VCU

VIRGINIA COMMONWEALTH UNIVERSITY

School of Medicine

# From Normative to Narrative: transitioning a clerkship curriculum and grading system

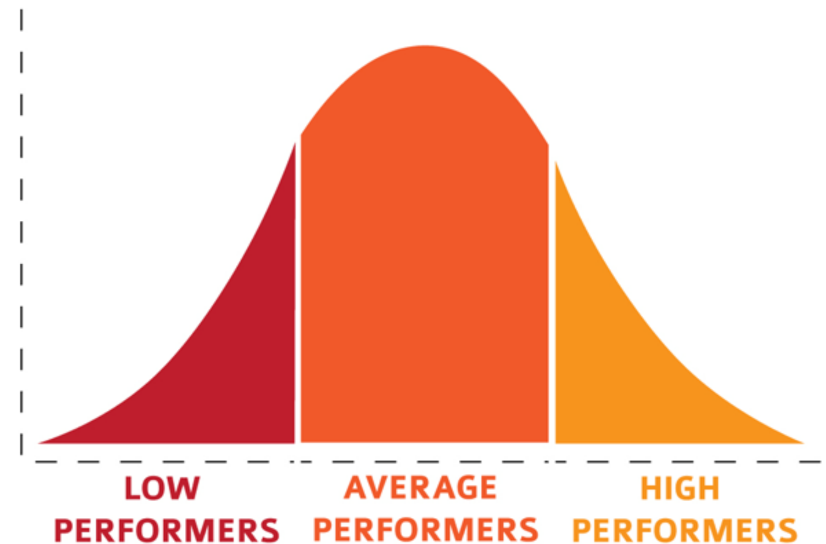
**Steven E. Bishop, MD**
**Homan Wai, MD**

# Disclosures

- None

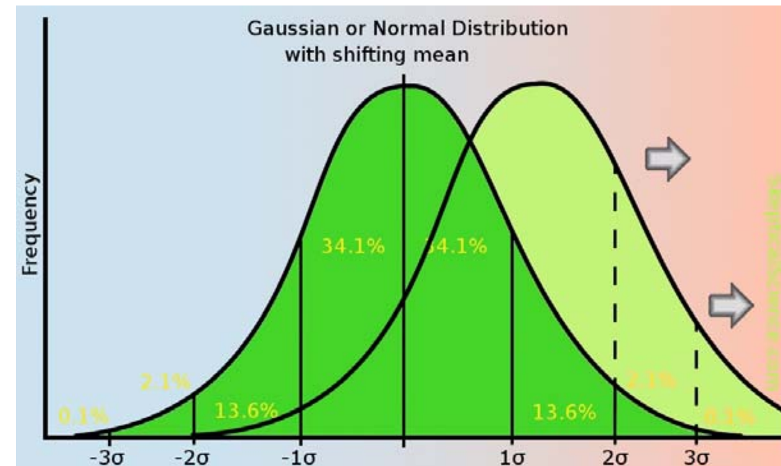
# What's wrong with normative?

- Normative used for many years
- Allows comparisons between students
  - (helpful to GME)
- Makes "intuitive" sense to many faculty



# The “dark” side of normative

- *Forces* an artificial distribution on a group of smart, highly accomplished students
  - In effect creates a “shifted” bell curve out of an already highly intelligent, motivated group
  - Unclear benefit to patients or clinical skills
- Often a single assessment (i.e. shelf) becomes the dominant factor in a grade
- Breeds competition rather than emphasis on clinical skills and patient care

