

Program Educational Characteristics and First Attempt Board
Pass Rates in Family Medicine Residencies

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The RTT Collaborative

in rural health professions education and training

Growing our own...together

Greetings from Lake Cumberland Regional Hospital Family Medicine Residency

Located in Somerset/Pulaski County KY

Houseboat Capital of the World

Populations 10,000

Hospital service area 100,000

Lake Cumberland Regional Hospital is a regional medical center for a 7 county area .

Largest hospital between Lexington KY and Knoxville TN.



Lake Cumberland Family Medicine Residency

Established in 2015.

Goals:

To educate physicians with the interest to practice in rural KY.

Repopulate the retiring/aging physicians in our community.



Competition is Challenging

We have 13 programs within a 150 mile radius of our program.

We are a relatively new program

6 years since inception

I am the third PD in 6 years.

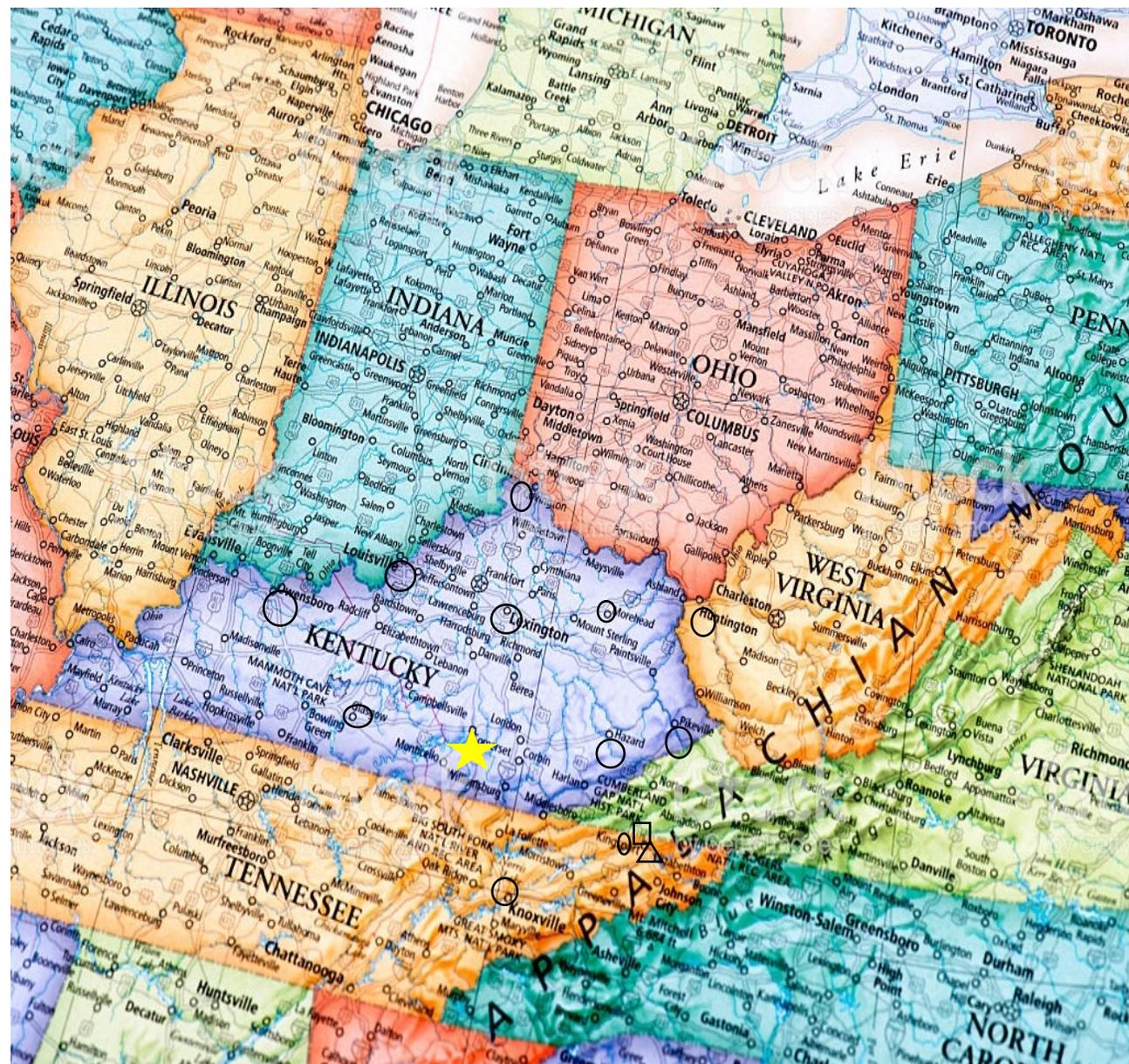
We are not affiliated with UK or UL medical schools.

