

Which Comes First – Curriculum or Evaluation?

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Learning Objectives

- 1) List reasons to evaluate Housestaff
- 2) Appropriately apply Bloom's Taxonomy in conjunction with both curriculum and evaluation tools
- 3) Map ACGME specialty milestones, subcompetencies and competencies to linked curriculum and evaluation tools
- 4) Use rating scales and/or behavioral anchor scales (BARS) to demonstrate degree of progression when evaluating Housestaff

Disclosures

- None

1. Reasons to Evaluate Housestaff

Creating tools for residents to demonstrate their understanding of the subject matter is critical to the learning process; it is essential to evaluate whether the educational goals and standards of the lessons are being met.

A. Assessment results **are important to the program** as they will provide feedback to let us know if..

- We are teaching what we think we are teaching.
- Residents are learning what has been specified in the goals and objectives.
- There is a way to teach the subject better.

B. Assessments **are important to Residents** as they will tell resident

- What they will be evaluated on
- The tools used to evaluate each required skill/knowledge
- How often they will be evaluated
- How the assessment will guide their learning plan

C. **Provides information to the CCC** for recommendations to the PD for:

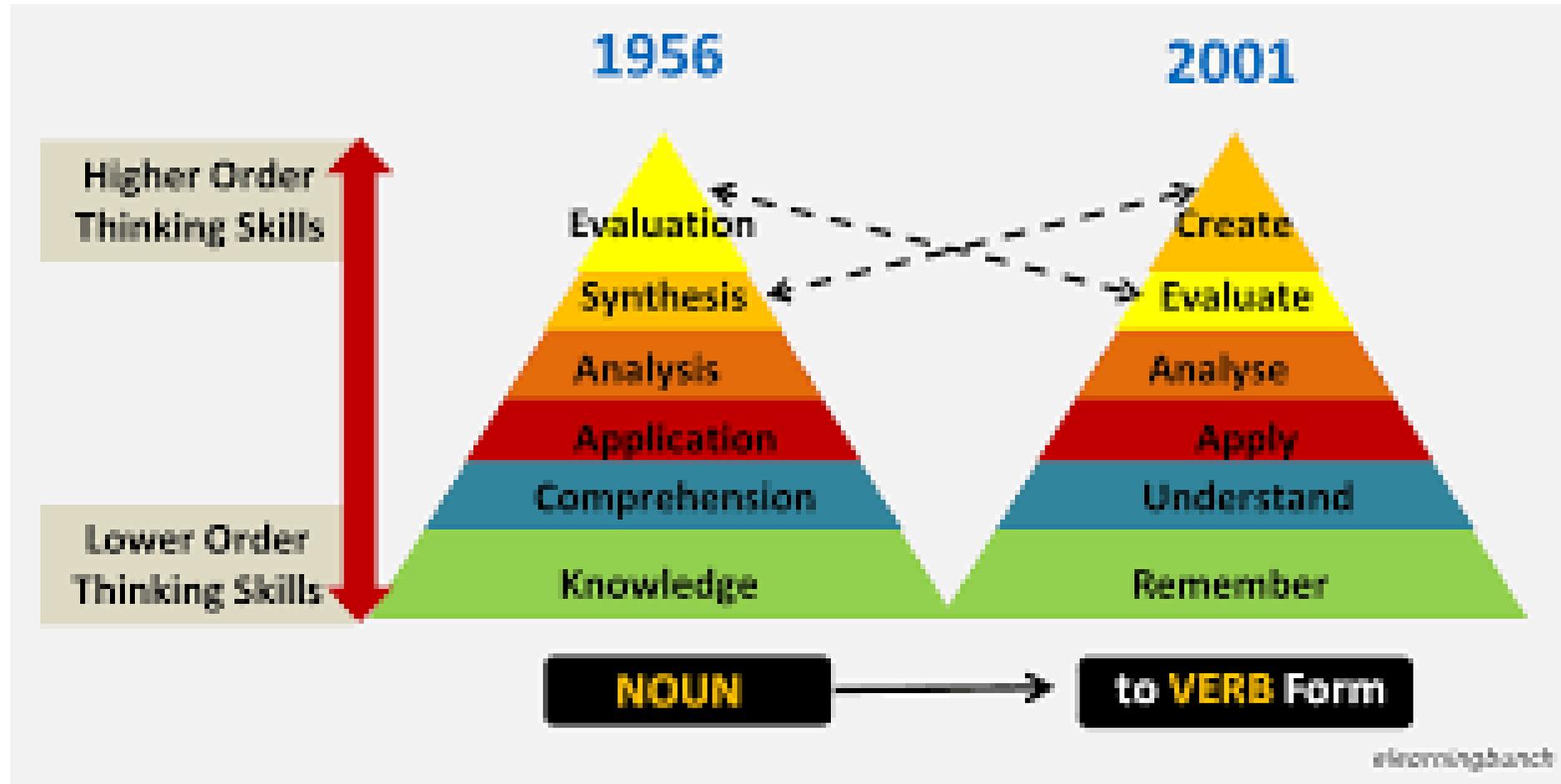
- Promotion
- Remediation
- Dismissal



2. Bloom's Taxonomy - Purpose

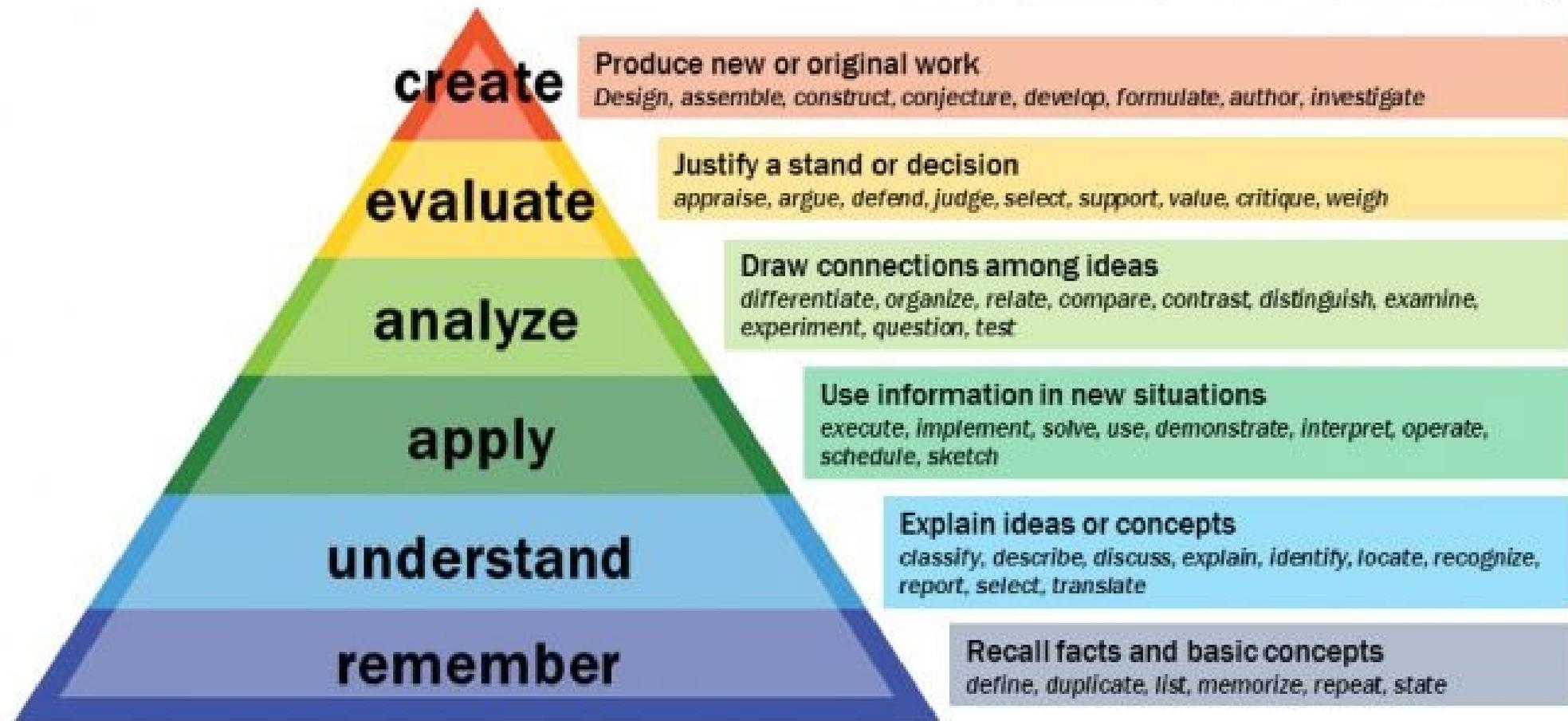
- **Bloom's taxonomy** was developed to provide a common language for teachers to discuss and exchange learning and assessment methods. Specific learning outcomes can be derived from the **taxonomy**, though it is most commonly used to assess learning on a variety of cognitive levels.
- **Revised Bloom's taxonomy** refers to the emphasis on two learning domains that make up educational objectives: cognitive (knowledge) and affective (attitude). The **revised taxonomy** focuses on six levels: remember, understand, apply, analyze, evaluate and create.