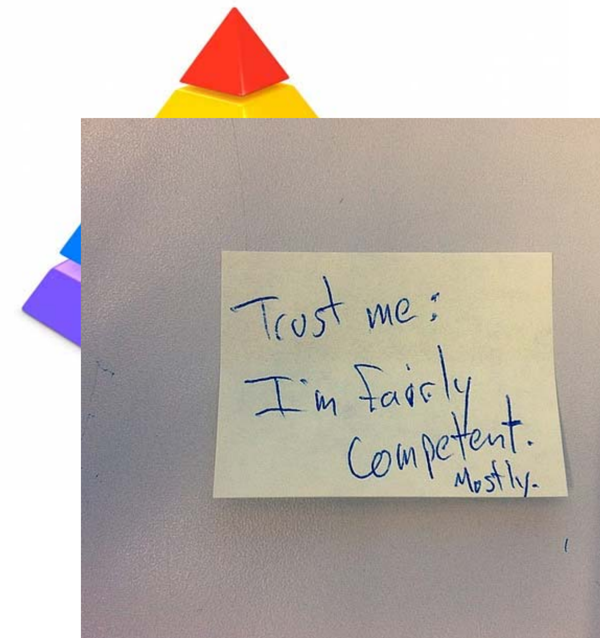


# What's our job in UME?

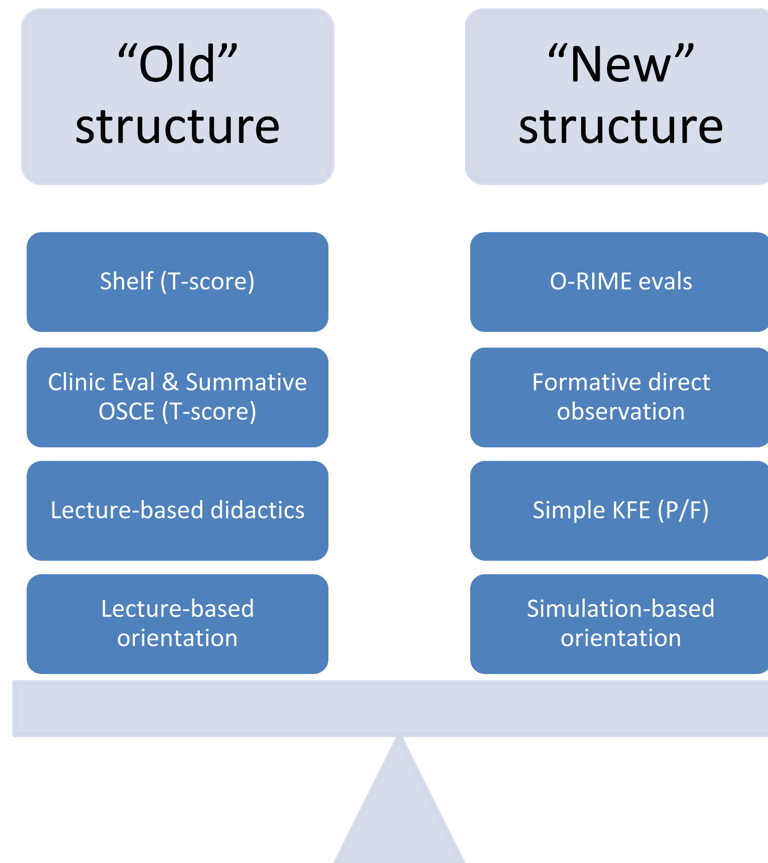
Stratify students—make it easy for GME to sort applications?

Certify competence for supervised practice?

