

STATE OF IOWA DEPARTMENT OF
Health AND **Human**
SERVICES

ACCESS TO OBSTETRICAL CARE IN
IOWA: A REPORT to the IOWA STATE
LEGISLATURE – CALENDAR YEAR 2022

January, 2024

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ACCESS TO OBSTETRICAL CARE IN IOWA: A REPORT TO THE IOWA STATE LEGISLATURE - CALENDAR YEAR 2022

Introduction

This report has been prepared annually in response to a 1997 mandate that amended Iowa Code 135.11 (16) to require:

16. Consult with the Office of Statewide Clinical Education Programs at the University of Iowa Carver College of Medicine and annually submit a report to the general assembly by January 15 verifying the number of physicians in active practice in Iowa by county who are engaged in providing obstetrical care. To the extent data are readily available, the report shall include information concerning the number of deliveries per year by specialty and county, the age of physicians performing deliveries, and the number of current year graduates of the University of Iowa Carver College of Medicine and the Des Moines University College of Osteopathic Medicine entering into residency programs in obstetrics & gynecology, and family medicine. The report may include additional data relating to access to obstetrical services that may be available.

Report to the 2024 Legislature

The Iowa Department of Health and Human Services, Bureau of Family Health, respectfully submits this report in response to the legislative mandate. The data summarized in this report provide an overview of the obstetrical workforce in Iowa for calendar years 2018 through 2022.

This report uses birth certificate data to generate the number and percent of licensed providers who provide deliveries in our state. Health Department staff link birth certificate data to data from the [University of Iowa-Carver College of Medicine-Office of Statewide Clinical Education Programs](#) (OSCEP) to obtain demographic and physician specialty information.

Definitions:

The categories of providers who perform deliveries and who are included in this report are defined as follows:

- An obstetrician/gynecologist physician has either an MD or DO degree and has completed a four-year obstetrics/gynecology residency. This specialty is devoted to medical and surgical care to women and has particular expertise in pregnancy, childbirth and disorders of the reproductive system.
- A family medicine physician has either an MD or DO degree and has completed a three-year family medicine residency. This specialty is devoted to comprehensive care for people of all ages. Often family medicine physicians do not perform surgical deliveries (cesarean sections.)
- Certified Nurse-Midwives CNMs are advanced practice nurses, registered both as nurses and as midwives. They have completed at least a baccalaureate program and a midwifery education program in addition to having passed a national certification examination to become licensed. In Iowa, they have the ability to write prescriptions. CNMs tend to care for pregnant women at low risk for adverse maternal and newborn outcomes. Most have a physician back up if complications arise.
- A resident is a physician (one who holds the degree of MD or DO) who practices medicine usually in a hospital or clinic under the direct or indirect supervision of an attending physician.

National Data¹

According to Rayburn² (2017), there were 4.5 obstetricians-gynecologists per 10,000 women of reproductive age (WRA) in the United States. In the same publication, Rayburn reported that there were 3.3 obstetricians-gynecologists per 10,000 WRA in Iowa.

2022 Iowa Population and Provider Information:

- 2022 estimated total Iowa population: 3,200,517³
- 2022 estimated Iowan WRA: 608,952³

Table I. Rate of physicians per 10,000 WRA, 2018-2022

Year	Physicians ⁴	Obstetricians-Gynecologists
2022	8.9	3.9
2021	9.1	3.8
2020	8.8	3.8
2019	9.6	4.0
2018	10.7	4.2

¹ The rates reported in the Rayburn report differ from those in this report because the data collection methods differ.

² Rayburn WF. The Obstetrician-Gynecologist Workforce in the United States: Facts, Figures, and Implications, 2017. The Office of Workforce Studies and Planning of the American Congress of Obstetricians and Gynecologists: Washington D.C.

³ Single-race Population Estimates, United States, 2020-2022. July 1st resident population by state, age, sex, single-race, and Hispanic origin, on CDC WONDER Online Database. The 2020-2022 postcensal series of estimates of the July 1 resident population are based on the Blended Base produced by the US Census Bureau in lieu of the April 1, 2020 decennial population count, released by the Census Bureau on June 22, 2023. Accessed at <http://wonder.cdc.gov/single-race-single-year-v2022.html> on Nov 15, 2023 10:26:38 AM

⁴ The total number of delivering physicians includes obstetricians, family medicine and other types of physicians. It excludes resident physicians

Table 2. Count of unique licensed providers who delivered at least one infant, Iowa 2018-2022

Provider type	2018	2019	2020	2021	2022
Obstetricians & Gynecologists	252	243	232	231	236
Family Medicine	324	294	247	269	263
Other Physicians	59	53	66	53	46
Residents⁵	47	52	58	30	39
CNM/ARNP	91	90	83	92	97
Total	773	732	686	675	681