We have never filled in the conventional match until this year.

Filled the prior 3 years with SOAP

This was our first year to have a full compliment of residents. 6/6/6.

How can we stand out?



Why do residents select a residency?

- Location
- Program Size
- Program Reputation/Diversity/Opportunities
- Job Market after residency
- Salary
- Formal Education/Didactics
- Work Environment
- Board Pass Rates

How can I get students to come to south central rural KY for residency?

- Things that I can control.....
 - Didactics/Education
 - Unique rotations/exposures
 - Community involvement
 - Competitive salary/benefit package
 - High clinic patient volumes
 - Board Pass Rates

NIPDD Academic Project: Program Educational Characteristics and First Attempt Board Pass Rates in Family Medicine Residencies

- NIPDD is the National Institute for Program Director Development
- Sponsored/Supported by the AAFP, AFMRD, ABFM, & STFM.
- Competitive and designed for new or upcoming APD's and PD's.
- Year long program that GREATLY assists those new to GME.
- One requirement is an Academic Project.

Methods

- Google document survey of family medicine residency program directors(PD) with at least 3 years tenure as a PD at their current program
- The AFMRD list serve of PD was used as the source of the survey distribution
- 120 surveys were completed
- The main question to be answered: Are there certain types of educational/didactic programs that help ensure 100% pass rate of the FM boards on first attempt?

Questionnaire

- How long have you been a PD at your current program?
- How long has your program been in existence?
- What is the population of the city of your program?
- How many residents do you have per academic year?
- Do you put an emphasis on the yearly in training exam and its results?
- What is your past 3 years first try FM board pass rate?

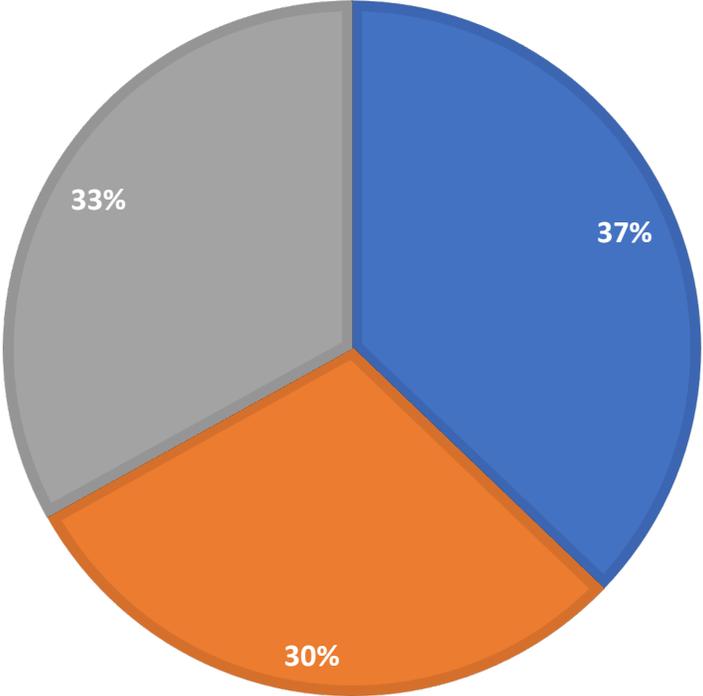
Questionnaire cont.

