

Access to Obstetric and Prenatal Care Providers in North Carolina

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This presentation in one slide

- Workforce data are “illustrative” but suffer from some important gaps that limit ability to draw definitive conclusions
- It’s basically a good news story: number of physicians providing prenatal and obstetric care has increased
- Number of family medicine physicians doing deliveries decreased dramatically between 2000-2012, but on rise again
- Obstetric care providers generally well-distributed but:
 - 93% of FMs providing deliveries practice in metropolitan counties with a FM Residency Program
 - Maternal & Fetal Medicine physicians are geographically concentrated which is potentially problematic for high risk mothers

Who we are and what we do

Mission: to provide timely, objective data and analysis to inform health workforce policy in North Carolina and the United States.

- We house 38 years of continuous, complete licensure (***not survey***) data on 19 health professions from 11 boards
- Data are provided ***voluntarily*** by the boards—there is no legislation that requires this and there is no appropriation
- System is independent of government and health care professionals
- Independence brings rigor and objectivity

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We used these (somewhat imperfect) licensure data for this analysis

- Analysis draws on physician and CNM licensure files
- Physicians, but not CNMs, are asked on licensure form whether they provide prenatal care and “routine” obstetric care
- We identified physician specialty from self-reported “primary area of practice” and residency training
- Excluded small number of physicians who said they were providing deliveries but were not in specialties that typically provide this type of care (examples: orthopedic surgery, geriatric medicine, cardiology, neurology etc.)

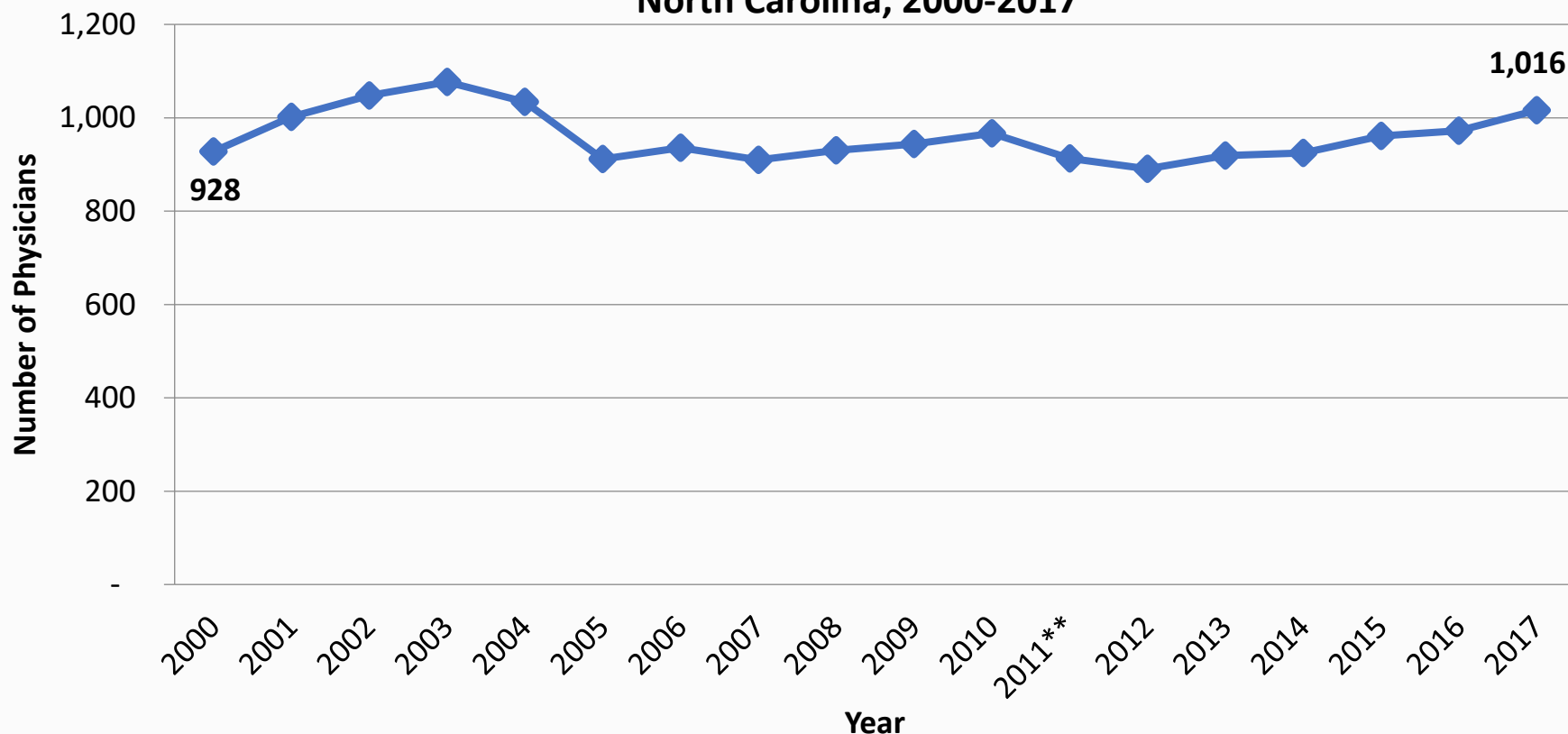
In true academic fashion, we have to tell you everything that is wrong with the data before we tell you what we found

- Self-report data—if physician didn't check box for “routine” obstetric deliveries or prenatal care, not included in analysis
- We don't know from licensure data:
 - if CNMs are providing deliveries or prenatal care
 - about prenatal care provided by NPs or by RNs
- Residents deliver a lot of babies. We have included residents in some of the analyses and not others
- We use births/provider as workload measure, but more than one provider might attend a birth (example: in an academic health center, birth could include attending, resident, and CNM)
- We didn't measure outcomes related to distance to care



Slight increase in number of physicians providing obstetric deliveries

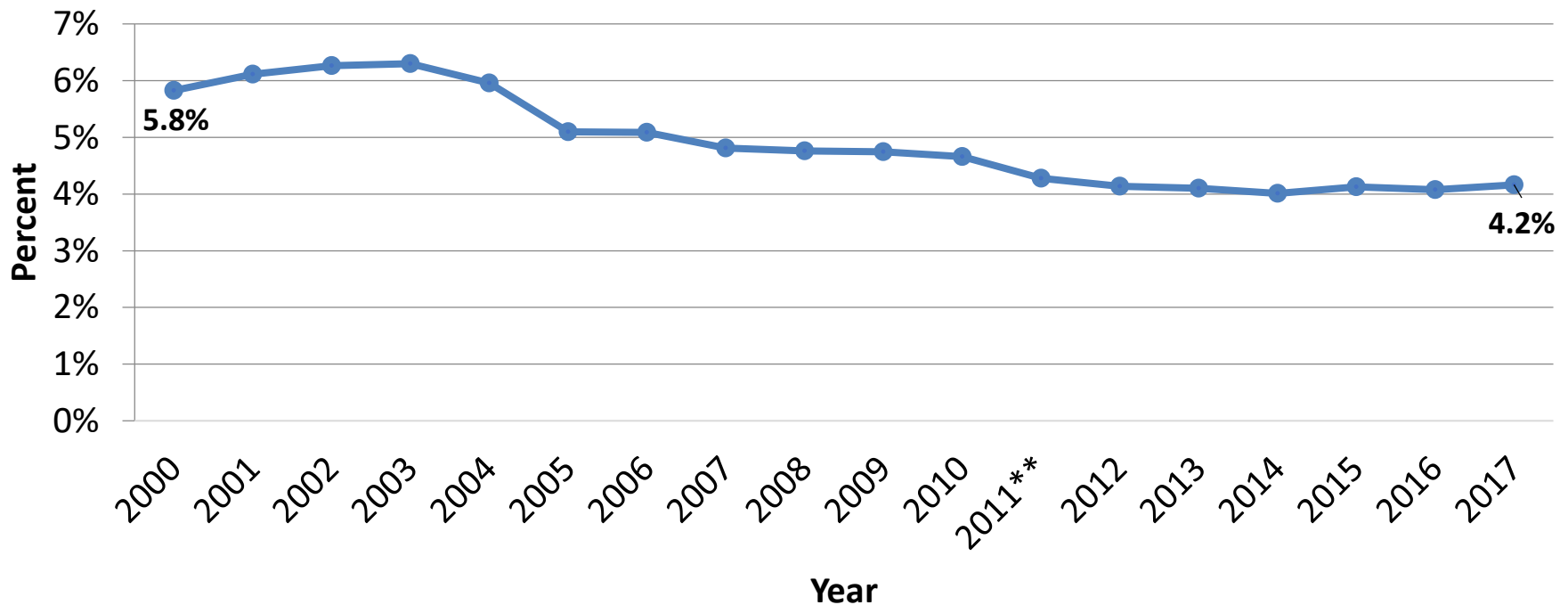
Total Physicians Providing Obstetric Deliveries,
North Carolina, 2000-2017