Table 3. Count and percent of births by provider type, Iowa, 2018-2022⁶

Year	2018	2019	2020	2021	2022
Provider Type	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Obstetricians & Gynecologists	26,117 (69.4)	26,213 (69.8)	25,762 (71.6)	26,099 (70.8)	25,790 (70.2)
Family Medicine	5,805 (15.4)	5,498 (14.6)	4,941 (13.7)	4,993 (13.6)	5,083 (13.8)
Other Physicians⁷	955 (2.5)	892 (2.4)	664(1.9)	639 (1.7)	553 (1.5)
Residents	235 (0.6)	405 (1.1)	255 (0.7)	173 (0.5)	164 (0.5)
CNM/ARNP	4,109 (10.9)	4,095 (10.9)	3,853 (10.7)	4,411 (12.0)	4,577 (12.5)
Unlicensed others	420 (1.1)	454 (1.2)	490 (1.4)	530 (1.4)	564 (1.5)
Total	37,641	37,577	35,965	36,845	36,731

⁵ The number of deliveries by residents may be underestimated because these deliveries may be documented under the name of the supervising faculty physician

⁶ See [Appendix D](#) for data from years 2014 – 2022, including a trend line for each provider type

⁷ Other physicians include maternal/fetal medicine (MFM) specialists, emergency room physicians and general surgeons (who may perform cesarean sections for family medicine patients). Surgeons provided 83.3% (n=455) of the deliveries by other physicians.

Table 4. Demographic information for unique licensed providers who delivered at least one infant, Iowa 2022

Provider Type	Provider Count	Average age, delivering males	Average age, delivering females	% male delivering providers	% female delivering females
Obstetricians & Gynecologists	236	55.3	42.5	32.2	67.8
Family Medicine	263	44.9	39.0	54.4	45.6
Other Physicians	46	50.2	43.6	82.6	17.4
CNM/ARNP	97	0.0	41.6	0.0	100.0

Table 5. University of Iowa, Carver College of Medicine, Obstetrics & Gynecology and Family Medicine Residency Programs, June 30, 2022⁸

Specialty	Total # Residents Graduating in June 2022	Total # Continuing Education (Specializing)	Total # Entering Practice	Total # (%) entering an Iowa Practice
Obstetrics & Gynecology	5	2	3	2 (67%)
Family Medicine	54	7	47	27(57%)

Table 6. Obstetrics & Gynecology Residents by Location and Year, July 2021 – June 2022⁹

Residency Location	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
U of I Carver College of Medicine	6	5	5	5	21

⁸ University of Iowa Graduate Medical Education Program

⁹ Data source: University of Iowa Graduate Medical Education Program

Table 7. Iowa medical school May 2022 graduates obtaining a residency position in obstetrics & gynecology (OBGYN) or family medicine (FM) through the National Resident Matching Program

University	# Students Matching in OBGYN Residency	# Students Matching in UI OBGYN Residency Program	# Students Matching in FM Residency	# Students Matching in an Iowa Based FM Residency Program
U of I Carver College of Medicine	13	2 (15%)	18	5 (28%)
Des Moines University of Osteopathic Medicine	8	0	40	14 (35%)

Table 8. Family Medicine Residents by Location and Year, July 2020 – June 2021¹⁰

Residency Location	1st Year	2nd Year	3rd Year	Total
Cedar Rapids Medical Education – Closed 7/1/2020	0	0	0	0
Genesis Health System – Davenport	6	6	6	18
Broadlawns Medical Center - Des Moines	8	8	8	24
MercyOne Medical Center – Des Moines	10	10	10	30
UnityPoint - Iowa Lutheran – Des Moines	6	6	6	18
University of Iowa Hospitals and Clinics	8	6	6	20
MercyOne Medical Center - Mason City	6	6	6	18
MercyOne Medical Center – Waterloo	4	4	4	12
UnityPoint – Allen Hospital – Waterloo	3	3	3	9
Siouxland Medical Education Foundation – Sioux City	6	6	6	18
Total	57	55	55	167

¹⁰ Data obtained from publicly available organizational websites

Table 9: Births that occurred in Iowa regardless of residence by Legacy Hospital Perinatal Levels of Care, 2018-2022

Year	2018	2019	2020	2021	2022
OB Level (# of hospitals)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Non-institutional births	560 (1.5)	533 (1.4)	601 (1.7)	685 (1.9)	743 (2.0) ¹¹
Level 1 (35)	8,487 (22.6)	8,964 (23.9)	8,595 (23.9)	9,493 (25.8)	8,821 (24.0)
Level 2 (12)	8,932 (23.7)	8,829 (23.5)	8,304 (23.1)	8,217 (22.3)	8,889 (24.2)
Level 2 Regional (4)	4,833 (12.8)	4,754 (12.7)	4,481 (12.5)	4,604 (12.5)	4,558 (12.4)
Level 2 Regional Neonatal (2)	4,275 (11.4)	4,336 (11.6)	4,168 (11.6)	4,229 (11.5)	4,260 (11.6)
Level 3 (3)	10,554 (28.0)	10,141 (27.0)	9,814 (27.3)	9,617 (26.1)	9,460 (25.8)
Total (56)	37,641	37,557	35,963 ¹²	36,845	36,731