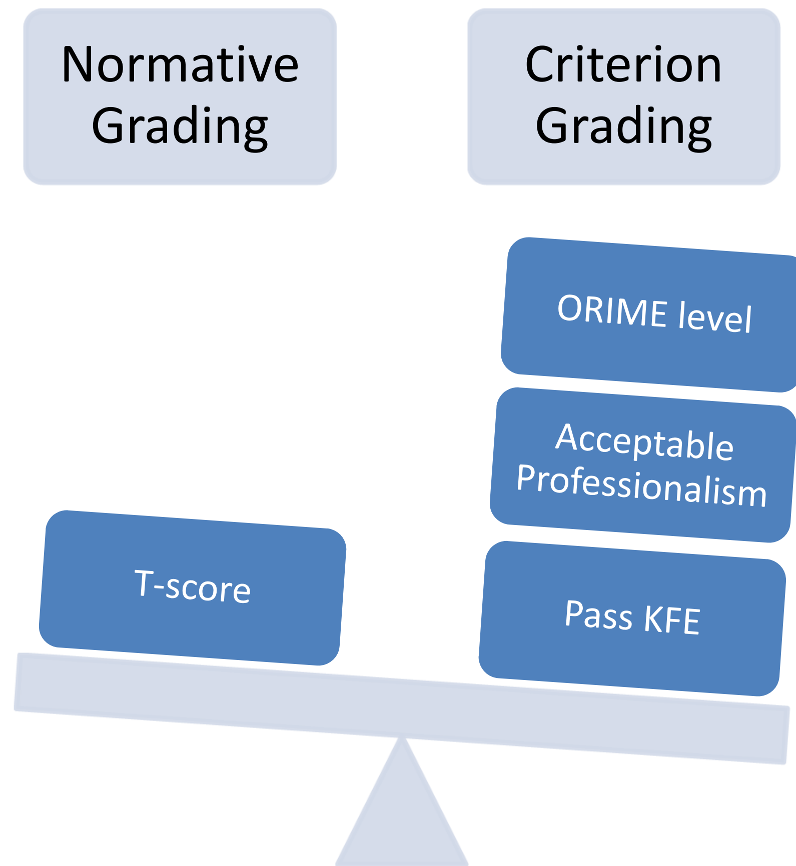
A bit of both?



# Changing the curriculum



# Establishing the criteria



# Establishing the criteria

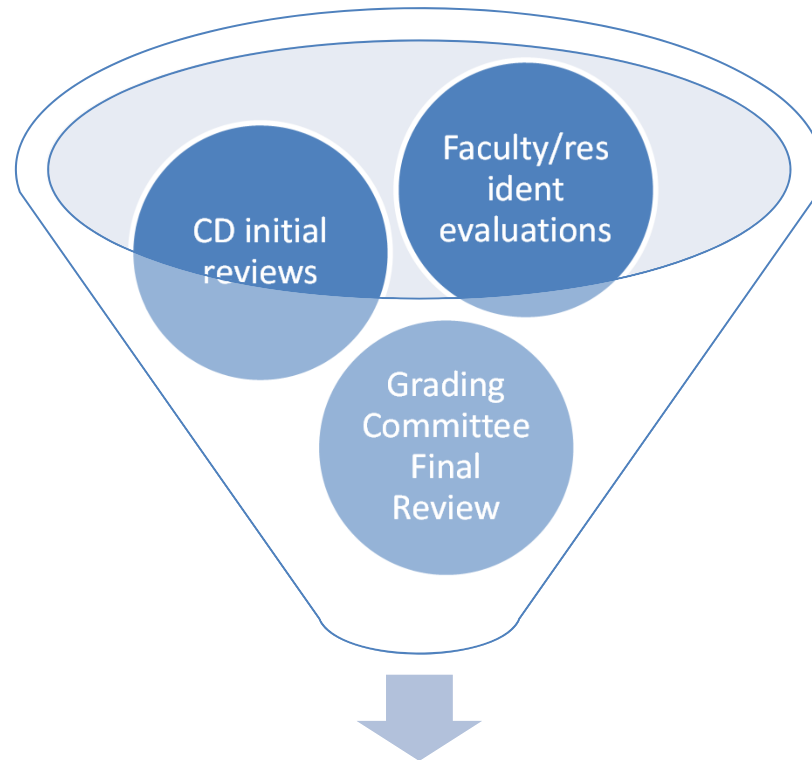
“Old” normative

| Pass | High Pass | Honors |
| --- | --- | --- |
| • T score >40 | • T-score >50 | • T-score >55 |

“New” criterion

| Pass | High Pass | Honors |
| --- | --- | --- |
| • Pass KFE<br>• Reporter<br>• Professionalism | • Pass KFE<br>• Interpreter<br>• Professionalism | • Pass KFE<br>• Manager<br>• Professionalism |