Notes: Data include active, instate, nonfederal, non-resident-in-training physicians licenses in North Carolina as of 31 October 2017 who reported that they provide obstetric deliveries.

But they make up a declining proportion of the total physician workforce in NC

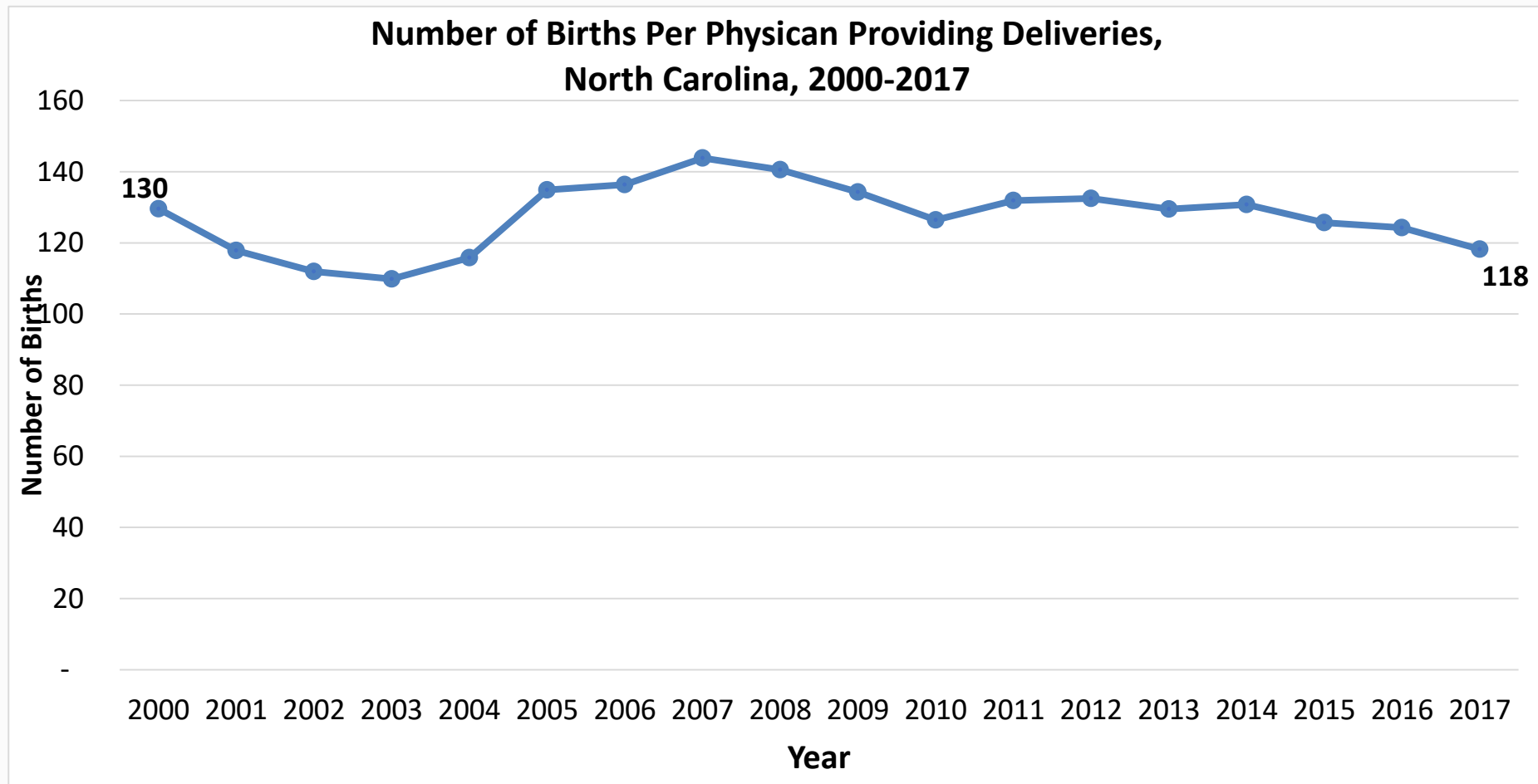
Percent of Total Active Physicians Providing Obstetric Deliveries, North Carolina, 2000-2017



Notes: Data include active, instate, nonfederal, non-resident-in-training physicians licenses in North Carolina as of 31 October 2017 who reported that they provide obstetric deliveries. Data for physicians providing obstetric deliveries are based on counts of individuals answering yes to the question, "Do you provide obstetric deliveries?" In 2011, this question was changed to read "Do you provide obstetric deliveries as a routine part of your practice?"

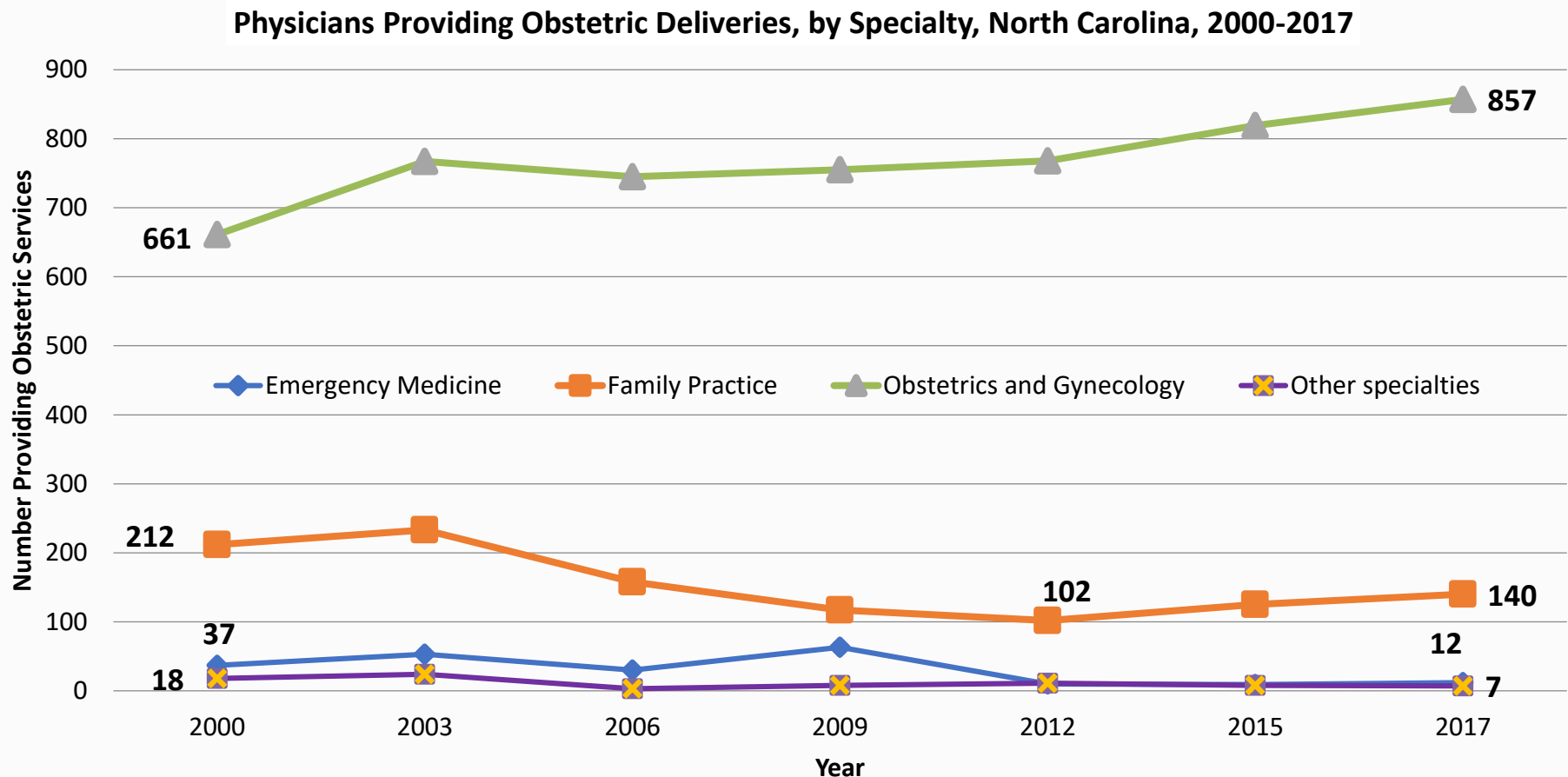
Sources: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