Geographic variability of provider type

Three provider types, Obstetrics & Gynecology physicians (OBGYN), Family Medicine physicians (FM), and Certified Nurse Midwives (CNM) provided 96.5% of births that occurred in Iowa during 2022. OBGYN physicians provided 70.2% of births, FM physicians provided 13.8% of births, and CNMs provided 12.5% of births. We used census data to create county levels of rurality designations (rural, micropolitan, metropolitan). Provider type varies by county levels of rurality. Births by levels of rurality and provider type are limited to births to residents that occurred in Iowa.

[Figure 1](#), [Figure 2](#), and [Figure 3](#) illustrate provider type variability among the top three provider types by rural, micropolitan, and metropolitan designations.

[Appendix A](#) presents the county level number and percent of births by the top three provider types.

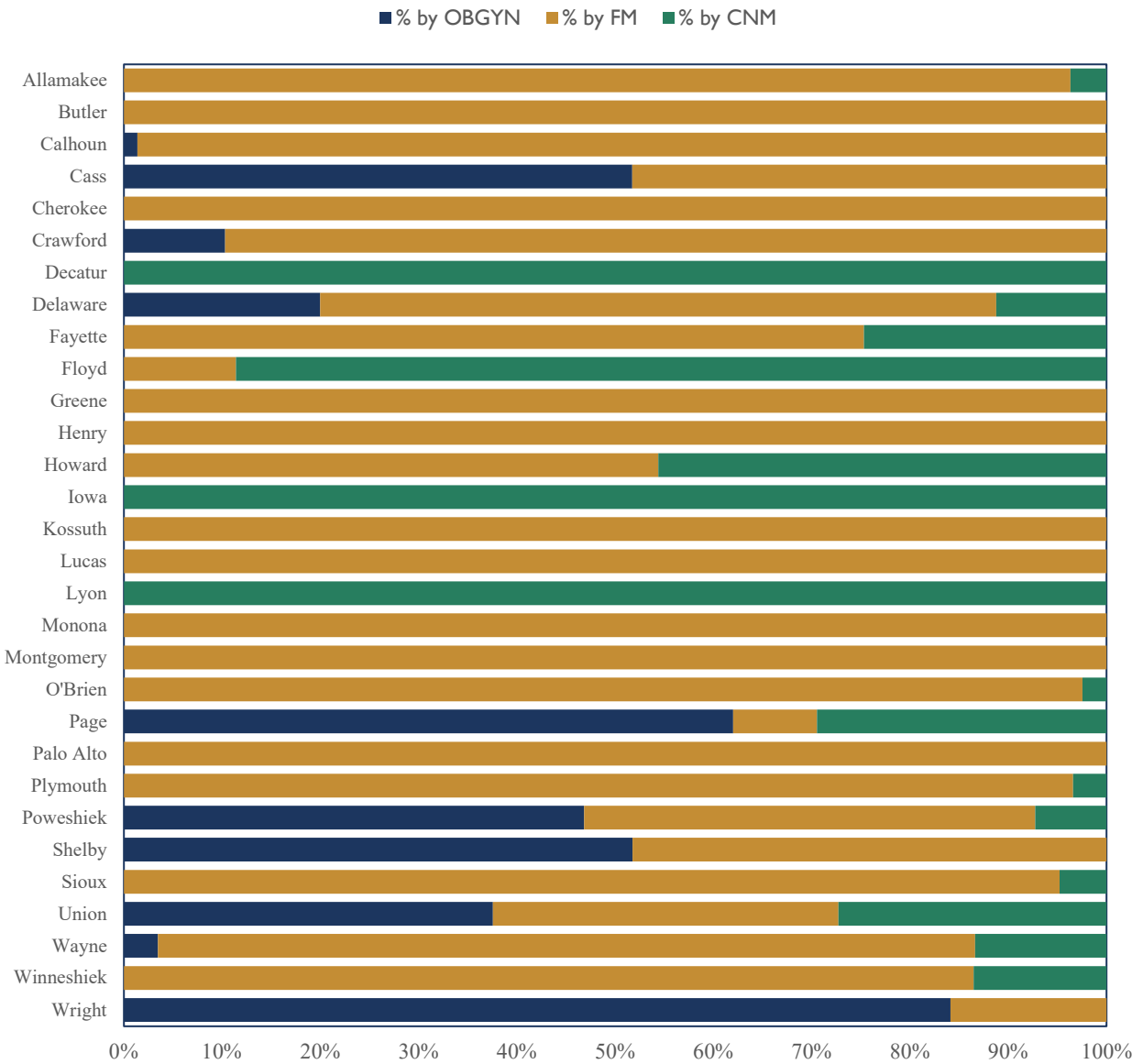
[Appendix B](#) presents a map to visualize county level availability of hospitals with obstetrical (OB) units. As of December 1, 2023, there were 56 facilities with OB units. Forty-one facility level OB units have closed since the year 2000. The Appendix B map also displays the year that an OB unit closed.

