

# Creating Competency Based Activity Evaluations

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## ACGME common program requirements for subspecialties in Internal Medicine

### V. Evaluation

#### 1. (b) The program must:

- (1) provide objective assessments of competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice;
- (3) document progressive fellow performance improvement appropriate to educational level;

[http://www.acgme.org/acWebsite/downloads/RRC\\_progReq/150pr707\\_ims.pdf](http://www.acgme.org/acWebsite/downloads/RRC_progReq/150pr707_ims.pdf)

## Development of competency-based goals and objectives

- ACGME Common Program Requirements
- ACR Core Curriculum Outline
- Bloom's Taxonomy
- Skeleton Goals and Objectives written independently by the four PDs
- A Textbook for Internal Medicine Education Programs

## Objectives: Outpatient Clinic

### ■ Medical Knowledge

"Describe the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting."

at each educational level...

## Bloom's Taxonomy

1956 Benjamin Bloom: levels of intellectual behavior important in learning

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

## Words for writing goals and objectives

Knowledge	Define, list, memorize, read, recite, repeat, reproduce, state
Comprehension	Classify, describe, discuss, explain, identify, locate, recognize, report, summarize, translate
Application	Apply, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write
Analysis	Appraise, compare, contrast, criticize, debate, differentiate, discriminate, examine, experiment, question
Synthesis	Assemble, argue, compile, defend, formulate, judge, modify, propose, select, specify, synthesize, value
Evaluation	Assemble, criticize, critique, defend, discriminate, explain, evaluate, judge, rank, rate, recommend, select, summarize, support

### ...at each educational level

1st 6 months	<b>Read</b> the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.
2nd 6 months	<b>Discuss</b> the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.
3rd 6 months	<b>Analyze</b> the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.
4th 6 months	<b>Explain</b> the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.

...as a continuum

#### • Medical Knowledge

Describe the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.



### Finally...Evaluations

- Should reflect whether each rotation objective is met, so should come nearly verbatim from the written objectives
- Should be simple for faculty to complete



Shah N et al, *Acad Psychiatry*. 2007 Nov-Dec;31(6):439-42.

### Evaluations - Numerical scale

- Traditional 1-9
- 1-5
  - 1: unacceptable/fail/horrible; 2: pretty bad but I don't want to fail him/her; 3: marginal/meets minimal expectations but not horrible; 4: good but not among the best; 5: superstar
- 1-3
  - 1: unsatisfactory; 2: appropriate for level; 3: superior performance

Massagli TL et al. *Am J Phys Med Rehabil*. 2007 Oct;86(10):845-52.  
Tabuenca A et al., *J Surg Educ*. 2007 Nov-Dec;64(6):390-4.

### Carolinas Fellows Consortium

- All goals and objectives nearly complete at May 2008 retreat
- Retreat in September 2008 to complete remaining G&Os
- Decided on 1-3 scale
- I wrote the first evaluation while everyone else drove home!

1: unsatisfactory 2: appropriate for level 3: superior performance 4: Insufficient observation

MEDICAL KNOWLEDGE	1	2	3	4
Describes the epidemiology, genetics, natural history, clinical expression including clinical subtypes, pathology, and pathogenesis of the rheumatic diseases encountered in the outpatient setting.				
Summarizes an approach to the evaluation of multi-organ inflammatory disorders				
Discusses biochemical mechanisms of action, conditions in which they may be useful, and list the potential side effects of the pharmacologic agents used to treat outpatient musculoskeletal and rheumatic diseases				
Identifies therapy-related complications				
Distinguishes non-rheumatic disorders from rheumatic diseases				
Interprets diagnostic tests used in the evaluation of outpatients with suspected rheumatic and musculoskeletal diseases				
Demonstrates the ability to critically appraise and cite literature pertinent to the evaluation of outpatients				
Describes the structure and function of musculoskeletal tissues and joints				
Discusses the roles of physical and occupational therapy in the care of ambulatory patients with rheumatic and musculoskeletal conditions				

## First evaluation

- Too cumbersome to complete with up to 10 objectives per competency
- What we really want to know is if there are objectives the fellow did not meet that should be a focus for remedial work
  - Rate the competency in general
  - Identify any areas of unsatisfactory performance

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**RHEUMATOLOGY FACULTY EVALUATION OF FELLOW**  
Activity - Adult Outpatient Continuity Clinic

Fellow: \_\_\_\_\_  
Time period: \_\_\_\_\_ Sites of Interaction: \_\_\_\_\_  
Evaluator: \_\_\_\_\_

For each competency check the appropriate assessment. If a performance in a competency is judged as unsatisfactory then check the linked boxes to note areas for fellow improvement.

