

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

ACCESS TO OBSTETRICAL CARE IN
IOWA: A REPORT to the IOWA STATE
LEGISLATURE – CALENDAR YEAR 2021

January, 2023

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ACCESS TO OBSTETRICAL CARE IN IOWA: A REPORT TO THE IOWA STATE LEGISLATURE - CALENDAR YEAR 2021

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 2022 Legislature

The Iowa Department of Health and Human Services, Bureau of Family Health, respectfully submit 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 2017 through 2021.

This report uses birth certificate data to generate the number and percent of licensed providers who provide deliveries in our state. 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 (OBGYN) 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.

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- 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 in the United States. In the same publication, Rayburn reported that there were 3.3 obstetricians-gynecologists per 10,000 WRA in Iowa.

2021 Iowa Population and Provider Information

- 2021 estimated total Iowa population: 3,193,079³
- 2021 estimated Iowa women of reproductive age: 606,327³

Table I. Rate of physicians per 10,000 women of reproductive age, 2017-2021

Year	Delivering Physicians⁴	Delivering Obstetricians-Gynecologists
2021	9.1	3.8
2020	8.8	3.8
2019	9.6	4.0
2018	10.7	4.2
2017	10.5	4.1

¹ The rates reported by the Rayburn report differ from those in this report because the report 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, 2020-2021. July 1st resident population by state, county, age, sex, single-race, and Hispanic origin, on CDC WONDER Online Database. Vintage 2021 estimates released by U.S. Census Bureau on June 30, 2022. Accessed at <http://wonder.cdc.gov/single-race-v2021.html> on Nov 1, 2022 1:55:35 PM

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

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Table 2. Count of unique licensed providers who delivered at least one infant, Iowa 2017-2021

Provider type	2017	2018	2019	2020	2021
Obstetricians & Gynecologists	244	252	243	232	231
Family Medicine	311	324	294	247	269
Other Physicians ⁵	66	59	53	66	53
Residents ⁶	88	47	52	58	30
CNM	76	91	90	83	92
Total	785	773	732	686	675

Table 3. Count and percent of births by provider type, Iowa, 2017 -2021

Year	2017	2018	2019	2020	2021
Provider Type	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Obstetricians & Gynecologists	26,552 (69.4)	26,117 (69.4)	26,213 (69.8)	25,762 (71.6)	26,099 (70.8)
Family Medicine	5,885 (15.4)	5,805 (15.4)	5,498 (14.6)	4,941 (13.7)	4,993 (13.6)
Other Physicians	1,059 (2.8)	955 (2.5)	892 (2.4)	664(1.9)	639 (1.7)
Residents	486 (1.3)	235 (0.6)	405 (1.1)	255 (0.7)	173 (0.5)
CNM	3,923 (10.3)	4,109 (10.9)	4,095 (10.9)	3,853 (10.7)	4,411 (12.0)
Unlicensed others	361 (0.9)	420 (1.1)	454 (1.2)	490 (1.4)	530 (1.4)
Total	38,266	37,641	37,577	35,965	36,845

See [Appendix A](#) for the number and percent of births by the top three provider types by county

See [Appendix B](#) for county level locations of facilities with OB units.

⁵ The majority of other physicians include surgeons and those in emergency medicine.

⁶ The number of deliveries by residents may be underestimated because these deliveries may be documented under the name of the supervising faculty physician

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Table 4. Demographic information for unique licensed providers who delivered at least one infant, Iowa 2021

Provider Type	Provider Count	Average age, delivering males	Average age, delivering females	% male delivering providers	% female delivering females
Obstetricians & Gynecologists	231	55.2	42.8	35.1	64.9
Family Medicine	269	44.0	38.8	53.5	46.5
Other Physicians	53	51.2	44.8	75.5	24.5
Certified Nurse Midwives	92	NA	43.3	0%	100%

Table 5. University of Iowa Hospitals & Clinics, Obstetrics & Gynecology and Family Medicine Residency Programs, June 30, 2021⁷

Specialty	Total # Residents Graduating in June 2021	Total # Continuing Education (Specializing)	Total # Entering Practice	Total # (%) entering an Iowa Practice
Obstetrics & Gynecology	5	2	3	2 (67%)
Family Medicine	57	9	48	24 (50%)