Average number of births per physician providing deliveries has declined slightly



Source: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

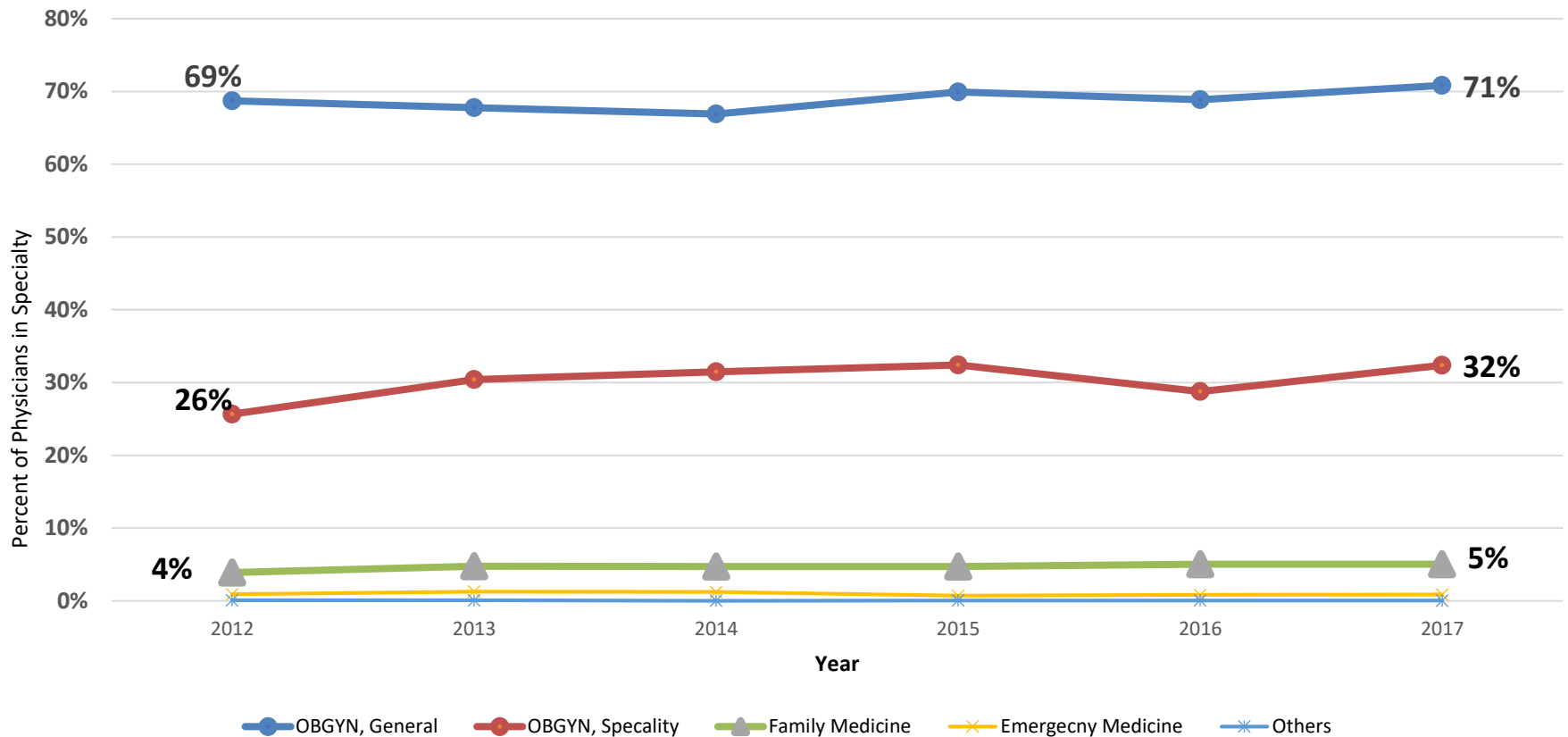
Number of OBGYNs providing obstetric deliveries is increasing. Number of FMs providing deliveries declined until 2012 but on the rise again



Source: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

Majority of general OBGYNs and about a third of specialty OBGYNs do deliveries. Only 5% of Family Medicine physicians provide routine deliveries

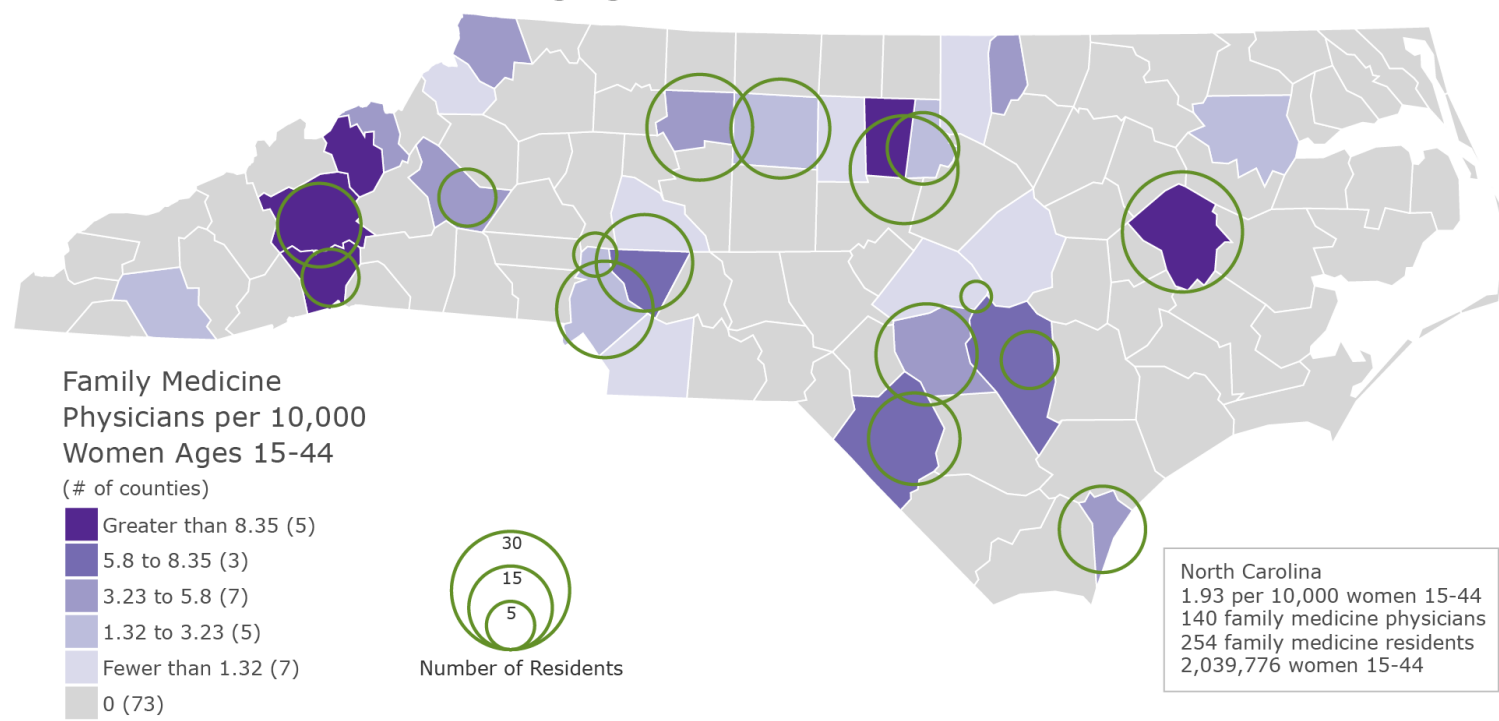
Percent of Physicians Providing Obstetric Deliveries by Specialty, North Carolina, 2012-2017



