

Obstetric training in family medicine residencies. A 2019 CERA survey of program directors.

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Dr. Fashner has nothing to disclose.

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Objectives

On completion of this session the participants should be able to:

- Recognize the current state of OB training in Family Medicine residency programs.
- Describe factors that may influence obstetric training in Family Medicine residency programs.
- Identify how OB training for family physicians may help alleviate maternity care workforce gaps.



Background

Previous research has shown gaps in maternity care in rural U.S., while the number of family physicians who provide maternity care is simultaneously declining.



The aims of this study were to describe OB training in family medicine residencies in 2019 and determine factors that contribute to volume of continuity deliveries, vaginal deliveries and residents who continue OB after graduation.

Methods

- Nine questions related to OB training were part of a survey by the Council of Academic Family Medicine Educational Research Alliance administered May to July 2019.
- All ACGME accredited U.S. family medicine residency program directors were invited to participate by email (616 individuals).
- The overall response rate was 42.4% (n=261).
- We used only data from program directors that had complete answers for all the demographic questions and all OB questions (n= 238).

Items of interest

Demographics

- Type of program
- Region of the country
- Community size
- Number of residents
- Number of non-US grads

Obstetric

- Family medicine attending at delivery
- Number of continuity deliveries
- Number of total vaginal deliveries
- Hours/number of rotations
- Independence given to resident
- Priority on continuity deliveries
- How many residents continued OB after graduating
- Number of residents who went to fellowship in OB
- Does the program have an OB fellowship

Statistical analysis

We used one-way analysis of variance to compare Likert variables and the number of continuity and total vaginal deliveries.

We used chi-square tests to compare the demographic categories to percentage of residents who continue OB after graduation.

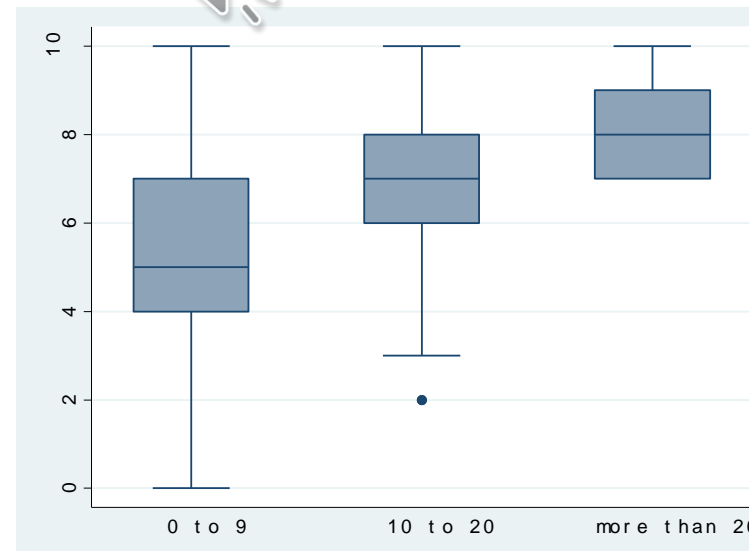
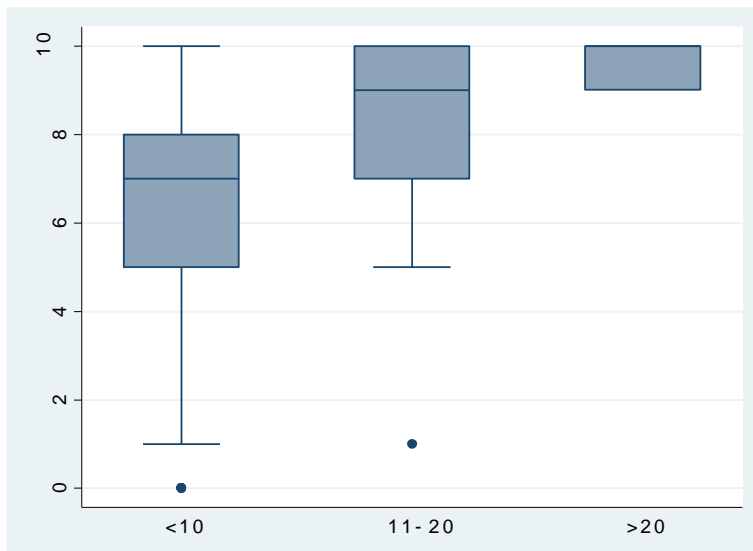
We calculated the odds ratio for the obstetric curriculum factors for >10% of residents in the last 5 years continuing OB after graduation.