Table 6. Obstetrics & Gynecology Residents by Location and Year, July 2020 – June 2021⁸

Residency Location	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
U of I Hospitals and Clinics	5	5	5	5	20

⁷ University of Iowa Graduate Medical Education Program

⁸ Data source: University of Iowa Graduate Medical Education Program

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Table 7. Iowa medical school May 2021 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	4	1 (25%)	17	5 (29%)
Des Moines University of Osteopathic Medicine	9	0	49	10 (20%)

Table 8. Family Medicine Residents by Location and Year, July 2020 – June 2021⁹

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	6	6	6	18
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	55	55	55	165

⁹ Data obtained from publicly available organizational websites

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Table 9: Number and percent of births that occurred in Iowa regardless of maternal residence by Historical Hospital Perinatal Levels of Care, 2017-2021

Year	2017	2018	2019	2020	2021
OB Level (# of hospitals)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Non-institutional births¹⁰	500 (1.3)	560 (1.5)	533 (1.4)	601 (1.7)	685 (1.9)
Level 1 (35)	9,134 (23.9)	8,487 (22.6)	8,964 (23.9)	8,595 (23.9)	9,493 (25.8)
Level 2 (12)	9,058 (23.7)	8,932 (23.7)	8,829 (23.5)	8,304 (23.1)	8,217 (22.3)
Level 2 Regional (4)	4,843 (12.7)	4,833 (12.8)	4,754 (12.7)	4,481 (12.5)	4,604 (12.5)
Level 2 Regional Neonatal (2)	4,207 (11.0)	4,275 (11.4)	4,336 (11.6)	4,168 (11.6)	4,229 (11.5)
Level 3 (3)	10,542 (27.5)	10,554 (28.0)	10,141 (27.0)	9,814 (27.3)	9,617 (26.1)
Total	38,284	37,641	37,557	35,963 ¹¹	36,845

Geographic variability by provider type

Three provider types, Obstetrics & Gynecology physicians (OBGYN), Family Medicine physicians (FM), and Certified Nurse Midwives (CNM) provided 96% of births that occurred in Iowa during 2021. OBGYN physicians provided 70.8% of births, FM physicians provided 13.6% of births, and CNMs provided 12% of births. However, provider type varies by county level of rurality. We used census data to create the county level designations of rural, micropolitan, and metropolitan. County in this instance refers to the county in which the birth occurred or where the provider attended the birth. FM physicians (63.4%) provide the majority of deliveries in rural counties (Table 10). Whereas OBGYN physicians provide the majority of deliveries in both metropolitan (81.6%) and micropolitan (57.2%) counties. See [Appendix C](#) for a map to visualize these county level designations.

¹⁰ In 2021, 71.0% (n=486) of non-institutional births were attended by unlicensed persons followed by CNMs (23.5%; n=161), FM physicians (2.6%; n=18), OBGYN physicians (2.0%; n=14), and physicians of other specialties (0.9%; n=6).