¹¹ In 2022, 70.0% (n=520) of non-institutional births were attended by unlicensed persons followed by ARNPs (25.8%; n=192), Family Medicine physicians (1.6%; n=12), OBGYN physicians (2.2%; n=16), and physicians of other specialties (0.4%; n=3).

¹² n=3 missing facility

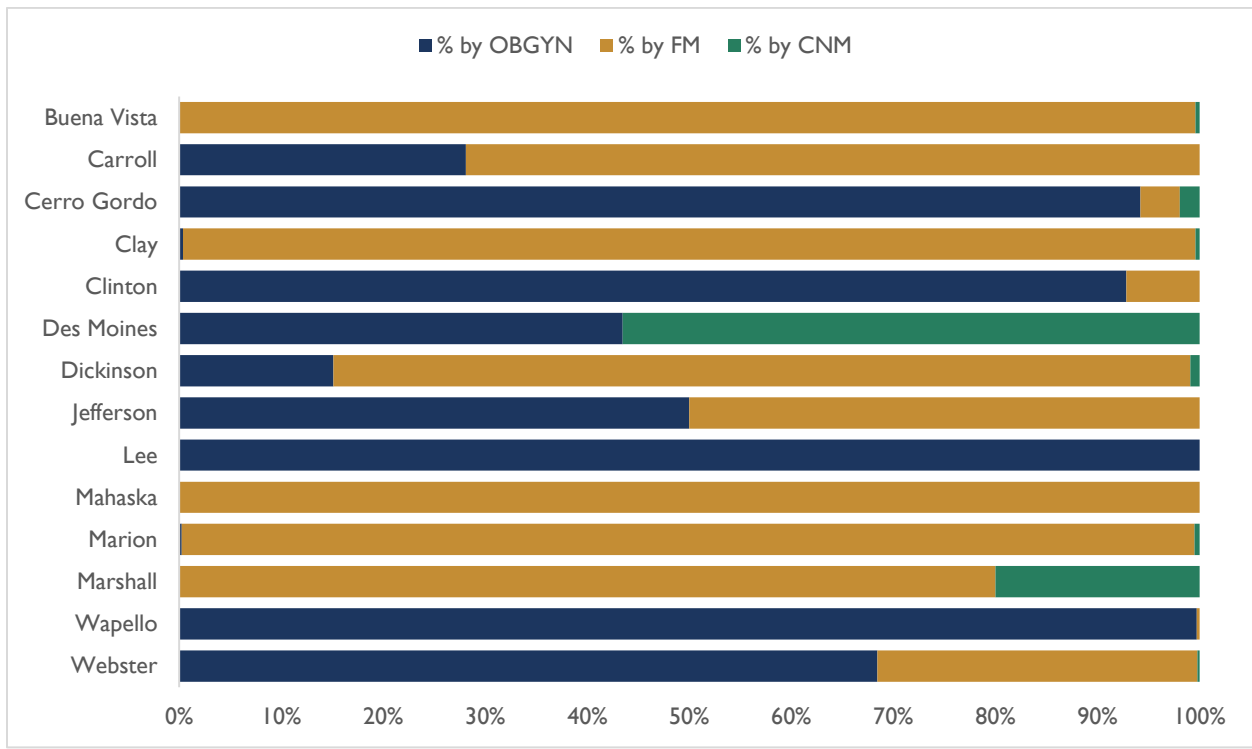
Appendix C presents a map to visualize the census based county level designations of rural, micropolitan, and metropolitan.

Figure 1: In rural counties¹³, OBGYN physicians attended 53.5% of births, FM physicians attended 35.1% of births, and CNMs attended 11.4% of births.



