



Access to Obstetrical Care in Iowa:

A Report to the Iowa State Legislature - Calendar year 2020



**Division of Health Promotion & Chronic Disease Prevention - Bureau of
Family Health**

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Acknowledgements

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Access to Obstetrical Care in Iowa: A Report to the Iowa State Legislature Calendar Year 2020

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 Public Health (IDPH), Division of Health Promotion & Chronic Disease Prevention, Bureau of Family Health, respectfully submits this report in response to the legislative mandate. The data summarized in this report provides an overview of the obstetrical workforce in Iowa for calendar years 2016 through 2020.

This report uses birth certificate data to generate the number and percent of licensed providers who attended 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](#) to obtain demographic and physician specialty information.

Definitions:

The categories of providers who attend 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 in training (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)³ in the United States. In the same publication, Rayburn reported that there were 3.3 obstetricians-gynecologists per 10,000 WRA in Iowa.

2020 Iowa Population and Provider Information:

- 2020 estimated total Iowa population: 3,163,561⁴
- 2020 estimated Iowan WRA: 618,424³

Table 1. Rate of Physicians per 10,000 WRA, Iowa 2016-2020

Year	Physicians ⁵	Obstetricians-Gynecologists
2020	8.8	3.8
2019	9.6	4.0
2018	10.7	4.2
2017	10.5	4.1
2016	11.4	4.1

Table 2. Count of Unique Licensed Providers Who Delivered at Least One Infant, Iowa 2016-2020

	2016	2017	2018	2019	2020
<i>Provider Type</i>	<i>Count of Providers</i>				
<i>Obstetricians & Gynecologists</i>	245	244	252	243	232
<i>Family Medicine</i>	350	311	324	294	247
<i>Other Physicians</i>	76	66	59	53	66
<i>Residents⁶</i>	62	88	47	52	58
<i>CNM/ARNP</i>	79	76	91	90	83
<i>Total</i>	812	785	773	732	686

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 Women of reproductive age are defined as women between the ages of 14 and 44.

⁴ U.S Census Bureau – accessed 11.19.21 via [IDPH Public Health Tracking Portal](#)

⁵ The total number of delivering physicians includes obstetricians, family medicine physicians and other types of physicians. This count excludes resident physicians.

⁶ Residents perform more deliveries than noted because frequently these deliveries are documented under the name of the supervising faculty physician

Table 3. Count and Percent of Births by Provider Type, Iowa 2016 -2020

<i>Year</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
<i>Provider Type</i>	Number (%)				
<i>Obstetricians & Gynecologists</i>	26,909 (68.8)	26,552 (69.4)	26,117 (69.4)	26,213 (69.8)	25,762 (71.6)
<i>Family Medicine</i>	6,351 (16.3)	5,885 (15.4)	5,805 (15.4)	5,498 (14.6)	4,941 (13.7)
<i>***Other Physicians</i>	1,363 (3.5)	1,059 (2.8)	955 (2.5)	892 (2.4)	664 (1.9) ⁷
<i>Residents</i>	418 (1.1)	486 (1.3)	235 (0.6)	405 (1.1)	255 (0.7)
<i>CNM/ARNP</i>	3,691 (9.4)	3,923 (10.3)	4,109 (10.9)	4,095 (10.9)	3,853 (10.7)
<i>Unlicensed other⁸</i>	344 (0.9)	361 (0.9)	420 (1.1)	454 (1.2)	490 (1.4)
<i>Total</i>	39,076	38,266	37,641	37,577	35,965 ⁹

*** Other physicians include maternal/fetal medicine specialists, emergency room physicians, and general surgeons (who may perform cesarean sections for family medicine patients). Surgeons provided 78.3% (n=520) of the deliveries those categorized as “other physicians”.

Table 4. Demographic Information for Unique Licensed Providers Who Delivered at Least One Infant, Iowa 2020

<i>Provider Type</i>	<i>Provider Count</i>	<i>Avg. Age, Delivering Males</i>	<i>Avg. Age Delivering Females</i>	<i>% Delivery Providers, Male</i>	<i>% Delivery Providers, Female</i>
<i>Obstetricians & Gynecologists</i>	232	55.8	42.5	35.8	64.2
<i>Family Medicine</i>	247	44.7	39.0	53.0	47.0
<i>Other Physicians</i>	66	48.9	45.9	75.8	24.2

⁷ The number and percent of deliveries attended by “other physicians” has likely decreased due to improved data collection of provider specialty.

⁸ Unlicensed persons include lay midwives, registered nurses, EMT staff, and family members

⁹ n=1 missing provider type

Table 5. University of Iowa, Carver College of Medicine, Obstetrics & Gynecology and Family Medicine Residency Programs, June 30, 2020¹⁰

<i>Specialty</i>	<i>Total # Residents Graduating in June 2020</i>	<i>Total # Continuing Education (Specializing)</i>	<i>Total # Entering Practice</i>	<i>Total # (%) entering an Iowa Practice</i>
<i>Obstetrics & Gynecology</i>	5	2	3	2 (67%)
<i>Family Medicine</i>	57	8	46	24 (52%)

Table 6. Iowa Medical School May 2020 Graduates Who Obtained a Residency Position in Obstetrics & Gynecology (OBGYN) or Family Medicine (FM) Through the National Resident-Matching Program¹¹