Blooms Taxonomy Model



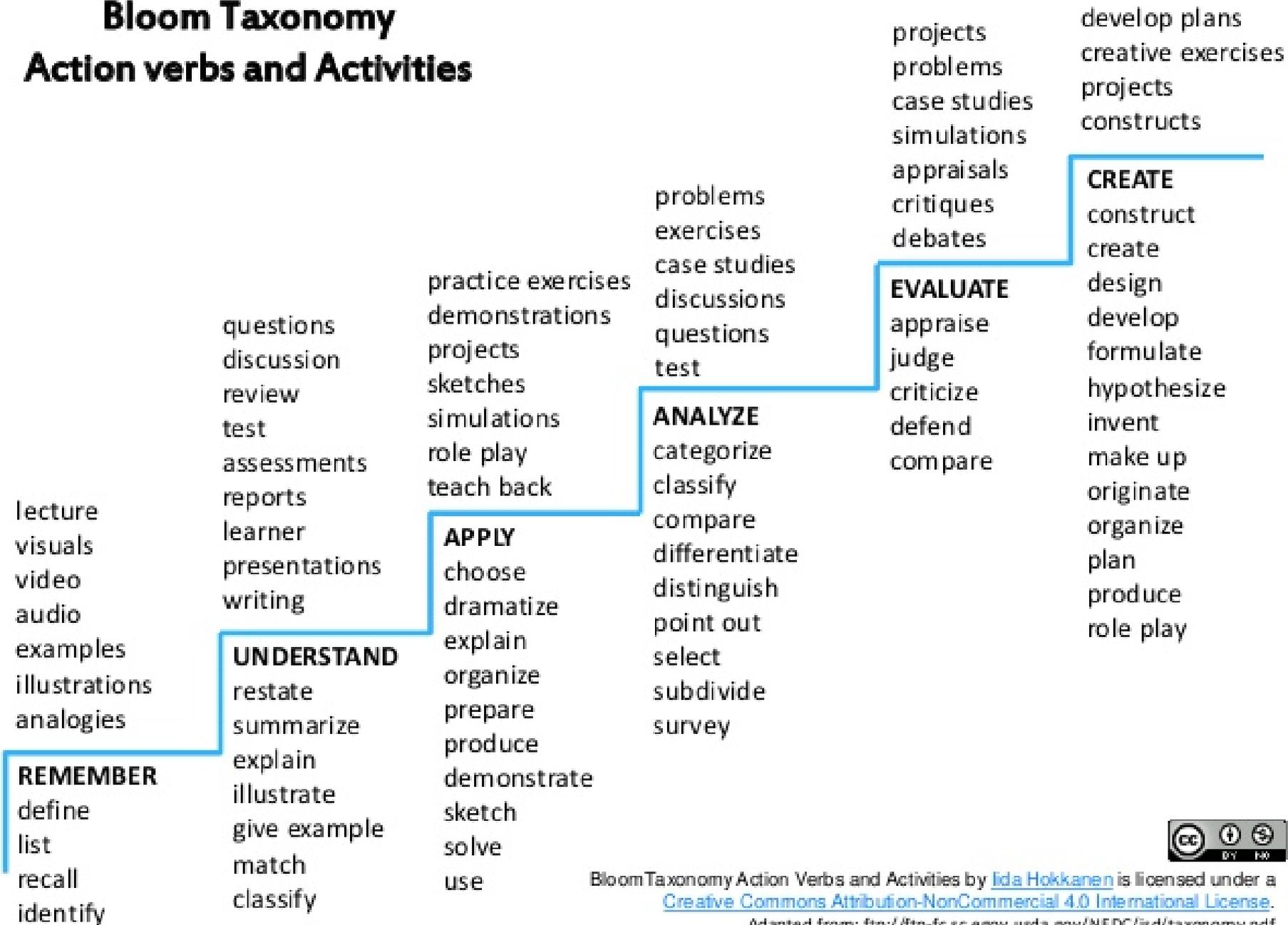
Revised Bloom's Taxonomy

Bloom's Taxonomy



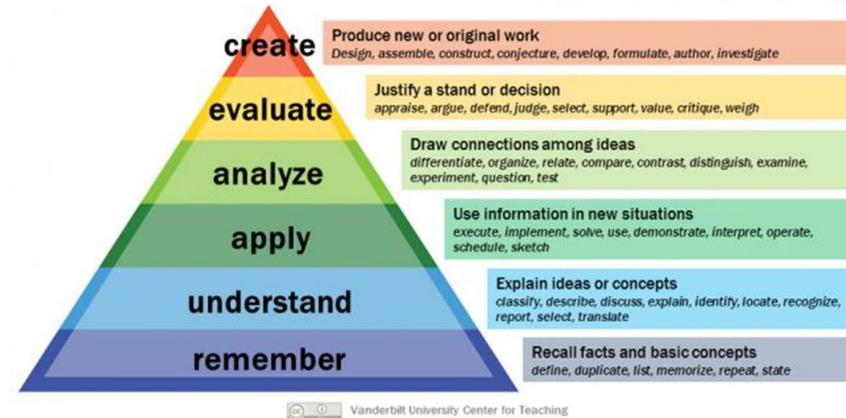
Bloom Taxonomy

Action verbs and Activities



Bloom's Taxonomy

Objective Examples



Not so good

- Understand/Learn/Know medical comorbidities and treatment modalities that can affect obstetrical outcomes
- Understand/Learn/Know how cost-awareness affects diagnostic and treatment plans

Better

- Restate how medical comorbidities and treatment modalities that can affect obstetrical outcomes
- Explain how cost-awareness affects diagnostic and treatment plans

Best

- Distinguish and treat *common* medical comorbidities and treatment modalities that can affect obstetrical outcomes
- Distinguish and treat *complex* medical comorbidities and treatment modalities that can affect obstetrical outcomes
- Incorporate cost-awareness into the development of diagnostic and treatment plans

Mini exercise

- Write an objective for *Professionalism* using the **Understanding** level in Bloom's taxonomy and a method to evaluate it. Please post this in the chat.

Example: Discuss the proper indications and contraindications for a lumbar puncture. (Case discussion evaluated through end of rotation evaluation form)

You may refer to the file placed in the chat for reference

Post your answer in the chat

Mini exercise

- Write an objective for *Systems-based practice* (eg: *Quality Improvement*) using the **Analyze** level in Bloom's taxonomy and a method to evaluate it. Please post this in the chat.

Example: Compare and contrast differential diagnoses including most common and life-threatening diagnoses using a rule-in/rule-out approach. (Thinking out loud during rounds so attendings understand thought process that is evaluated on the end of rotation evaluation form; chart review check list)

You may refer to the file placed in the chat for reference

Post your answer in the chat

Mini exercise

- Write an objective for *Interpersonal and Communication Skills* using the **Evaluate** level in Bloom's taxonomy and a method to evaluate it. Please post this in the chat.