Descriptive results

- Over half of the programs (56%) had graduates with <10 continuity deliveries.
- Almost half of programs (45%) had graduates with <40 total vaginal deliveries.
- Half of the programs (50%) had the minimum 8 weeks in OB training.
- A majority of the programs (61.3%) had <10% of graduates continue OB.

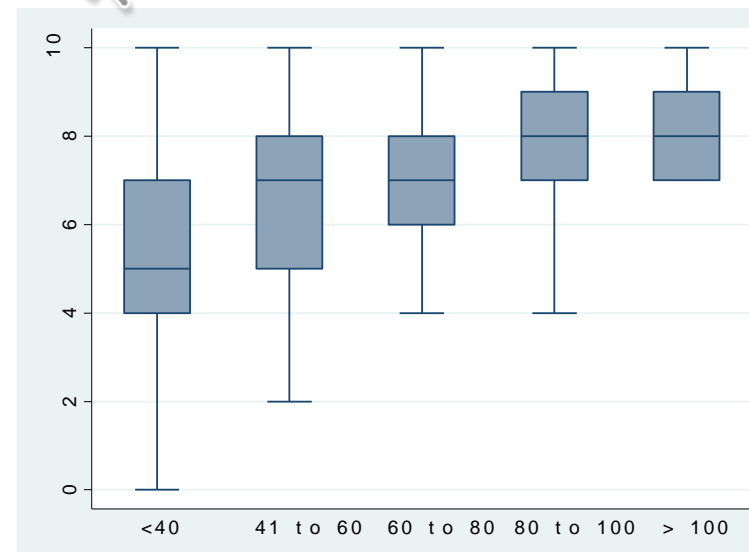
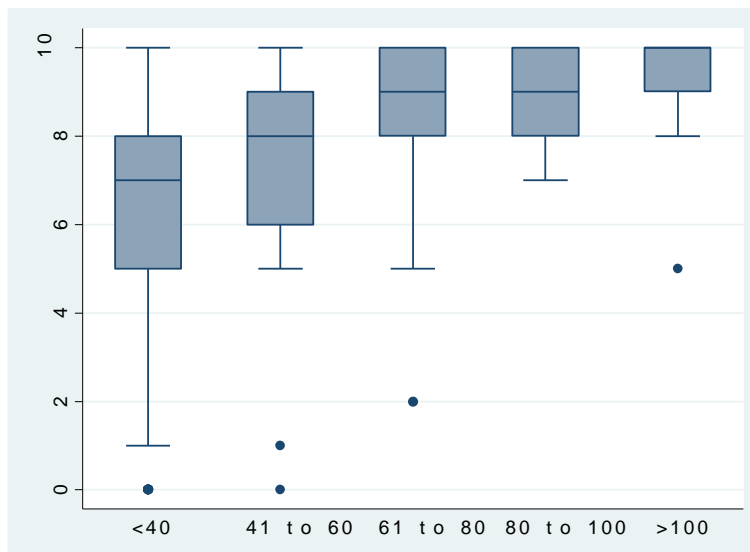
Results - deliveries

- The priority given to continuity deliveries was higher as the category of continuity deliveries increased ($p < 0.001$).
- The independence of a resident doing the delivery was higher as the category of continuity deliveries increased ($p < 0.001$).



Results - deliveries

- The priority of continuity deliveries by the program was higher as the category of total vaginal deliveries increased ($p < 0.001$).
- The independence of a resident doing the delivery was higher as the category of total vaginal deliveries increased ($p < 0.001$).



Results – continuing OB

- There was statistically significant differences for the demographic categories and residents in the last 5 years continuing OB.