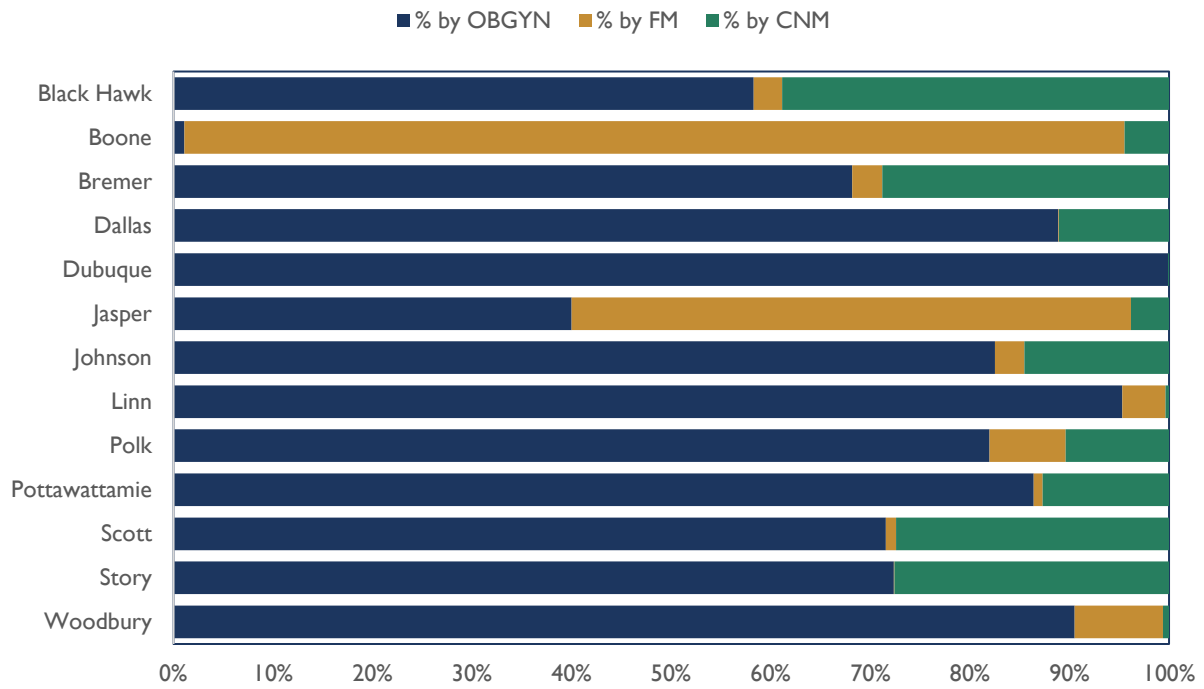
¹³ Rural counties with less than 10 occurrent births (n=31) were excluded from Figure 1.

Figure 2: In micropolitan counties¹⁴, OBGYN physicians attended 60.2% of births, FM physicians attended 25.3% of births, and CNMs attended 14.5% of births.



¹⁴ Micropolitan counties with less than 10 occurrent births (n=2) were excluded from Figure 2.

Figure 3: In metropolitan counties¹⁵, OBGYN physicians attended 81.3% of births, FM physicians attended 5.5% of births, and CNMs attended 13.2% of births.



¹⁵ Metropolitan counties with less than 10 occurrent births (n=9) were excluded from Figure 3.

Appendix A

County	Rurality	OB unit	Births to residents that occurred in Iowa, 2022					
			OB/GYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Adair	Rural	Never ¹⁶						
Adams	Rural	Closed ¹⁷						
Allamakee	Rural	OB Unit			79	96.3%	** ¹⁸	3.7%
Appanoose	Rural	Closed						
Audubon	Rural	Closed						
Benton	Metropolitan	Never					**	100.0%
Black Hawk	Metropolitan	OB Unit	1,284	58.3%	63	2.9%	856	38.9%
Boone	Metropolitan	OB Unit	**	1.1%	85	94.4%	**	4.4%
Bremers	Metropolitan	OB Unit	135	68.2%	6	3.0%	57	28.8%
Buchanan	Rural	Closed					**	100.0%
Buena Vista	Micropolitan	OB Unit			252	99.6%	**	0.4%
Butler	Rural	Never			**	100.0%		
Calhoun	Rural	OB Unit	**	1.4%	70	98.6%		
Carroll	Micropolitan	OB Unit	100	28.1%	256	71.9%		
Cass	Rural	OB Unit	74	51.7%	69	48.3%		
Cedar	Rural	Never						
Cerro Gordo	Micropolitan	OB Unit	633	94.2%	26	3.9%	13	1.9%
Cherokee	Rural	OB Unit			93	100.0%		
Chickasaw	Rural	Closed						
Clarke	Rural	Never						
Clay	Micropolitan	OB Unit	**	0.4%	250	99.2%	**	0.4%
Clayton	Rural	Closed						
Clinton	Micropolitan	OB Unit	272	92.8%	21	7.2%		
Crawford	Rural	OB Unit	10	10.3%	87	89.7%		
Dallas	Metropolitan	OB Unit	1,430	88.9%	**	0.1%	178	11.1%
Davis	Rural	Closed						
Decatur	Rural	Closed					**	100.0%
Delaware	Rural	OB Unit	41	20.0%	141	68.8%	23	11.2%
Des Moines	Micropolitan	OB Unit	289	43.5%	0	0.0%	376	56.5%
Dickinson	Micropolitan	OB Unit	34	15.1%	189	84.0%	**	0.9%
Dubuque	Metropolitan	OB Unit	1,262	99.9%			**	0.1%
Emmet	Rural	Closed						
Fayette	Rural	OB Unit			61	75.3%	20	24.7%
Floyd	Rural	OB Unit			8	11.4%	62	88.6%
Franklin	Rural	Closed						
Fremont	Rural	Closed						
Greene	Rural	Closed			**	100.0%		
Grundy	Metropolitan	Never						
Guthrie	Metropolitan	Never	**	50.0%			**	50.0%
Hamilton	Rural	Closed						
Hancock	Rural	Never						
Hardin	Rural	Closed						

