Rural Opportunities in Medical Education

Rural-based, Longitudinal, Interdisciplinary Curriculum What have we learned?

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ROME Sites

Yr 03-04 campuses

ROME Outcomes

- Exam scores*
  - Subject exams
  - USMLE Step 2
- Clinical encounters
- Career choices
- Practice locations

Data from “Performance of Medical Students in a Non-Traditional Rural Clinical Program, 1998-99 through 2003-04”

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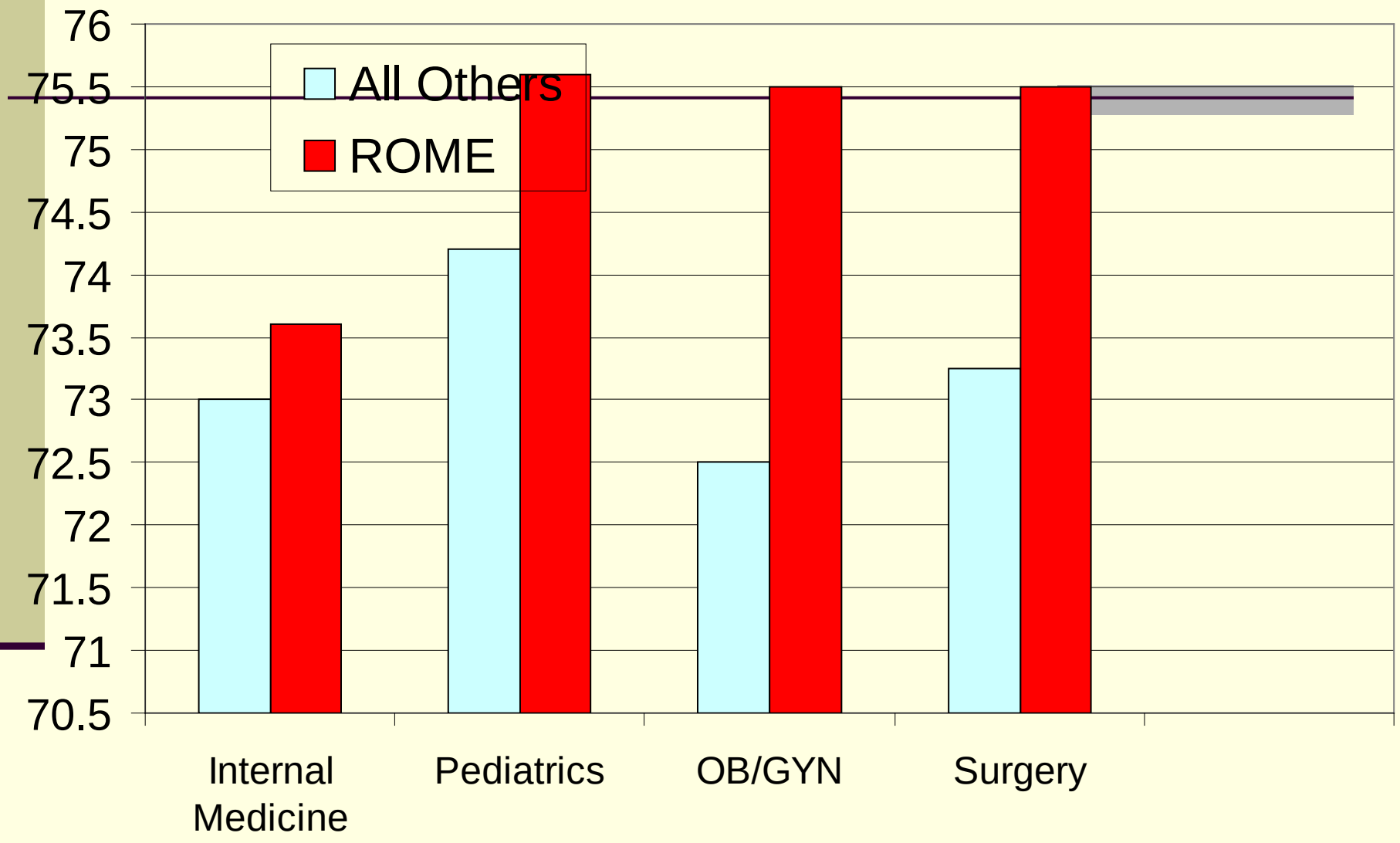
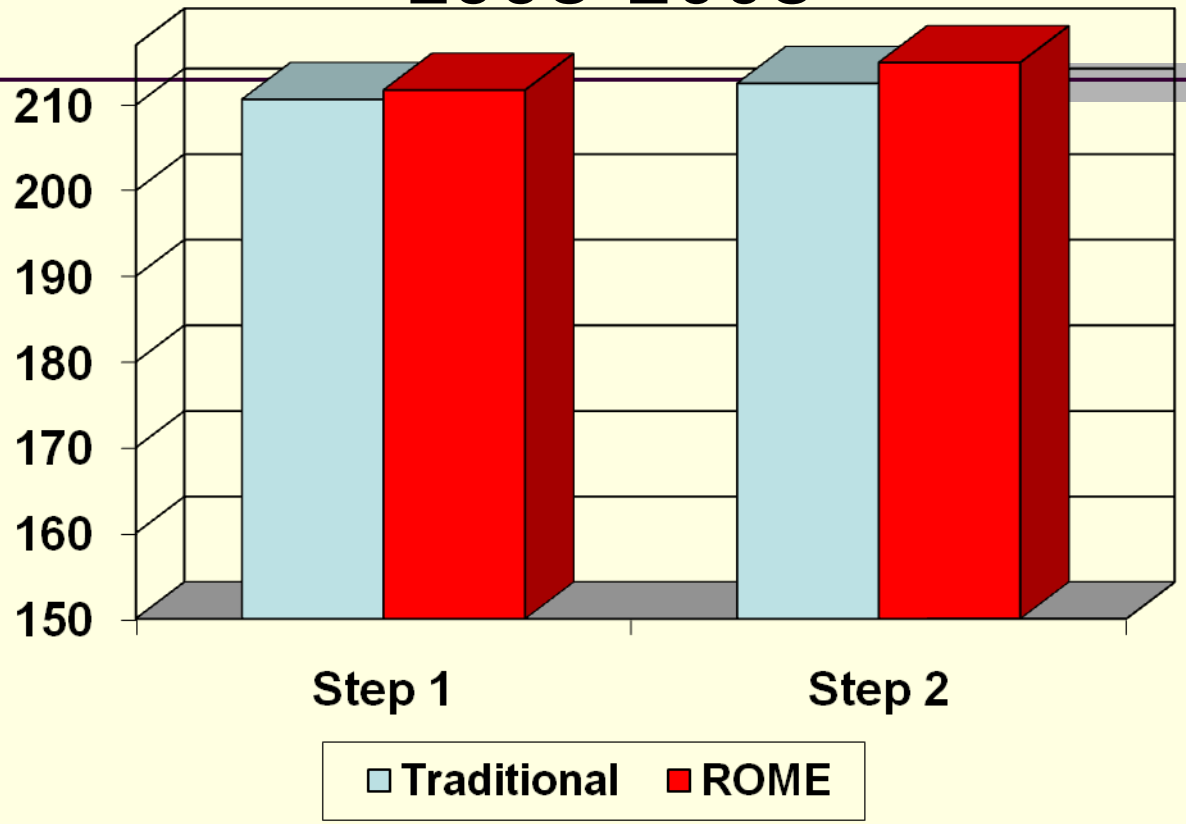
Roger W. Schauer, MD, and Dean Schieve, PhD