Source: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

Vast majority (93%) of FMs who deliver babies practice in metropolitan counties with a FM Residency Program

Family Medicine Physicians Who Provide Routine Obstetric Deliveries per 10,000 Childbearing Age Females, North Carolina, 2017

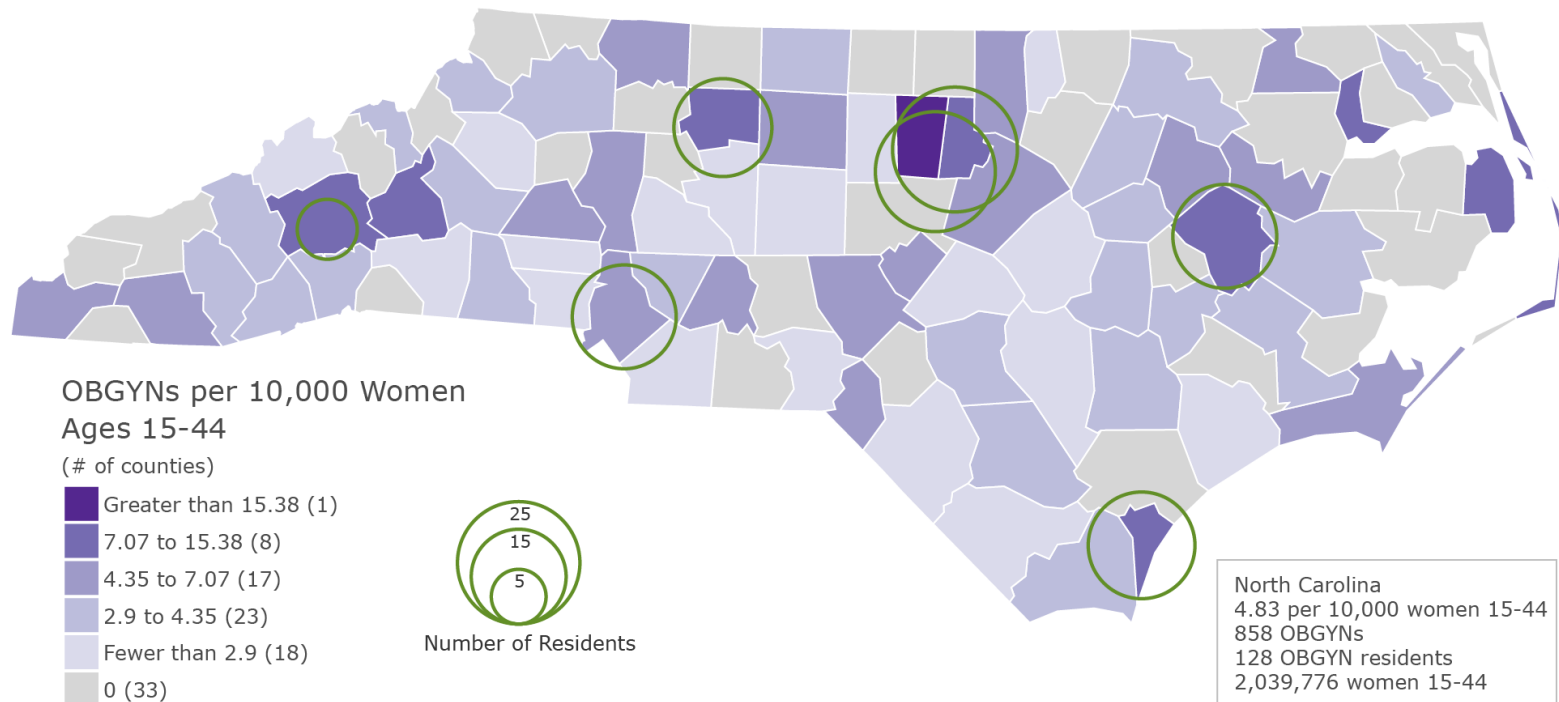


Notes: Data include active, licensed physicians in practice in North Carolina as of October 31, 2017 who are not employed by the Federal government. Physician data are derived from the North Carolina Medical Board. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

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Distribution of OBGYNs providing deliveries not as pronounced around residency training locations

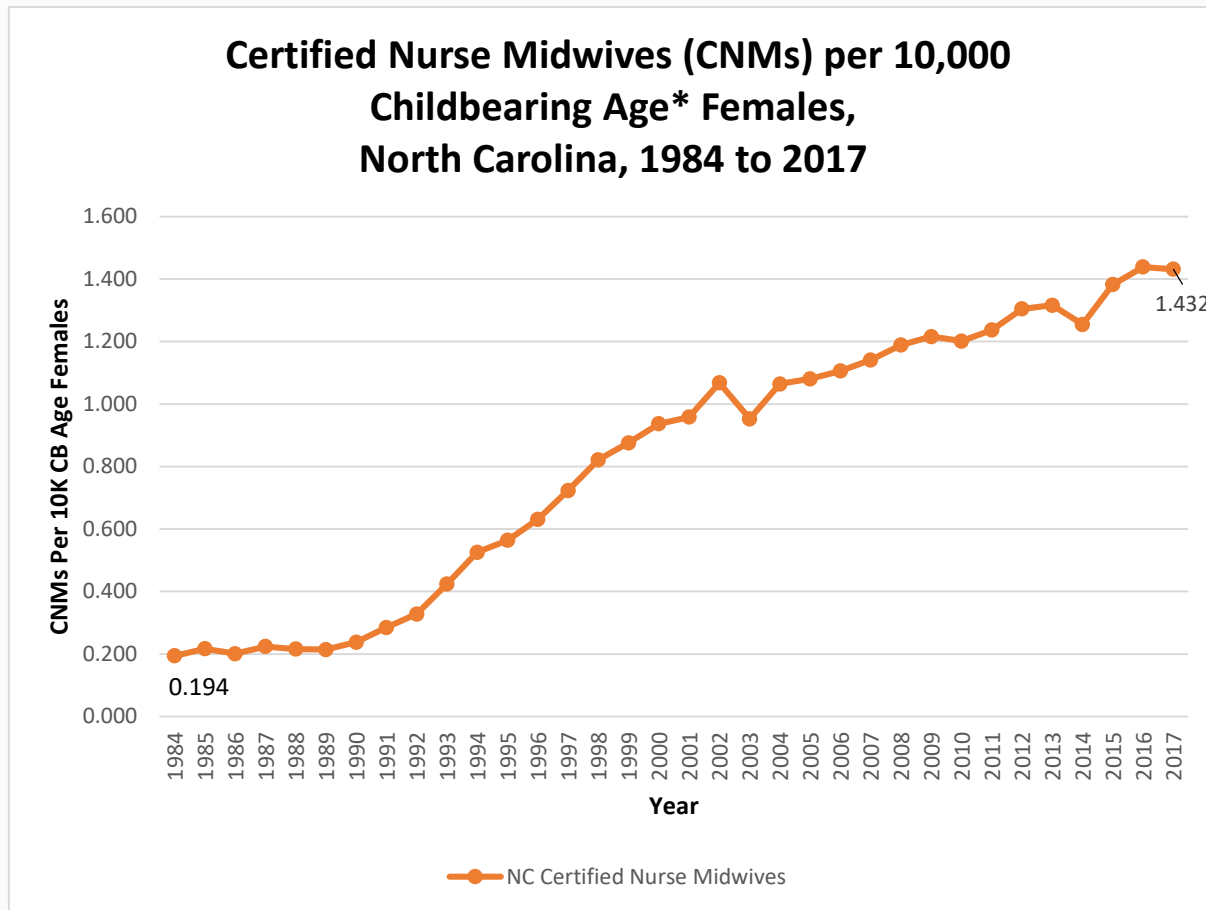
OBGYNs Providing Obstetrics Services per 10,000 Childbearing Age Females, North Carolina, 2017