Example: Select a therapeutic treatment based on evidence-based medicine and the patient's input. (Chart review; direct observation checklist)

You may refer to the file placed in the chat for reference

Post your answer in the chat

3. Map ACGME specialty milestones, subcompetencies and competencies to linked curriculum and evaluation tools



Steps to revising goals and objectives

Rotational Goals and Objectives

6. Resident input

5. Faculty input

4. Incorporate Program Aims

3. Site specific experiences

2. ACGME curriculum requirements

1. Milestone – create shared mental model

Figure 1b: Example of the Basic Anatomy of a Milestone

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid green; padding: 2px; border-radius: 5px;">Competency</div> <div style="border: 1px solid orange; padding: 2px; border-radius: 5px;">Subcompetency</div> </div>				
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid green; padding: 2px; border-radius: 5px;">Patient Care 5:</div> <div style="border: 1px solid orange; padding: 2px; border-radius: 5px;">Urgent and Emergent Medical Conditions</div> </div>				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Recognizes urgent and emergent medical conditions and initiates system protocols as appropriate</p> <p>Knows code status</p>	<p>Performs an initial assessment of patients with urgent and emergent conditions</p> <p>Discusses and clarifies code status with patient and family</p>	<p>Provides initial stabilization of patients with urgent and emergent medical conditions, as well as safe transitions in care</p> <div style="border: 1px solid blue; padding: 2px; border-radius: 5px; margin-top: 10px;"> <p>Uses code status in clinical decision making</p> </div>	<p>Coordinates the initial assessment and management of urgent and emergent conditions with the interprofessional care team</p> <p>Considers patient and family wishes to modify code status and subsequent care as appropriate</p>	<p>Anticipates clinical decompensation and intervenes early</p> <p>Leads conversation with medical team when care is futile</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid blue; padding: 2px; border-radius: 5px;">Milestone</div> </div>				
<p>Comments:</p> <div style="text-align: right;"> <p>Not Yet Completed Level 1 <input type="checkbox"/></p> <p>Not Yet Assessable <input type="checkbox"/></p> </div>				

1. Define milestone –

Patient Care 5: Somatic Therapies (including Psychopharmacology and Neurostimulation Therapies) A: Understands the mechanisms of action, indications, and evidence base for somatic therapies and appropriately applies them to patient care B: Educates patients about somatic therapies including access to accurate psychoeducational resources C: Appropriately monitors patient's response to treatment				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists commonly used somatic therapies and their indications to target specific psychiatric symptoms	Appropriately prescribes commonly used somatic therapies and understands their mechanism of action	Researches, cites, and starts to apply the evidence base when developing treatment plans that include somatic therapies	Consistently applies the evidence base when developing treatment plans that include somatic therapies, including with complex or treatment-refractory cases	Manages complex combinations of somatic therapies and considers novel approaches
Reviews with the patient general indications and common adverse effects for commonly prescribed drugs and other somatic treatments	Appropriately uses educational and other resources to support the patient and optimize understanding and adherence	Explains mechanisms of action and the body's response to commonly prescribed drugs and other somatic treatments (including drug metabolism) to patients/families	Explains less common somatic treatment choices to patients/families in terms of proposed mechanisms of action, potential risks and benefits, and the evidence base	Leads the development of novel patient educational processes or materials
Lists key baseline assessments necessary before initiating somatic treatments to ensure patient safety	Obtains baseline assessments necessary before initiating treatment with commonly used somatic therapies	Monitors relevant assessments and adverse effects throughout treatment and incorporates findings from the literature into treatment strategy	Manages adverse effects and safety concerns in complex or treatment refractory cases	Incorporates new developments in the evidence base into treatment to optimize safety, minimize adverse effects, and improve response
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are commonly used somatic therapies and when should resident be expected to be able to list them?

Creating the shared mental model

Shared Mental Model - The perception of, understanding of, or knowledge about a situation or process that is shared among team members through communication.



