Family Medicine Accelerated Track (F-MAT)

Texas Tech University Health Sciences Center
School of Medicine

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Assistant Dean for Educational Affairs
Regional Chair Department of Family Medicine
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What is F-MAT?

3 year accelerated M.D. curriculum

Purpose:

• Increase number of students choosing a career in FM
• Prepare primary care physicians more efficiently with less cost

Liaison Committee Medical Education (LCME) approved February, 2010
University of Arizona  1972

- Implemented a 3 yr curriculum 1972
- 140 weeks instruction
- Compressed 72 wk basic science into 56 wk
- 1977 established a new 4 yr curriculum
- Major problems: intensity class work, insufficient vacation, inadequate time to teach basic science¹
Accelerated Residency Programs

• 1990’s 15 ARP’s
• Combined MS 4 and PGY-1
• Successful outcome measures
• ABFM and ABIM found pilots to be “incredibly successful”
• Discontinued by 2002 due to ACGME rules which prohibit allowing trainees to begin residency without M.D.
Why We Chose Family Medicine

- Shortage of primary care physicians
- Declining student interest in primary care
- >90% FM grads select primary care
- Good fit for grant funding opportunities
- Address specific needs for rural west Texas
- FM faculty/residencies highly supportive
F-MAT Setting

- 3 campuses of TTUSOM (Amarillo, Lubbock, Permian Basin)
- Years 1&2 spent in Lubbock
- Year 3 on regional campus of eventual FM residency
- Amarillo (4), Lubbock (5), Permian Basin (3)
- Represents half of annual FM residency slots
Student Selection Process

- First class chosen Dec 2010
- Limited to 12 students/year
- Admission criteria:
  - Expressed interest FM career during admissions process and F-MAT application
  - Academic Performance top 50%
  - Interviews with F-MAT faculty
Cost Motivators for Students

• Finish med school one year earlier about 1/2 cost.
• Reduced debt due to:
  1. One less year tuition and fees
  2. TTUHSC will provide scholarship support equivalent to one year tuition and fees
  3. Earlier realization of income as physician
• Decreasing medical school by one year offers greatest potential to reduce financial burden $160,000-$230,000²
## Current Curriculum

160 weeks of instruction

<table>
<thead>
<tr>
<th>TTUSOM Standard Curriculum</th>
<th>Texas Tech University Health Sciences Center School of Medicine</th>
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<tbody>
<tr>
<td><strong>Year 1:</strong></td>
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<tr>
<td><strong>Clinically Oriented Anatomy (11wks)</strong></td>
<td><strong>Biology of Cells &amp; Tissues (9wks)</strong></td>
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<td><strong>Early Clinical Experience 1</strong></td>
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<td><strong>Year 2:</strong></td>
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<tr>
<td><strong>Integrated Neurosciences (12wks)</strong></td>
<td><strong>Multisystem Disorders (8wks)</strong></td>
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<td><strong>Early Clinical Experience 2</strong></td>
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<td><strong>Basic Medical Spanish</strong></td>
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<td><strong>Year 3:</strong></td>
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<tr>
<td><strong>Pediatrics</strong></td>
<td><strong>Internal Med</strong></td>
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<td><strong>Continuity Clinic</strong></td>
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<td><strong>Integrative Seminar</strong></td>
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<td><strong>Year 4:</strong></td>
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<tr>
<td><strong>Neuro 4 wks</strong></td>
<td><strong>Ambulatory 2 wks</strong></td>
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### Family Medicine Accelerated Track (F-MAT Curriculum)

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<thead>
<tr>
<th>Year1:</th>
<th>Jul</th>
<th>Aug</th>
<th>Sept</th>
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<td>F-MAT1 (8wks)</td>
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<tr>
<th>Year2:</th>
<th>F-MAT1 (8wks)</th>
<th>Integrated Neurosciences (12wks)</th>
<th>Multisystem Disorders (8wks)</th>
<th>System Disorders I (9wks)</th>
<th>System Disorders II (8wks)</th>
<th>Step1 Study Time</th>
<th>Neuro (4wks)</th>
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<td>Early Clinical Experience 2</td>
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**Family Medicine Clerkship/ F-MAT2 including Geriatrics Rotation**

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<tr>
<th>Year3:</th>
<th>Pediatrics</th>
<th>Internal Med</th>
<th>OB/Gyn</th>
<th>Surgery</th>
<th>Psychiatry</th>
<th>F-MAT3 including All-Campus OSCE</th>
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<td>Mentored Clinical Experience (MCX)</td>
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<td>Integration Seminar</td>
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**Key:**
- New F-MAT Courses
- Existing Experience, New Placement
- Unchanged Courses
- Unchanged Clerkships
- Unchanged Longitudinal Experiences

*rev. July 2010*
Basic Science Changes

• Does not decrease or change basic science requirements in years 1 or 2
• Basic science curriculum is blue printed by the national licensing exam given at the end of year 2
• Due to timing of test is difficult to move basic science into 3rd year
Earlier Clinical Experiences
3 new courses

• FMAT 1 replaces an 8 wk summer break Yr 1
• FMAT 2 moves Yr 3 FM clinical +Yr 4 geriatric clinical into Yr 2
• Moves Yr 4 neurology clinical into summer break Yr 2
• FMAT 3 moves Yr 4 critical care into Yr 3
• 2 less Yr 4 clinical electives overall
Outcome Measures

- Student enrollment and successful completion
- National test scores
- Match results
- Post-Residency Board scores\(^{3-5}\)
- Leadership roles in FM program\(^{3-5}\)
- Placement after residency\(^{3-5}\)
- LCME outcome measures report due 2013
Risks Associated With F-MAT

- Fast-paced curriculum may eliminate students and discourage them from FM career
- Loss of student commitment to FM over time
- Students may choose to rank residency programs outside of TTUSOM
Barriers to Implementation

- Changes in student selection process
- Changes in expectations re: test scores
- Alternate learning tracks = risk of faculty fatigue
- Cost of alternate F-MAT track (est. $900K)
- Criticism of “dumbing down” graduates
- Residency match process - timelines
Lake Erie College of Osteopathic Medicine

- Primary Care Scholars Pathway (PSCP)
- Accelerated 3 year curriculum geared toward primary care
- Uses Independent Study learning modules + specific early primary care clinical rotations
- Linked to primary care residency programs
- Also offer traditional 4 yr pathway
4th Year – Do We Need It?

• Despite representing substantial portion of student time – has received significantly less attention than other years\(^6\)

• Yr 4 curricula should prepare students for residency

• Excessive focus on securing residency positions/ match processes

• Inadequate transition from student to physician status
Curriculum Redesign Considerations

- National consensus on goals and objectives of medical education
- Basic science requirements - reevaluation
- Earlier timing of clinical experiences
- Student selection of specialty choice
- Implications for Yr 4 redesign
Broader Implications

• Core curriculum can be taught in 3 yrs
• Increased undergraduate-med school integration could decrease burden Yr 1&2
• Critical issue: clinical experiences integrated earlier in curriculum
• Further collaboration needed to improve student transition into physician role
Selected Bibliography


3. Chang LL; Grayson MS; Patrick PA; Sivak SL “Incorporating the fourth year of medical school into an internal medicine residency: effect of an accelerated program on performance outcomes and career choice.” Teach Learn Med. 2004 Fall;16(4):361-4.