¹¹ N=3 missing facility

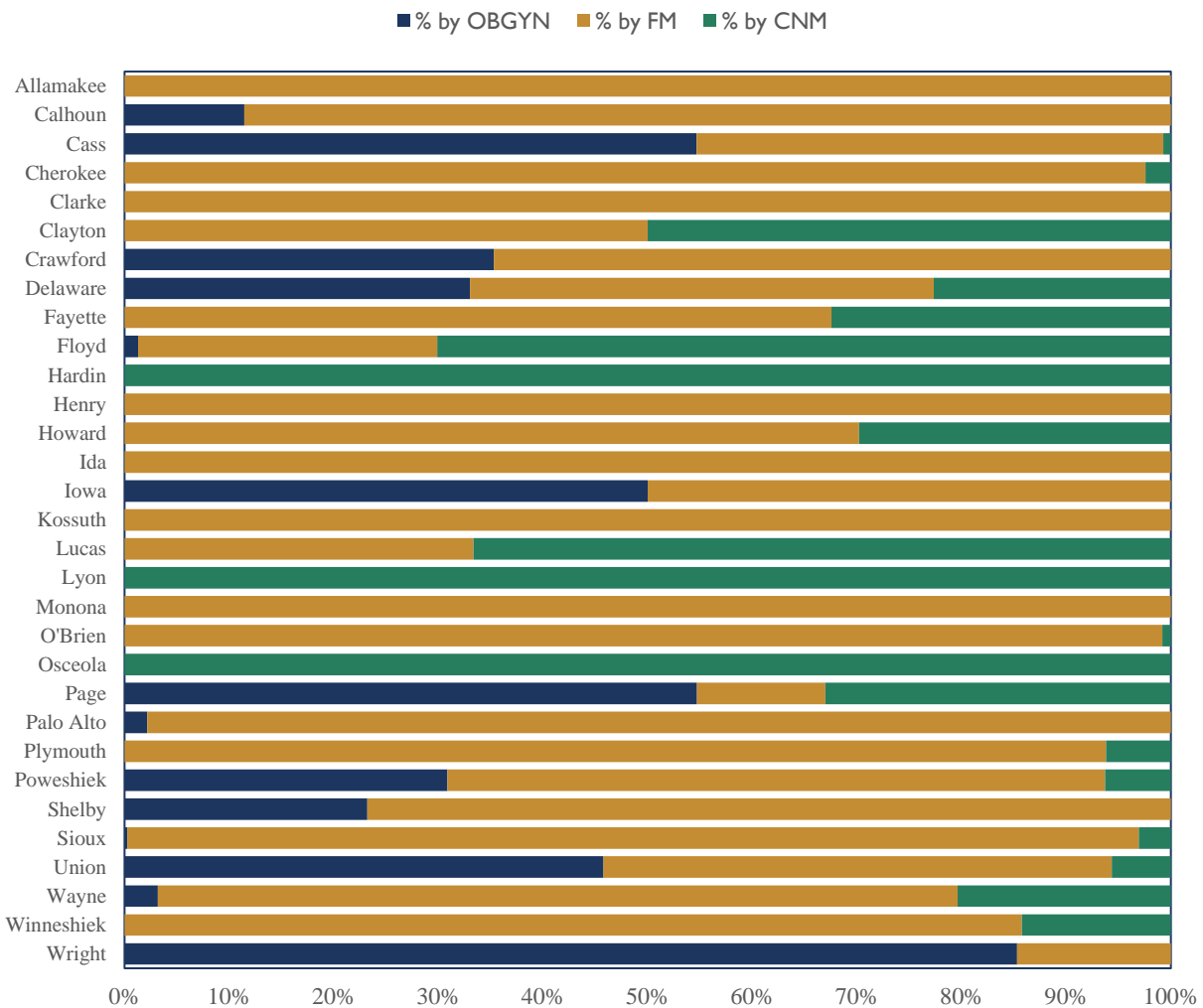
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Table 10: Number and percent of deliveries by and provider type and rurality, Calendar Year 2021

Rurality	OBGYN	FM	CNM
	Number (%)	Number (%)	Number (%)
Metropolitan Counties	22,690 (81.6)	1,367 (4.9)	3,757 (13.5)
Micropolitan Counties	2,546 (57.2)	1,543 (34.7)	361 (8.1)
Rural Counties	866 (26.7)	2,083 (64.3)	293 (9.0)

Figures 1 through 3 illustrate provider type variability by selected rural, micropolitan, and metropolitan designated counties.

Figure 1: In rural counties, OB/GYN physicians attended 26.7% of births, FM physicians attended 63.4% of births, and CNMs attended 9.0% of births.



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Figure 2: In micropolitan counties, OBGYN physicians attended 57.2% of births, FM physicians attended 34.7% of births, and CNMs attended 8.1% of births.