Not shared model
←

Shared mental model
→



1. Define milestone.

Patient Care 5: Somatic Therapies (including Psychopharmacology and Neurostimulation Therapies)
A: Understands the mechanisms of action, indications, and evidence base for somatic therapies and appropriately applies them to patient care
B: Educates patients about somatic therapies including access to accurate psychoeducational resources
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Level 1	Level 2	Level 3	Level 4	Level 5
Lists commonly used somatic therapies and their indications to target specific psychiatric symptoms	Appropriately prescribes commonly used somatic therapies and understands their mechanism of action	Researches, cites, and starts to apply the evidence base when developing treatment plans that include somatic therapies	Consistently applies the evidence base when developing treatment plans that include somatic therapies, including with complex or treatment-refractory cases	Manages complex combinations of somatic therapies and considers novel approaches

What are commonly used somatic therapies and when should resident be expected to be able to list them?
 Committee Decides:

1. Recognizes that selective serotonin reuptake inhibitors (SSRIs) treat depression and anxiety disorders - Resident should have instruction and be evaluated on this skill in one of the first 2 rotations of PGY1 year.
2. Recognizes that Electroconvulsive therapy (ECT) is a somatic treatment procedure which involves the electrical induction of seizures as a treatment for psychiatric disorders. Resident should have instruction and be evaluated on this skill in the last quarter of the PGY1 year. Site 1 has patient population numbers which will provide resident with extensive experience.



1. Creating the shared mental model

What are commonly used somatic therapies and when should resident be expected to be able to list them?

Committee Decides:

1. Recognizes that selective serotonin reuptake inhibitors (SSRIs) treat depression and anxiety disorders - Resident should have instruction and be evaluated on this skill in one of the first 2 rotations of PGY1 year.

List as patient care objective in PGY1 geriatric rotation at site 2.

FYI – add the following to the rotational evaluation:

Resident listed/recognized that selective serotonin reuptake inhibitors (SSRIs) treat depression and anxiety disorders

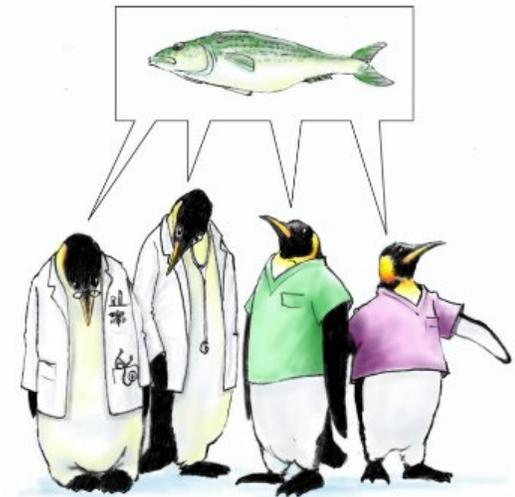
2. Recognizes that Electroconvulsive therapy (ECT) is a somatic treatment procedure which involves the electrical induction of seizures as a treatment for psychiatric disorders. Resident should have instruction and be evaluated on this skill in the last quarter of the PGY1 year. Site 1 has patient population numbers which will provide resident with extensive experience.

List as patient care objective in PGY1 rotation with Dr. Smith, as she is an expert in ECT.

FYI – add the following to the evaluation for Dr. Smith's rotation:

Resident appropriately explained ECT as treatment for psychiatric disorders.

3. Continue until all commonly used therapies are listed.



2. Define ACGME specialty curriculum requirements

IV.	Educational Program
IV.A.	Curriculum Components
IV.B.	ACGME Competencies
IV.C.	Curriculum Organization and Resident Experiences ...
IV.D.	Scholarship

IV.B.1.b).(1).(a) Residents must demonstrate competence in the evaluation and treatment of patients of different ages and genders from diverse backgrounds, and from a variety of ethnic, racial, sociocultural, and economic backgrounds; and;

1. Define requirement
2. Which rotation(s) will provide the resident opportunities to learn and demonstrate the skill(s)?
 - a. Add the goals and objectives that you have defined to the rotations you identify
3. How should resident be evaluated for this skills?
4. *(write the question for the evaluation form or create the specific evaluation tool)*

3. Include experiences unique to rotation site

1. Identify unique experiences of each site
2. Define unique experience in goals and objectives
 - a. Add these goals and objectives to that rotation
3. How should resident be evaluated for this skill(s)?
(write the question for the evaluation form or create evaluation tool)

EX: 1. One of the unique strengths of Site 3 is is a national leader in milieu therapy that serve as a core principal of inpatient clinical care.

2. Residents will appropriately use milieu therapy to help patients develop skills and behaviors necessary for societal acceptance.
3. Residents should be evaluated via treatment plan reviews.

