

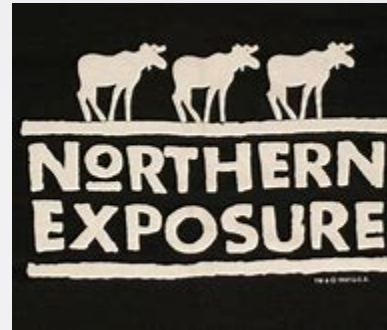
NBME Family Medicine Subject Exam: Utilizing for Maximum Impact

B. Earl Salser Jr. MD
Associate Professor
UAB Department of Family and Community Medicine

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

Knowledge that will change your world

My Journey



NBME Family Medicine Subject Exam: The Basics

- Computer based exam
- 110 questions
- Modular Family Medicine Core + chronic + MSK
 - Adult medicine/MSK ($> \frac{1}{2}$); Pediatrics ($< \frac{1}{4}$); Ob/Gyn ($< \frac{1}{4}$)
- Time allotted: 2 hours 45 minutes
- Questions: developed by family physicians

NBME Family Medicine Subject Exam: UAB History

- Started using test on all 4 campuses >15 years ago
- Utilized uniformly at all 4 regional campuses
 - Birmingham, Tuscaloosa, Huntsville, Montgomery



NBME Family Medicine Subject Exam: Incorporation into Clerkship

- **Grade weight distribution:**
 - 75 % clinical evaluation/oral examination/fmCases
 - 25 % NBME subject exam
- **Honors/Pass/Fail (NBME exam)**
 - Honors: 78 or higher
 - Pass: 58-77
 - Fail: below 58
- **NOTE: High Pass utilized in overall grading**

Preparing Students: Helpful Tips

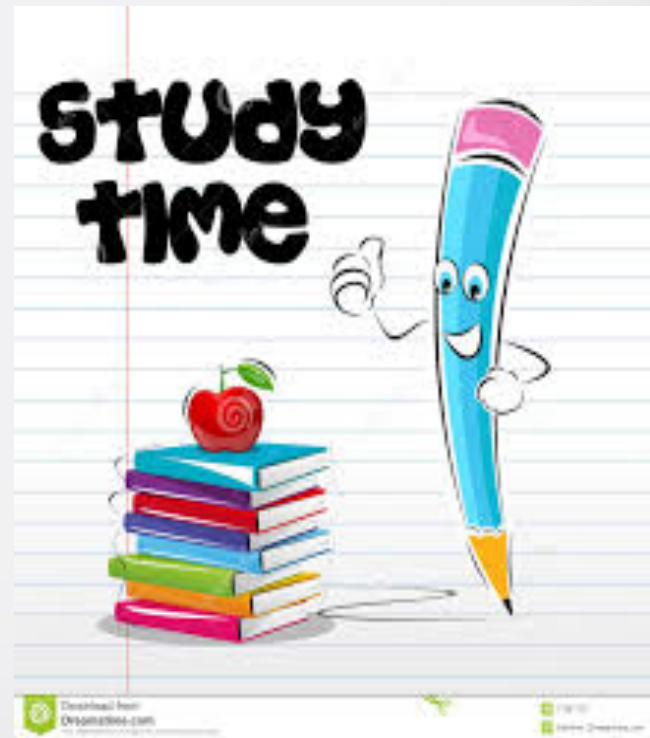
- Clerkship directors: **Take the exam!**

FACULTY REVIEW OF SUBJECT EXAMINATIONS: “Medical school faculty or other medical education institution staff may preview an exam to determine if it is appropriate for use. A free, online service that allows the review of web-based subject exams is available via the NBME Services Portal.”

-- **Guide to the Subject Examination Program: High Quality Assessment Tools in Medical Education (2017)**

Preparing Students: Helpful Tips

- Provision of dedicated study time
 - UAB Bham – ½ day per week



Preparing Students: Beneficial Resources

- **Most used:**
 - CASE FILES Family Medicine
 - PreTest
 - Blueprints
 - ~~NMS Family Medicine~~



Preparing Students: Beneficial Resources

- **Question Banks**

- AAFP Board Review Questions (1000 questions)
 - Students must become member of AAFP (free registration)
 - AAFP app access
- U world Q Bank

- **Aquifer FM Cases**

- Pro: Good for exposure/knowledge gaps
- Con: Time commitment

Preparing Students: Beneficial Resources

- **Preventative Medicine**

- Immunization Schedules (pediatric, adult)
- Screening guidelines (review week of test):

www.uspstf.gov

- Utilize app: **AHRQ ePSS** app

Prep Resources Students Are Using

- Most used:
 - Underground Clinical Vignettes
 - Pretest
- High variability based on specialty:
 - First Aid, Case Files, Blueprints, AAFP qb



NBME Family Medicine Shelf Exam: Annual Academic Year-End Report

- Provided by NBME
- Data averages for first time takers and all takers (remediating grades added)
- Compares your institution to national averages
- Comparative data for 4wk/6wk/8wk rotations

NBME Subject Exam: Medical Knowledge Performance Indicators

- Comparative Data compared to national average regarding broad medical topics
- **Performance indicators** are coded within 3 major content areas:
 - 1 – Organ Systems/Topic
 - 2 – Physician Task
 - 3 – Patient Group (age associated)