¹⁶ Never refers to a county that has never had an OB Unit

¹⁷ Closed refers to a county that had an OB unit in the past and now no longer has an OB unit. See Appendix B for the year during which a facility level OB unit closed.

¹⁸ ** Events of less than or equal to 5 are suppressed per Iowa HHS confidentiality policy

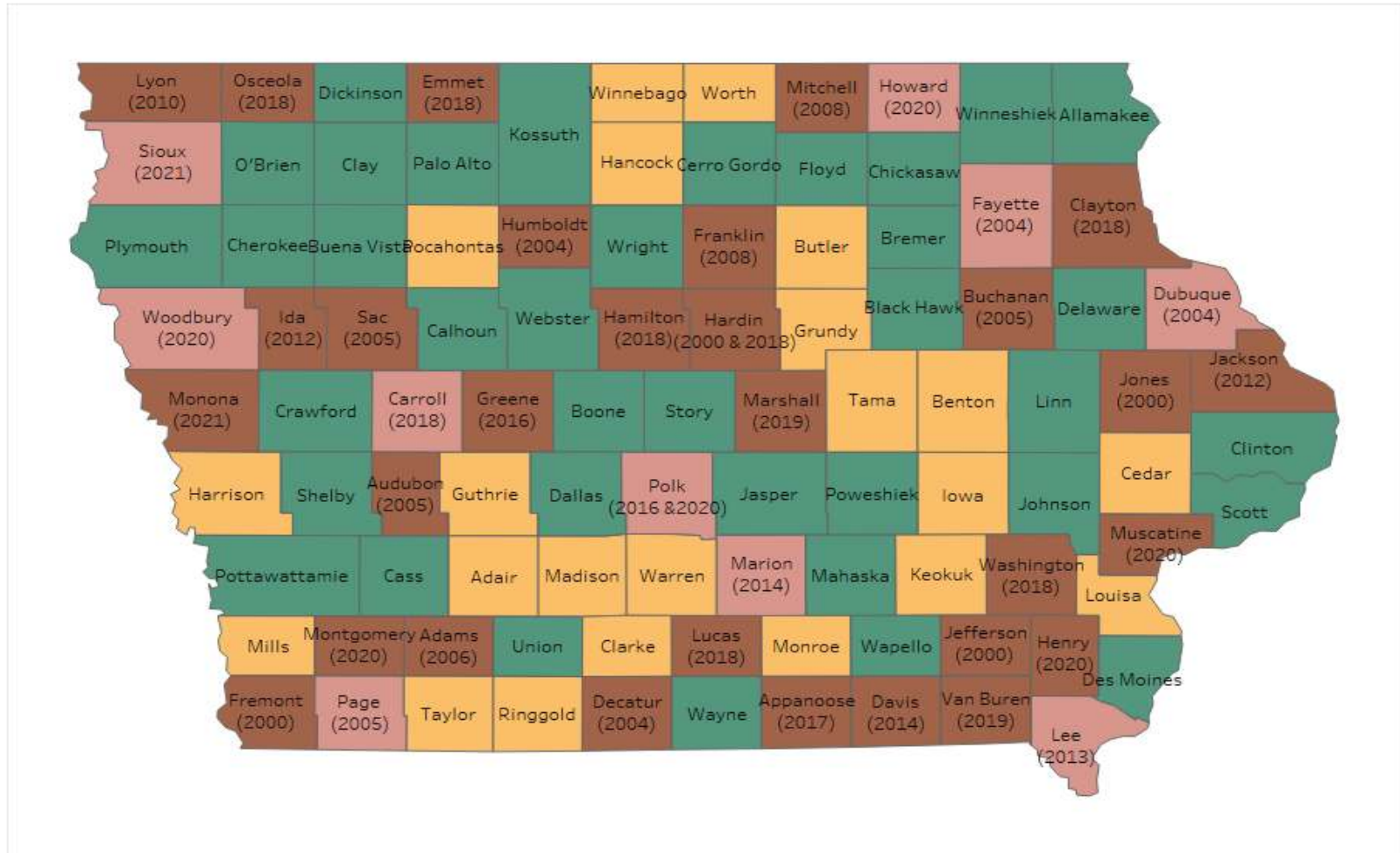
County	Rurality	OB unit	Births to residents that occurred in Iowa, 2022					
			OB/GYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Harrison	Metropolitan	Never						
Henry	Rural	Closed			**	100.0%		
Howard	Rural	OB Unit			31	54.4%	26	45.6%
Humboldt	Rural	Closed					**	100.0%
Ida	Rural	Closed						
Iowa	Rural	Never					**	100.0%
Jackson	Rural	Closed						
Jasper	Metropolitan	OB Unit	42	40.0%	59	56.2%	**	3.8%
Jefferson	Micropolitan	Closed	**	50.0%	**	50.0%		
Johnson	Metropolitan	OB Unit	3,033	82.5%	109	3.0%	534	14.5%
Jones	Metropolitan	Closed	**	50.0%	0	0.0%	**	50.0%
Keokuk	Rural	Never						
Kossuth	Rural	OB Unit			121	100.0%		
Lee	Micropolitan	OB Unit	170	100.0%				
Linn	Metropolitan	OB Unit	2,817	95.3%	128	4.3%	10	0.3%
Louisa	Rural	Never						
Lucas	Rural	Closed			**	100.0%		
Lyon	Rural	Closed					**	100.0%