Comparison of Shelf Exam Raw Scores

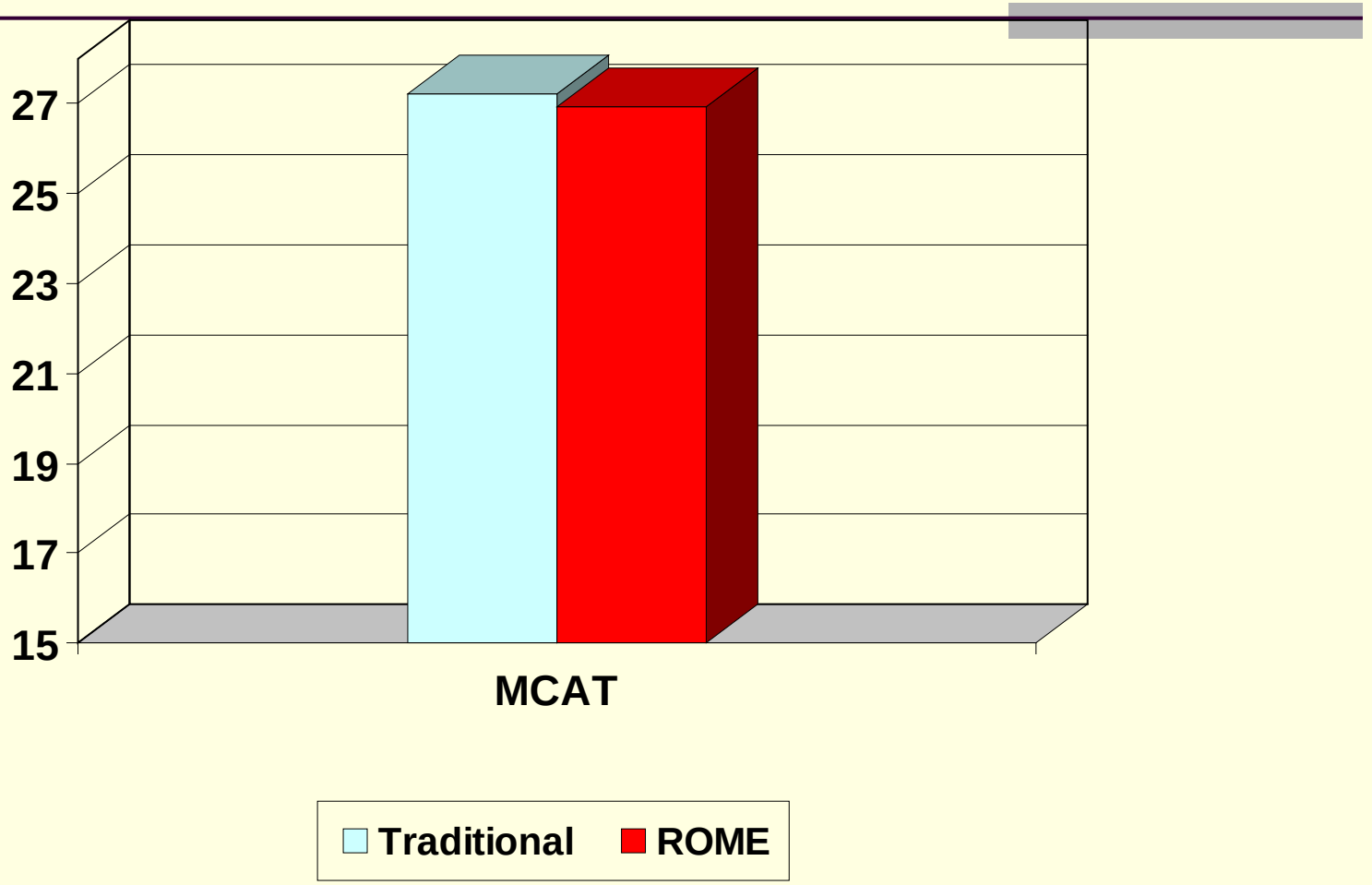
Based on Available Data from 1998 to 2003