- What type of educational materials/practices do you provide your residents?
 - Faculty presented lectures
 - Resident presented lectures
 - Student presented lectures
 - Required board review questions (NEJM, Scientific American, etc.)
 - Required quizzes
 - Require journal club
 - Faculty/Resident mentoring
 - Required American Board to Family Medicine Sam(Self Assessment Module)
 - Required board review course paid for by the program
 - Educational focus groups (2-4 hour lecture/educations sessions weekly/monthly)
 - Mandatory grand rounds attendance
 - Emphasis on Yearly In Service Training Exam

Demographics of the Participants

PD TENURE

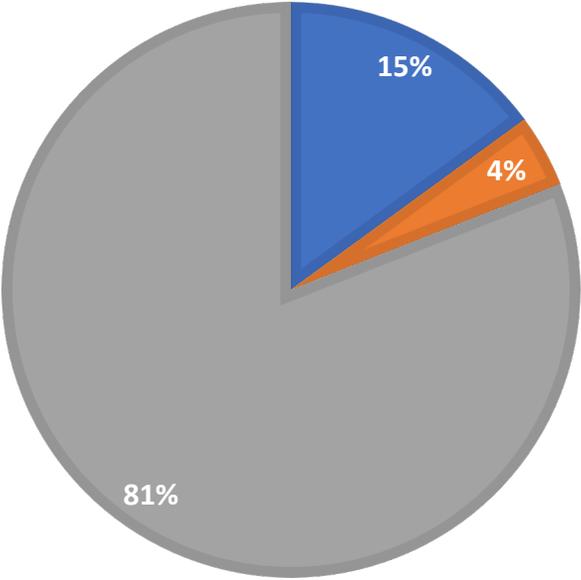
■ 3-5 years ■ 6-9 years ■ 10 years or greater



Demographics of the Participants

RESIDENCY EXISTENCE

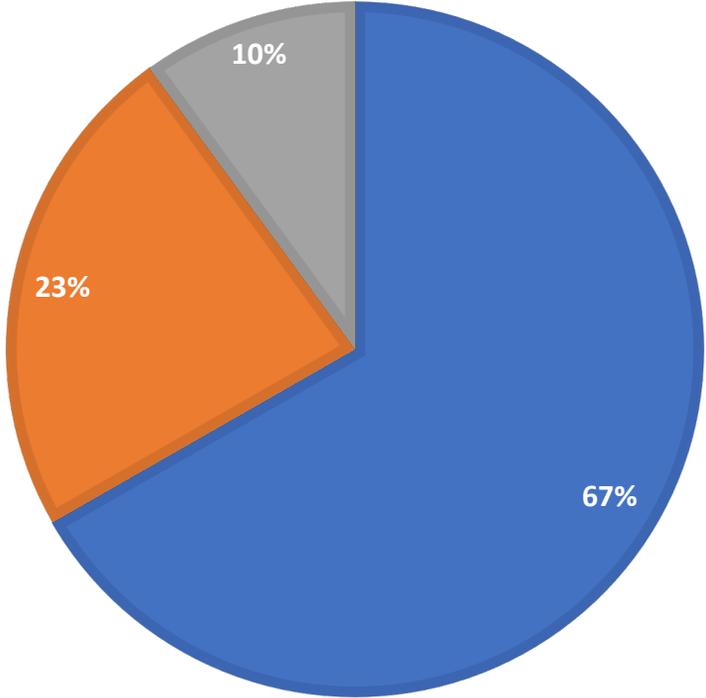
■ 3-10 years ■ 11-20 years ■ 21 years or greater



Demographics of the Participants

PROGRAM'S LOCATION POPULATION

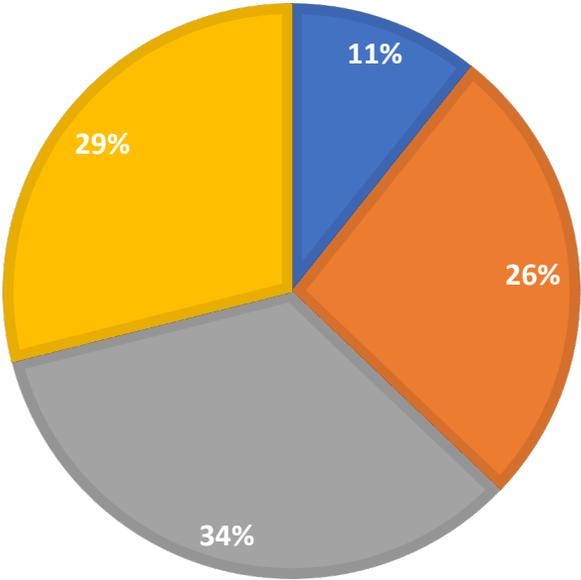
■ 100,00 or greater ■ 25,000-99,999 ■ 24,999 or less



