

Supplemental materials for

White VanGompel E, Singh L, Carlock F, Rittenhouse C, Ryckman KK, Radke S. Family Medicine Presence on Labor and Delivery: Effect on Safety Culture and Cesarean Delivery. *Ann Fam Med*. 2024;22(5):375-382.

Supplemental Table 1. Family Physicians' attitude in both vs only FM hospitals			
Variable	Both OB & FM	FM Only	
	n=52	n=26	p-value ^a
Best Practices	3.04 (2.93 - 3.15)	2.96 (2.78 - 3.14)	0.415
Fear of Vaginal Birth	1.52 (1.38 - 1.66)	1.49 (1.25 - 1.73)	0.564
Physician oversight	3.09 (2.93 - 3.24)	2.87 (2.65 - 3.10)	0.180
Maternal Agency	2.81 (2.59 - 3.03)	2.79 (2.53 - 3.05)	0.875
Overestimation of Cesarean Safety	1.81 (1.67 - 1.94)	1.94 (1.75 - 2.13)	0.167
Unit Norms ^b	3.04 (2.94 - 3.14)	3.30 (3.18 - 3.43)	0.002
Vaginal Birth Microculture	2.87 (2.76 - 2.99)	3.21 (3.04 - 3.38)	0.002
Safety Culture	3.33 (3.24 - 3.43)	3.47 (3.36 - 3.58)	0.079
FM = family medicine			
^a Kruskal-Wallis test			
^b Unit norms contains 2 subscales measuring latent constructs that fall within the overall larger scale, vaginal birth microculture and safety culture.			

Supplemental Table 2. Obstetricians' attitudes in both versus OB only hospitals			
Variable	Both	OB Only	
	n=74	n=24	p-value ^a
Best Practices	2.83 (2.72 - 2.94)	2.57 (2.41 - 2.73)	0.011
Fear of Vaginal Birth	1.59 (1.46 - 1.73)	1.69 (1.49 - 1.88)	0.306
Unit Microculture	3.03 (2.95 - 3.11)	3.05 (2.89 - 3.21)	0.868
Physician oversight	2.80 (2.64 - 2.95)	2.81 (2.61 - 3.00)	0.762
Maternal Agency	2.34 (2.18 - 2.51)	2.65 (2.40 - 2.89)	0.038
Overestimation of Cesarean Safety	1.96 (1.83 - 2.09)	2.00 (1.81 - 2.19)	0.494
Unit Norms ^b	3.17 (3.09 - 3.25)	3.18 (3.02 - 3.34)	0.997
Vaginal Birth Microculture	3.02 (2.92 - 3.12)	3.05 (2.86 - 3.23)	0.904
Safety Culture	3.44 (3.36 - 3.52)	3.42 (3.25 - 3.59)	0.916
OB = obstetrician ^a Kruskal-Wallis test ^b Unit norms contains 2 subscales measuring latent constructs that fall within the overall larger scale, vaginal birth microculture and safety culture.			

Supplemental Table 3. Hospital Characteristics by County-level of Maternity Care Access					
	Overall	Access to MC	Moderate	MC Desert	
Hospital Characteristics	39	23	15	1	<i>P</i> Value ^a
NTSV CS rate	0.25 ± 0.08	0.25 ± 0.07	0.25 ± 0.10	0.14	0.80
% age above 35	0.09 ± 0.02	0.10 ± 0.02	0.08 ± 0.02	0.13	0.007
% BMI over 30	0.32 ± 0.05	0.32 ± 0.04	0.33 ± 0.06	0.31	0.43
% Medicaid	0.41 ± 0.10	0.40 ± 0.10	0.42 ± 0.10	0.31	0.38
Rural/urban-suburban					0.000
Non rural	17 (43.6)	16 (69.6)	1 (6.7)	0 (0)	
Rural	22 (56.4)	7 (30.4)	14 (93.3)	1 (100)	
Teaching Hospital					0.03
No	29 (74.4)	14 (60.9)	14 (93.3)	1 (100)	
Yes	10 (25.6)	9 (39.1)	1 (6.7)	0 (0)	
Nursery acuity level^b					0.05
1	18 (58.1)	8 (40)	10 (90.9)	0 (.)	
2	7 (22.6)	6 (30)	1 (9.1)	0 (.)	
3	5 (16.1)	5 (25)	0 (0)	0 (.)	
4	1 (3.2)	1 (5)	0 (0)	0 (.)	
<i>Missing = 8</i>					
Maternal Care Level^{c,d}					0.004
1	13 (43.3)	4 (20)	9 (90)	0 (.)	
2	13 (43.3)	12 (60)	1 (10)	0 (.)	
3	2 (6.7)	2 (10)	0 (0)	0 (.)	
4	2 (6.7)	2 (10)	0 (0)	0 (.)	
<i>Missing = 9</i>					
Average Annual delivery volume					0.12
Less than 1000	29 (74.4)	15 (65.2)	14 (93.3)	0 (0)	
1000 - 2499	7 (17.9)	5 (21.7)	1 (6.7)	1 (100)	
2500 or more	3 (7.7)	3 (13)	0 (0)	0 (0)	
Hospital Provider Mix					0.01
Both	15 (38.5)	11 (47.8)	4 (26.7)	0 (0)	
Only FM	12 (30.8)	3 (13)	9 (60)	0 (0)	
Only OB	12 (30.8)	9 (39.1)	2 (13.3)	1 (100)	

BMI = body mass index; FM = family medicine; NICU = neonatal intensive care unit; NTSV = nulliparous, term, singleton, vertex; OB = obstetrician.

^a P values calculated using nonparametric Kruskal-Wallis test for continuous variables and Fisher exact test for categorical variables.

^b Missing (n = 8).

^c Iowa-specific maternal care level designations.²²

^d Missing (n = 9).

^e Maternity care desert designation by county.⁹