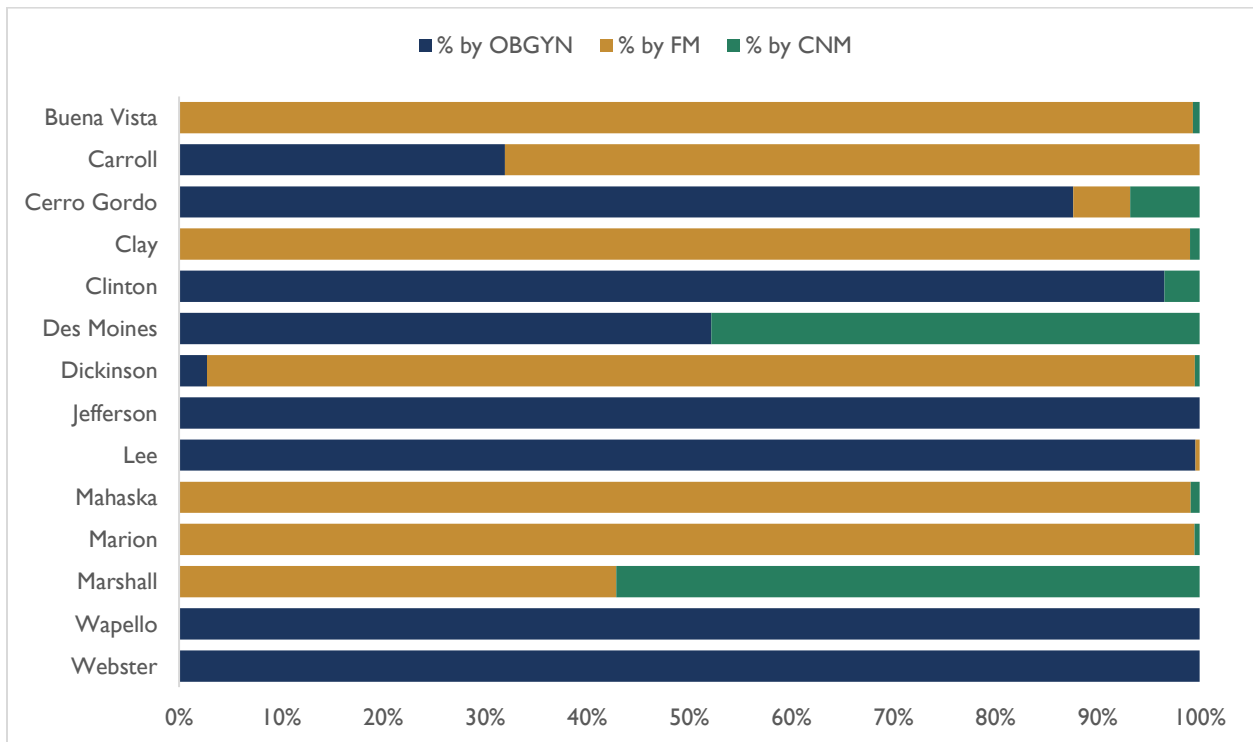
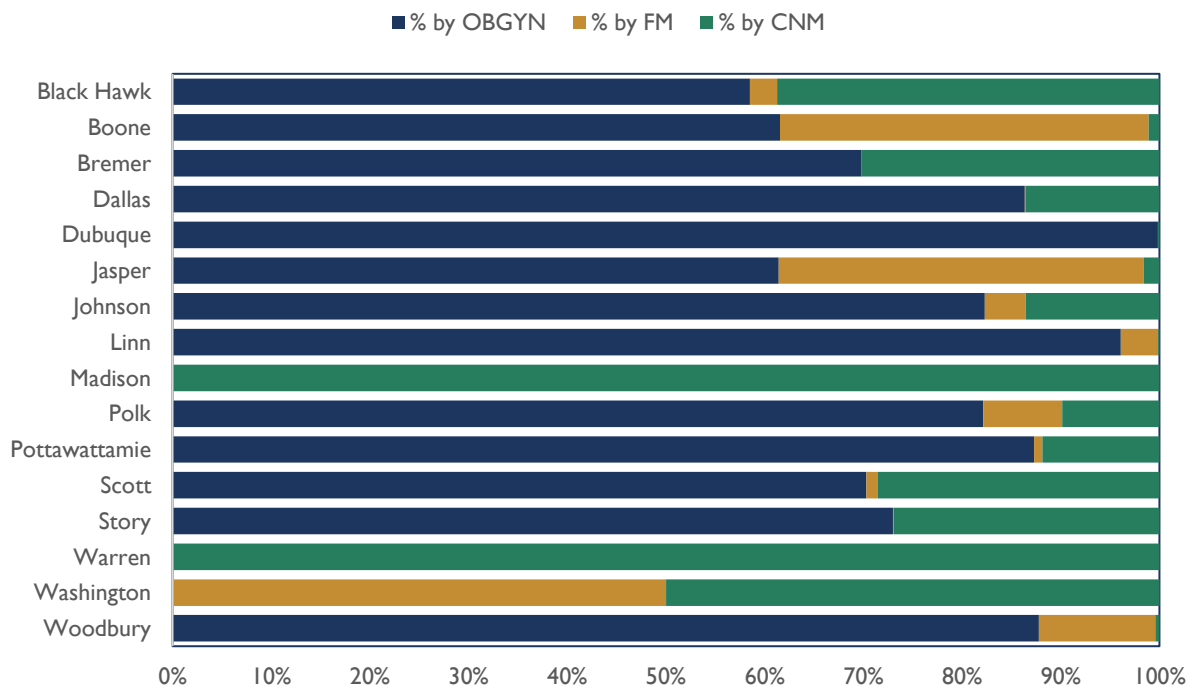