# How the ORIME sausage gets made!




Final ORIME designation

# Extra special note!

- Curriculum office staff concerned about grade ***deflation*** using ORIME
- Determined we must use lower thresholds for Honors and HP in rotations 1-3;  also an attempt to correct "timing" bias in student schedules
- Rotations 1-3:
  - Honors = interpreter or manager
  - HP = reporter with exceptional comments
- Rotations 4-6:
  - Honors = manager
  - HP = interpreter

# ORIME summative evaluation

**RIME Framework Instructions:**

Please consider all of your interactions with the above student and determine whether you believe their overall performance while working with you is most characteristic of a "Reporter," an "Interpreter," or "Manager" based on the RIME framework descriptions of each level of performance below.

**Observer:**

Does not actively contribute to patient care; passive participant in rounds; does not report information or meaningfully add to clinical discussions.

**Reporter:**

Accurately gathers history and performs basic physical examination; Clearly organizes and communicates data, orally and written; Able to recognize normal from abnormal and identify a new problem; reliable: day-to-day, punctual, follows-up.

**Interpreter:**

Can do everything described under "reporter" plus the following: demonstrates independent and critical thinking; prioritizes problems and develops a differential diagnosis; interprets follow-up test results; shows a higher level of knowledge, increased skill in selecting data which support diagnosis; and can applying test results to specific patients.

**Manager:**

Can do everything described under "reporter" and "interpreter" plus the following: actively and directly involved in patient care; decides when action needs to be taken; proposes and selects among different diagnostic and therapeutic options; tailors the plan to the particular patient

Educator:

Has mastered the skills in reporter, interpreter, and manager; seeks out literature and does in-depth research into a central clinical question; appraises the quality of relevant scientific literature; takes a role in educating other members of the team.

**Select student performance:**

**Overall Summative for this student:**

SAVE

VCU School of Medicine

VIRGINIA COMMONWEALTH UNIVERSITY

# Acceptable professionalism = self-directed learning

- Completion of at least 42 formative direct observation evaluations
  - Student-driven process

- Attendance at all didactic sessions (unless excused)

- Completion of at least 500 MCQ's on question bank with >75% correct

# Direct observation

- Point of Education (POE) evaluations
- Based on EPA key functions
- Behavior-based
- Focused on 1-2 skills at a time
- Student-generated via text-based platform

# Which EPA's for direct observation?

- EPA 1: gather a history and perform a physical examination
- EPA 3: order and interpret common diagnostic and screening tests
- EPA 6: provide an oral presentation of a clinical encounter
- EPA 9: collaborate as a member of an inter-professional team

# Point of Education Evaluations

CREATE EVALUATION

SELECT CLERKSHIP:

Internal Medicine

SELECT EVALUATOR:

SELECT STUDENT FROM ROTATION 6:

ORDER AND INTERPRET DIAGNOSTIC TESTING

- [ ] Gathered and prioritized data according to the patient's illness
- [x] Interpret results of basic studies appropriately.
- [ ] Order tests, analyze and communicate results appropriately.

PROVIDE AN ORAL PRESENTATION OF A CLINICAL ENCOUNTER

- [x] Gathered and prioritized data according to the patient's illness
- [ ] Present cases to colleagues appropriately.

SUBMIT

**EPA 3: Order and interpret diagnostic testing**

KF 2: Interpret results of basic studies appropriately.

| | |
|---|---|
| Knew or independently determined appropriate ranges for results. | Yes |
| Interpreted results accurately based on known or provided ranges. | No |
| Evaluated urgency of results. | Yes |
| Eliminated common insignificant or explainable abnormalities. | Yes |
| Accounted for sensitivity, specificity, and PPV | N/A |

