuously improve care for a panel of patients</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				

Practice



Stepwise Approach

Step 1 - Describe the EPA

What is the critical activity of the profession?

Step 2 – Define the components which must be observed or mastered prior to entrustment?

Step 3 – Link the Milestones

Which Milestones are you looking at when you look through a Window?

Step 1: Define the EPA

- Is part of essential professional work in given context
 - Must require adequate knowledge, skill, and attitude
 - Must lead to recognized output of professional labor
 - Should be confined to qualified personnel
 - Should be independently executable
 - Should be executable within a time frame
 - Should be observable and measurable
 - Should reflect one or more competencies
-
- *Cincinnati addition*
 - Should be frequent enough to be seen in a rotation
 - Should be important

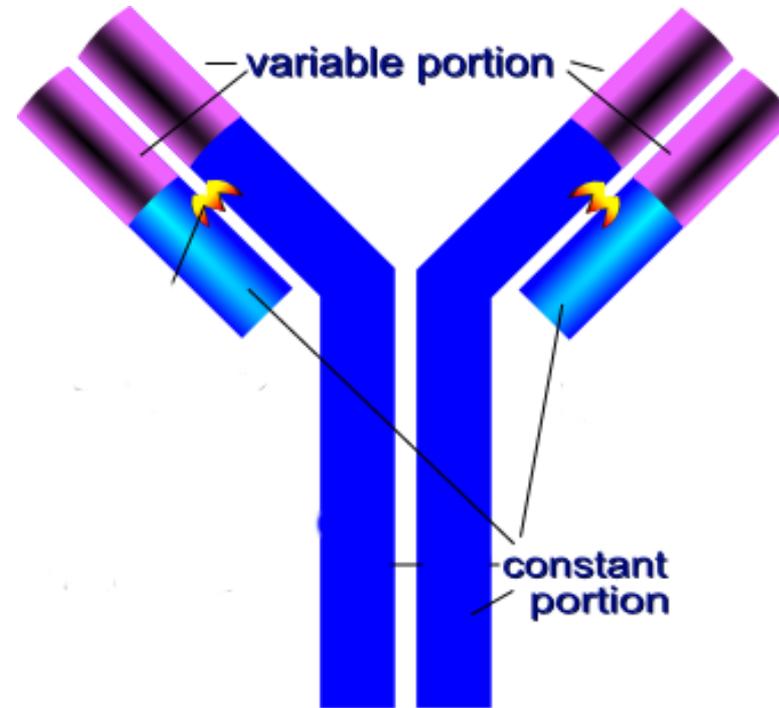
ten Cate et al.
Acad Med 2007; 82: 542-47

The Cincinnati Experience

Pearls and Pitfalls



Our Approach: Antibody Metaphor



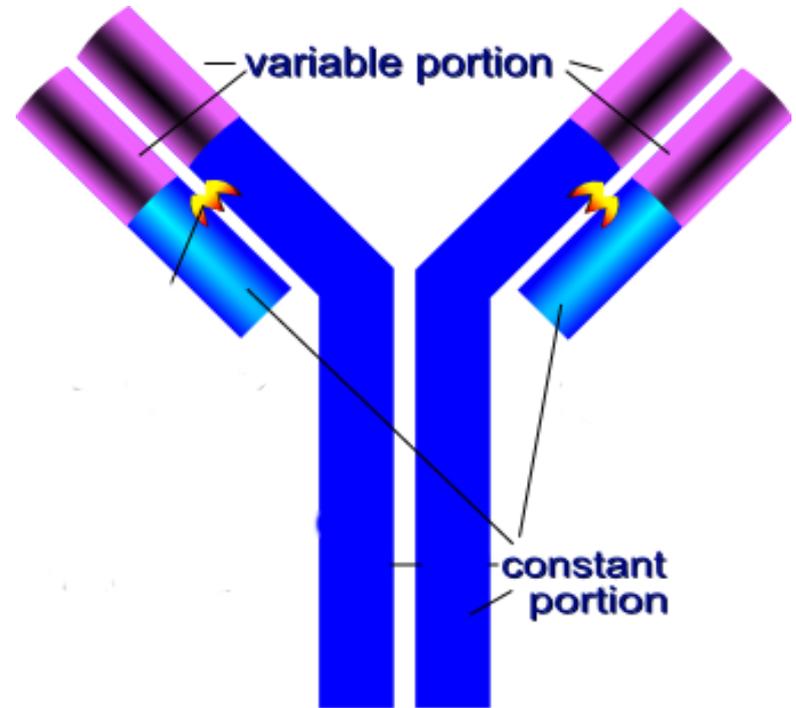
Our Approach: Antibody Metaphor

Content Based EPAs ('variable portion')

- example: *titrate insulin*
- generally different for each rotation

Process Based EPAs ('constant portion')

- example: *perform a teachback*
- generally the same for similar rotation types
 - Inpatient – 1 set
 - Consult – 1 set
 - Ambulatory – 1 set



Our Approach: Levels and Vision

1. Created separate sets of content and process EPAs for interns and senior residents



2. Created EPAs for non attending evaluations (multisource evaluations)



When Writing EPAs:

1. *Are part of essential professional work in given context.*
2. *Must require adequate knowledge, skill, and attitude.*
3. *Must lead to recognized output of professional labor.*
4. *Should be confined to qualified personnel.*
5. *Should be independently executable.*
6. *Should be executable within a time frame.*
7. *Should be observable and measurable in its process and outcome (well done or not well done).*
8. *Should reflect one or more competencies.*

PLUS

9. Should be frequent enough to be seen in a rotation
10. Should be important
11. Should be measurable by the attending on the rotation
 - If not, rotation should be structured so attending can see it
 - Or, EPA should be moved to multisource
 - Or it should be changed or dropped