MEDICAL KNOWLEDGE	Unsatisfactory	Appropriate for Level	Superior Performance	Insufficient Observation

Unsatisfactory performance in:

- Describe the pathogenesis and clinical expression of the rheumatic diseases encountered
- Summarize an approach to the evaluation of multi-organ inflammatory disorders
- Mechanisms of action, uses, and potential side effects of the pharmacologic agents used
- Identify therapy-related complications
- Distinguish non-rheumatic disorders from rheumatic diseases
- Interpret diagnostic tests
- Critically appraise and cite literature pertinent to the evaluation of outpatients
- Describe the structure and function of musculoskeletal tissues and joints
- Discuss the roles of physical and occupational therapy
- Specify the role of orthopedic surgery in the care of patients with musculoskeletal conditions

“document progressive fellow performance improvement appropriate to educational level”

- 1<sup>st</sup> 6 months
  - Read the pathogenesis and clinical expression of the common rheumatic diseases encountered
- 2<sup>nd</sup> 6 months
  - Discuss the pathogenesis and clinical expression of the common rheumatic diseases encountered
- 3<sup>rd</sup> 6 months
  - Analyze the pathogenesis and clinical expression of the common rheumatic diseases encountered
- 4<sup>th</sup> 6 months
  - Explain the pathogenesis and clinical expression of the common rheumatic diseases encountered

## Outpatient Consults – first 6 months

MEDICAL KNOWLEDGE	Unsatisfactory	Appropriate for Level	Superior Performance	Insufficient Observation

Unsatisfactory performance in:

- the pathogenesis and clinical expression of the rheumatic diseases encountered
- an approach to the evaluation of multi-organ inflammatory disorders
- Mechanisms of action, uses, and potential side effects of the pharmacologic agents used
- therapy-related complications
- non-rheumatic disorders from rheumatic diseases
- diagnostic tests
- literature pertinent to the evaluation of outpatients
- the structure and function of musculoskeletal tissues and joints
- the roles of physical and occupational therapy
- the role of orthopedic surgery in the care of patients with musculoskeletal conditions

Bloom's Taxonomy: Knowledge

Define, list, memorize, read, recite, repeat, reproduce, state

## Outpatient Consults – second 6 months

MEDICAL KNOWLEDGE	Unsatisfactory	Appropriate for Level	Superior Performance	Insufficient Observation

Unsatisfactory performance in:

- the pathogenesis and clinical expression of the rheumatic diseases encountered
- an approach to the evaluation of multi-organ inflammatory disorders
- Mechanisms of action, uses, and potential side effects of the pharmacologic agents used
- therapy-related complications
- non-rheumatic disorders from rheumatic diseases
- diagnostic tests
- literature pertinent to the evaluation of outpatients
- the structure and function of musculoskeletal tissues and joints
- the roles of physical and occupational therapy
- the role of orthopedic surgery in the care of patients with musculoskeletal conditions

Bloom's Taxonomy: Comprehension/application

Classify, describe, discuss, explain, identify, locate, recognize, report, summarize, translate; Apply, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write

## Outpatient Consults – third 6 months

MEDICAL KNOWLEDGE	Unsatisfactory	Appropriate for Level	Superior Performance	Insufficient Observation

Unsatisfactory performance in:

- the pathogenesis and clinical expression of the rheumatic diseases encountered
- an approach to the evaluation of multi-organ inflammatory disorders
- Mechanisms of action, uses, and potential side effects of the pharmacologic agents used
- therapy-related complications
- non-rheumatic disorders from rheumatic diseases
- diagnostic tests
- literature pertinent to the evaluation of outpatients
- the structure and function of musculoskeletal tissues and joints
- the roles of physical and occupational therapy
- the role of orthopedic surgery in the care of patients with musculoskeletal conditions