Factor	Categories	Residents in last 5 years who continue OB after graduation			P-value
		<10% N (% of total)	11-25% N (% of total)	26-100% N (% of total)	
Region	Northeast	35 (14.7)	5 (2.1)	4 (0.17)	0.031
	Midwest	35 (14.7)	23 (9.7)	15 (6.3)	
	South	50 (21)	14 (5.9)	4 (0.17)	
	West	26 (10.9)	13 (5.5)	14 (5.9)	
Type of program	University based	22 (9.2)	13 (5.5)	6 (2.5)	0.001
	Community based, university affiliated	86 (36.1)	28 (11.8)	27 (11.3)	
	Community based, non-affiliated	31 (13.0)	11 (4.6)	2 (0.8)	
	Military	0 (0)	2 (0.8)	2 (0.8)	
	other	7 (2.9)	1 (0.4)	0 (0)	

Factor	Categories	Residents in last 5 years who continue OB after graduation			P-value
		<10% N (% of total)	11-25% N (% of total)	26-100% N (% of total)	
Size of community	<30,000	21 (8.8)	3 (1.3)	2 (0.8)	0.001
	30,00-75,000	38 (16.0)	5 (2.1)	5 (2.1)	
	75,000-149,999	20 (8.4)	16 (6.7)	8 (3.3)	
	150,000-499,999	24 (10.1)	12 (5.0)	16 (6.7)	
	500,000 to 1 million	21 (8.8)	12 (5.0)	8 (3.3)	
	>1 million	22 (9.2)	8 (3.4)	1 (0.4)	

Factor	Categories	Residents in last 5 years who continue OB after graduation			P-value
		<10% N (% of total)	11-25% N (% of total)	26-100% N (% of total)	
Non-US graduates	0 to 24%	76 (31.9)	41 (2.1)	34 (14.3)	0.001
	25 to 49%	26 (10.9)	8 (3.3)	2 (0.8)	
	50 to 74%	22 (9.2)	5 (2.1)	0 (0)	
	75 to 100%	20 (8.4)	1 (0.4)	1 (0.4)	
	Don't know	2 (0.8)	0 (0)	0 (0)	
Number of residents in program	<19	76 (31.9)	13 (5.5)	8 (3.3)	<0.001
	19-31	57 (24)	26 (10.9)	17 (7.1)	
	>31	13 (5.5)	16 (6.7)	12 (5.0)	

Results – OB after graduation

- The odds ratios were all statistically significant for the OB questions and >10% of residents over the past 5 years continuing OB after graduation.



Factor	Categories	≤10% continue OB N (% of total)	>10% continue OB N (% of total)	Odds ratio (95% CI)
Family medicine faculty supervise delivery	0 to 40%	107 (45%)	38 (16%)	reference
	41 to 100%	39 (16.4%)	54 (22.7%)	3.9 (2.25 to 6.77)
Number of continuity deliveries	0 to 9	108 (45.4%)	25 (10.5%)	reference
	10 to 20	36 (15.1%)	62 (26.1%)	7.44 (4.1 to 13.5)
	>20	2 (0.8%)	5 (2.1%)	10.8 (2.26 to infinity)
Number of total vaginal deliveries	<40	94 (39.5%)	13 (5.5%)	reference
	41 to 80	51 (21.4%)	55 (23.1%)	7.8 (3.92 to 15.48)
	>80	1 (0.4%)	24 (10.1%)	173.5 (26.82 to infinity)

Factor	Categories	≤10% continue OB N (%)	>10% continue OB N (%)	Odds ratio (95% CI)
Number of rotations	Minimum (2 rotations)	95	24	reference
	>2 rotations	49	67	5.4 (3.04 to 9.64)
Priority on continuity delivery	Not important (0 to 9)	129	55	reference
	Extremely important (10)	17	37	5.10 (2.66 to 9.77)
Independence of residents on rotation	Low (0 to 4)	35	4	reference
	Medium (5 to 7)	90	41	3.99 (1.38 to 11.42)
	High (8 to 10)	21	47	19.58 (6.37 to 59.40)
OB/MCH fellowship at program	No	140	68	reference
	Yes	6	24	8.24 (3.29 to 20.51)

Conclusion

- In 2019, most program directors responded:
 - The residents had low number of continuity deliveries.
 - The program had the minimum required rotations in OB.
 - Less than 10% of graduates in the last 5 years were doing OB after graduation.

Conclusion

- From this survey, family medicine programs may increase the number of graduates practicing OB if the following could be instituted:
 - Increase priority on continuity deliveries.
 - Provide a high level of independence by residents at the delivery.
 - Have family medicine attending the deliveries over 40% of the time.
 - More rotations in OB.
 - Add an OB fellowship.
 - Increase the number of continuity deliveries.
 - Increase the total number of vaginal deliveries.

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Thank you. We look forward to your questions and comments.

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