Demographics of the Participants

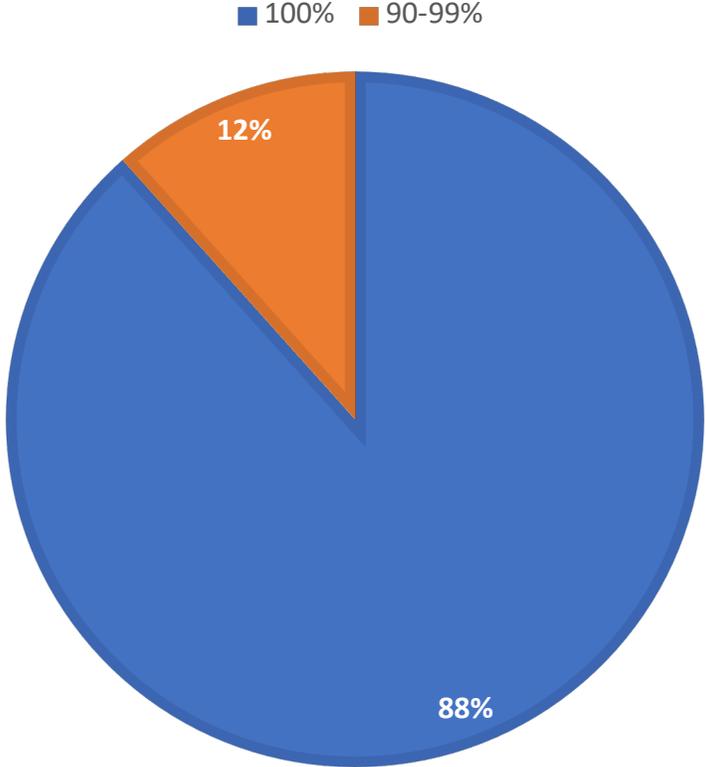
RESIDENT CLASS SIZE PER ACADEMIC YEAR

■ 1-4 Residents ■ 5-6 Residents ■ 7-9 Residents ■ 10 Residents or More



Demographics of the Participants

FM BOARD % PASS RATE ON FIRST ATTEMPT OVER THE LAST 3 YEARS



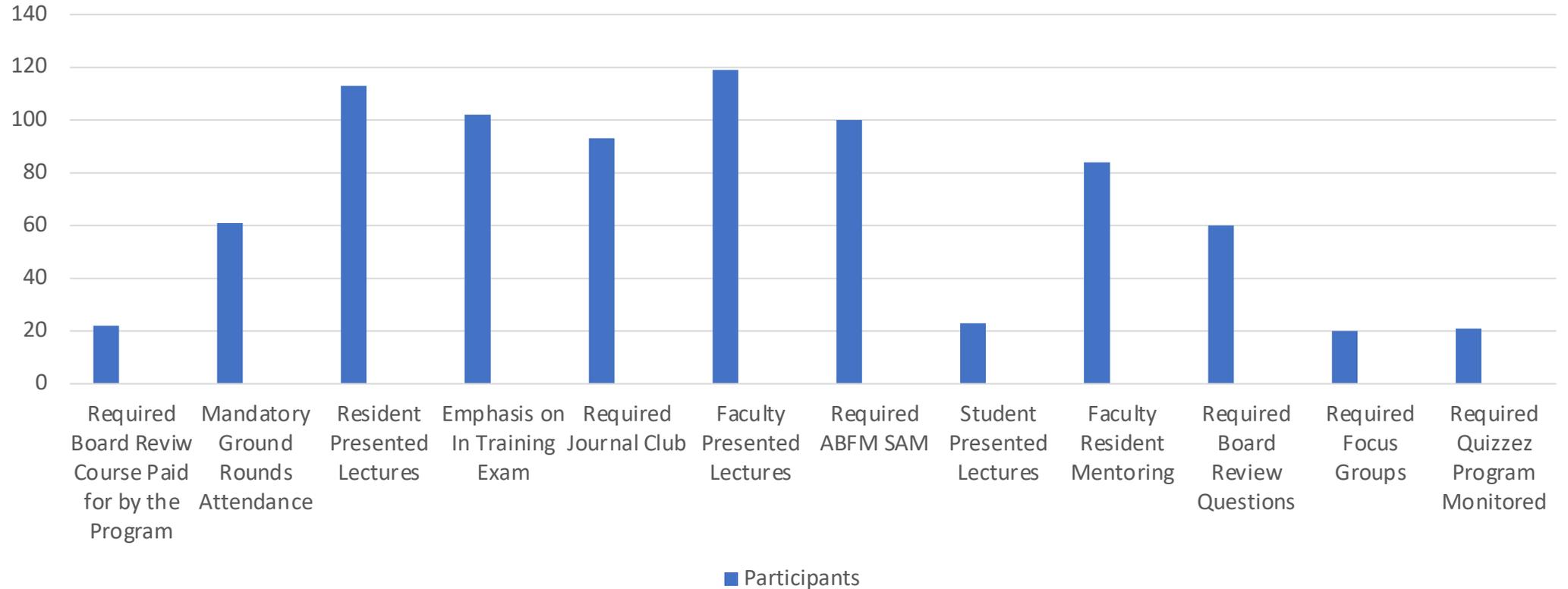
Results