4. Incorporate your Aims

Review your program aims. What goals and objectives must be included in your curriculum to assist with being successful with meeting your aims?

Our psychiatry residency program aims to educate psychiatrists who are:

- Clinicians | Expert in providing culturally-competent, evidence-based, comprehensive care to patients from across the social, economic, and cultural spectrum who are dealing with complex conditions (psychiatric, substance use, medical, legal)
- Educators | Skilled in teaching, lifelong learning, and scholarship
- Scientists | Engaged in advancing knowledge through neuroscience and clinical research
- Leaders | Dedicated to advancing mental health through education, research, policy, advocacy, and public sector psychiatry

Our psychiatry residency program aims to educate psychiatrists who are:

- Clinicians -Expert in providing culturally-competent, evidence-based, comprehensive care to patients from across the social, economic, and cultural spectrum who are dealing with complex conditions (psychiatric, substance use, medical, legal)
 - What goals and objectives have been included to provide medical and legal experiences?
- Educators -Skilled in teaching, lifelong learning, and scholarship
 - What goals and objectives have been include to provide teaching experiences?
 - How are you evaluating current residents? How are you evaluating graduates to see if this aim was accomplished?
- Scientists -Engaged in advancing knowledge through neuroscience and clinical research
- Leaders -Dedicated to advancing mental health through education, research, policy, advocacy, and public sector psychiatry

5. Solicit Site director and faculty input/expertise

Ask your teaching faculty for input on experiences they provide the residents, their expectations of the residents before and after their rotational experience and how the resident should be evaluated.

Include input in the goals and objectives.