Figure 3: In metropolitan counties, OBGYN physicians attended 81.6% of births, FM physicians attended 4.9% of births, and CNMs attended 13.5% of births.



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Appendix A

County	Rurality	OB unit	Births that occurred in Iowa, 2021					
			OB/GYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Adair	Rural	Never ¹²						
Adams	Rural	Closed ¹³						
Allamakee	Rural	OB Unit	0	0.0%	73	100.0%	0	0.0%
Appanoose	Rural	Closed						
Audubon	Rural	Closed						
Benton	Metropolitan	Never						
Black Hawk	Metropolitan	OB Unit	1,310	58.5%	62	2.8%	867	38.7%
Boone	Metropolitan	OB Unit	56	61.5%	34	37.4%	** ¹⁴	1.1%
Bremer	Metropolitan	OB Unit	148	69.8%	0	0.0%	64	30.2%
Buchanan	Rural	Closed						
Buena Vista	Micropolitan	OB Unit	0	0.0%	305	99.3%	**	0.7%
Butler	Rural	Never						
Calhoun	Rural	OB Unit	8	11.4%	62	88.6%	0	0.0%
Carroll	Micropolitan	OB Unit	113	31.9%	241	68.1%	0	0.0%
Cass	Rural	OB Unit	76	54.7%	62	44.6%	**	0.7%
Cedar	Rural	Never						
Cerro Gordo	Micropolitan	OB Unit	658	87.6%	42	5.6%	51	6.8%
Cherokee	Rural	OB Unit	0	0.0%	80	97.6%	**	2.4%
Chickasaw	Rural	Closed ¹⁵						
Clarke	Rural	Never						
Clay	Micropolitan	OB Unit	0	0.0%	209	99.1%	**	0.9%
Clayton	Rural	Closed	0	0.0	**	100%	0	0.0%
Clinton	Micropolitan	OB Unit	309	96.6%	0	0.0%	11	3.4%
Crawford	Rural	OB Unit	30	35.3%	55	64.7%	0	0.0%
Dallas	Metropolitan	OB Unit	1,437	86.4%	**	0.1%	226	13.6%
Davis	Rural	Closed						
Decatur	Rural	Closed						
Delaware	Rural	OB Unit	67	33.0%	90	44.3%	46	22.7%
Des Moines	Micropolitan	OB Unit	313	52.2%	0	0.0%	287	47.8%
Dickinson	Micropolitan	OB Unit	6	2.7%	212	96.8%	**	0.5%
Dubuque	Metropolitan	OB Unit	1,303	99.8%	0	0.0%	**	0.2%
Emmet	Rural	Closed						
Fayette	Rural	OB Unit	0	0.0%	50	67.6%	24	32.4%
Floyd	Rural	OB Unit	**	1.3%	22	28.6%	54	70.1%
Franklin	Rural	Closed						
Fremont	Rural	Closed						
Greene	Rural	Closed						
Grundy	Metropolitan	Never						
Guthrie	Metropolitan	Never						

¹² Never refers to a county that has never had an OB Unit

¹³ Closed refers to a county that had an OB unit in the past and now no longer has an OB unit