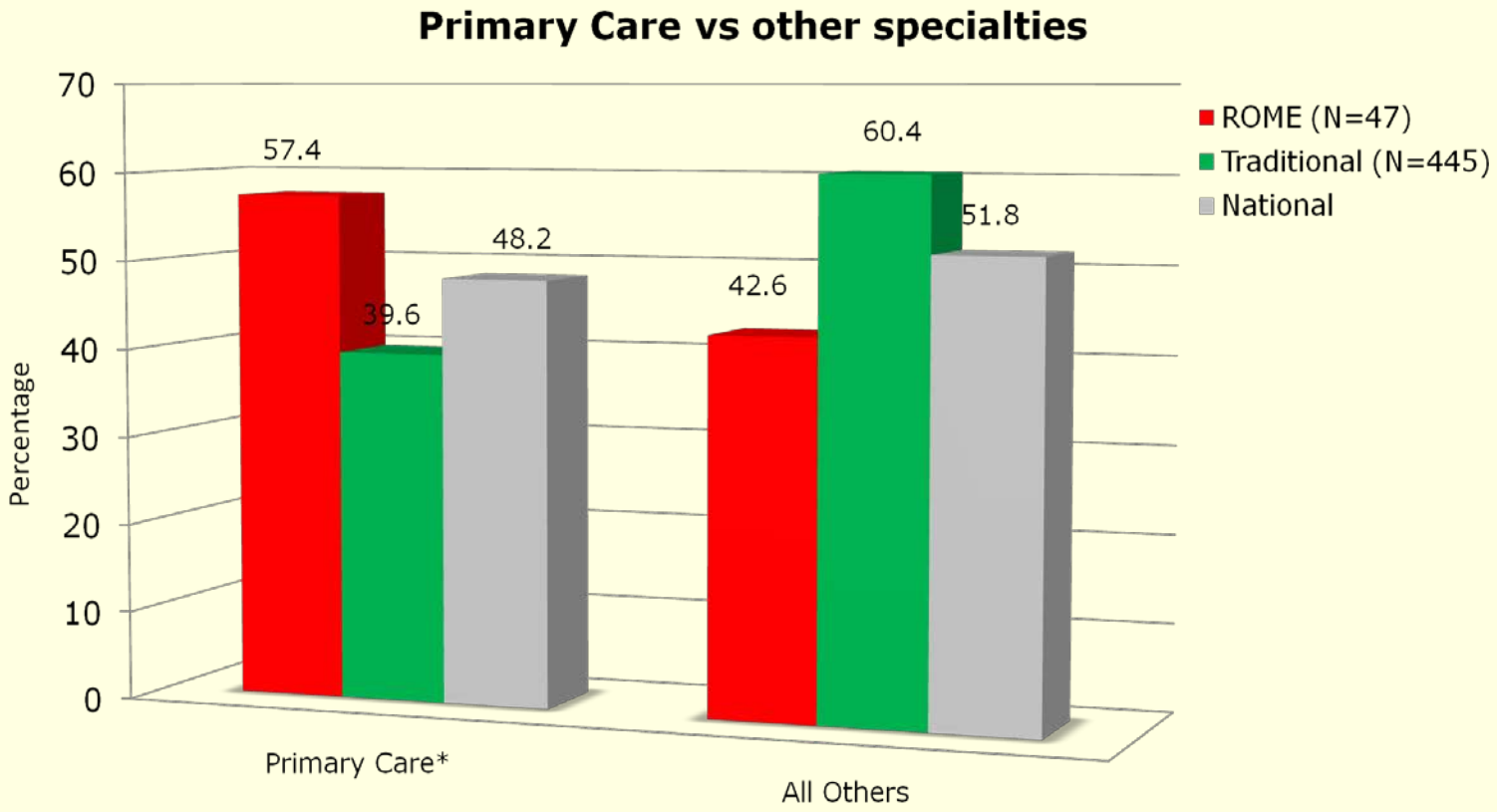
NBME Step 1 and 2 Scores 1998-2003



MCAT Scores for 1998-2003 cohort



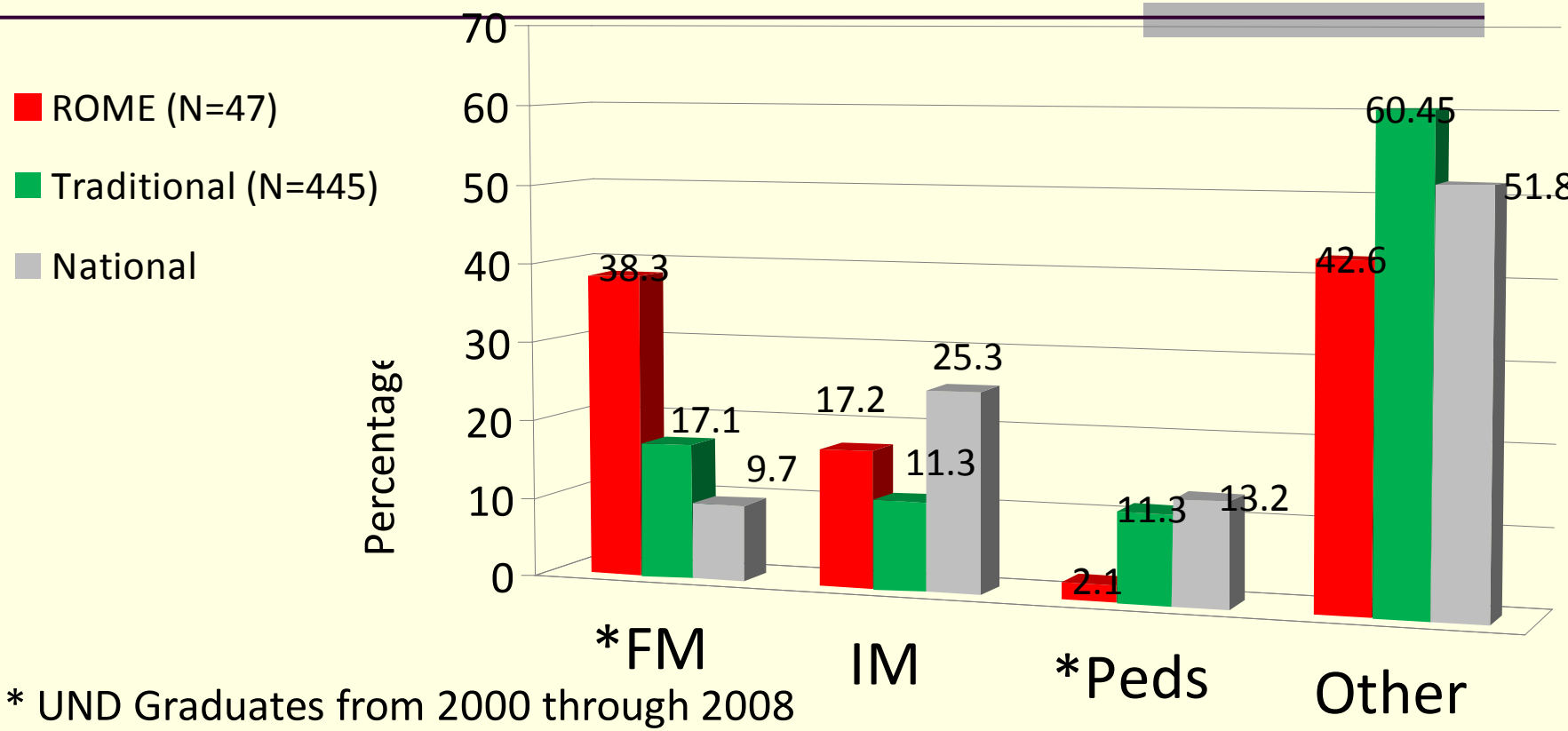
ROME vs UND grads vs national residency match



•p<0.05 Fisher's Exact Test between ROME & Traditional curriculum students only.