NATIONAL BOARD OF MEDICAL EXAMINERS®

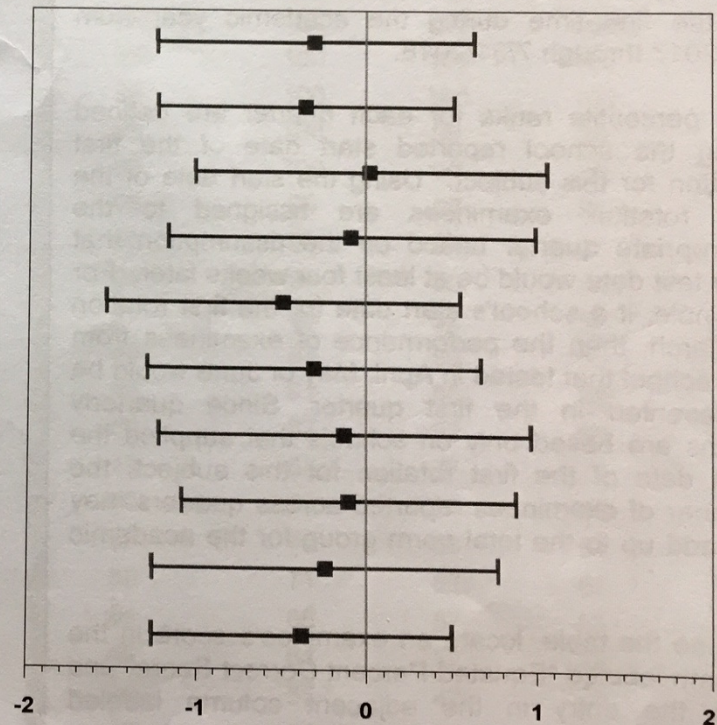
Subject Examination Program

Modular Family Medicine Core + Chronic + Musculoskeletal Examination

Performance of First-Time Takers During the 2017-2018 Academic Year
8/1/2017 - 7/31/2018

Medical School: 001-010 U Alabama Birmingham School of Medicine

- 1-Musculoskeletal System and Skin & Subcutaneous Tissue
- 1-Cardiovascular and Respiratory Systems
- 1-Behavioral Health and Nervous System & Special Senses
- 1-Renal & Urinary Systems and Female and Male Reproductive Systems
- 2-Chronic Care
- 2-Health Maintenance, Pharmacotherapy, Intervention & Management
- 2-Diagnosis, including Foundational Science Concepts
- 3-Pediatric (0 - 17)
- 3-Adult (18 - 65)
- 3-Older Adult (66 and older)



Challenges and Opportunities: Preparing Students for Success

- **Challenge: Regrouping for didactics**
 - Community preceptors utilized all over the state (travel, etc)
 - Reduced clinical time
- **Opportunity:**
 - High yield didactics (Focus on gaps)
 - TBL – utilizing gamification (FM Cases)
 - Zoom web connectivity (or other platform)

NBME Integration Into the Clerkship

How much should the exam count?

- Internal medicine NBME can increase or drop the final grade based on exam score. Cutoffs were based on UW historical averages.
- OB, Surgery, EM, Neuro all use an adjustment to GPA, ranging from 0.08-0.2 points
- Psych has a complicated equation based on historical averages at the UW

Proposal for FM: keep the grade adjustment as-is

What should our cut-offs be?

Percent correct:
Mean 76.1
SD 8.0

Equated Percent Correct Scores					
	Academic Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
N	2,662	645	540	618	618
Mean	76.1	73.2	75.4	76.9	79.2
SD	8.0	8.0	7.5	7.8	7.3

Honors Range:
78-87

Examination Components Administered	Hofstee Compromise
	Range of Acceptable Minimum Honors Scores
Core + Chronic Care + Musculoskeletal	78 to 87

Acceptable Minimum
To Pass:
60-62

Examination Components Administered	Modified Angoff	Hofstee Compromise	
	Recommended Passing Score	Range of Acceptable Minimum Passing Scores	Recommended Passing Score
Chronic Care	57	50 to 62	61
Chronic Care	57	50 to 62	61
Core + Chronic Care + Musculoskeletal	58	50 to 62	61

Proposal for exam score cut offs

- Honors: 1 SD over the mean = 84
- High Pass: 1 SD below and above the mean = 68 – 83
- Pass starts at the MINIMUM acceptable passing score = 50-67
- Fail is 49 or less

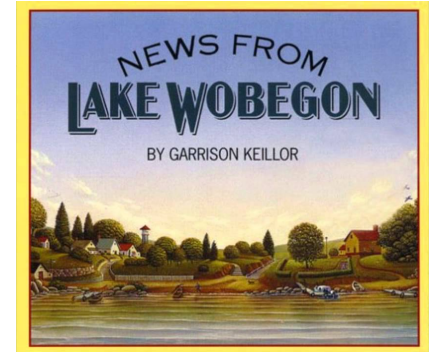


We can revisit this after the first year or two of using the NBME

Should we revisit the “Honors GPA”?

We require the highest bar to achieve honors from a clinical standpoint and yet have the highest proportion of honors in every class.

Other clerkship honors cutoff range from 4.5-4.8



Would we give more accurate feedback if we made it *easier* to get honors from a GPA standpoint?

Proposal: drop the honors cutoff to 4.7