<i>University</i>	<i># Students Matching in OBGYN Residency</i>	<i># Students Matching in UI OBGYN Residency Program</i>	<i># Students Matching in FM Residency</i>	<i># Students Matching in an Iowa Based FM Residency Program</i>
<i>U of I Carver College of Medicine</i>	4	1 (25%)	17	5 (29%)
<i>Des Moines University</i>	9	0	49	10 (20%)

Table 7. Family Medicine Residents by Location and Year, July 2019 – June 2020¹²

<i>Residency Location</i>	<i>1st Year</i>	<i>2nd Year</i>	<i>3rd year</i>	<i>Total</i>
<i>Cedar Rapids Medical Education – Closed 7/1/2020</i>	0	0	0	0
<i>Genesis Health System - Davenport</i>	6	6	6	18
<i>Broadlawns Medical Center - Des Moines</i>	8	8	8	24
<i>MercyOne Medical Center – Des Moines</i>	10	10	10	30
<i>UnityPoint - Iowa Lutheran – Des Moines</i>	6	6	6	18
<i>University of Iowa Hospitals and Clinics</i>	6	6	6	18
<i>MercyOne Medical Center - Mason City</i>	6	6	6	18
<i>Siouxland Medical Education Foundation – Sioux Falls</i>	6	6	6	18
<i>Northeast Iowa Medical Education Foundation – Waterloo</i>	6	6	6	18
<i>Total</i>	54	54	54	162

¹⁰ University of Iowa Graduate Medical Education Program

¹¹ Data sources - [University of Iowa 2020 Match Results](#) and [Des Moines University 2020 Match Results](#)

¹² Data obtained from publicly available organizational websites.

Table 8. Obstetrics & Gynecology Residents by Location and Year, July 2019 – June 2020¹³

<i>Residency Location</i>	<i>1st Year</i>	<i>2nd Year</i>	<i>3rd Year</i>	<i>4th Year</i>	<i>Total</i>
<i>University of Iowa Hospitals and Clinics</i>	5	5	5	5	20

Table 9: Occurrent Births by Hospital Level of Care, 2016-2020

	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>
<i>OB Level (# of hospitals)</i>	Number (%)				
<i>++ Home births</i>	549 (1.4)	500 (1.3)	560 (1.5)	533 (1.4)	601 (1.7)
<i>Level 1 (35)</i>	9,625 (24.6)	9,134 (23.9)	8,487 (22.6)	8,964 (23.9)	8,595 (23.9)
<i>Level 2 (12)</i>	8,988 (23.0)	9,058 (23.7)	8,932 (23.7)	8,829 (23.5)	8,304 (23.1)
<i>Level 2 Regional (4)</i>	5,111 (13.1)	4,843 (12.7)	4,833 (12.8)	4,754 (12.7)	4,481 (12.5)
<i>Level 2 Regional Neonatal (2)</i>	4,333 (11.1)	4,207 (11.0)	4,275 (11.4)	4,336 (11.6)	4,168 (11.6)
<i>Level 3 (3)</i>	10,488 (26.8)	10,542 (27.5)	10,554 (28.0)	10,141 (27.0)	9,814 (27.3)
<i>Total</i>	39,094	38,284	37,641	37,557	35,963 ¹⁴

++ Home births are primarily attended by lay midwives and family members. Specifically, 72.2% (n=434) of home births were attended by unlicensed persons followed by ARNPs (22.3%; n=133), Family Medicine physicians (3.0%; n=18) and OBGYN physicians (1.7%; n=10). The remaining provider types were each less than 1% of home births.

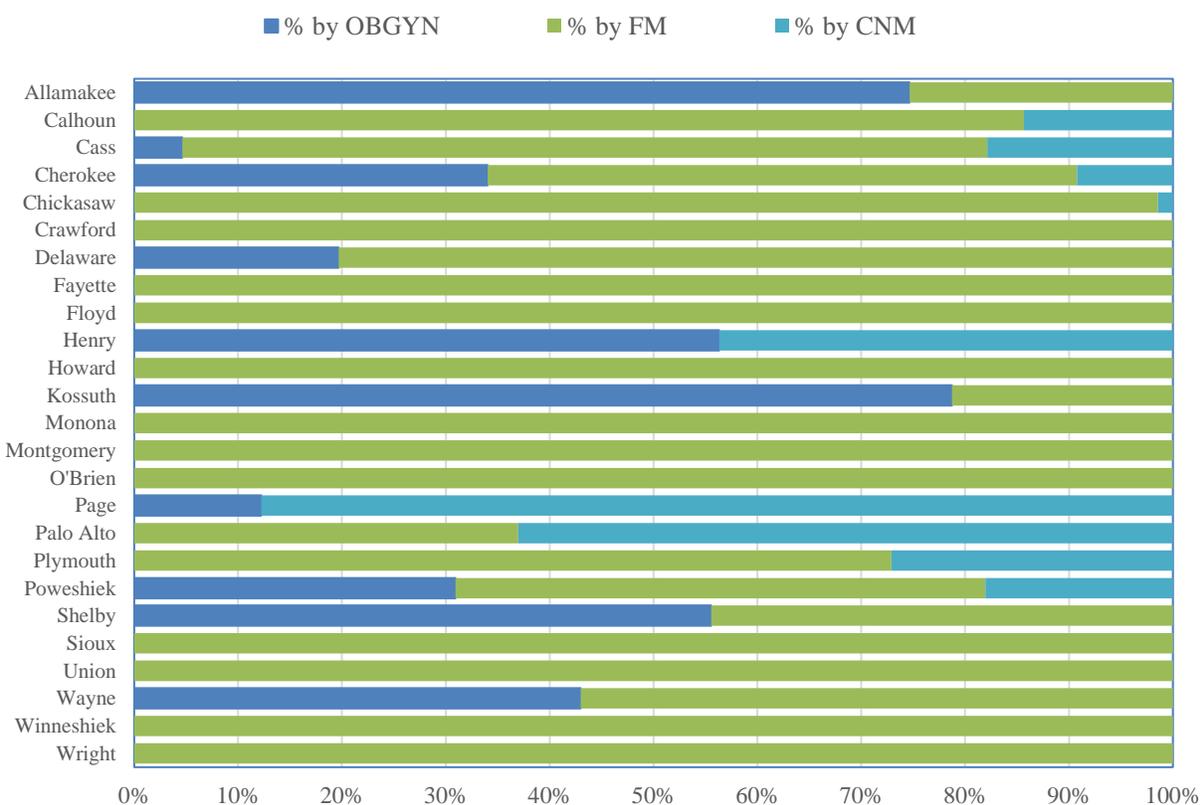
¹³ Data source: University of Iowa Graduate Medical Education Program