¹⁴ ** Per Department policy, event counts between 1 and 5 are suppressed

¹⁵ Closed 06.30.20 – County no longer has an OB Unit

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County	Rurality	OB unit	Births that occurred in Iowa, 2021					
			OB/GYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Hamilton	Rural	Closed						
Hancock	Rural	Never						
Hardin	Rural	Closed	0	0.0%	0	0.0%	**	100.0%
Harrison	Metropolitan	Never						
Henry	Rural	Closed	6	12.2%	0	0.0%	43	87.8%
Howard	Rural	OB Unit	0	0.0%	33	70.2%	14	29.8%
Humboldt	Rural	Closed						
Ida	Rural	Closed	0	0.0%	**	100.0%	0	0.0%
Iowa	Rural	Never	**	50.0%	**	50.0%	0	0.0%
Jackson	Rural	Closed						
Jasper	Metropolitan	OB Unit	78	61.4%	47	37.0%	**	1.6%
Jefferson	Micropolitan	Closed	**	100.0%	0	0.0%	0	0.0%
Johnson	Metropolitan	OB Unit	3,016	82.3%	152	4.1%	496	13.5%
Jones	Metropolitan	Closed						
Keokuk	Rural	Never						
Kossuth	Rural	OB Unit	0	0.0%	126	100.0%	0	0.0%
Lee	Micropolitan	OB Unit	259	99.6%	**	0.4%	0	0.0%
Linn	Metropolitan	OB Unit	2,937	96.1%	116	3.8%	**	0.1%
Louisa	Rural	Never						
Lucas	Rural	Closed	0	0.0%	**	33.3%	**	66.7%
Lyon	Rural	Closed	0	0.0%	0	0.0%	**	100.0%
Madison	Metropolitan	Never	0	0.0%	0	0.0%	**	100.0%
Mahaska	Micropolitan	OB Unit	0	0.0%	114	99.1%	**	0.9%
Marion	Micropolitan	OB Unit	0	0.0%	416	99.5%	**	0.5%
Marshall	Micropolitan	Closed	0	0.0%	**	42.9%	**	57.1%
Mills	Metropolitan	Never						
Mitchell	Rural	Closed						
Monona	Rural	Closed ¹⁶	0	0.0%	49	100.0%	0	0.0%
Monroe	Rural	Never						
Montgomery	Rural	Closed ¹⁷						
Muscatine	Micropolitan	Closed ¹⁸						
O'Brien	Rural	OB Unit	0	0.0%	122	99.2%	**	0.8%
Osceola	Rural	Closed						
Page	Rural	OB Unit	58	54.7%	13	12.3%	35	33.0%
Palo Alto	Rural	OB Unit	**	2.2%	90	97.8%	0	0.0%
Plymouth	Rural	OB Unit	0	0.0%	106	93.8%	7	6.2%
Pocahontas	Rural	Never						
Polk	Metropolitan	OB Unit	6,664	82.1%	652	8.0%	798	9.8%
Pottawattamie	Metropolitan	OB Unit	831	87.3%	8	0.8%	113	11.9%
Poweshiek	Rural	OB Unit	54	30.9%	110	62.9%	11	6.3%
Ringgold	Rural	Never						
Sac	Rural	Closed						
Scott	Metropolitan	OB Unit	1,969	70.3%	32	1.1%	799	28.5%