•National percentages are provided for reference only.

ROME student specialty selection vs traditional UND curriculum vs nationwide data*

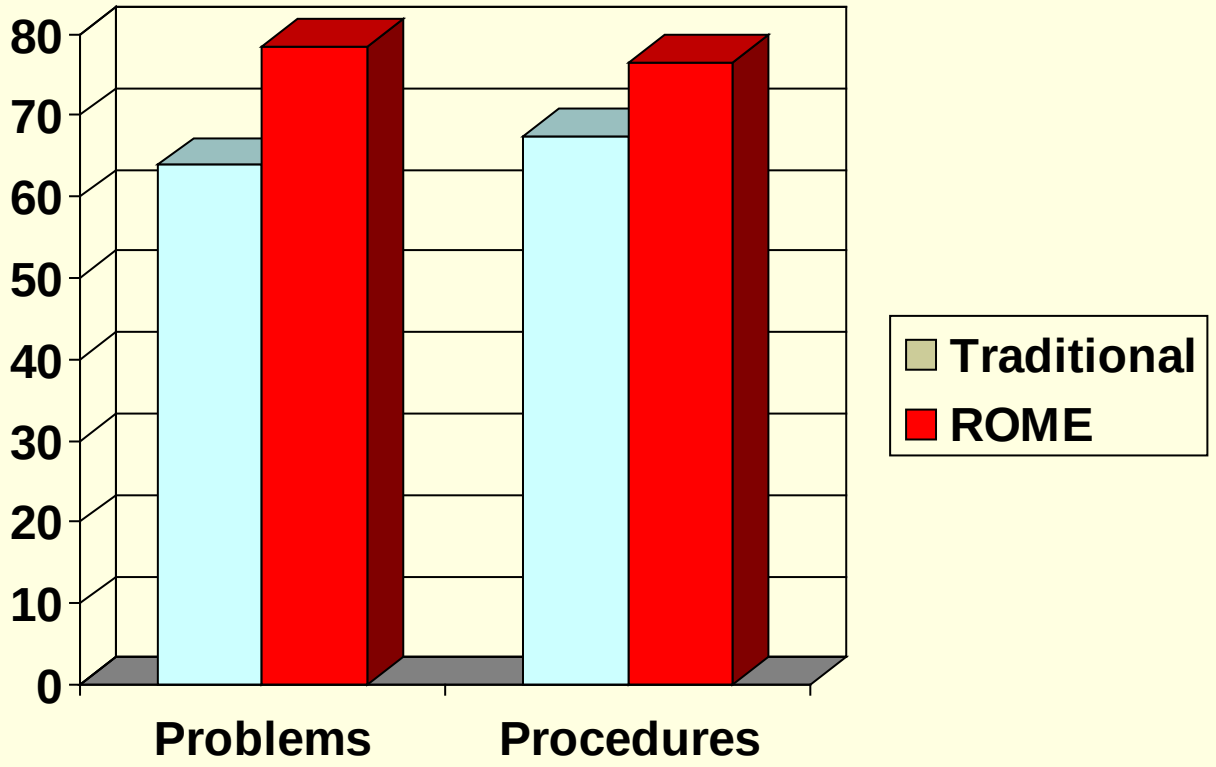


