

Use of RIME as an Evaluation Tool of Students

Hari Raja, M.D.
Clerkship Director
Internal Medicine

Objectives

- Explore the characteristics of what makes a good, bad, and average student
- Look at our past/current grading systems
- Describe the RIME evaluation model
- Learn strategies on how to incorporate this in grading students
- See how this has affected clerkships here at UTSW

You grade the student

- Punctual to rounds and shows good effort
- Writes thorough progress notes on his patients
- Turns in an H&P to you to grade that is complete and attaches 3 articles backing up his work-up of the patient
- Appears professional every day
- Appears to be easy going with the team

What qualities make a
great student?

Qualities of a Great Student

- Thorough
- Professional
- Able to perform an accurate history and physical
- Able to communicate facts accurately and in a concise manner
- Superior knowledge base
- Takes initiative for patient care

What qualities make a
bad student?

Qualities of a bad student

- Unable to perform a history and physical
- Does not understand the plan of care for the patient
- Disorganized
- Cannot present well
- Poor knowledge base
- Casual observer- “lost in the action”

What qualities make an
average student?

Average student

- Thorough
- Professional
- Can adequately perform H&P
- Average knowledge base
- Involved in patient care
- Able to communicate findings of H&P

What types of evals have been used?

- One study (1987)
 - 101 schools out of 124 returned survey of their grading system
 - 69 school used descriptor terms
 - 28 used letter grading
 - 4 used numerical grading system

Magarian GJ. *Academic Medicine*. 1990; 65:636-639

What types of evals have been used?

- 5 point scale from 1-5
- Below average, average, above average, superior
- Meets expectations, exceeds expectations, etc.
- Can be recommended to most competitive residency programs

The Problem: Clinical Evaluation

- Lack of meaningful comments by evaluators
- Need to address professionalism
- Insufficient definition of evaluation criteria

The Problem: Clinical Evaluation

- Inter-observer variability
- Late submission of evaluations or lost evals
- Delay in feedback to students

One Answer: RIME

- Introduced in 1999 at USUHS
- Method of formal evaluation and feedback session
- Systematic set of global terms describing progressive student performance

*Pangaro, LN. Academic medicine. 1999; 74:1203-1207

RIME

- Reporter
- Interpreter
- Manager
- Educator

Observer

- A student in pre-reporter status
- Not meaningfully contributing to patient care activities
- Failing student

Reporter

- Accurately and reliably assesses and communicates the clinical information
 - Interviewing the patient
 - Physical exam
 - Oral presentations
 - Progress notes

Reporter

- Answers the “what” questions
- Hard worker and responsible
- Works well with patients and staff

Reporter example

- Ex: Student reports on a patient with altered mental status and states that the sodium is 120, but can't recognize that that is the most likely cause of the AMS.
- Example of “what” questions-
 - “What is wrong or abnormal?”
 - Answer- “The patient has AMS. The patient has a Na of 120.”

Reporter example

- “My patient has a fever”
- What was the temperature?
- Answer: “The temperature was 38.5.”
- Why do you think they have a fever?
- “ I am not sure. It could be a lot of things.”

Interpreter

- Has independent, critical thinking
- Prioritizes the problem list
- Creates a differential diagnosis without prodding
- Can answer “why” questions

Interpreter example

- Ex: Student now recognizes that Na^+ of 120 is abnormal and can give a differential diagnosis of the different causes.
- Example of “why” questions-
 - “Why would the patient have a sodium of 120?”
 - Answer- “The differential of euvolemic hyponatremia includes SIADH, water intoxication, or hypothyroidism.”

Interpreter example

- “My patient has a fever”
- What was the temperature?
- Answer: “The temperature was 38.5.”
- Why do you think they have a fever?
- Answer: “I think that it might be pneumonia or possibly line sepsis from the central line.”

Manager

- High degree of direct involvement in patient care
- Level expected of a Sub-I
- Proposes diagnostic and therapeutic actions and options applied to individual patient
- Makes decisions with understanding of patient needs
- Suggests next step for patient

Manager example

- Ex: The student can distinguish between the different causes of the hyponatremia and present both a work-up and a treatment plan.
 - If the student doesn't get the right answer but shows good thought process, that would still count
- The student above now can recommend fluid restriction as a treatment for the patient with hyponatremia, but may not show the higher level thinking to explain the pathophysiology or how to monitor the treatment once started on their own initiative.

Manager example

- “My patient has a fever”
- What was the temperature?
- Answer: “The temperature was 38.5.”
- Why do you think they have a fever?
- Answer: “I think that it might be pneumonia or possibly line sepsis from the central line.”

Manager example

- What would you like to do?
- Answer: “The patient also was found to be neutropenic today, so I think that we should do blood cultures times two, urine culture, CXR, and start empirically on Cefepime.