Madison	Metropolitan	Never					**	100.0%
Mahaska	Micropolitan	OB Unit			139	100.0%		
Marion	Micropolitan	OB Unit	**	0.2%	402	99.3%	**	0.5%
Marshall	Micropolitan	Closed			**	80.0%	**	20.0%
Mills	Metropolitan	Never					**	100.0%
Mitchell	Rural	Closed						
Monona	Rural	Closed			**	100.0%		
Monroe	Rural	Never						
Montgomery	Rural	Closed			**	100.0%		
Muscatine	Micropolitan	Closed						
O'Brien	Rural	OB Unit			120	97.6%	**	2.4%
Osceola	Rural	Closed						
Page	Rural	OB Unit	80	62.0%	11	8.5%	38	29.5%
Palo Alto	Rural	OB Unit			69	100.0%		
Plymouth	Rural	OB Unit			114	96.6%	**	3.4%
Pocahontas	Rural	Never						
Polk	Metropolitan	OB Unit	6,582	82.0%	613	7.6%	834	10.4%
Pottawattamie	Metropolitan	OB Unit	960	86.4%	10	0.9%	141	12.7%
Poweshiek	Rural	OB Unit	97	46.9%	95	45.9%	15	7.2%
Ringgold	Rural	Never						
Sac	Rural	Closed						
Scott	Metropolitan	OB Unit	2,147	71.6%	31	1.0%	822	27.4%
Shelby	Rural	OB Unit	44	51.8%	41	48.2%	0	
Sioux	Rural	OB Unit			360	95.2%	18	4.8%
Story	Metropolitan	OB Unit	1,016	72.4%	**	0.1%	387	27.6%
Tama	Rural	Never						
Taylor	Rural	Never						
Union	Rural	OB Unit	62	37.6%	58	35.2%	45	27.3%
Van Buren	Rural	Closed						
Wapello	Micropolitan	OB Unit	352	99.7%	**	0.3%		0.0%