Notes: Data include active, licensed physicians in practice in North Carolina as of October 31, 2017 who are not employed by the Federal government. Physician data are derived from the North Carolina Medical Board. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

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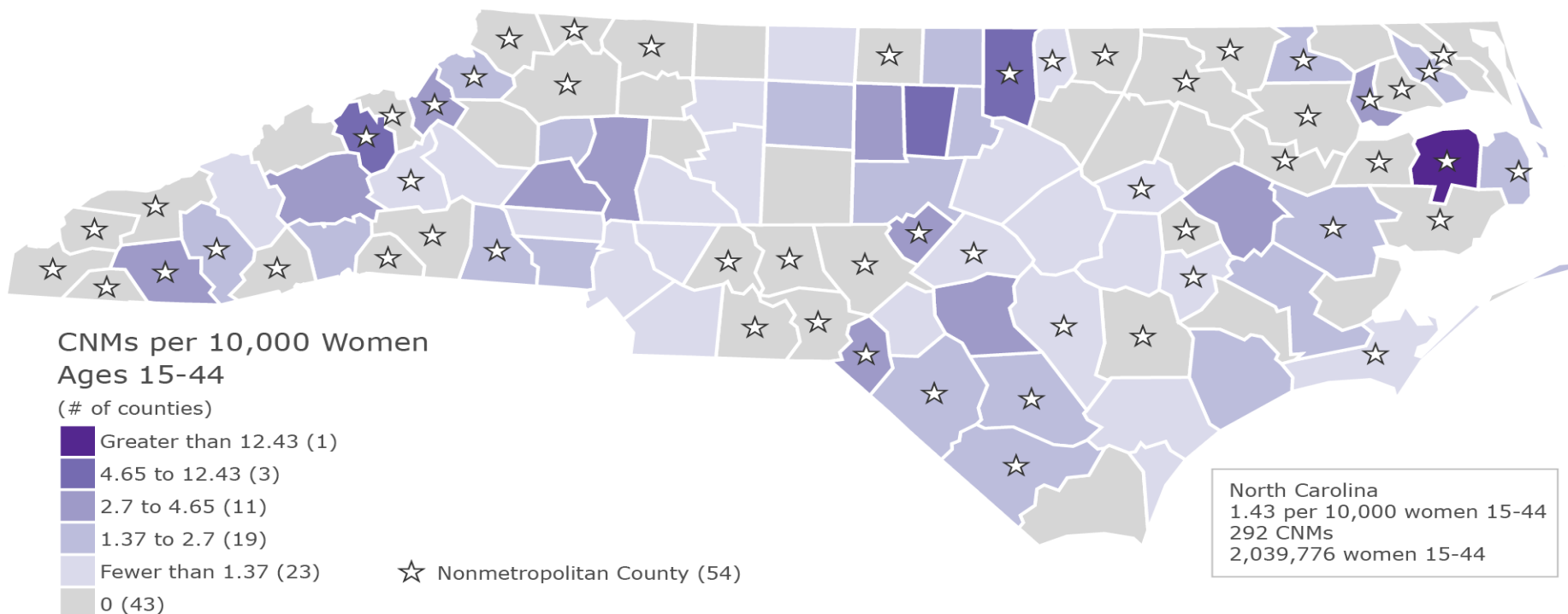
State has seen steady increase in ratio of CNMs per 10K childbearing age females



Sources: North Carolina Health Professions Data System, with data from the North Carolina Board of Nursing – Certified Nurse Midwife (1984-2017); Childbearing population data source: North Carolina Office of Budget and Management, LINC, accessed from http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Certified Nurse Midwives report primary practice locations in 57 Counties

Certified Nurse Midwives (CNMs) per 10,000 Childbearing Age Females, North Carolina, 2017



Notes: Data include active, licensed professionals in practice in North Carolina as of October 31 of each year. Data are derived from licensure data from each profession's licensing board. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

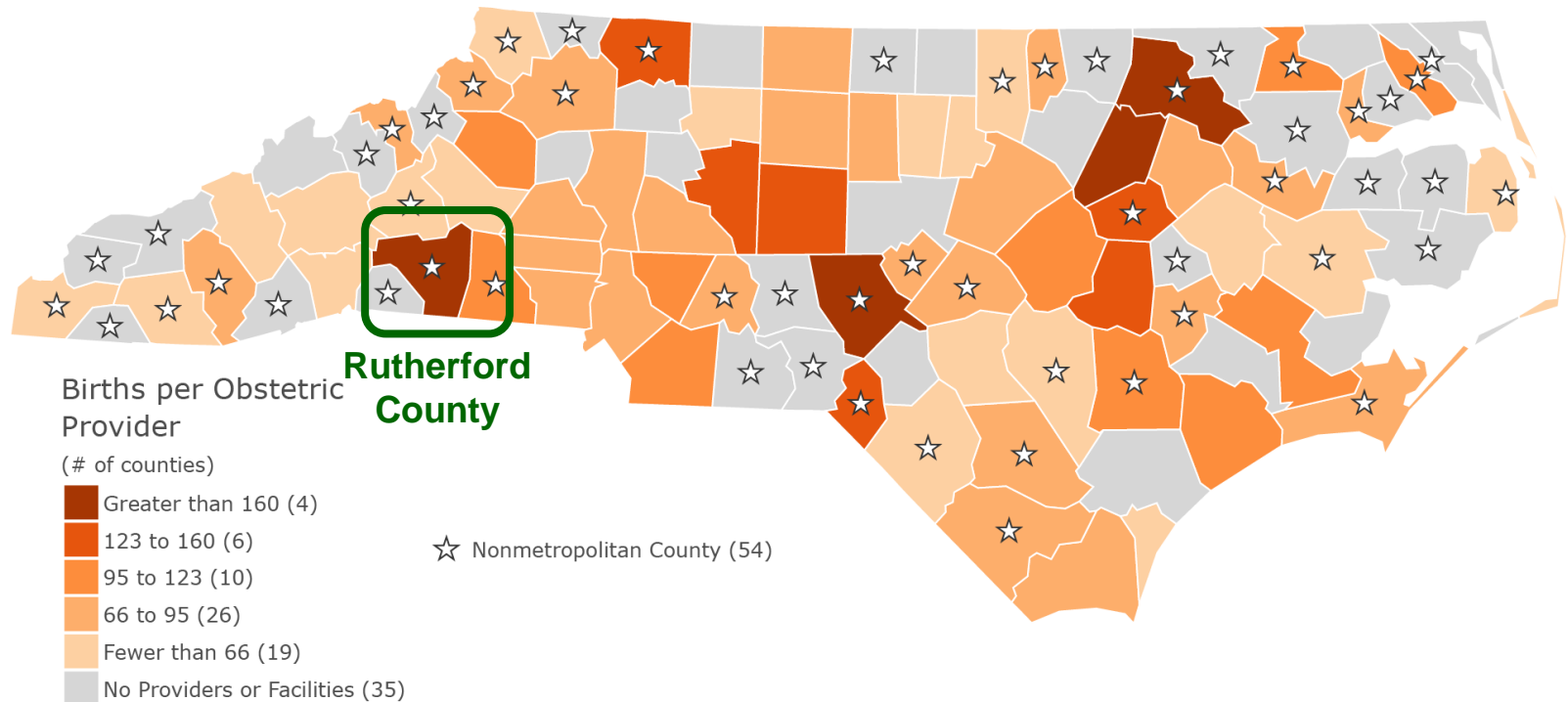
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Combining data on physicians and CNMs reveals that there are no providers or delivery facilities in 35 counties