¹⁴ n=3 missing facility

Geographic variability of provider type: Three provider types, Obstetrics & Gynecology physicians (OBGYN), Family Medicine physicians (FM), and Certified Nurse Midwives (CNM) attended 96% of Iowa’s occurrent deliveries in 2020. At the state level, and based on these provider types 74.6% of deliveries were attended by OBGYN physicians, 14.3% by FM physicians, and 11.2% by CNMs. Based on county level of rurality, there is considerable variation in attendants by provider type. County levels of rurality (rural, micropolitan, metropolitan) are based on census determined metropolitan statistical areas (MSA)¹⁵ and are presented as a map in Figure 4.

Figures 1 through 3 illustrate provider type variability by rural, micropolitan, and metropolitan statistical areas.

Figure 1: In rural counties, 16.4% of deliveries are attended by OBGYN physicians, 72.3% by FM physicians, and 11.3% by CNMs.



¹⁵ <https://www.iowadatatcenter.org/aboutdata/statisticalareas> (State Library of Iowa accessed 11.16.21)

Figure 2: In micropolitan counties, 55.3% of births are attended by OBGYN physicians, 42.1% by FM physicians, and 2.6% by CNMs.

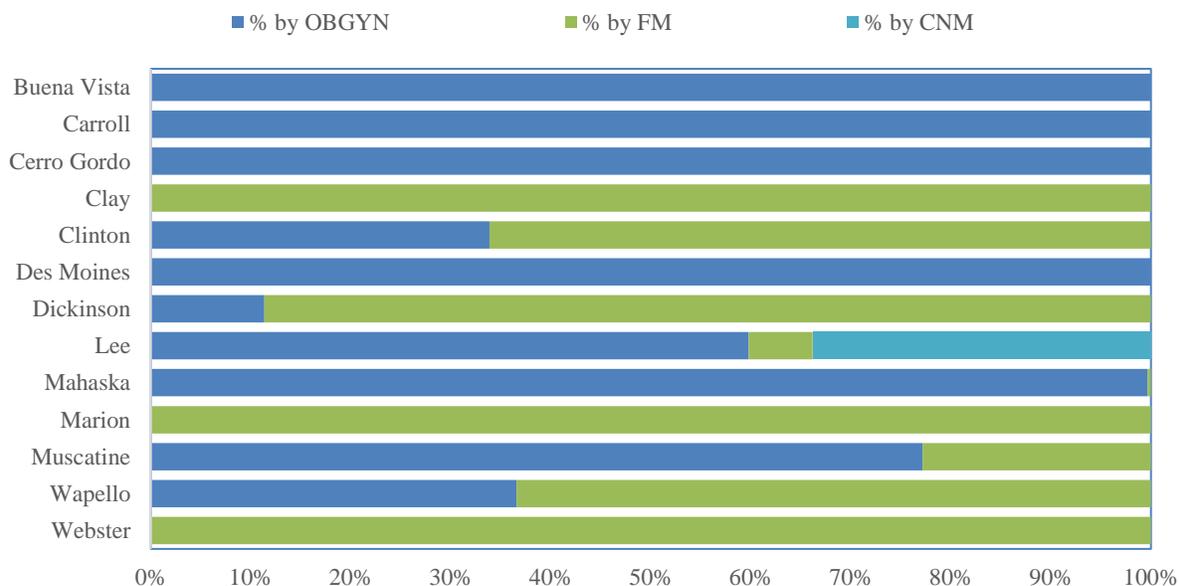
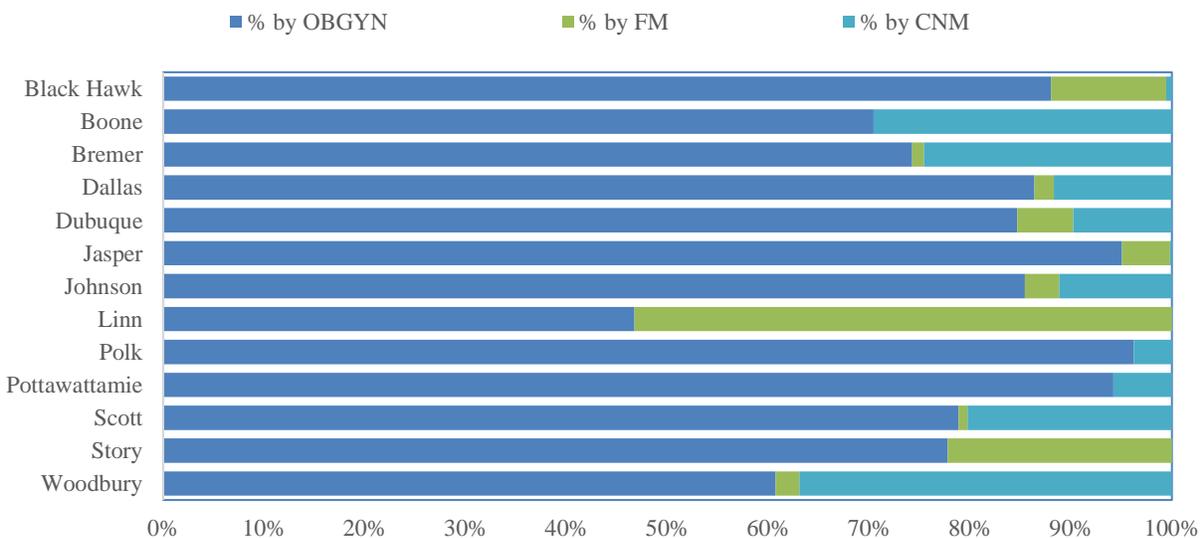