¹⁶ Closed 12.20.21 – County no longer has an OB Unit

¹⁷ Closed 10.08.20 – County no longer has an OB Unit

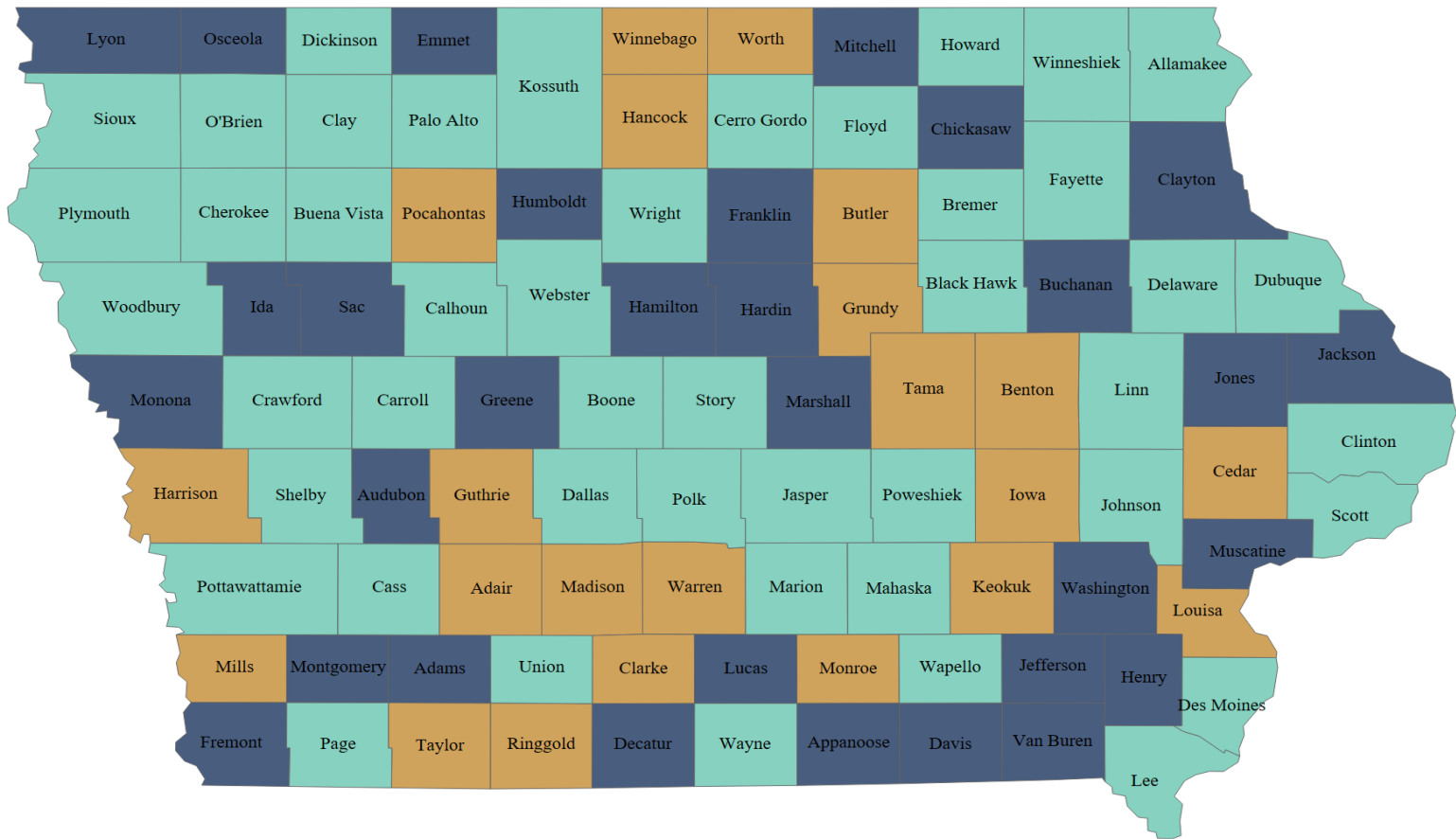
¹⁸ Closed 10.08.20 – County no longer has an OB Unit

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County	Rurality	OB unit	Births that occurred in Iowa, 2021					
			OBGYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Shelby	Rural	OB Unit	16	23.2%	53	76.8%	0	0.0%
Sioux	Rural	OB Unit	**	0.3%	379	96.7%	12	3.1%
Story	Metropolitan	OB Unit	1,003	73.0%	**	0.1%	370	26.9%
Tama	Rural	Never						
Taylor	Rural	Never						
Union	Rural	OB Unit	65	45.8%	69	48.6%	8	5.6%
Van Buren	Rural	Closed						
Wapello	Micropolitan	OB Unit	394	100.0%	0	0.0%	0	0.0%
Warren	Metropolitan	Never						
Washington	Metropolitan	Closed						
Wayne	Rural	OB Unit	**	3.2%	120	76.4%	32	20.4%
Webster	Micropolitan	OB Unit	490	100.0%	0	0.0%	0	0.0%
Winnebago	Rural	Never						
Winneshiek	Rural	OB Unit	0	0.0%	229	85.8%	38	14.2%
Woodbury	Metropolitan	OB Unit	1,938	87.8%	261	11.8%	9	0.4%
Worth	Micropolitan	Never						
Wright	Rural	OB Unit	482	85.3%	83	14.7%	0	0.0%