Births per Provider of Obstetric Deliveries by Facility County, North Carolina, 2017



Notes: Data include active, licensed certified nurse midwives, non-federal physicians who indicated that they provide obstetric services, and Ob-Gyn or Family Medicine physician residents in practice in North Carolina as of October 31, 2017. Data are derived from licensure data from the North Carolina Medical Board and the North Carolina Board of Nursing. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

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Burnout is real risk in places with few obstetric delivery providers

April 16, 2019:

The Daily Courier (Forest City, North Carolina) | 4/16/2019 8:47:51 PM GMT

Rutherford Regional suspends OBGYN services

MACKENZIE WICKER MWICKER@THEDIGITALCOURIER.COM



RUTHERFORDTON — Rutherford Regional Medical Center has temporarily suspended baby deliveries and other gynecological services.

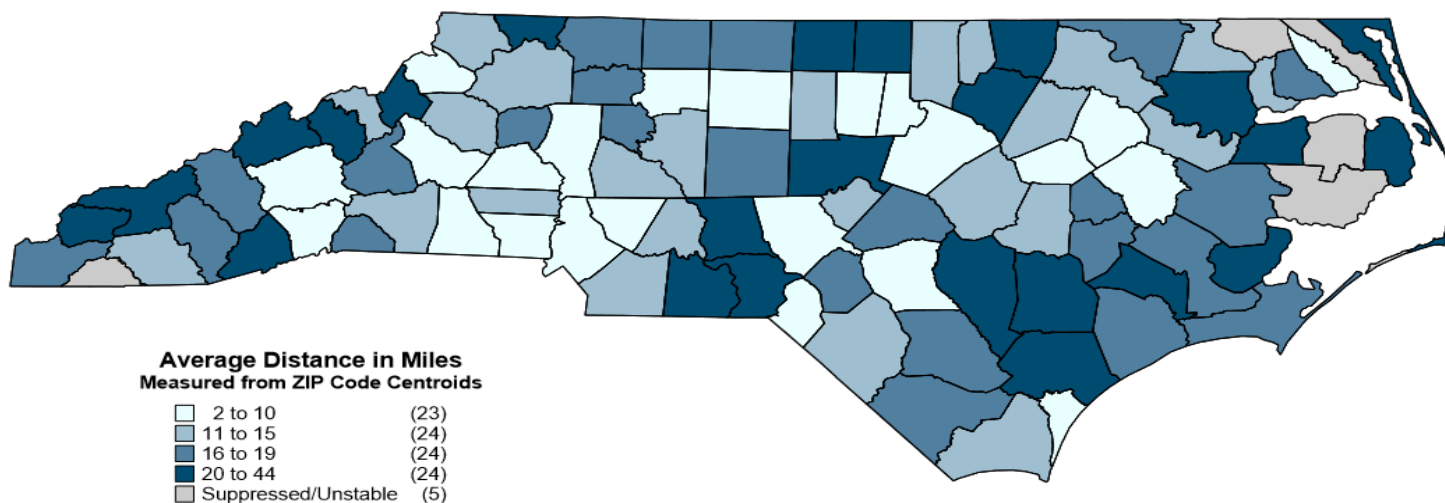
“Dr. Robin Pendleton, who co-owns the practice with Dr. Jeffrey Sabolovic, told The Daily Courier in January that, as the only obstetrics and gynecological physicians working with RRHS, **he and his partner were on call every day.** Seeking more flexibility — for themselves and their patients — they reached out to Atrium Health to discuss other options.

The doctors’ new on call schedule with Atrium will average 1 out of every 6 days each month.”

**12 of the counties with the longest travel times
lack maternity care providers and birth facilities;
2,383 (2%) births originated from these counties.**

Average Distance to Care for Discharges for Childbirth Miles from Residence to Hospital

Residents Discharged from North Carolina Hospitals: October 1, 2015 to September 30, 2016



Note: Inpatient DRG codes include 756, 766, 774, 775, 767, 768.

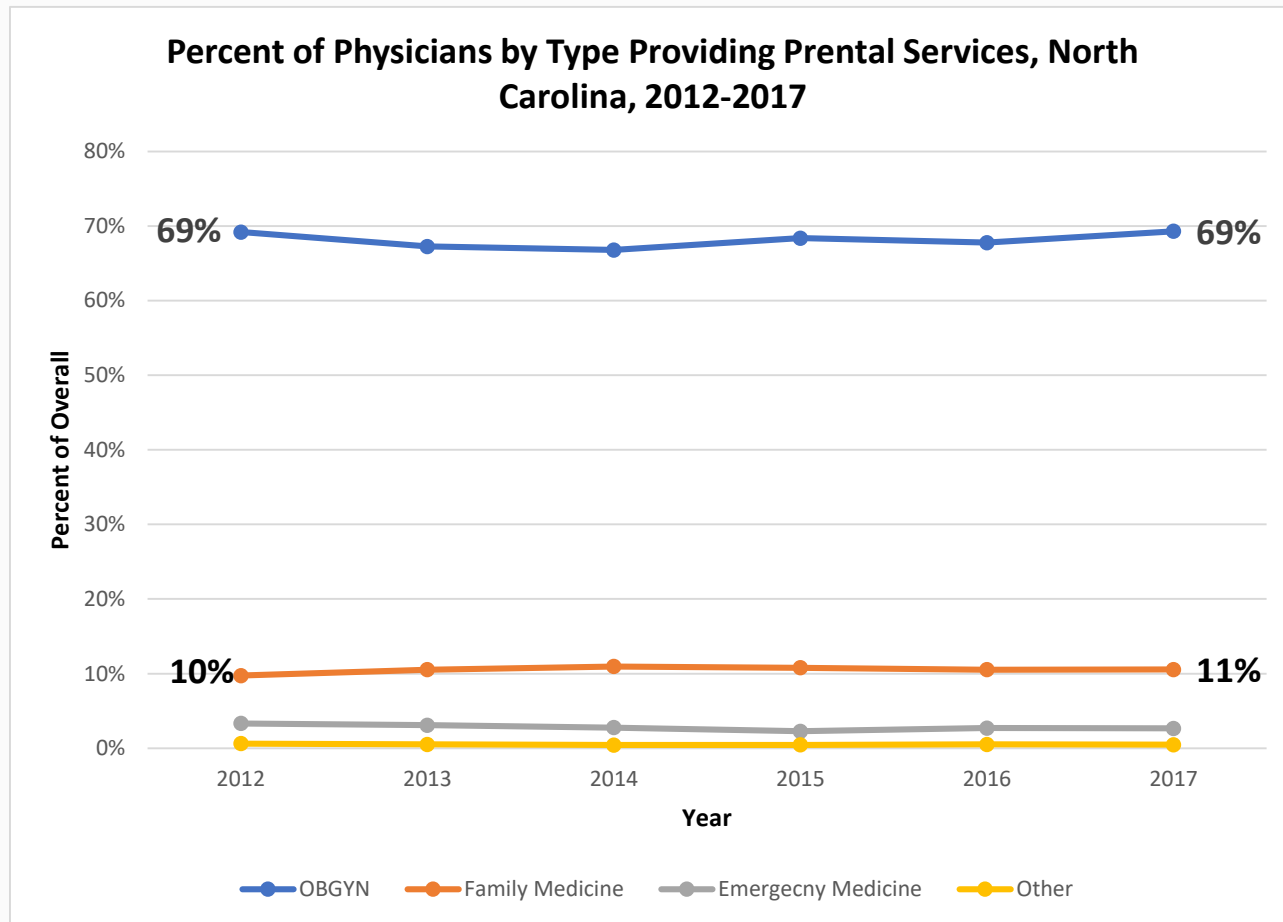
Information for counties with fewer than 50 discharges suppressed.