- 89.2% (107) of all PD's had 100% first try board pass success over the past 3 years.
- 10.8% (13) of all PD's had between 90-99% first try pass success over the past 3 years.

Results

Table 1 summarizes the distributions of the educational programs used by the study participants (120)

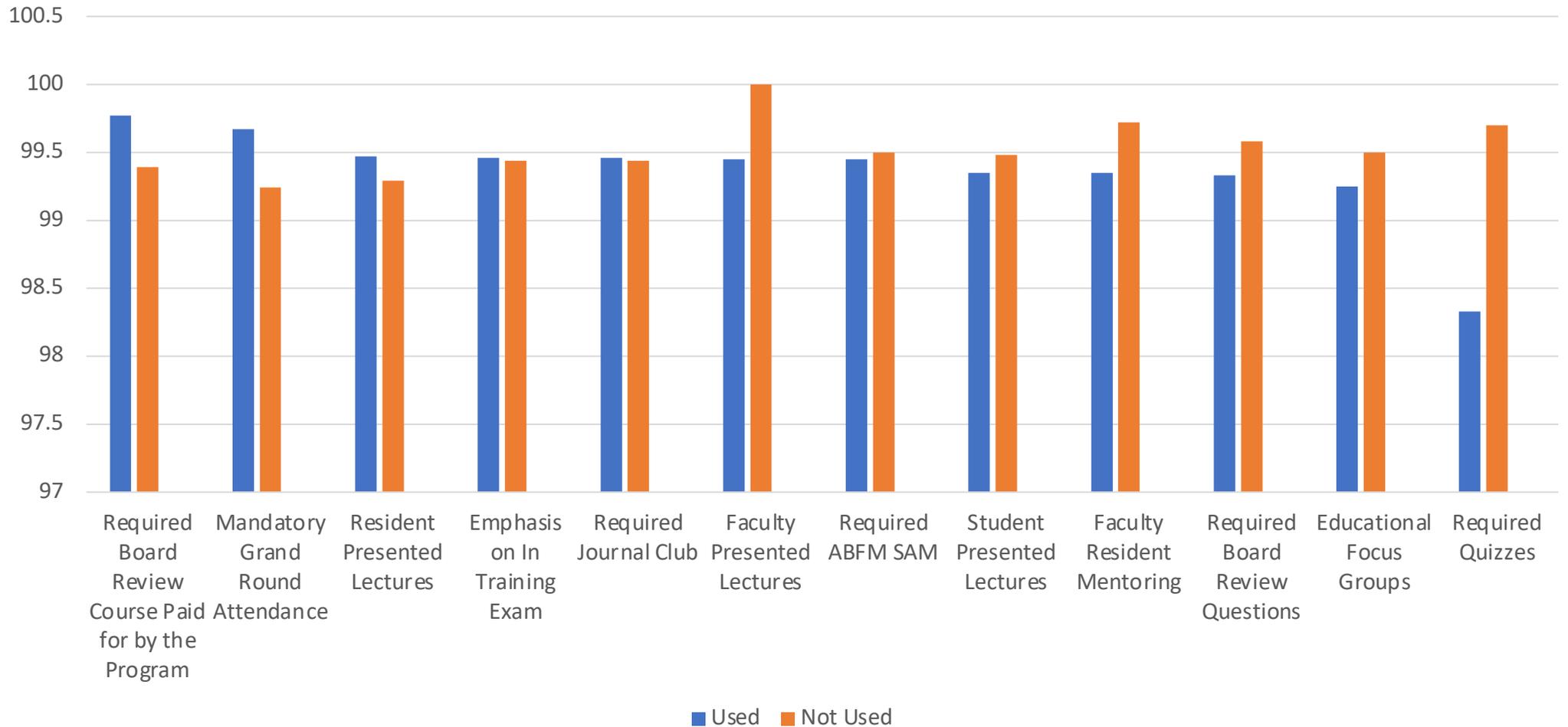
Educational Materials/Practices Provided for Residents
Table 1