VCU School of Medicine

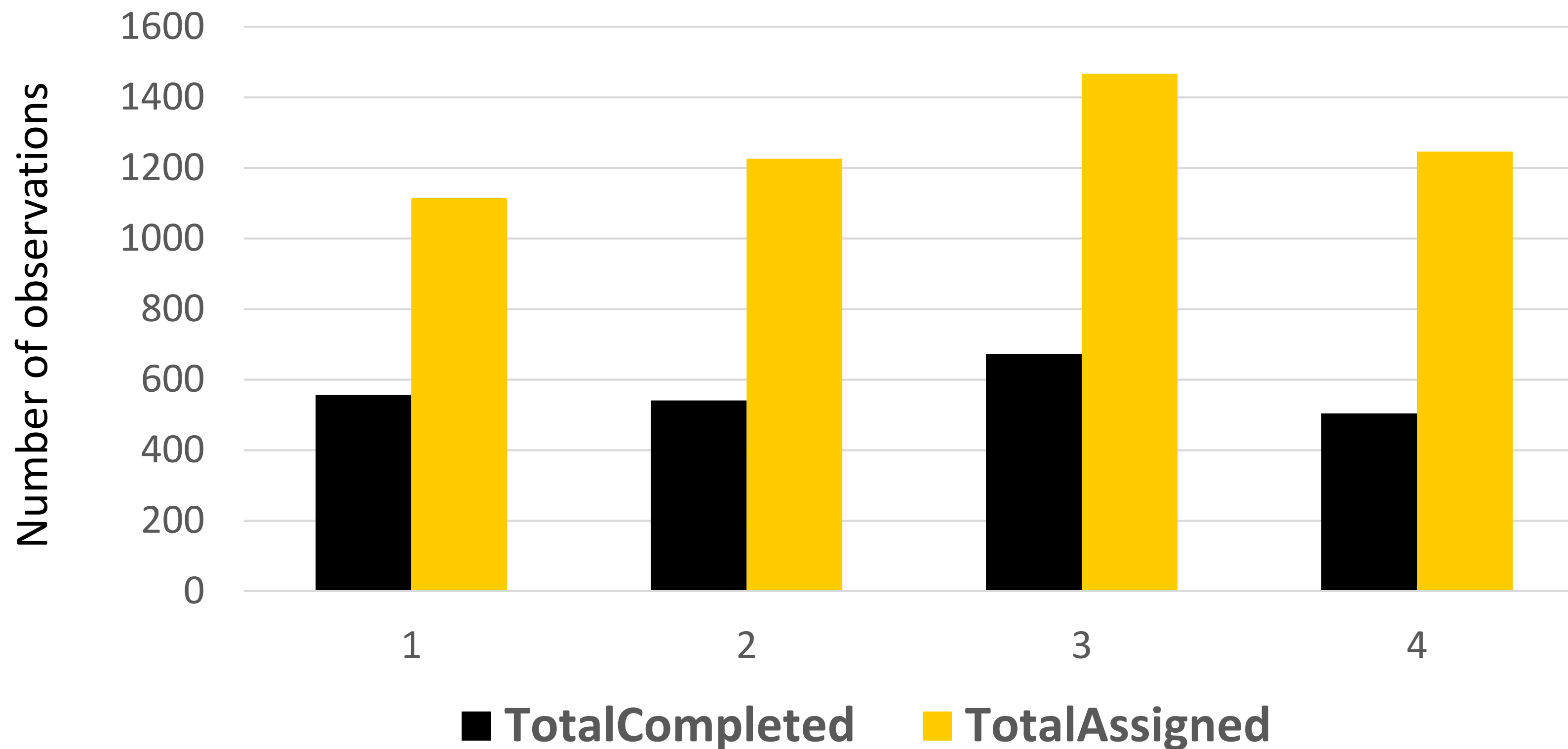
VIRGINIA COMMONWEALTH UNIVERSITY

# Key Features Exam

- Developed by Valerie Lang and folks at Med U (Now Aquifer)
- Test of clinical reasoning vs. pure fact-based knowledge
- For this pilot phase ,“pass” set at 2SD below mean from national sample (Lang et al.)
- Piloted exam with local clerkship directors, deans and 35% appeared to be reasonable for passing/borderline competent student