6. Solicit Resident experiences

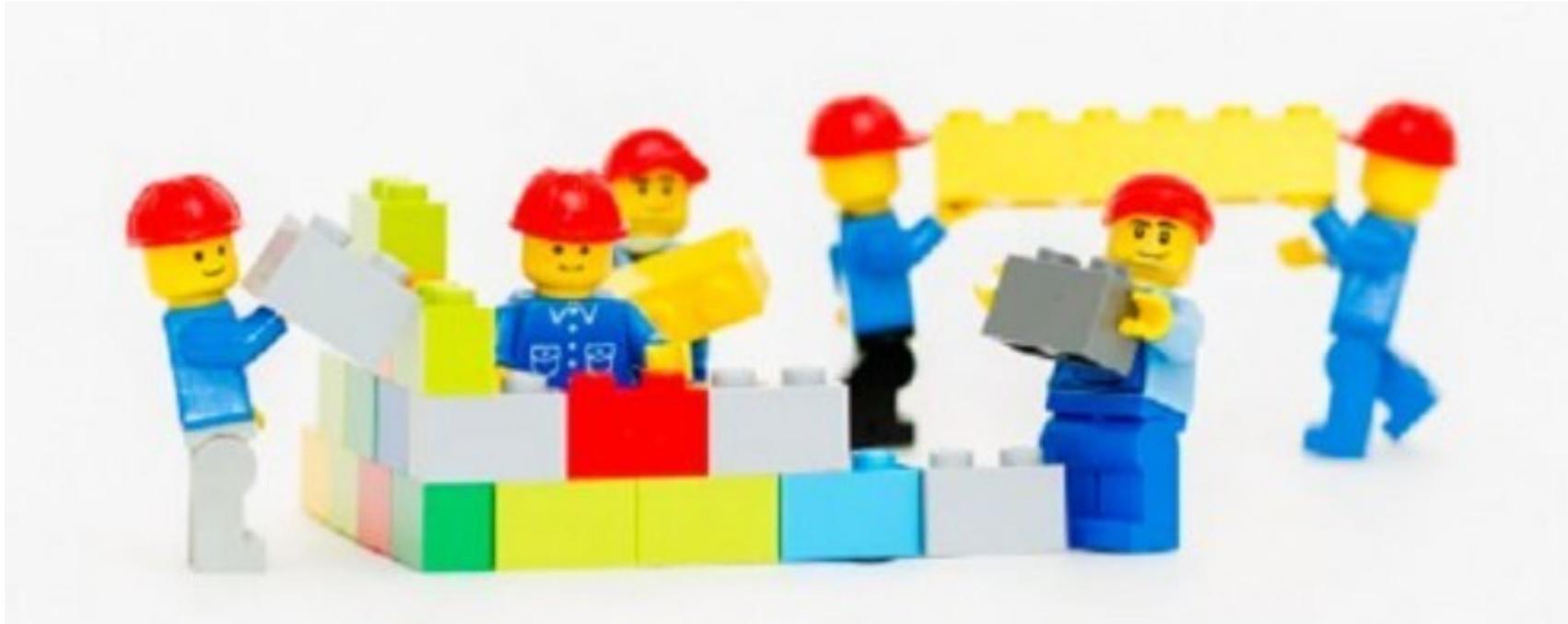


Ask the resident who have experienced the rotation.

What other skills did they learn?

How would they like to be evaluated for the objectives that have been identified?

Taking the time to complete each piece of the process will result in an accurate and useful curriculum with evaluation tools that will provide meaningful feedback.



4. Use rating scales and/or behavioral anchor scales (BARS) to demonstrate degree of progression when evaluating Housestaff

Behaviorally anchored rating scales (BARS) are scales used to rate performance. It is an appraisal method that aims to combine the benefits of narratives, critical incidents, and quantified ratings by *anchoring a quantified scale with specific narrative examples of good, moderate, and poor performance*. Typically 5-9 levels.

BARS Example

Performance Criteria: Respect for Others

Description: Shows consideration and courtesy to the ideas, opinions and values of other team members to promote harmony within the team

RATINGS

<i>Below Expectation</i>	<i>Meets Expectations</i>	<i>Exceeds Expectations</i>
<ul style="list-style-type: none">• Does not or will not listen to other team members• Often interrupts• Makes crude or inappropriate comments	<ul style="list-style-type: none">• Listens to and is respectful of other team members• Even if they do not agree, are willing to come to a consensus on a group decision	<ul style="list-style-type: none">• Offers encouragement to other team members and wants to hear their ideas• Helps to moderate conflicts within the group

What does this format remind you of?

Rating Scale that Demonstrate Progression

Example 1	Example 2
<p>(1) Struggles to achieve task even with assistance</p> <p>(2) Able to achieve task with ongoing Full Supervision</p> <p>(3) Able to achieve task with Indirect Supervision</p> <p>(4) Ready for Independent Practice</p> <p>(5) Aspirational – can act as an Instructor</p> <p>Not Observed</p>	<p>(1) NOVICE - Frequent intervention indicated (typically starting PGY 1)</p> <p>(2) BEGINNER - Needs regular supervision (typically starting PGY 2)</p> <p>(3) EARLY INTERMEDIATE - Needs occasional guidance (typically starting PGY 3)</p> <p>(4) ADVANCED INTERMEDIATE - Ready to practice independently (typically a graduating resident)</p> <p>(5) EXPERT - Advanced Clinician/Can Teach (typically an experienced attending)</p> <p>Not Observed</p>

End Product: Evaluation Items are Reflective of Curriculum and Mapped to Milestones Document with Rating Scale that shows Progression or BARS

UF Dermatology Residency General Dermatology Clinic (PGY-2, PYG-3, PGY-4) Rotation Goals and Objectives

Rating Scale: |

- 1-Frequent intervention indicated
- 2-Needs regular direct supervision
- 3-Needs occasional guidance/indirect supervision
- 4-Ready to practice independently/oversight
- 5-Advanced clinician/Can Teach
- N/A-Not observed

1. Performed accurate, detailed history and exam for patients with skin diseases (PC1)
2. Selected appropriate laboratory and diagnostic tests, sites and techniques (PC2)
3. Competently performed and interpreted diagnostic (e.g. KOH, Tzanck smears, Scabies prep, hair examination, use of Wood's lamp and dermoscopy) (PC2)
4. Appropriately applied indications for and risks of dermatologic therapies (topical and systemic agents, phototherapy) (PC4)

Poll

What comes first?

A. Curriculum/goals and objectives

B. Evaluation methods/forms

C. Neither – they both need to be developed at the same time

Questions?



Find these slides/handouts here:

<https://gme.med.ufl.edu/graduate-medical-education/gme-office-faculty-and-staff-development/>