Results

Table 2 shows average pass rate by methods used

% Board Passage Comparison in Methods Used and Not Used



Results

Table 3

- Table 3 shows the % of residents achieving first try board passage based on if the PD used or not used the respective method in their formal educational processes.
- Each column contains methods used vs. not used and totals 100%.
- Each row shows the breakdown of methods with(107) or without(13) 100% board first attempt pass rate.

Table 3

Method	% First Try Board Pass Rate	Method Used	Method Not Used	p.value
Required Board Review Course Paid for by the Program	90-99%(13)	1(4.5%)	12(12.2%)	
				.294
	100%(107)	21(95.5)	86(87.8%)	
Mandatory Grand Round Attendance	90-99%(13)	4(6.6%)	9(15.3%)	
				.125
	100%(107)	57(93.4%)	50(84.7%)	
Resident Presented Lectures	90-99%(13)	12(10.6%)	1(14.3%)	
				.762
	100%(107)	101(89.4%)	6(85.7%)	
Emphasis on Yearly In Training Exams	90-99%(13)	11(10.8%)	2(11.1%)	
				.967
	100%(107)	91(89.2%)	16(88.9%)	
Required Journal Club	90-99%(13)	10(10.8%)	3(11.1%)	
				.958
	100%(107)	83(89.2%)	16(88.9%)	
Faculty Presented Lectures	90-99%(13)	13(10.9%)	0(0.0%)	
				.726
	100%(107)	106(89.1%)	1(100%)	

Table 3

Method	% First Try Board Pass Rate	Method Used	Method Not Used	p.value
Required ABFM SAM (Self Assessment Module)	90-99%(13)	11(11.0%)	2(10.0%)	
				.895
Student Presented Lectures	100%(107)	89(89.0%)	18(90.0%)	
	90-99%(13)	3(13.3)	10(10.3%)	.704
Faculty Resident Mentoring	100%(107)	20(86.9%)	87(89.7%)	
	90-99%(13)	11(13.1%)	2(5.6%)	.223
Required Board Review Questions (NEJM, Scientific American, AFP)	100%(107)	73(86.9%)	34(94.4%)	
	90-99%(13)	8(13.3%)	5(8.3%)	.378
Educational Focus Groups (2-4 Hour Educational Sessions held at Regular Intervals)	100%(107)	52(86.7%)	55(91.7%)	
	90-99%(13)	3(15.0%)	10(10.0%)	.511
Required Quizzes	100%(107)	17(85.0%)	90(90%)	
	90-99%(13)	7(33.3%)	6(6.1%)	.000
	100%(107)	14(66.67%)	93(93.9%)	

Conclusions

- Programs that paid for mandatory board review courses had 95.5% first try board pass success vs. 87.7% that did not use this option.
- Mandatory Grand Rounds attendance had 93.3% first pass success vs. 84.7% that did not mandate attendance.
- Mandatory quizzes monitored by the program had the least successful first try board passage, 66.7% vs. 93.9% that did not require the quizzes.

Conclusions

- Programs that do not have 100% first attempt board passage should consider mandatory board review courses paid for by their programs/institutions.
- Mandatory Grand Rounds attendance should be considered as an adjunct for assistance in 100% board passage.
- If mandatory quizzes are part of your educational regimen, consideration of its validity should be re-evaluated.

Study Limitations

- Inability to adequately determine response rate due to the method of distribution.
 - Not all Family Medicine PD's with a 3 year tenure at their current programs are members of the AFMRD.
- While some of the data's statistical significance is marginal (large p. values), it still may have practical value and significance in adopting curriculum strategies for board passage success.

Lessons Learned

- Research is challenging and humbling
- It can be done in a rural setting
- Get a mentor
- Don't be afraid to fail
- Have someone else read your final draft
- Do NIPDD if possible

Thank You to The RTT Collaborative



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Sources

- Full bibliography and study available upon request by contacting me at Patrick.Jenkins@lpnt.net.