APPENDIX B

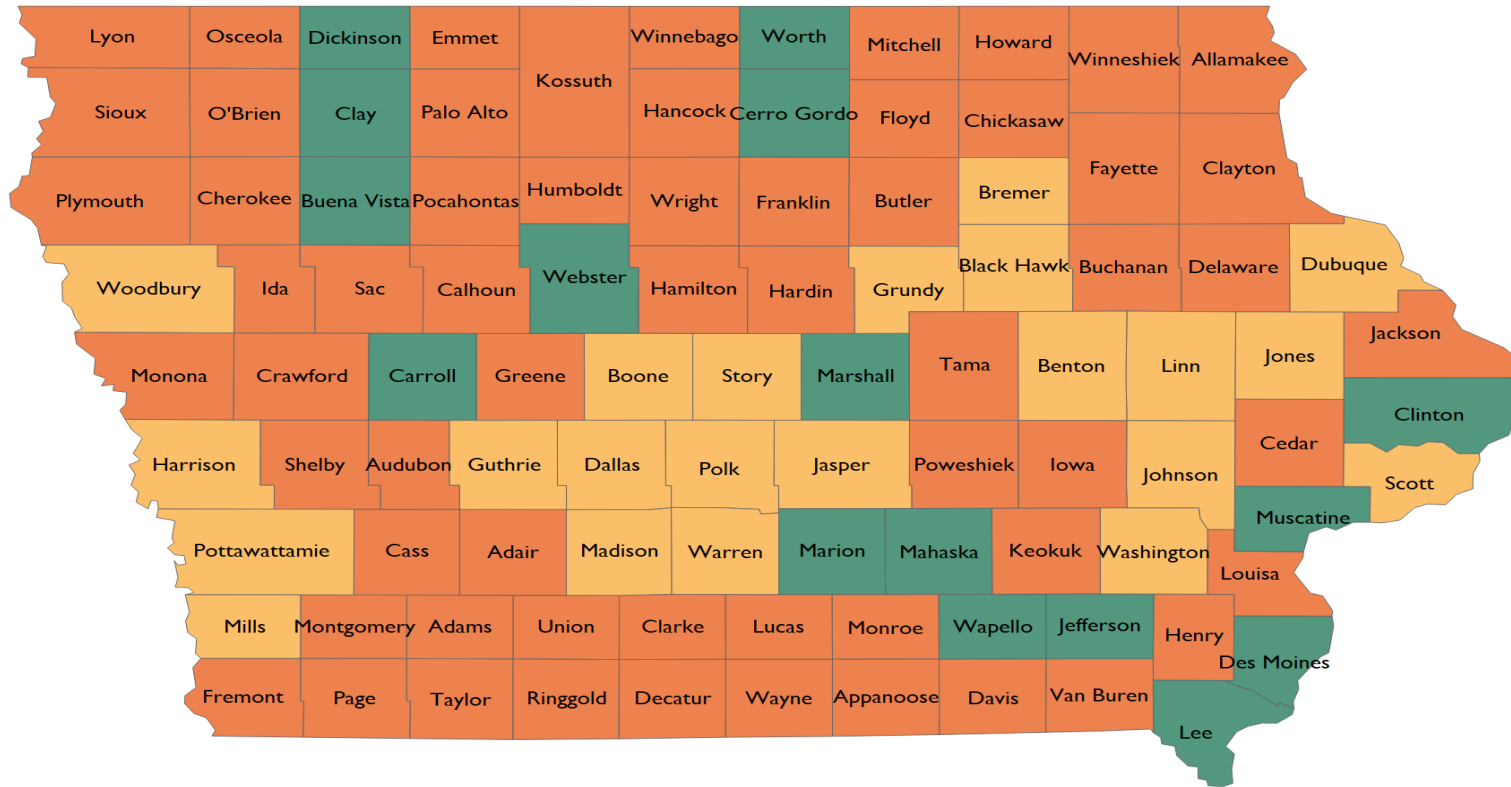
COUNTY LEVEL AVAILABILITY OF FACILITIES WITH OB UNITS



■ OB Unit
 ■ Closed
 ■ Never

APPENDIX C

FIGURE 4. COUNTY LEVEL OF RURALITY BASED ON METROPOLITAN STATISTICAL AREAS



Rurality
 Metropolitan
 Micropolitan
 Rural