Bloom's Taxonomy: Analysis/synthesis

Appraise, compare, contrast, criticize, debate, differentiate, discriminate, examine, experiment, question; Assemble, argue, compile, defend, formulate, judge, modify, propose, select, specify, synthesize, value

## Outpatient Consults – fourth 6 months

MEDICAL KNOWLEDGE	Unsatisfactory	Appropriate for Level	Superior Performance	Insufficient Observation

**Unsatisfactory performance in:**

- the pathogenesis and clinical expression of the rheumatic diseases encountered
- an approach to the evaluation of multi-organ inflammatory disorders
- Mechanisms of action, uses, and potential side effects of the pharmacologic agents used
- therapy-related complications
- non-rheumatic disorders from rheumatic diseases
- diagnostic tests
- literature pertinent to the evaluation of outpatients
- the structure and function of musculoskeletal tissues and joints
- the roles of physical and occupational therapy
- the role of orthopedic surgery in the care of patients with musculoskeletal conditions

### Bloom's Taxonomy: Evaluation

Assemble, criticize, critique, defend, discriminate, explain, evaluate, judge, rank, rate, recommend, select, summarize, support

## Evaluation Form – First Year Fellow

### Adult Inpatient Consults – First Year Fellow Objective Feedback Form

Fellow: \_\_\_\_\_ Consult Months: \_\_\_\_\_ Attending: \_\_\_\_\_

**First year fellow goals.** To gain competence in the consultative care of inpatients with suspected or proven musculoskeletal and rheumatic diseases.

The first year fellow is expected to meet the following benchmarks: (a) over the first six months to discuss, and (b) over the second six months to additionally analyze, the objectives under each competency.

Please rate the degree to which the fellow accomplished the following competencies and overall goals for the rotation. Check the shaded box best describing the overall accomplishments for each competency, and the smaller boxes under each competency for those objectives which were **NOT** fully achieved.

COMPETENCY	Meets an Insufficient Number of Objectives	Meets a Satisfactory Number of Objectives	Meets All or Nearly All Objectives
<b>Medical Knowledge</b>			
<i>Objective(s) not fully achieved:</i>			
<input type="checkbox"/> expression	Describe disease epidemiology, genetics, natural history, pathogenesis and clinical		
....			
....			
....			
....			
<i>Comments:</i>			

## Evaluation Form – Second Year Fellow

### Adult Inpatient Consults - Second Year Fellow Objective Feedback Form

Fellow: \_\_\_\_\_ Consult Months: \_\_\_\_\_ Attending: \_\_\_\_\_

**Second year fellow goals.** To independently and comprehensively manage the care of inpatients with suspected or proven musculoskeletal and rheumatic diseases. The second year fellow will demonstrate progressive independence in completion of the following objectives such that they are capable of complete independence in the role of a consultant by the end of clinical fellowship training.

The second year fellow is expected to discuss, analyze, and explain the objectives under each competency.

Please rate the degree to which the fellow accomplished the following competencies and overall goals for the rotation. Check the shaded box best describing the overall accomplishments for each competency, and the smaller boxes under each competency for those objectives which were **NOT** fully achieved.

COMPETENCY	Meets an Insufficient Number of Objectives	Meets a Satisfactory Number of Objectives	Meets All or Nearly All Objectives
<b>Medical Knowledge</b>			
<i>Objective(s) not fully achieved:</i>			
<input type="checkbox"/> expression	Describe disease epidemiology, genetics, natural history, pathogenesis and clinical		
....			
....			
....			
....			
<i>Comments:</i>			

## Summary

- Writing goals and objectives was a collaborative effort
- Use words from Bloom's taxonomy to define progressive expectations by educational level
- Carry goals and objectives forward into evaluations
- Make evaluations easy to complete to ensure compliance

## Conclusion

- It is easy to write rotation and activity evaluations when you start with thorough, competency-based goals and objectives!

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