* UND Graduates from 2000 through 2008

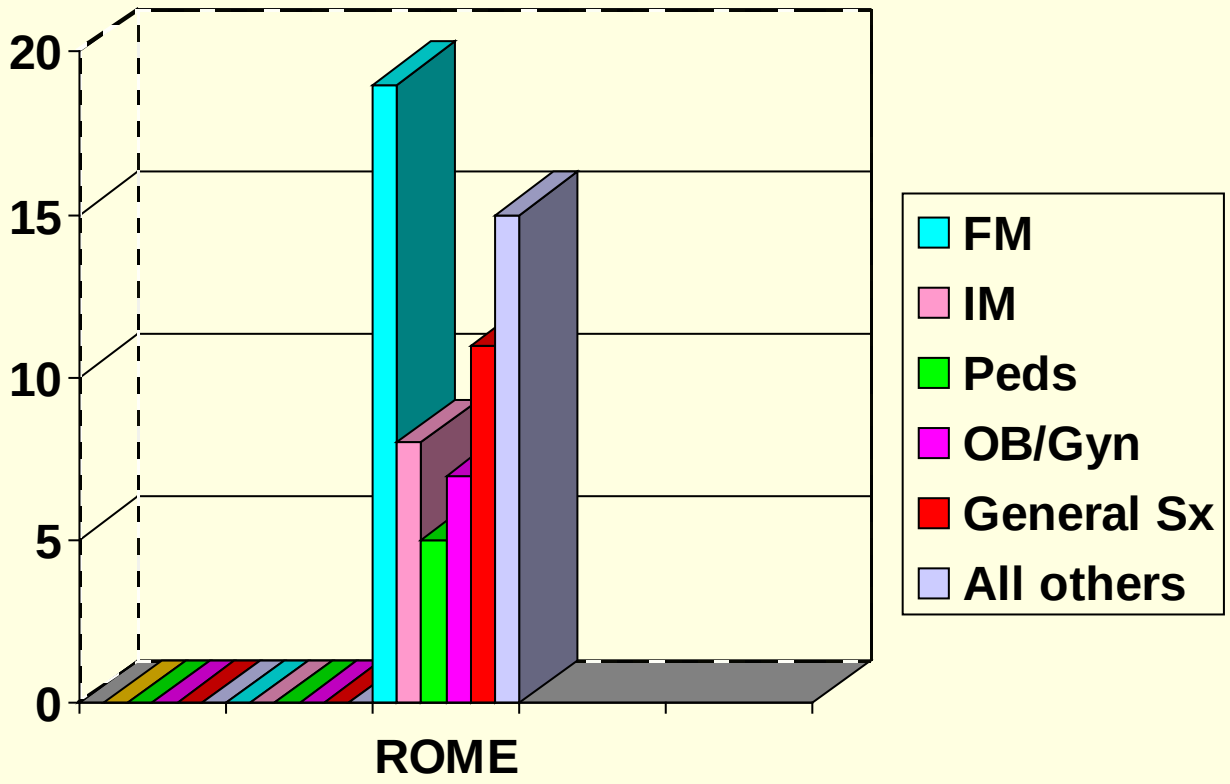
p<0.05 Fisher's Exact Test between ROME & Traditional curriculum students only

National percentages for reference only.