Educator

- Poses questions and independently seeks answer
- Shares new knowledge , teaches others, becomes a leader
- Self-directed learning
- Looks to the current literature to answer the questions
- Can answer the “How” questions

Educator example

- Ex: The student has figured out the cause of the hyponatremia and investigated the literature to see which therapy is proven to have benefits without any prompting.
- Example of “how” questions-
 - “How does the sodium level affect altered mental status?”
 - How does fluid restriction work for the treatment of SIADH?
 - Based on the literature, how effective is this demeclocycline for SIADH refractory to fluid restriction?
 - How can we assess if it is working?”

Educator example

- What would you like to do?
- Answer: “The patient also was found to be neutropenic today, so I think that we should do blood cultures times two, urine culture, CXR, and start empirically on Cefepime.

Educator example

- How effective is this?
- Answer: I found an article in last year's NEJM that showed that treating neutropenic patients with fever empirically with Cefepime was equally as effective as Vanc/Ceftazidime.

You grade the student- Student #1

- Punctual to rounds and shows good effort
- Writes thorough progress notes on his patients
- Turns in an H&P to you to grade that is complete and attaches 3 articles backing up his work-up of the patient
- Appears professional every day
- Appears to be easy going with the team

You grade the student- Student #1

- Daily presentation
 - Student: "Mr. Jones is our 45-year old male who was admitted with chest pain. He is without complaints today and has no changes on physical exam. His data also show no changes in his EKG, labs, or CXR."
 - "He has ruled out for MI and our plan is to discharge him home with possible outpatient stress test."

You grade the student- Student #1

- Attending: "Why do you want to do this?"
- Student: "He has no more chest pain and I think that this is likely noncardiac, but he should get a stress test to risk stratify this."
- Att: "Why do a stress test at all?"
- Student: "Because that is what the guidelines say."

You grade the student- Student #2

- Usually punctual but sometimes comes in late to rounds
- Writes progress notes that are thorough, but he sometimes forgets to do them in the morning
- Turns in an H&P to you that is very complete with 4 references to support his plan on the patient
- Appears professional and is easy going

You grade the student- Student #2

- Daily presentation
 - Student: "Mr. Jones is our 32-year old female with diabetes who was admitted with cellulitis. She note improvement of her rash on the leg today and has a decrease in warmth and erythema on the right leg on physical exam. The initial lesion was 4 cm but is now 2 cm in diameter. Her blood cultures are negative for 2 days.
 - "I would like to discharge her today on oral Clindamycin and Levaquin for 7 more days."

You grade the student- Student #2

- Attending: "Why do you pick those antibiotics?"
- Student: "She was initially treated with Vancomycin and Timentin and Sanford says that this is a good combination that we can use for this disease."
- Att: "Are there any other antibiotic options for this patient?"
- Student: "Sanford also says that we can give Keflex."

How can you make this
work for you at UTSW?

How can this work for you?

- Educate the faculty
- There has to be buy-in to the change.
- Must meet with the students at mid-rotation for feedback
- Meet with students at end of the rotation for feedback
- Use the descriptive terms when talking with the students and tell them how they can get to the next level

Does RIME work at UTSW?

Internal Medicine experience (Pre-RIME)

<u>Grade</u>	<u>1999-2000</u>	<u>2000-2001</u>	<u>2001-2002</u>
Honors	38%	41%	55%
Near Honors	42%	33%	21%
High Pass	15%	18%	21%
Pass	3%	4%	3%

Does RIME work at UTSW?

<u>Grade</u>	<u>2002- 2003</u>	<u>2003- 2004</u>	<u>2004- 2005</u>	<u>2005- 2006</u>
Honors (Educator)	41%	44%	44%	47%
Near Honors (Manager)	35%	38%	43%	42%
High Pass (Interpreter)	11%	14%	13%	7%
Pass (Reporter)	3%	1%	2%	1%

What do I think?

- Good points
 - RIME is an objective attempt to provide subjective feedback to students
 - Allow us to put them in a category of where they are and what they can do to get to the next level
 - Allows the students to have a target to shoot for and they know what they need to do to get to the next level
 - Fewer student complaints about grades since using RIME

What do I think?

- Bad points
 - RIME is sometimes difficult to use in all situations
 - Students sometimes are in between categories
 - Students adapt quickly
 - The students work product has improved greatly over the past 3 years and has led to the rise in the number of Honors
 - Many faculty are not giving mid-rotation feedback and just using the criteria at the end of rotation to assign grade
 - Leads to inaccurate grading and grade inflation

Summary

- We all struggle to find the “perfect” evaluation tool
- RIME is a good option
- However, it needs to be adapted to your situation
- Also need to educate faculty
- Yearly tweaking of the system