# May 1, 2017

# Direct observations



# How much feedback did they get?

Median word count per student

1000
800
600
400
200
0

Rotation 1 Rotation 2 Rotation 3 Rotation 4

■ AY 16 ■ AY 17

# ORIME designations

Percent achieving designation

80
60
40
20
0

Rotation 1
Rotation 2
Rotation 3
Rotation 4

Manager
Interpreter
Reporter
Observer

**Observer** **Reporter** **Interpreter** **Manager**

## Grade outcomes by rotation and AY

Percent achieving grade

80
70
60
50
40
30
20
10
0

AY 16 Rotation 1
AY 16 Rotation 2
AY 16 Rotation 3
AY 16 Rotation 4
AY 17 Rotation 1
AY 17 Rotation 2
AY 17 Rotation 3
AY 17 Rotation 4

Fail   Pass   High Pass   Honors

The Great Inflation

Bubble burst: rubric shift

# Key Features Exam Scores

64
62
60
58
56
54
52
50
48

Rotation 1 Rotation 2 Rotation 3 Rotation 4

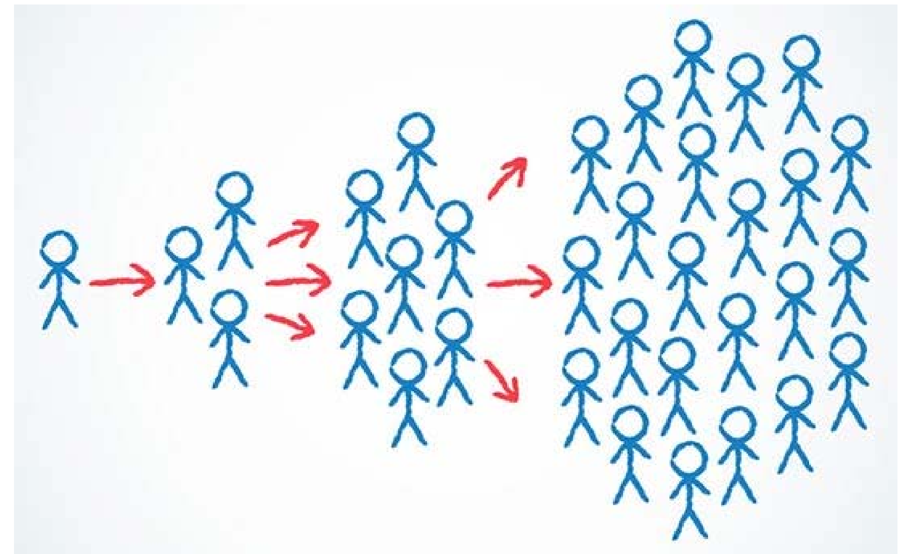
Average Median

# Conclusions

- Successfully transitioned to criterion-based, narrative-focused grading structure
  - The IM clerkship did not devolve into chaos without a number-based evaluation or a shelf exam
- Attempting to “correct” for timing bias is fraught with unintended consequences and should be approached carefully
- Total feedback is increased
  - Anecdotally it is high-quality and actionable per student reports
- Getting faculty/residents to perform direct observations is challenging
  - Requires ongoing reinforcement at evaluator and student level
  - Other evaluations/demands on evaluator time MUST be reduced to off-set direct observation time; we accomplished this by simplifying the summative evaluations

# Next steps

- Pilot deemed successful by Curriculum Council
- All clerkships adopted RIME & criterion-based grading
- Faculty development underway across the institution



# Thank you!

- Homan Wai, MD (INOVA clerkship director)
- Stephanie Call, MD MSPH
- Allison Dubinsky
- Gilda Harris-Howard
- John Nestler, MD
- Joel Browning
- Brie Dubinsky
- Thomas Bryan
- Gilda Harris-Howard

VCU School of Medicine

VIRGINIA COMMONWEALTH UNIVERSITY