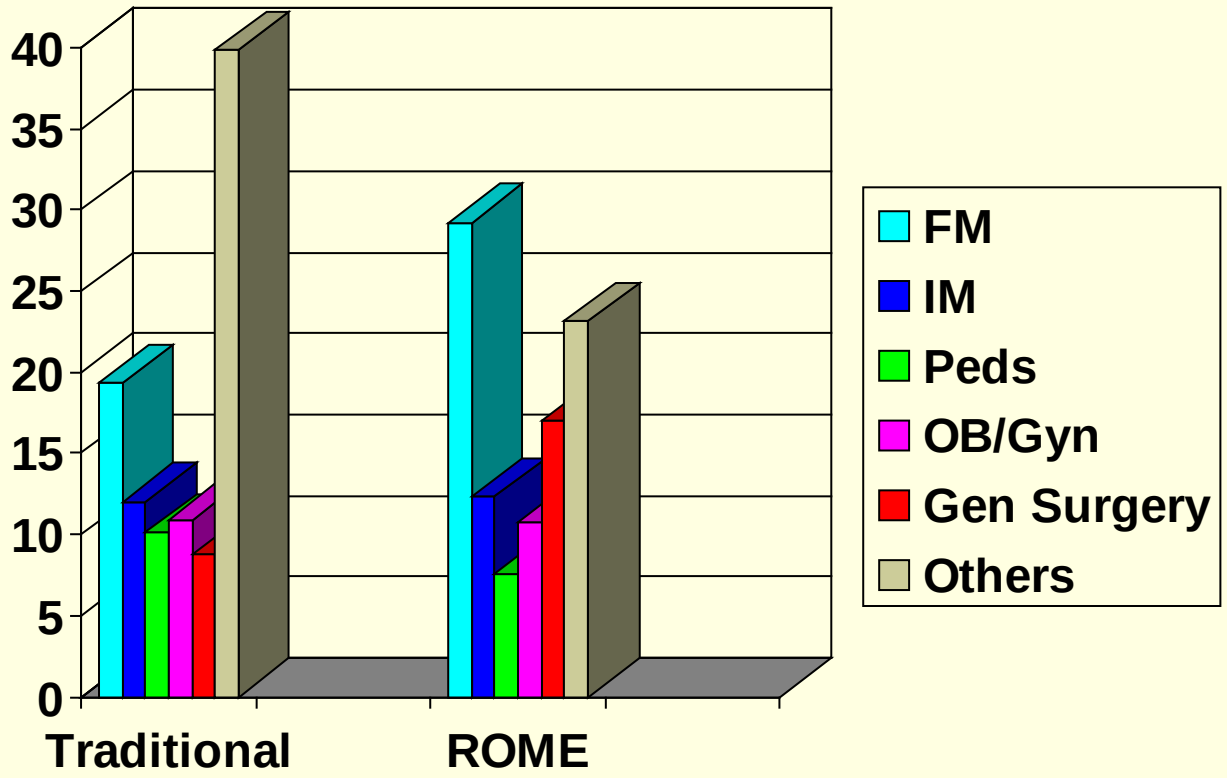
Observation vs Hands-on learning 2005-2008 - percentiles



ROME Graduates through 2010
N = 65



Traditional (N= 543) vs ROME (N=65) Graduates (percentiles)



Why community-based teaching & learning?

"Real world" medicine

- see more patients
- wider variety of patient problems
- more acute care
- more procedures
- closer supervision
- one-to-one teaching & mentoring

Additional reported benefits

Common office-based problems

Chronic disease management (continuity)

Health maintenance

- Prevention & screening

Doctor-patient relationship

Why Ambulatory Setting?

That is where the most patients are found

Requires unique skills

(teachers possess unique skills/knowledge)

Authentic role models

Influences careers

Why smaller, remote communities?

Practice and population unmodified by tertiary care practice

To increase awareness of needs and opportunities for future practice

*Perceptions & Challenges for Preceptors

Time

(economic concerns of systems)

Teaching expertise/experience

*(their self-assessment)

Student expectations

from clinical faculty:

Clinical experience

Direction

Feedback

Evaluation - forms at:

http://www.med.und.edu/familymedicine/rome/

from the med school:

Feedback

Credit for clerkships

Pass USMLE 2

Addressing Student Isolation

- Orientation to clerkship & sites
- 2 Students per site
- Interactive videoconferencing with Polycom ViewStations
- Faculty visits (all clerkship directors at least once per year – average once per month, including ROME director)

Comparable experiences

PDA-based clinical encounters database

- Evaluate clinical experience in real time

Uniform evaluation tools across clerkships

Visits by clerkship directors

Clinical faculty**

Outcomes

+++ Improved clinical experience

+/- Credit for disciplinary clerkships(Neuroscience)

++ Pass USMLE 2

++ Improved data

++ Improved student evaluation

+ Faculty teaching skills development

+? Improved program evaluation

+ Increased family medicine entrants

+? More graduates selecting rural/smaller communities (too early)