County	Rurality	OB unit	Births to residents that occurred in Iowa, 2022					
			OBGYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Warren	Metropolitan	Never	0		0		9	100.0%
Washington	Metropolitan	Closed						
Wayne	Rural	OB Unit	6	3.5%	143	83.1%	23	13.4%
Webster	Micropolitan	OB Unit	308	68.4%	141	31.3%	**	0.2%
Winnebago	Rural	Never						
Winneshiek	Rural	OB Unit	0		224	86.5%	35	13.5%
Woodbury	Metropolitan	OB Unit	1,989	90.5%	195	8.9%	13	0.6%
Worth	Micropolitan	Never						
Wright	Rural	OB Unit	514	84.1%	97	15.9%	0	

APPENDIX B

County level availability of OB Units, 2023

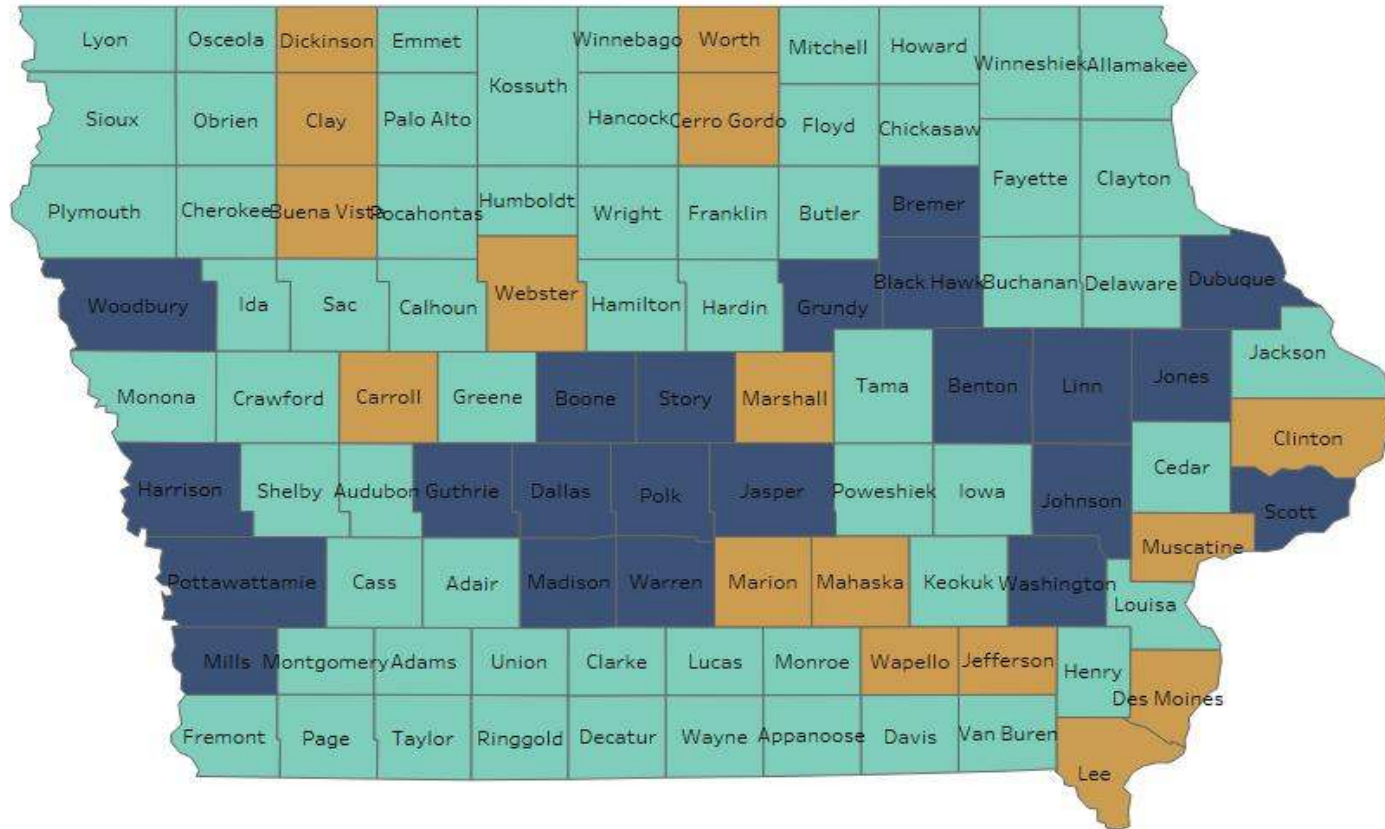
- OB Unit closed (Year closed) n=41
- Never had OB Unit (n=22)
- OB Unit (n=56)
- OB Unit closed - another remains open



APPENDIX C

United States census based county level designations

Metropolitan Micropolitan Rural



APPENDIX D

Table 10. Count and percent of births by provider types, Iowa, 2014-2022

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
Provider Type	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Obstetricians & Gynecologists	25,338 (67.2)	27,171 (68.8)	26,909 (68.8)	26,552 (69.4)	26,117 (69.4)	26,213 (69.8)	25,762 (71.6)	26,099 (70.8)	25,790 (70.2)
Family Medicine	6,414 (17.0)	6,721 (17.0)	6,351 (16.3)	5,885 (15.4)	5,805 (15.4)	5,498 (14.6)	4,941 (13.7)	4,993 (13.6)	5,083 (13.8)
Other Physician	1,625 (4.3)	1,578 (4.0)	1,363 (3.5)	1,059 (2.8)	955 (2.5)	892 (2.4)	664(1.9)	639 (1.7)	553 (1.5)
Residents	744 (2.0)	292 (0.7)	418 (1.1)	486 (1.3)	235 (0.6)	405 (1.1)	255 (0.7)	173 (0.5)	164 (0.5)
CNM/ARNP	3,221 (8.5)	3,433 (8.7)	3,691 (9.4)	3,923 (10.3)	4,109 (10.9)	4,095 (10.9)	3,853 (10.7)	4,411 (12.0)	4,577 (12.5)
Unlicensed other	360 (1.0)	294 (0.8)	344 (0.9)	361 (0.9)	420 (1.1)	454 (1.2)	490 (1.4)	530 (1.4)	564 (1.5)

Figure 4. Percent of births by provider types, Iowa 2014-2022