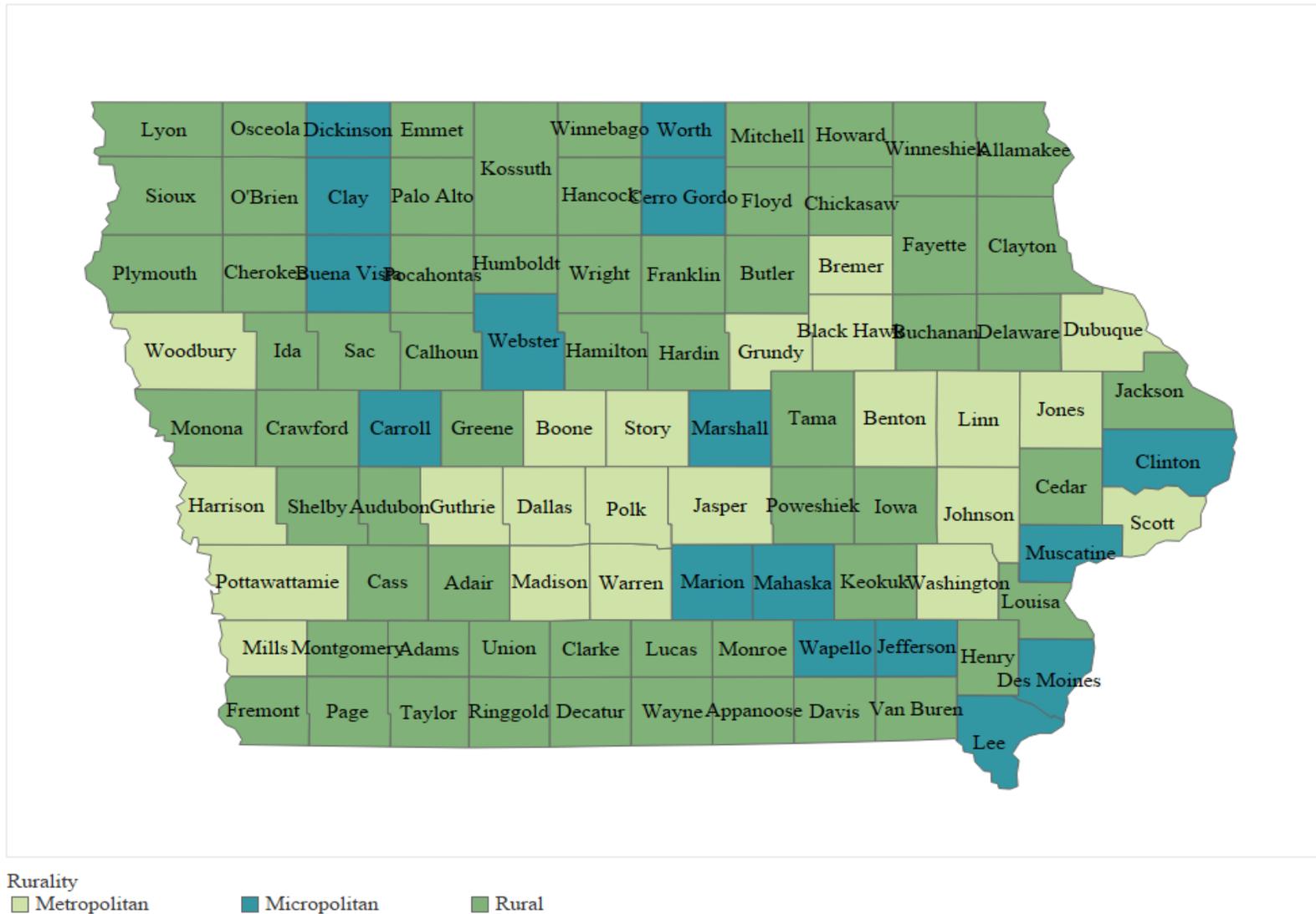
Figure 3: In metropolitan counties, 79.9% of births are attended by OBGYN physicians, 8.2% by FM physicians, and 11.9% by CNMs.



See Appendix A for the count and percent of deliveries by the top three provider types, by county, MSA, and by OB Unit availability.

See Appendix B for maps that present county level OB Unit availability and the percent of deliveries by the top three provider types and county level OB Unit availability.

Figure 4. County Level Rurality Designation Based on Metropolitan Statistical Areas



Appendix A

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County	Rurality	OB unit ¹⁶	Occurrent Births in 2020 ¹⁷					
			OBGYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Adair	Rural	Never ¹⁸						
Adams	Rural	Closed ¹⁹						
Allamakee	Rural	OB Unit	0	0.0%	82	100.0%	0	0.0%
Appanoose	Rural	Closed						
Audubon	Rural	Closed						
Benton	Metropolitan	Never						
Black Hawk	Metropolitan	OB Unit	1,385	60.7%	54	2.4%	842	36.9%
Boone	Metropolitan	OB Unit	105	77.8%	30	22.2%	0	0.0%
Bremer	Metropolitan	OB Unit	179	78.9%	**20	0.9%	46	20.3%
Buchanan	Rural	Closed						
Buena Vista	Micropolitan	OB Unit	0	0.0%	303	100.0%	0	0.0%
Butler	Rural	Never						
Calhoun	Rural	OB Unit	0	0.0%	61	100.0%	0	0.0%
Carroll	Micropolitan	OB Unit	117	36.6%	203	63.4%	0	0.0%
Cass	Rural	OB Unit	52	43.0%	69	57.0%	0	0.0%
Cedar	Rural	Never						
Cerro Gordo	Micropolitan	OB Unit	601	77.2%	178	22.8%	0	0.0%
Cherokee	Rural	OB Unit	0	0.0%	94	100.0%	0	0.0%
Chickasaw	Rural	Closed ²¹	0	0.0%	24	100.0%	0	0.0%
Clarke	Rural	Never						
Clay	Micropolitan	OB Unit	0	0.0%	236	100.0%	0	0.0%
Clayton	Rural	Closed						
Clinton	Micropolitan	OB Unit	302	99.7%	**	0.3%	0	0.0%
Crawford	Rural	OB Unit	60	55.6%	48	44.4%	0	0.0%
Dallas	Metropolitan	OB Unit	1,303	94.2%	0	0.0%	80	5.8%
Davis	Rural	Closed						
Decatur	Rural	Closed						
Delaware	Rural	OB Unit	60	30.9%	99	51.0%	35	18.0%
Des Moines	Micropolitan	OB Unit	336	59.8%	36	6.4%	190	33.8%
Dickinson	Micropolitan	OB Unit	22	11.3%	172	88.7%	0	0.0%
Dubuque	Metropolitan	OB Unit	1,247	96.2%	0	0.0%	49	3.8%
Emmet	Rural	Closed						
Fayette	Rural	OB Unit	0	0.0%	70	72.9%	26	27.1%
Floyd	Rural	OB Unit	0	0.0%	27	37.0%	46	63.0%
Franklin	Rural	Closed						
Fremont	Rural	Closed						
Greene	Rural	Closed						
Grundy	Metropolitan	Never						
Guthrie	Metropolitan	Never						
Hamilton	Rural	Closed						
Hancock	Rural	Never						
Hardin	Rural	Closed						
Harrison	Metropolitan	Never						

¹⁶ See Figure 5 for a map that reports county level OB unit availability

¹⁷ See Figures 6-8 for the information presented in a county level map format

¹⁸ Never refers to a county that has never had an OB Unit

¹⁹ Closed refers to a county that had an OB unit in the past and with the closure, no longer has an OB unit

²⁰ ** Per IDPH data standards event counts between 1 and 5 are suppressed

²¹ Closed 06.30.20 – County no longer has an OB Unit

County	Rurality	OB unit	Occurrent Births in 2020					
			OB/GYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Henry	Rural	Closed ²²	6	12.2%	0	0.0%	43	87.8%
Howard	Rural	OB Unit	0	0.0%	48	100.0%	0	0.0%
Humboldt	Rural	Closed						
Ida	Rural	Closed						
Iowa	Rural	Never						
Jackson	Rural	Closed						
Jasper	Metropolitan	OB Unit	71	46.7%	81	53.3%	0	0.0%
Jefferson	Micropolitan	Closed						
Johnson	Metropolitan	OB Unit	2,992	85.4%	120	3.4%	391	11.2%
Jones	Metropolitan	Closed						
Keokuk	Rural	Never						
Kossuth	Rural	OB Unit	0	0.0%	113	100.0%	0	0.0%
Lee	Micropolitan	OB Unit	274	100.0%	0	0.0%	0	0.0%
Linn	Metropolitan	OB Unit	2,863	95.1%	144	4.8%	5	0.2%
Louisa	Rural	Never						
Lucas	Rural	Closed						
Lyon	Rural	Closed						
Madison	Metropolitan	Never						
Mahaska	Micropolitan	OB Unit	44	33.8%	86	66.2%	0	0.0%
Marion	Micropolitan	OB Unit	0	0.0%	394	100.0%	0	0.0%
Marshall	Micropolitan	Closed						
Mills	Metropolitan	Never						
Mitchell	Rural	Closed						
Monona	Rural	OB Unit	0	0.0%	72	100.0%	0	0.0%
Monroe	Rural	Never						
Montgomery	Rural	Closed ²³	37	78.7%	10	21.3%	0	0.0%
Muscatine	Micropolitan	Closed ²⁴	13	100.0%	0	0.0%	0	0.0%
O'Brien	Rural	OB Unit	0	0.0%	127	100.0%	0	0.0%
Osceola	Rural	Closed						
Page	Rural	OB Unit	49	56.3%	0	0.0%	38	43.7%
Palo Alto	Rural	OB Unit	0	0.0%	83	100.0%	0	0.0%
Plymouth	Rural	OB Unit	0	0.0%	104	100.0%	0	0.0%
Pocahontas	Rural	Never						
Polk	Metropolitan	OB Unit	6,624	84.7%	435	5.6%	764	9.8%
Pottawattamie	Metropolitan	OB Unit	767	86.4%	17	1.9%	104	11.7%
Poweshiek	Rural	OB Unit	25	19.7%	102	80.3%	0	0.0%
Ringgold	Rural	Never						
Sac	Rural	Closed						
Scott	Metropolitan	OB Unit	2,030	74.3%	32	1.2%	672	24.6%
Shelby	Rural	OB Unit	0	0.0%	52	100.0%	0	0.0%
Sioux	Rural	OB Unit	0	0.0%	345	98.6%	**	1.4%
Story	Metropolitan	OB Unit	939	70.4%	0	0.0%	394	29.6%
Tama	Rural	Never						
Taylor	Rural	Never						
Union	Rural	OB Unit	48	34.0%	80	56.7%	13	9.2%

²² Closed 06.01.20 – County no longer has an OB Unit

²³ Closed 10.08.20 – County no longer has an OB Unit

²⁴ Closed 10.08.20 – County no longer has an OB Unit

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County	Rurality	OB unit	Occurrent Births in 2020					
			OBGYN		Family Medicine		Certified Nurse Midwife	
			Number	Percent	Number	Percent	Number	Percent
Van Buren	Rural	Closed						
Wapello	Micropolitan	OB Unit	454	100.0%	0	0.0%	0	0.0%
Warren	Metropolitan	Never						
Washington	Metropolitan	Closed						
Wayne	Rural	OB Unit	7	4.6%	117	77.5%	27	17.9%
Webster	Micropolitan	OB Unit	471	100.0%	0	0.0%	0	0.0%
Winnebago	Rural	Never						
Winneshiek	Rural	OB Unit	0	0.0%	209	85.7%	35	14.3%
Woodbury	Metropolitan	OB Unit	1,894	88.0%	246	11.4%	12	0.6%
Worth	Micropolitan	Never						
Wright	Rural	OB Unit	377	74.7%	128	25.3%	0	0.0%

Appendix B

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Figure 5. County Level OB Unit Availability 12.31.21

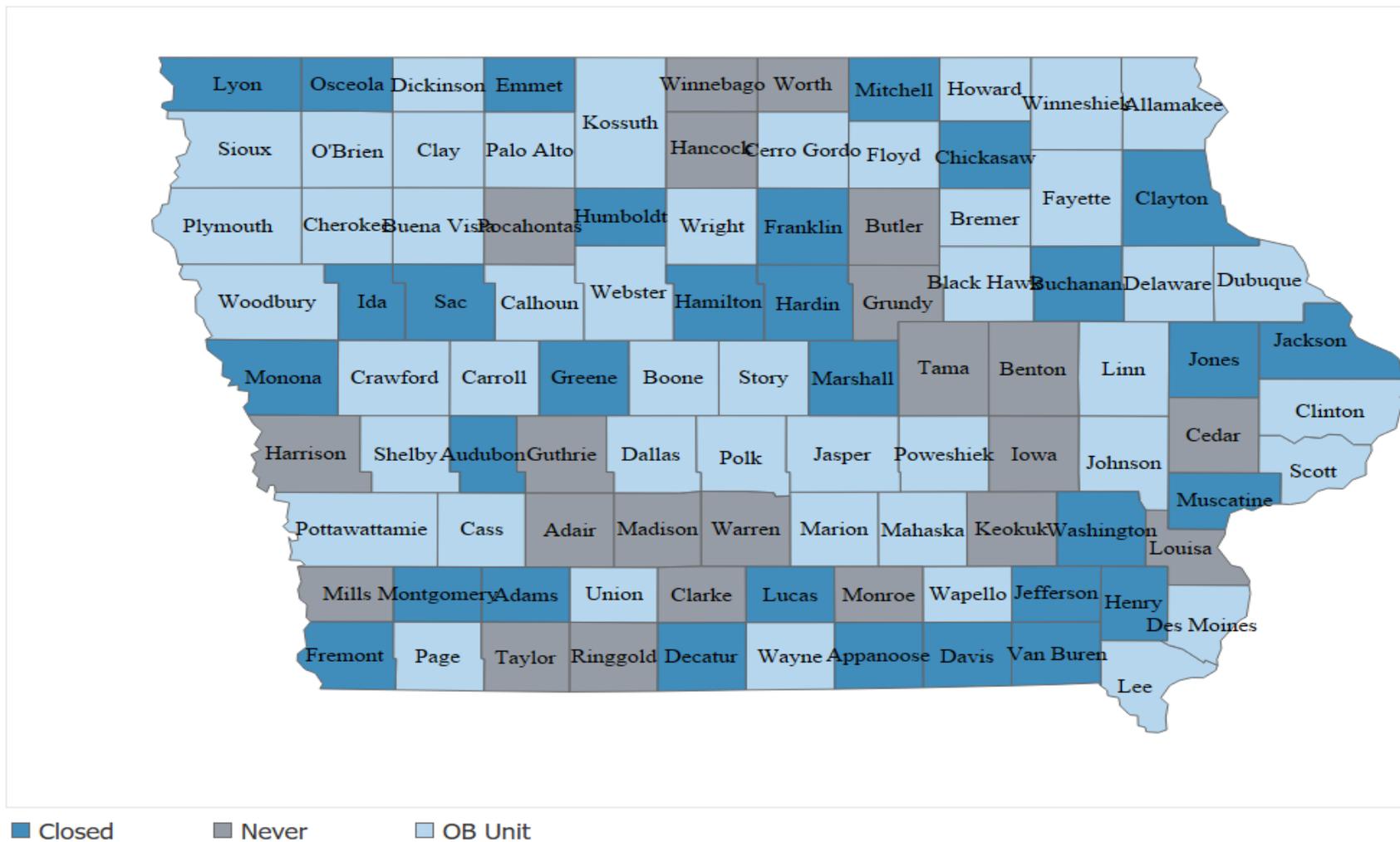


Figure 6. Percent of Deliveries by Attended by OBGYN Physicians, by Availability of OB Unit, Iowa Occurrent Births, Calendar Year 2020

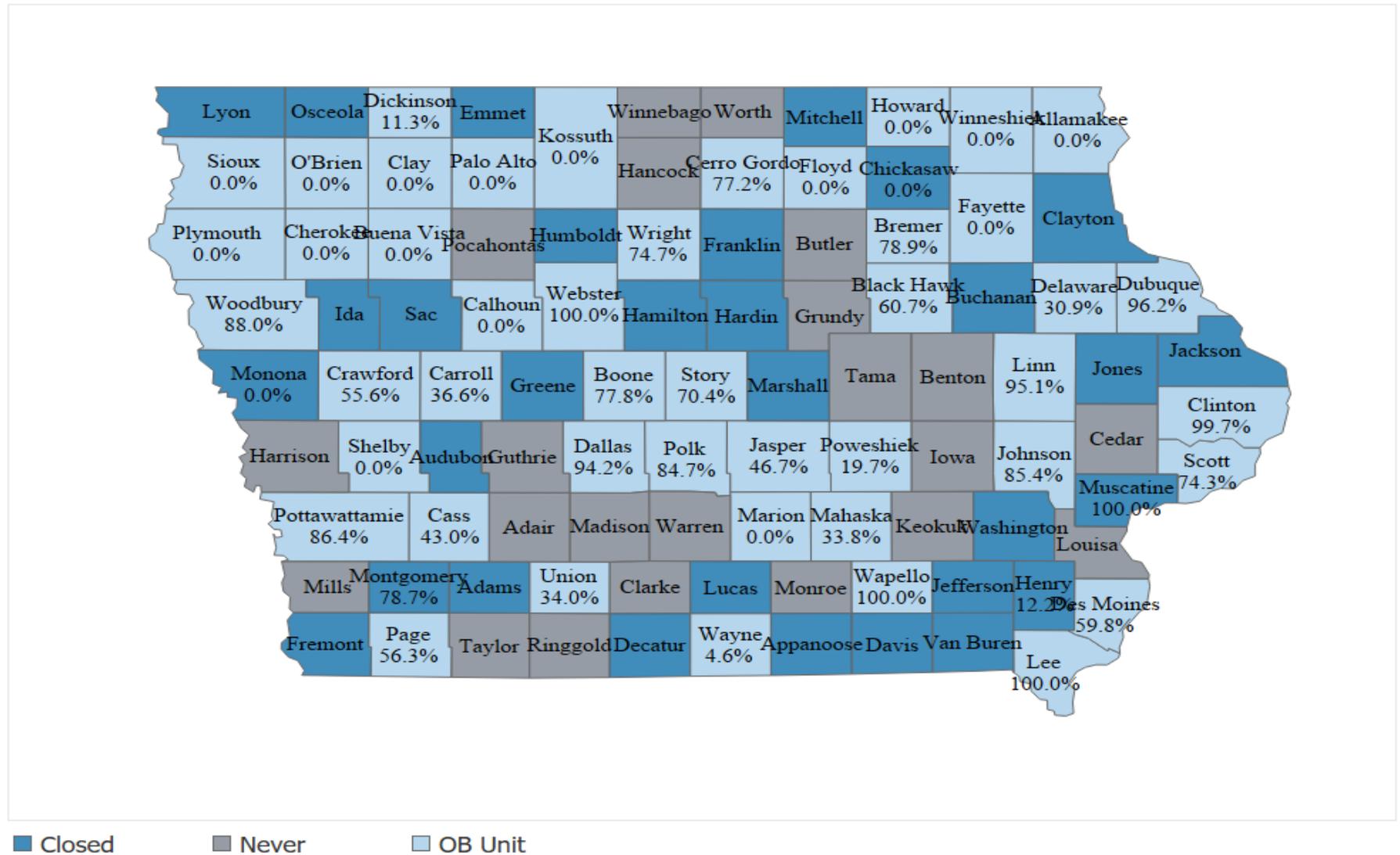


Figure 7. Percent of Deliveries by Attended by FM Physicians, by Availability of OB Unit, Iowa Occurrent Births, Calendar Year 2020

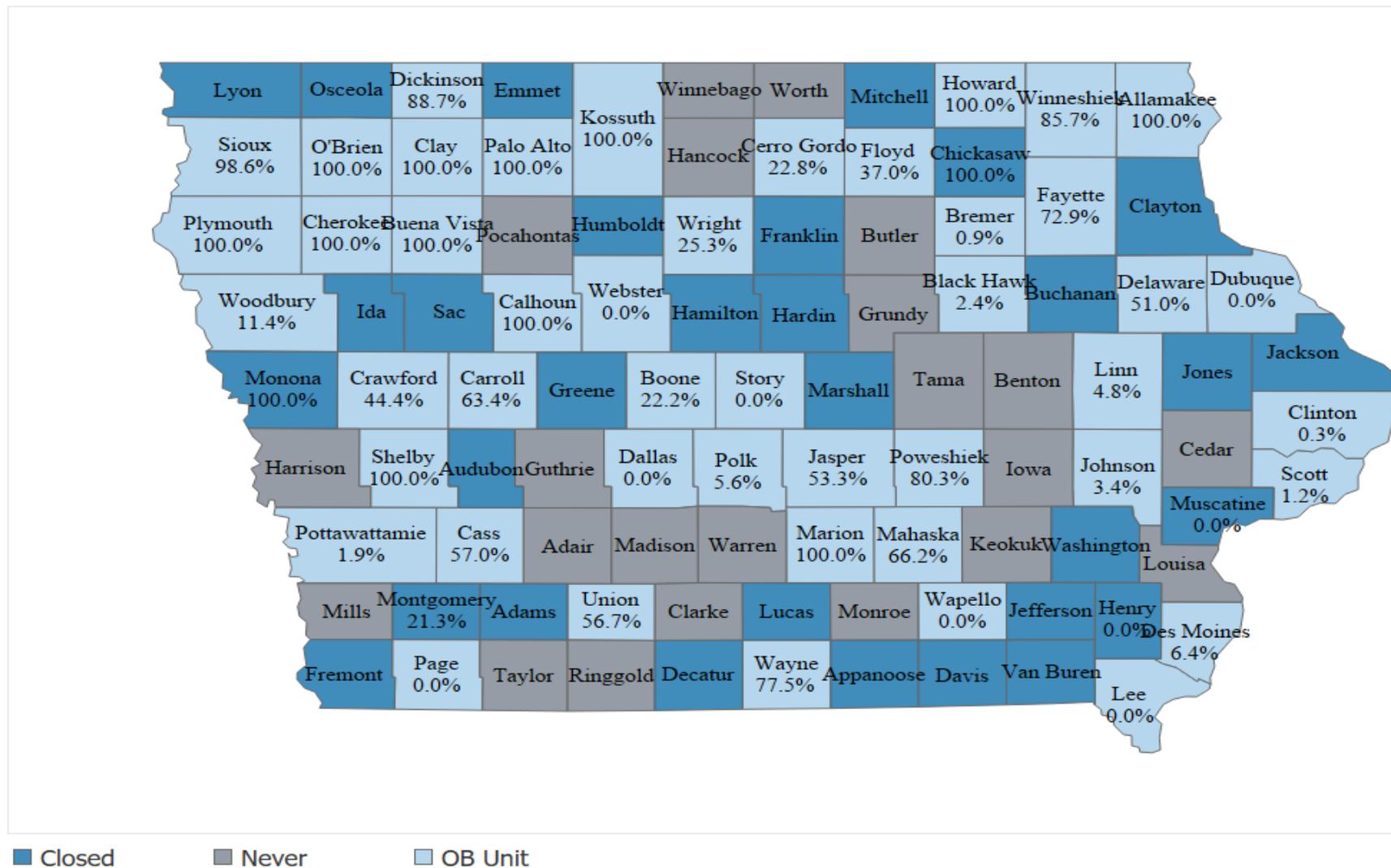


Figure 8. Percent of Deliveries by Attended by CNMs, by Availability of OB Unit, Iowa Occurrent Births, Calendar Year 2020