Source: Truven Health Analytics, an IBM Watson Health Company, Fiscal Year 2016.

Produced By: Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.



69% of OBGYNs provide prenatal care compared to 11% of Family Physicians



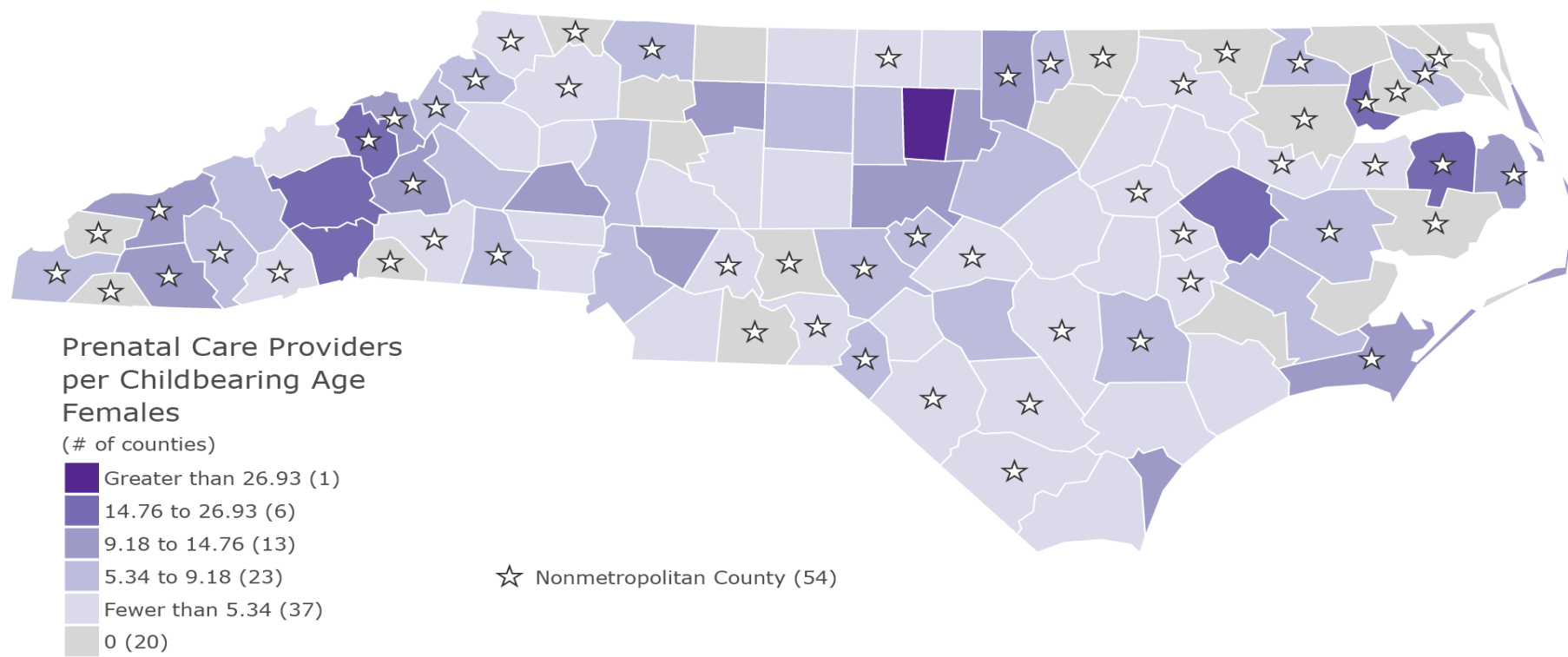
Notes: Data include active, instate, nonfederal, non-resident-in-training physicians licenses in North Carolina as of 31 October 2017 who reported that they provide prenatal care. Data omitted from 2004-2005 due to a high number of missing values.

Sources: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017).



80 counties have prenatal care provided by OBGYN, FM physician or CNM. Map does not include prenatal care provided by other professions in local health departments or other facilities

Prenatal Care Providers per 10,000 Childbearing Age Females, North Carolina, 2017

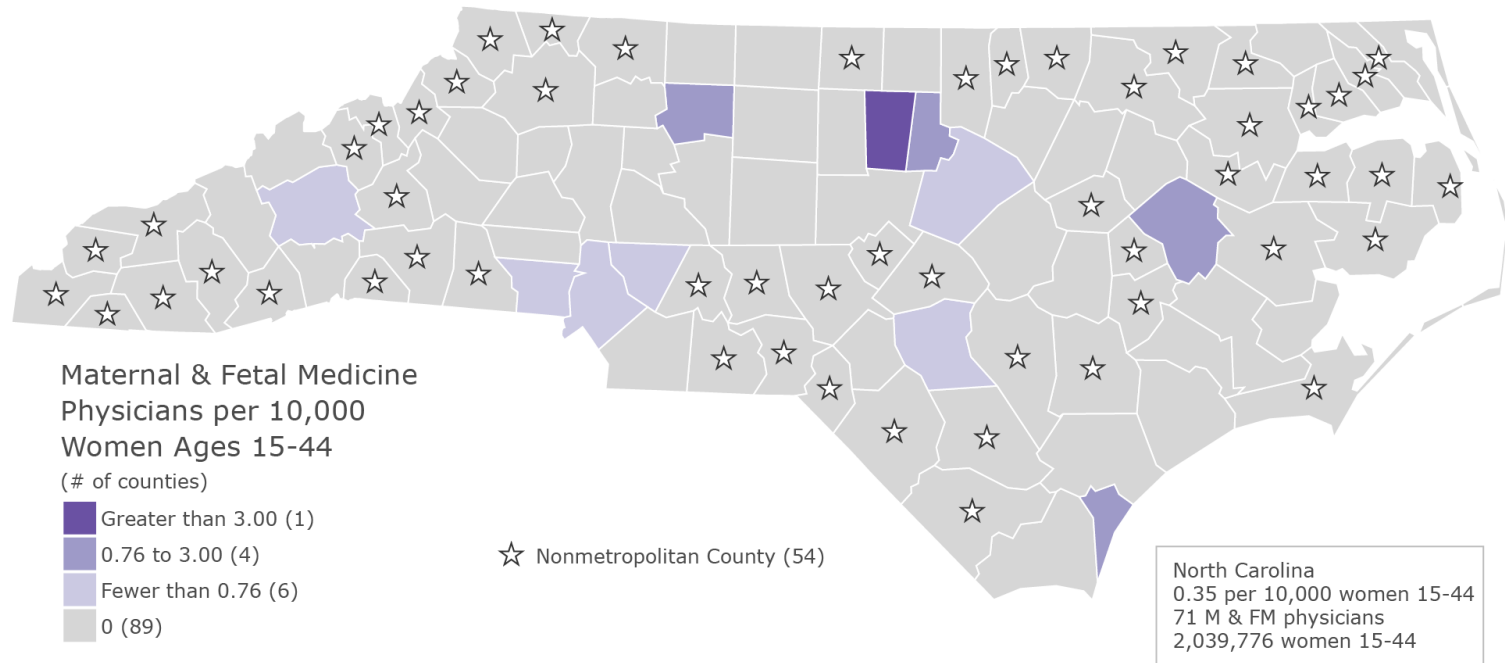


Notes: Data include active, licensed professionals in practice in North Carolina as of October 31 of each year. Data are derived from licensure data from each profession's licensing board. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.



Moms with complex medical needs likely travel to urban centers for Maternal & Fetal Medicine care

Maternal & Fetal Medicine Physicians per 10,000 Childbearing Age Females,
North Carolina, 2017



Notes: Data include active, licensed physicians in practice in North Carolina as of October 31, 2017 who are not residents-in-training and are not employed by the Federal government. Physician data are derived from the North Carolina Medical Board. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

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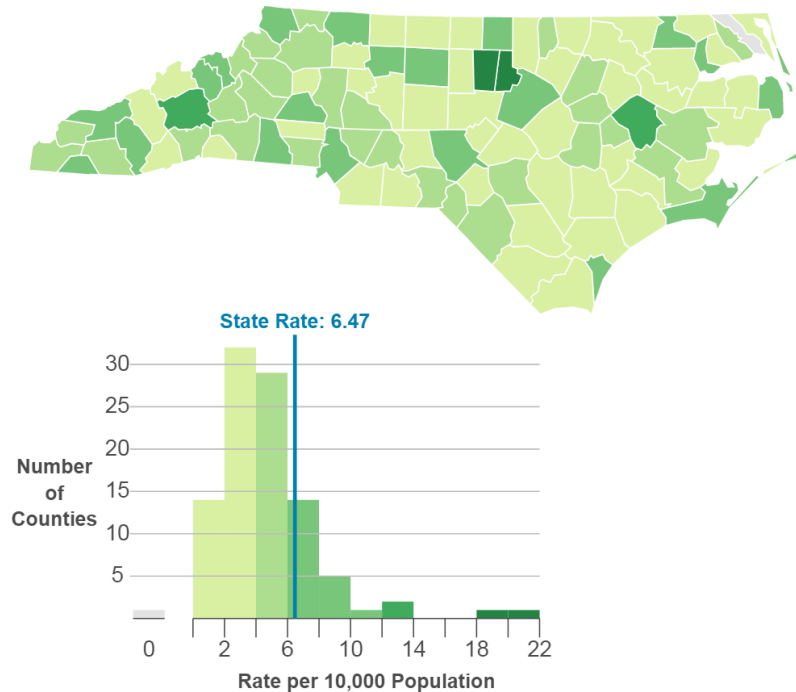
<https://nchealthworkforce.unc.edu/>

<https://www.shepscenter.unc.edu/programs-projects/workforce/>



Data are available in interactive data visualization (which will soon include NC Medicaid Managed Care Regions)

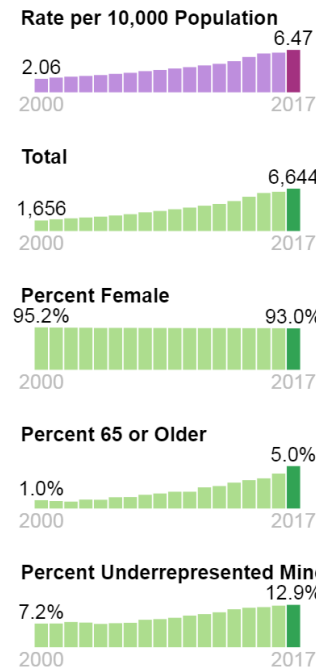
Nurse Practitioners per 10,000 Population by County, North Carolina, 2017



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Notes: Data include active, licensed nurse practitioners in practice in North Carolina as of October 31 of each year. Nurse practitioner data are derived from the North Carolina Board of Nursing. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data. Source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created April 17, 2019 at <https://nchealthworkforce.unc.edu/supply/>.

Profession Demographics for North Carolina

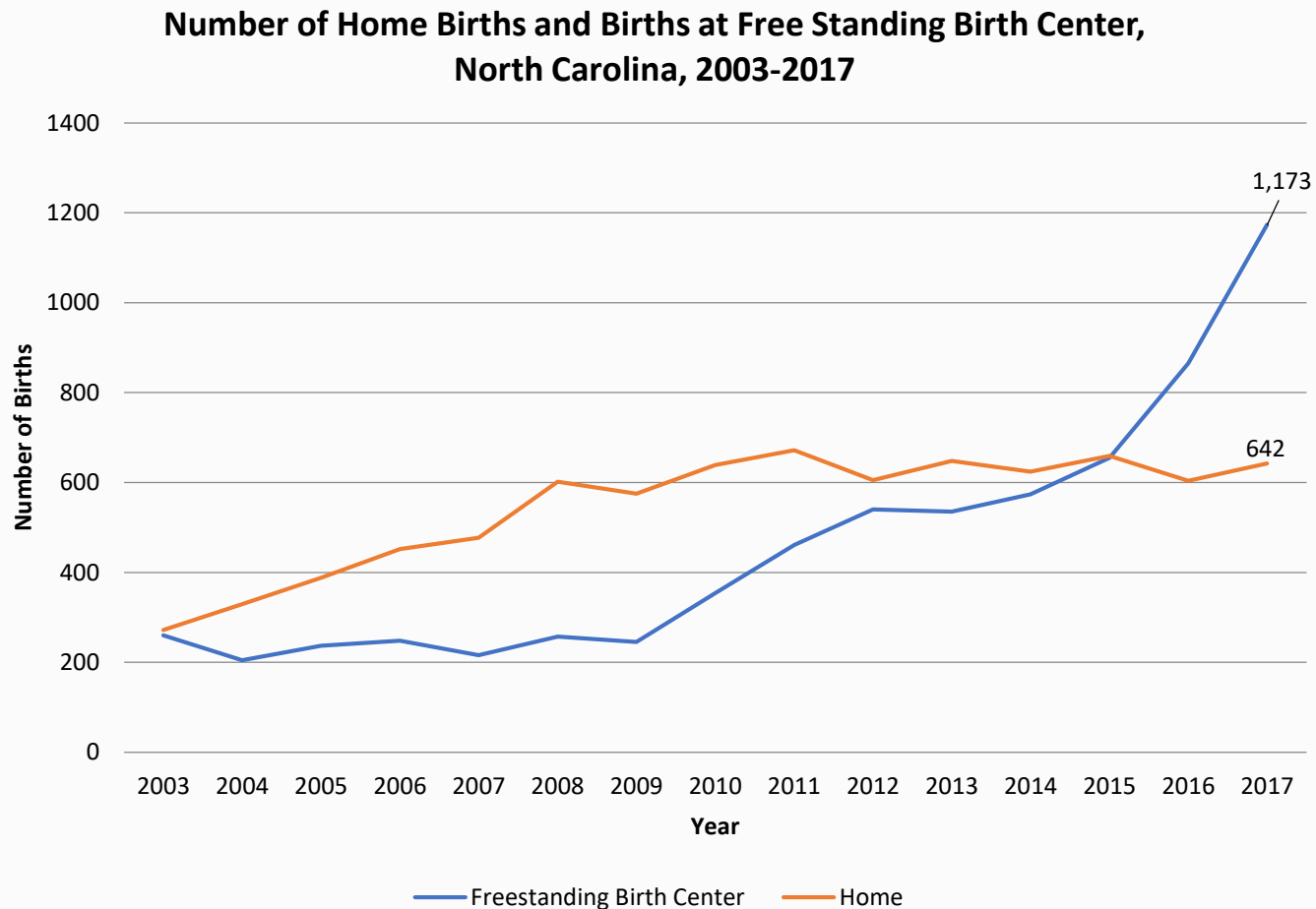


website: nchealthworkforce.unc.edu



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Both Home Birth and Free Standing Birth Center births have grown over the last 14 years, but over 98% of births still occur in hospitals



Source: CDC Wonder database maintained by the United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics.