Developing the Patient-Centered Workforce Needed for our Rapidly Changing Healthcare System

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This presentation in one slide

- The health care system is undergoing rapid change. Workforce will need to transform
- The State of the State-despite what you see in the press, NC (generally) doesn't face shortages. It's a maldistribution issue—by geography, specialty, ethnic/racial diversity and setting
- MAs and Family Physicians have somewhat divergent perspectives on MA roles in primary care practices in NC, but this gap can be closed
- To transform the workforce, we are going to have to move from old school to new school workforce planning approaches

The context for our work: lots of uncertainty, lots of pressure and rapid change

- Ongoing experimentation underway to transform the way health care is paid for, organized, and delivered
- Rising pressure to contain costs, increase value and address “upstream” social determinants of health
- Increased competition from corporate players like CVS, DispatchHealth, CityBlock, and Amazon who are using redesigned workforce, telehealth and house calls to meet patient needs (they get it…it’s about the patient!)
- Most hospitals and health care systems currently operating predominantly in fee-for-service model, but actively planning for value-based payment future

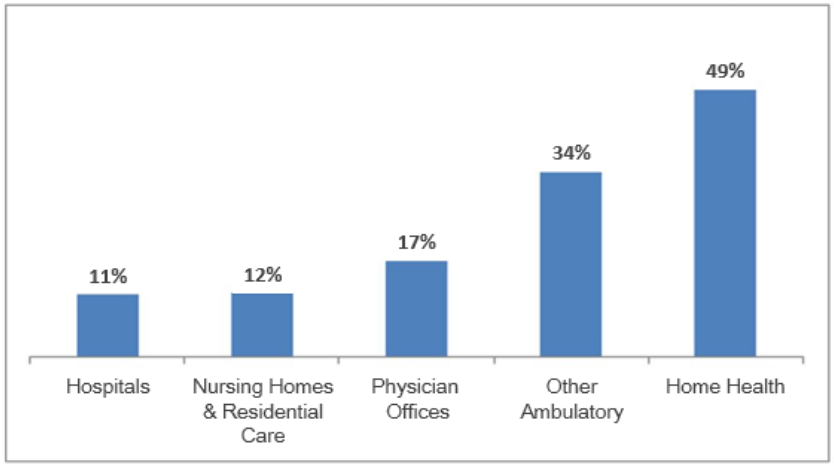
It sort of feels like this…

Hospitals, health systems and practices are simultaneously uninterested in workforce planning and hungry for a roadmap on how to redesign care delivery and workforce to deliver value

That road map leads out of the hospital into outpatient, community and home settings

- Shift from fee-for-service to value-based payments and fines that penalize hospitals for readmissions are shifting care from inpatient to ambulatory and community-based settings
- But we generally train the workforce in inpatient settings
- This is especially true of the nursing workforce

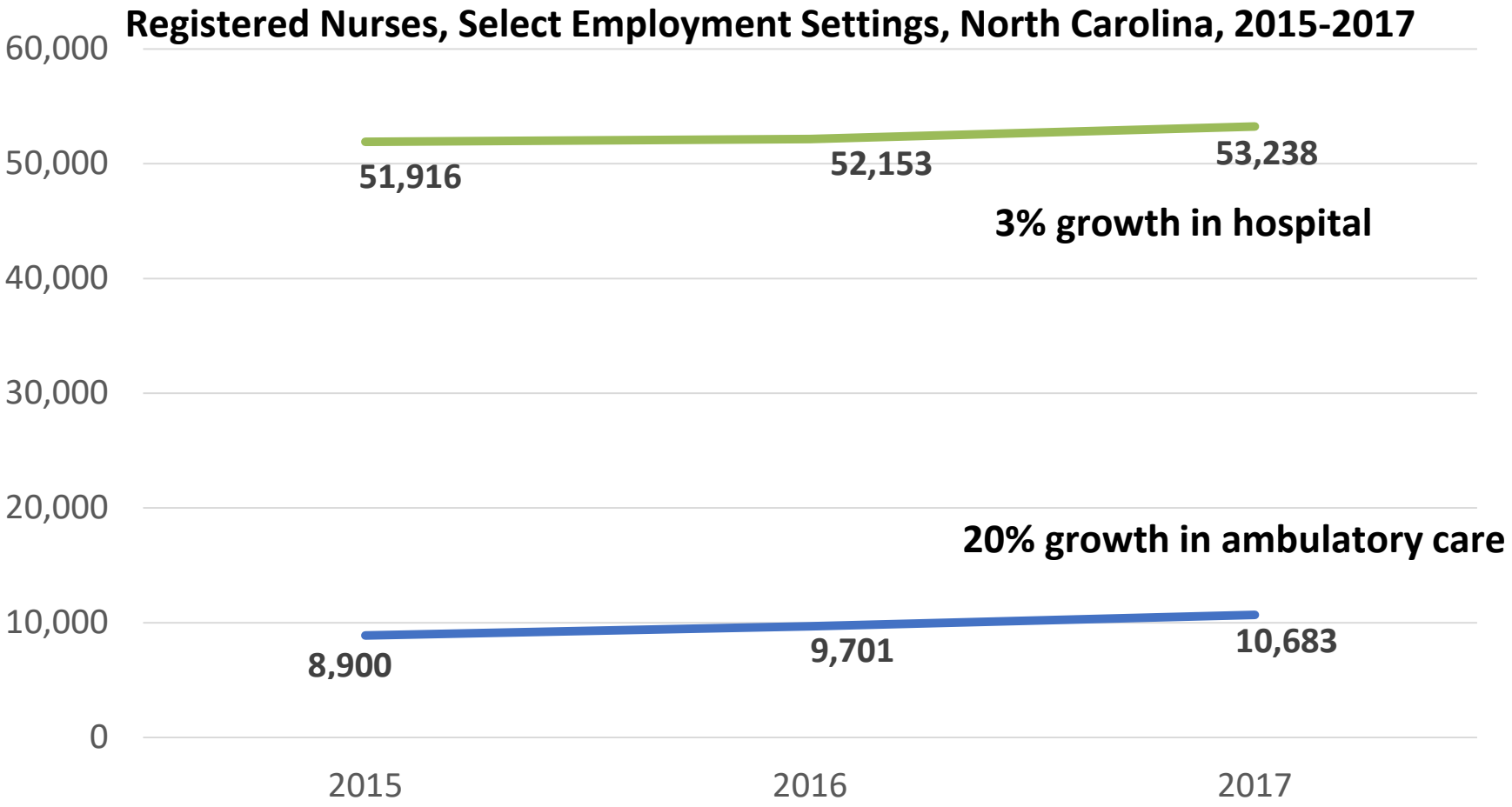
Exhibit 1: Health Care Job Growth by Setting: December 2007–January 2017



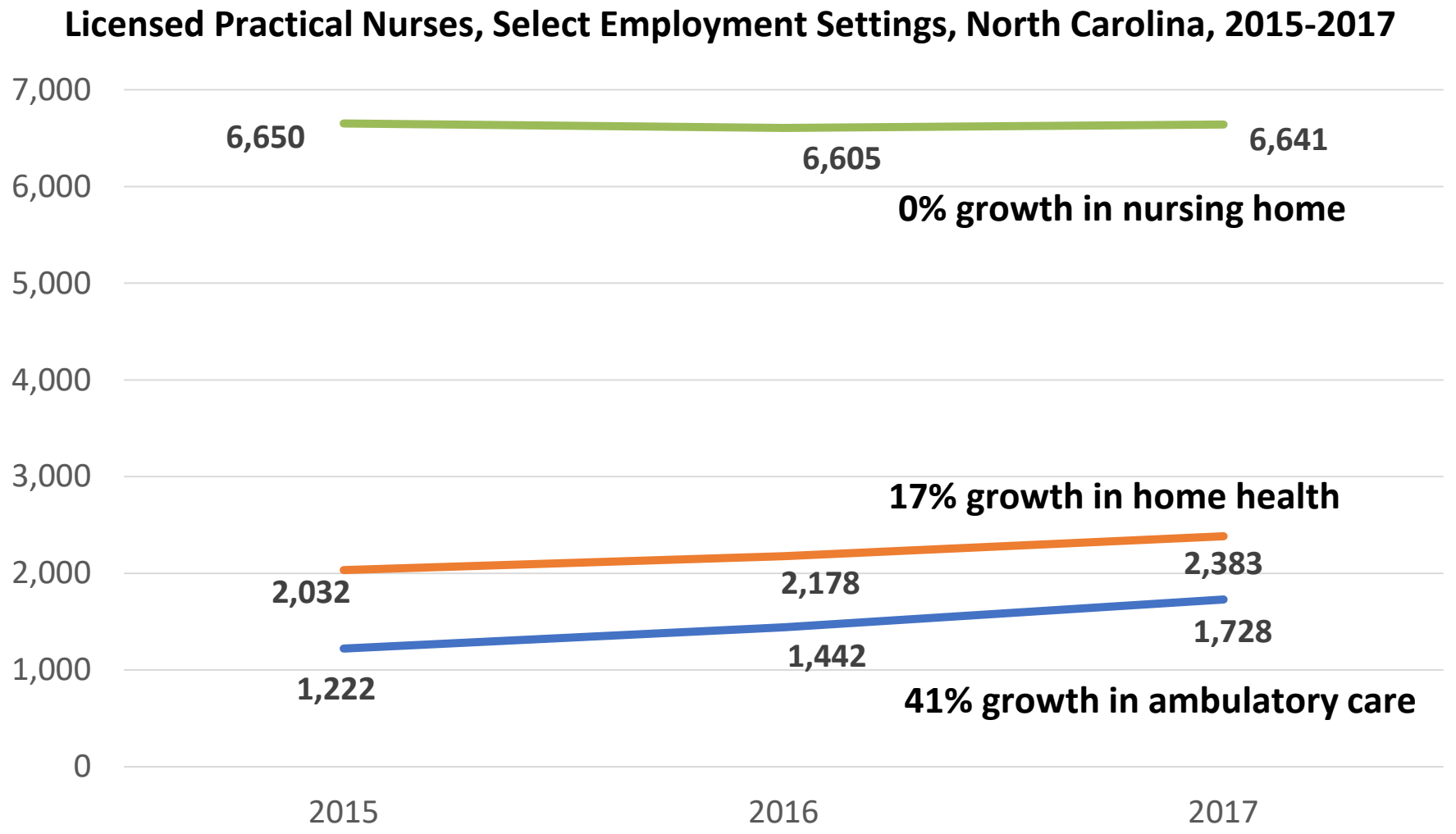
Source: Authors' analysis of BLS Current Employment Statistics data.

Turner A, Roehrig C, Hempstead K. What's Behind 2.5 Million New Health Jobs? *Health Affairs* Blog. March 17, 2017.

About half of RN workforce in NC is employed in hospitals but ambulatory care jobs are increasing rapidly

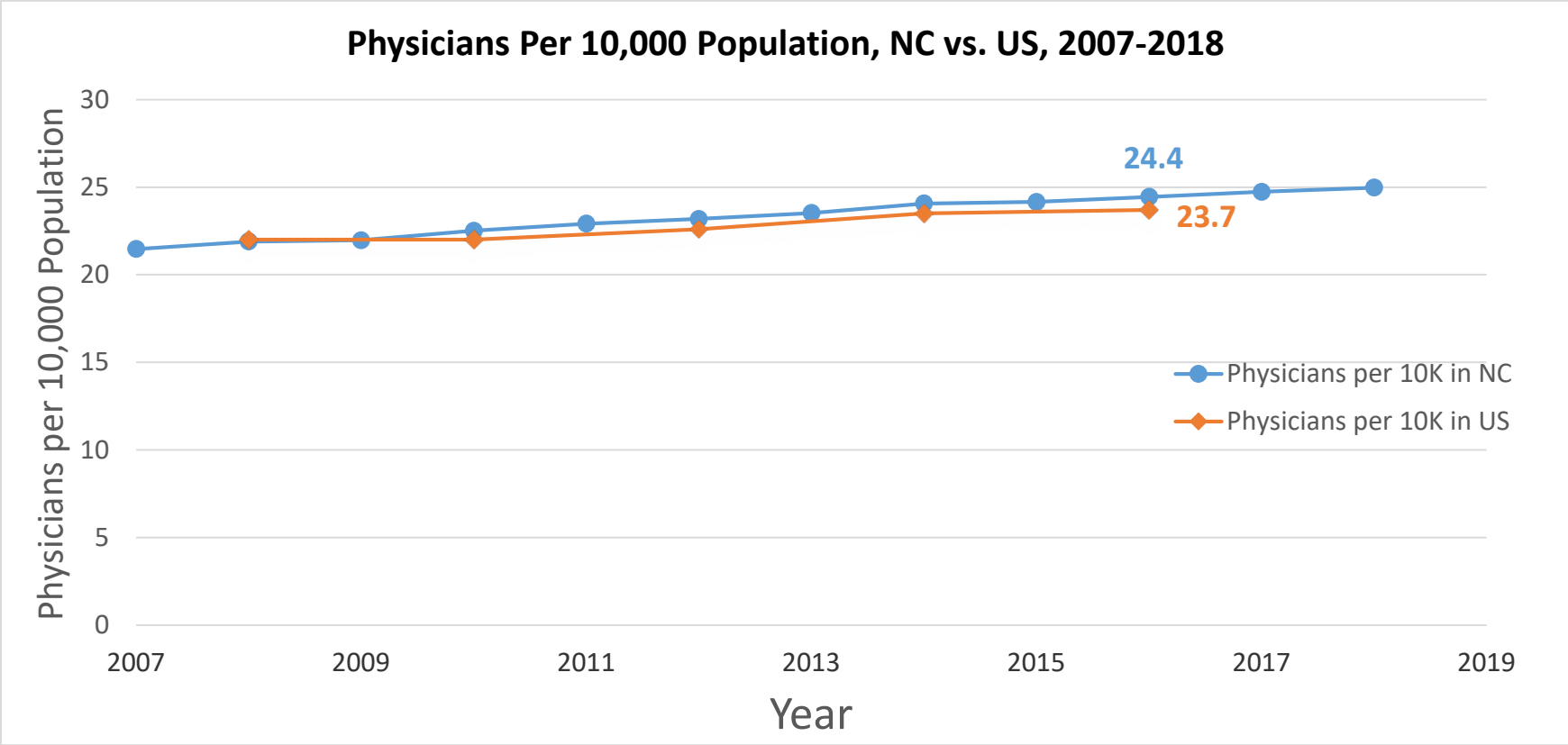


About one-third of LPN workforce in NC is in nursing homes but rapid growth in ambulatory care and home health



The State of the State

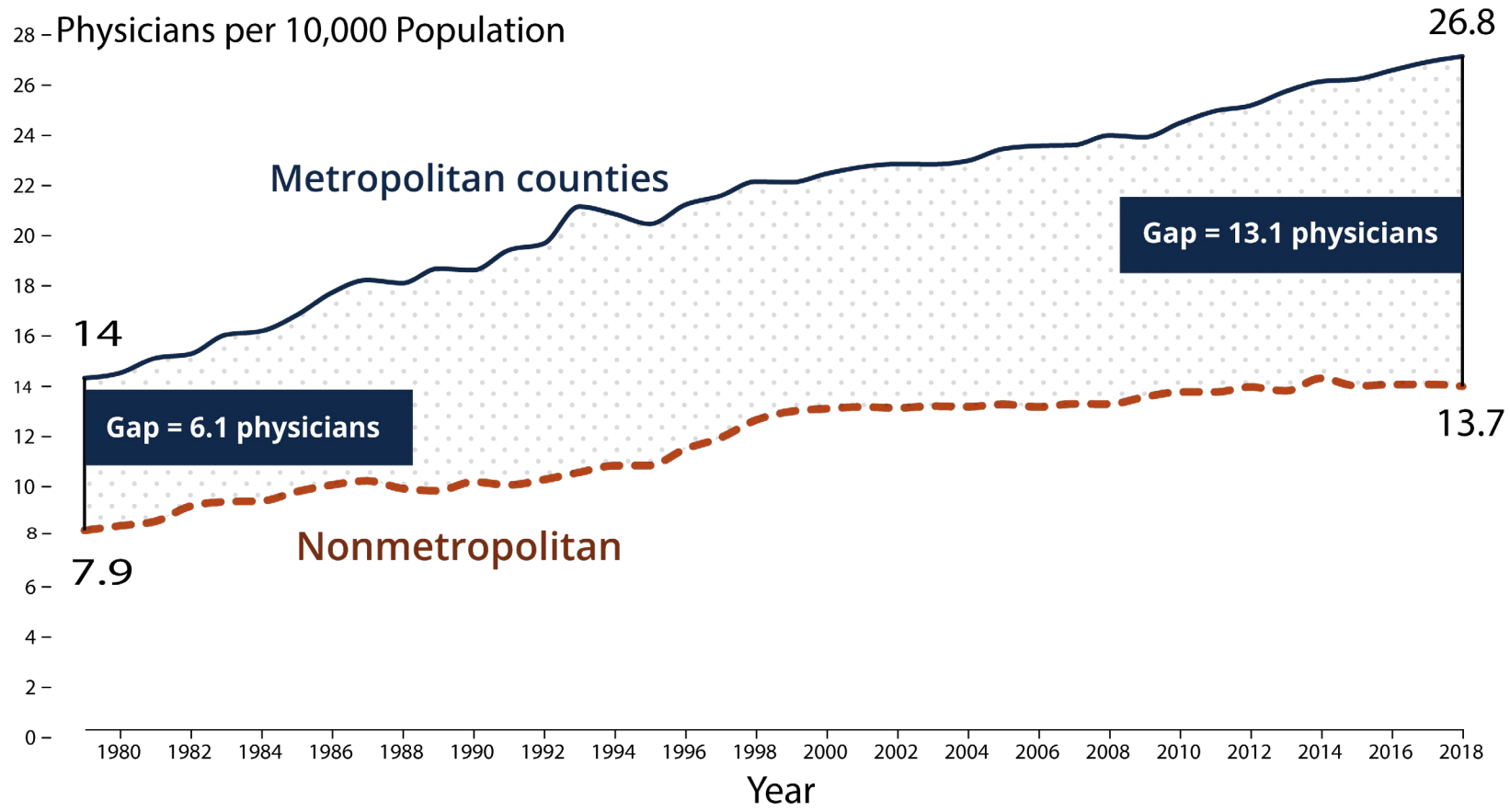
Fears of physician shortages generate headlines, but we see steady increase in supply



Sources: North Carolina Health Professions Data System, 2007 to 2018, with data derived from the NC Medical Board; AAMC State Physician Workforce Data Book, years 2009, 2011, 2013, 2015, 2019, with data derived from the AMA Physician Masterfile; US Census Bureau; North Carolina Office of State Planning. North Carolina physician data include all licensed, active, physicians practicing in-state, inclusive of federally employed physicians and excluding residents-in-training. US data includes total physicians active in patient care, inclusive of federally employed physicians and excluding residents-in-training.

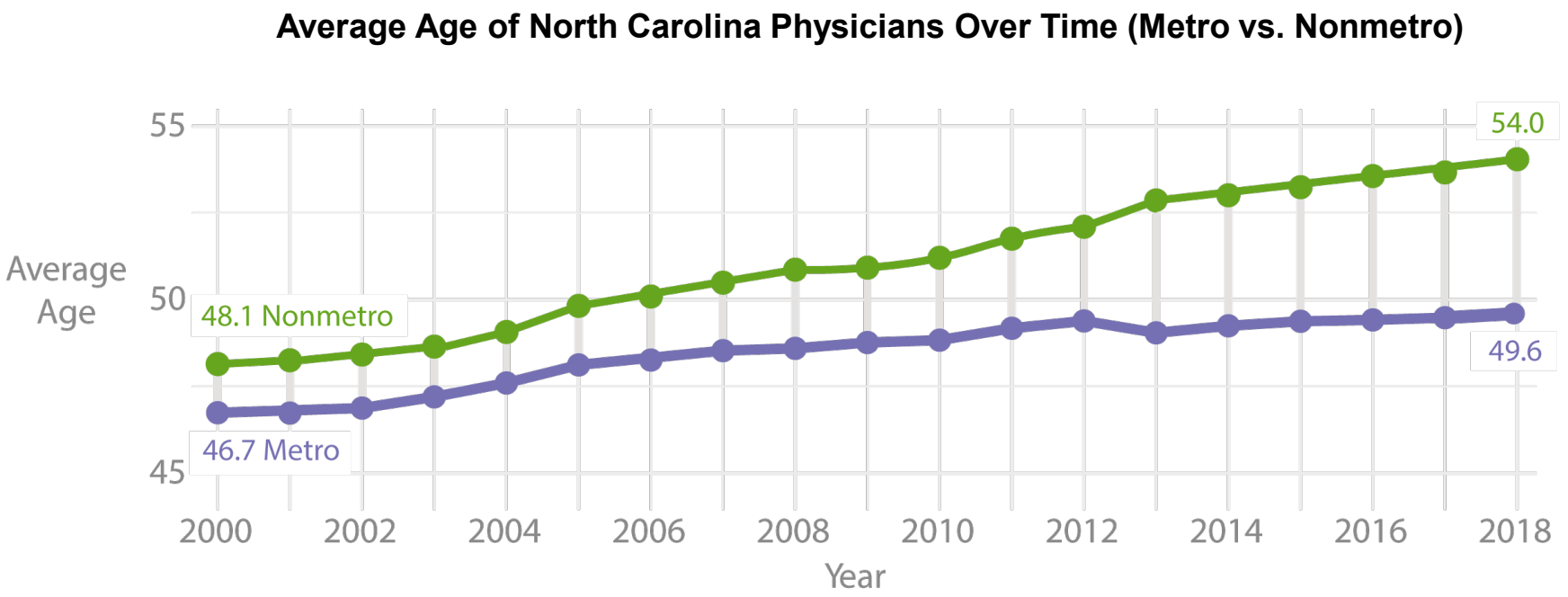
The real issue is maldistribution. Gap between rural and urban counties is growing

Physicians per 10,000 Population for Metropolitan and Nonmetropolitan Counties, North Carolina, 1979 - 2018



Notes: Data include active, licensed physicians in practice in North Carolina as of October 31 of each year 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.

Rural physician workforce is also aging at faster pace than urban workforce



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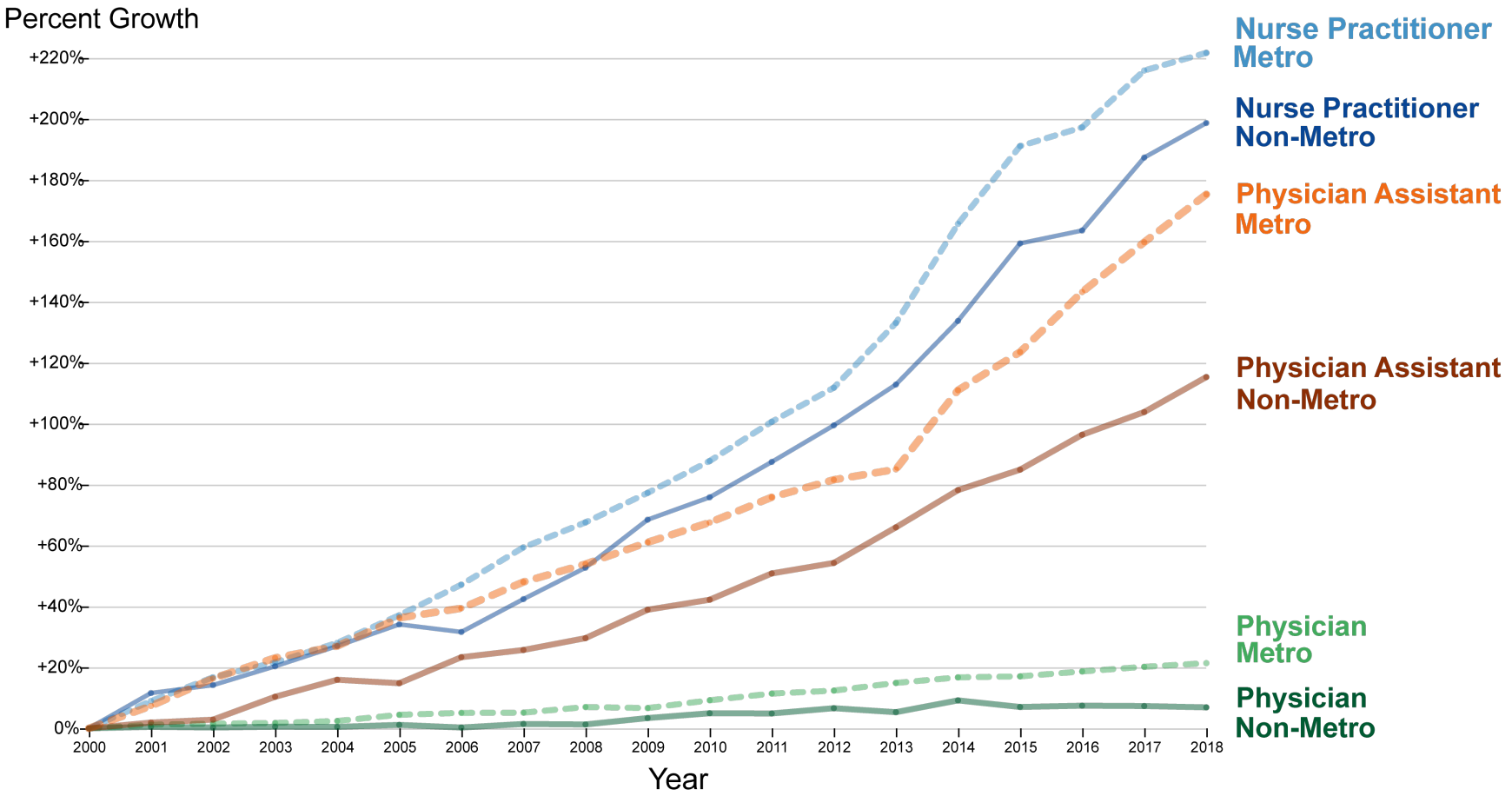
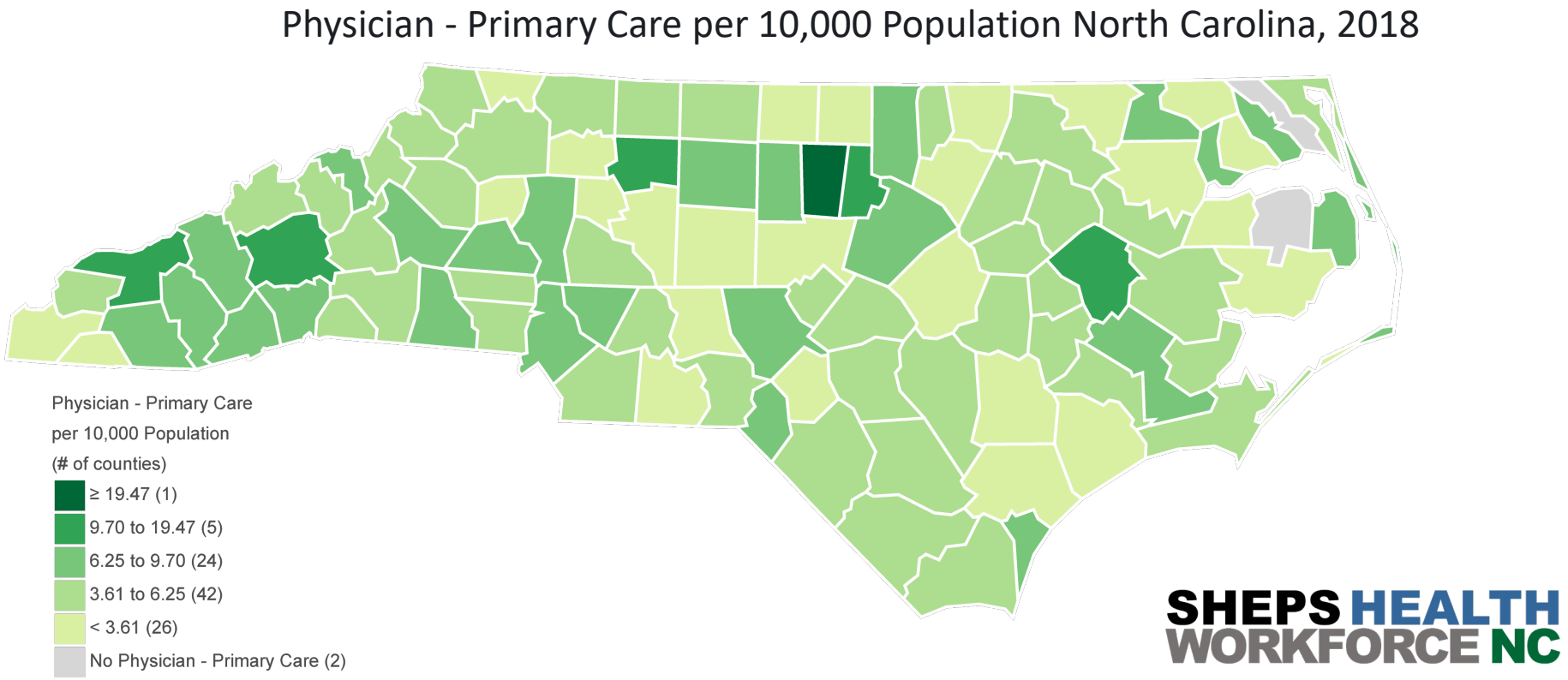
NC has seen fast growth in the Nurse Practitioner and Physician Assistant workforce

Cumulative Percentage Growth per 10,000 Population in Metropolitan and Non-Metropolitan Counties since 2000 for Nurse Practitioners, Physicians, Physician Assistants in North Carolina



20 NC counties have comparatively few primary care physicians; 2 counties have none



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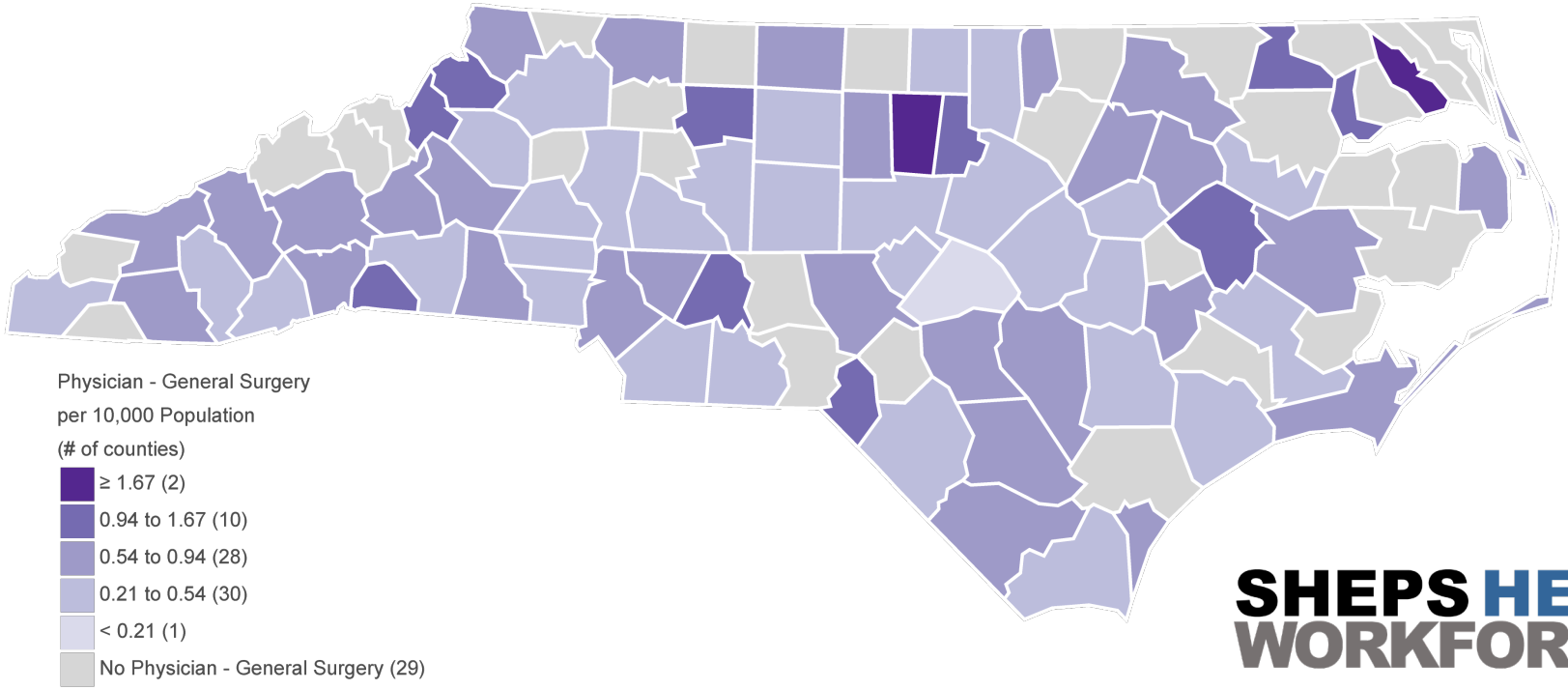
Source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created September 30, 2019 at https://nchealthworkforce.unc.edu/supply/.

29 NC counties had no general surgeon in 2018

Physician - General Surgery per 10,000 Population North Carolina, 2018



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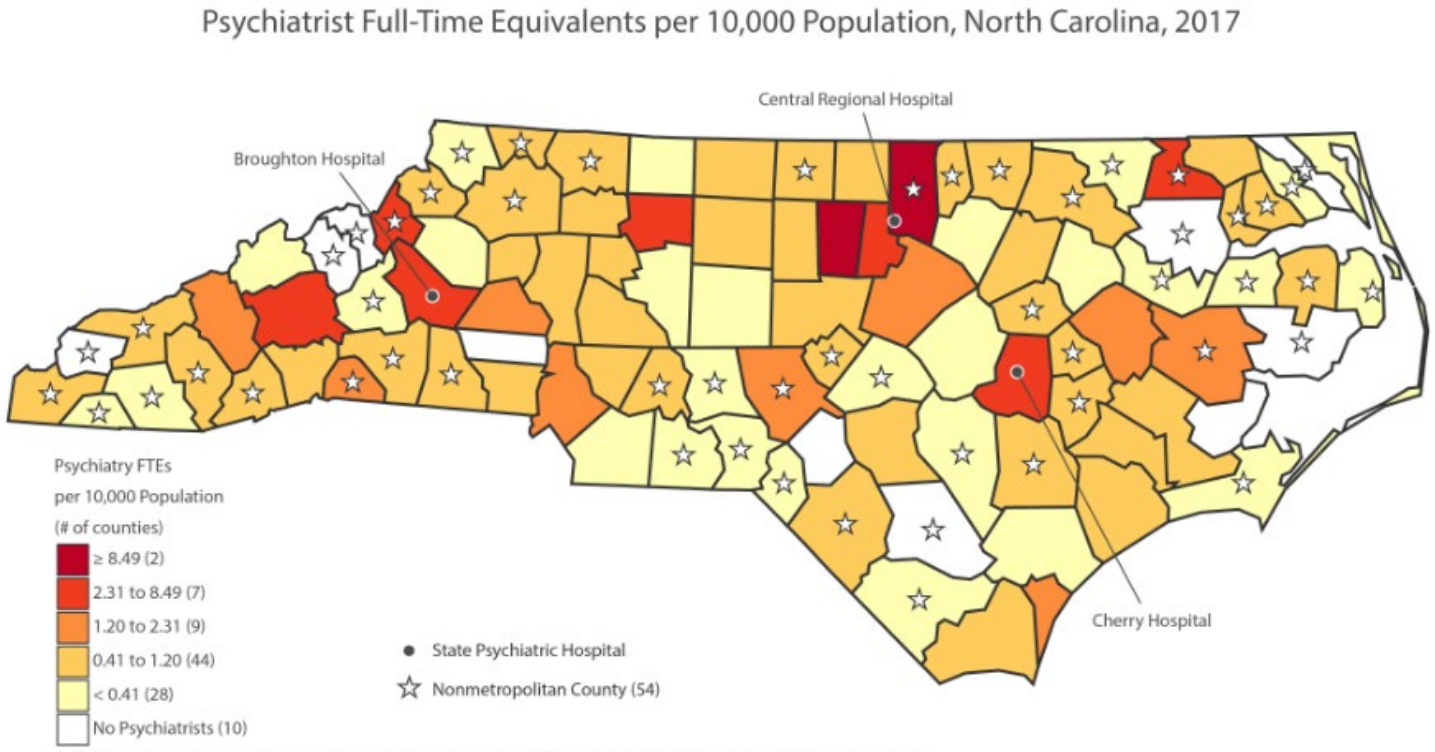
Source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created September 30, 2019 at https://nchealthworkforce.unc.edu/supply/.

"For the one-quarter of Americans who live outside metropolitan areas, general surgeons are the essential ingredient that keeps full-service medical care within reach. Without general surgeons as backup, family practitioners can't deliver babies, emergency rooms can't take trauma cases, and most internists won't do complicated procedures such as colonoscopies."

Washington Post, January 1, 2009

10 counties in NC have no psychiatrist coverage



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Closures of obstetric delivery units in rural NC have made state and national headlines

Eastern NC hospital nixes maternity services

Another Thing Disa… Rural America: Mat…

A new study shows that more than half of … don't have hospitals with obstetric service… hit the hardest.

by **Adriana Gallardo** and **Nina Martin**, Sept. 5, 4:01 p.m. EDT

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Pregnant women latest victims of rural health care shortage

559

Julie Ball, jball@citizen-times.com Published 1:26 p.m. ET May 11, 2017 | Updated 1:54 p.m. ET May 11, 2017

LETTER FROM NORTH CAROLINA

Rural Hospitals Are Dying and Pregnant Women Are Paying the Price

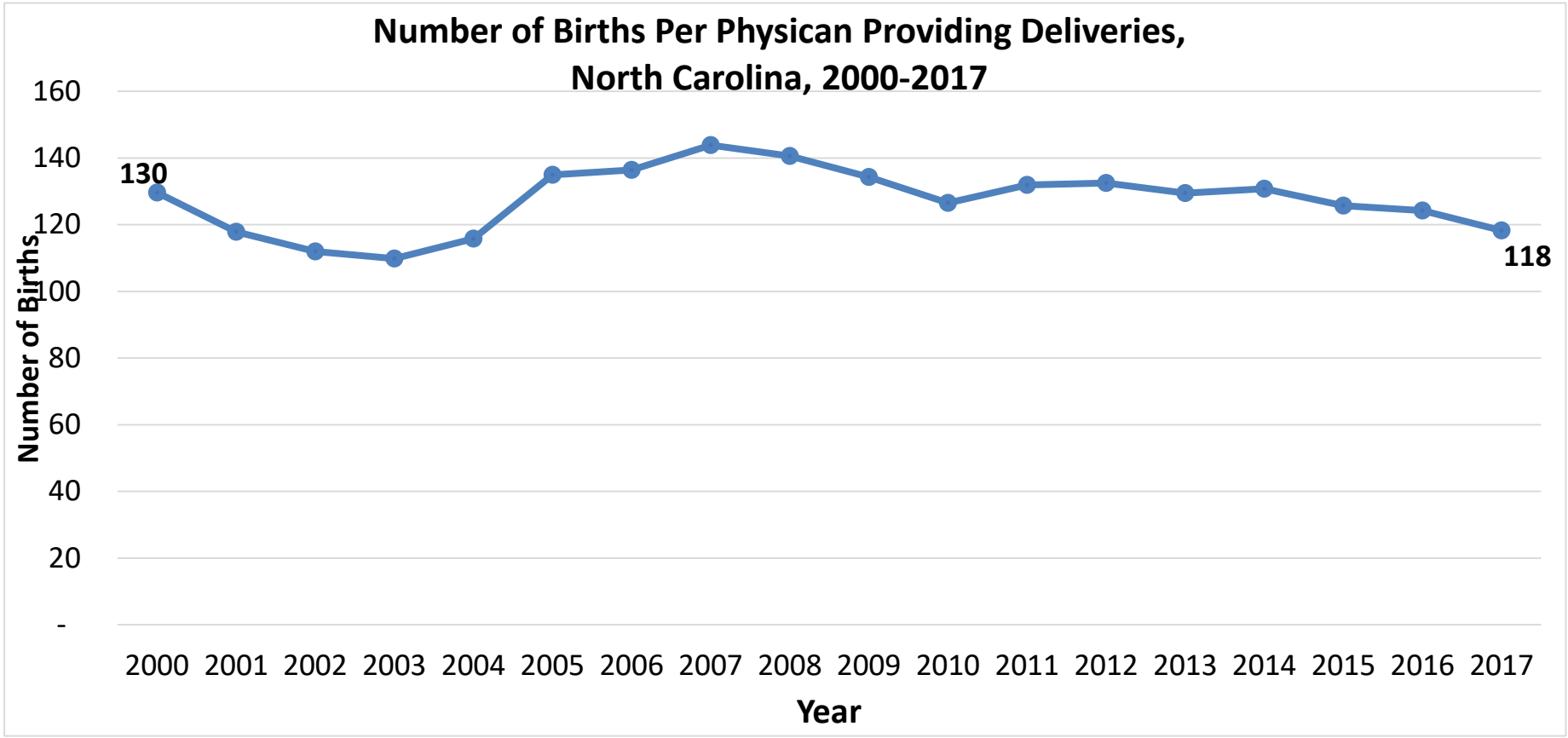
Heavily reliant on Medicaid dollars, small hospitals shut down maternity wards just to stay afloat.

By LISA RAB | October 03, 2017

J. Scott Applewhite/AP Photo

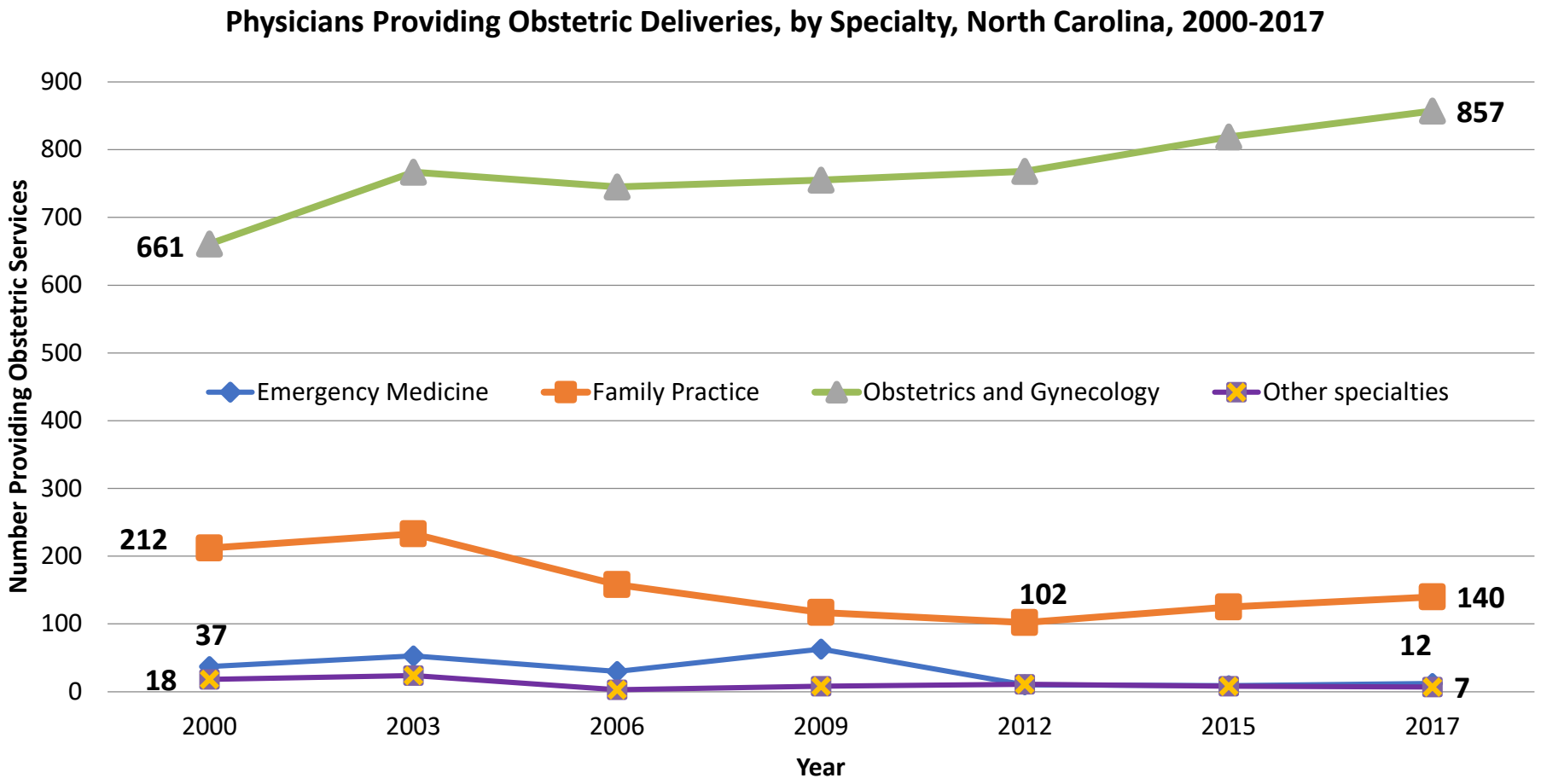
BOONE, N.C.—Three years ago, Lucia Parker gave birth to her first child surrounded by people she loved. Her mother, sister, and husband were by her side at Blue Ridge Regional Hospital, and the nurses attending her were family friends. Each of them took turns massaging her back. They lifted her out of a

Yet the average number of births per physician providing deliveries has declined slightly



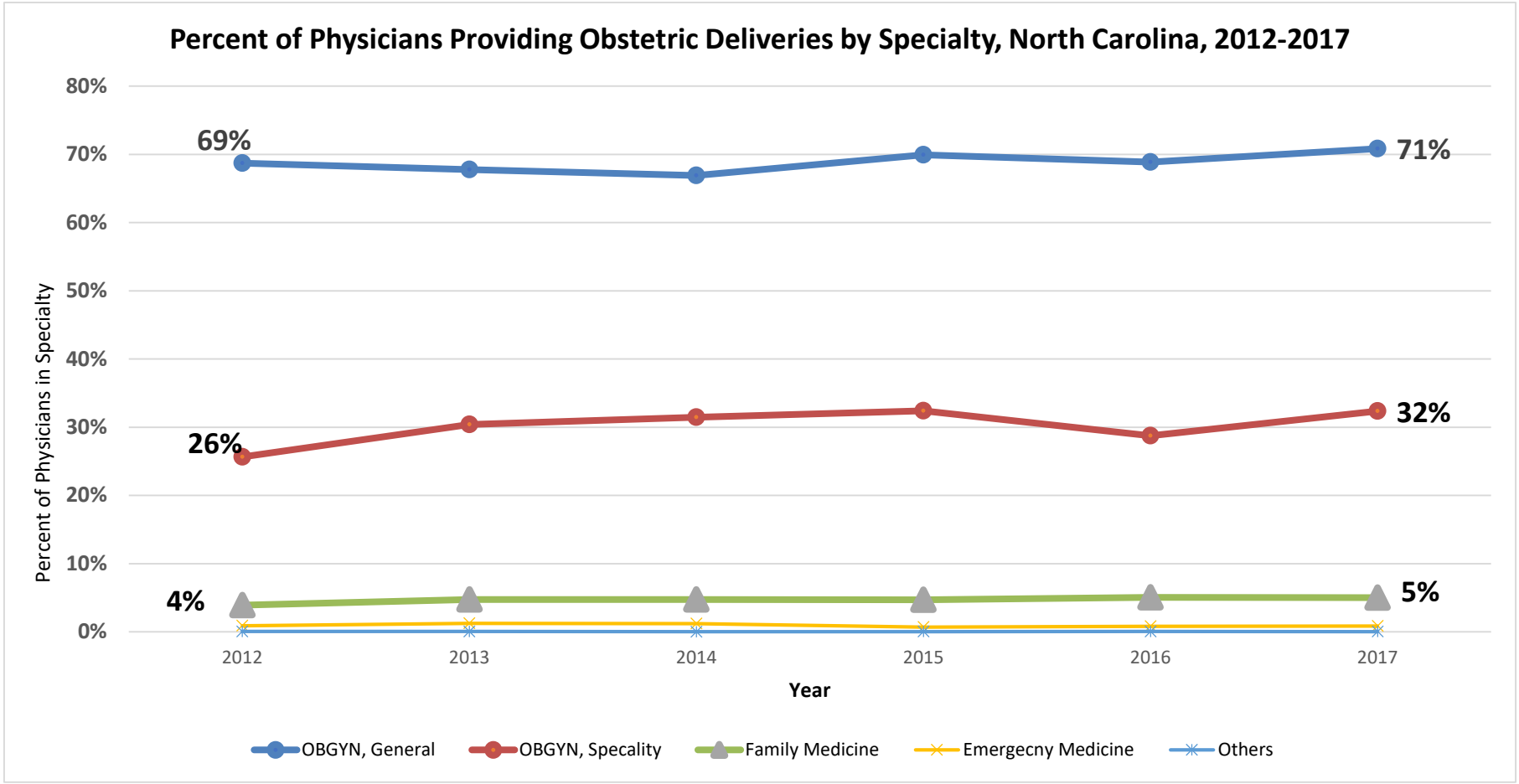
Source: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

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



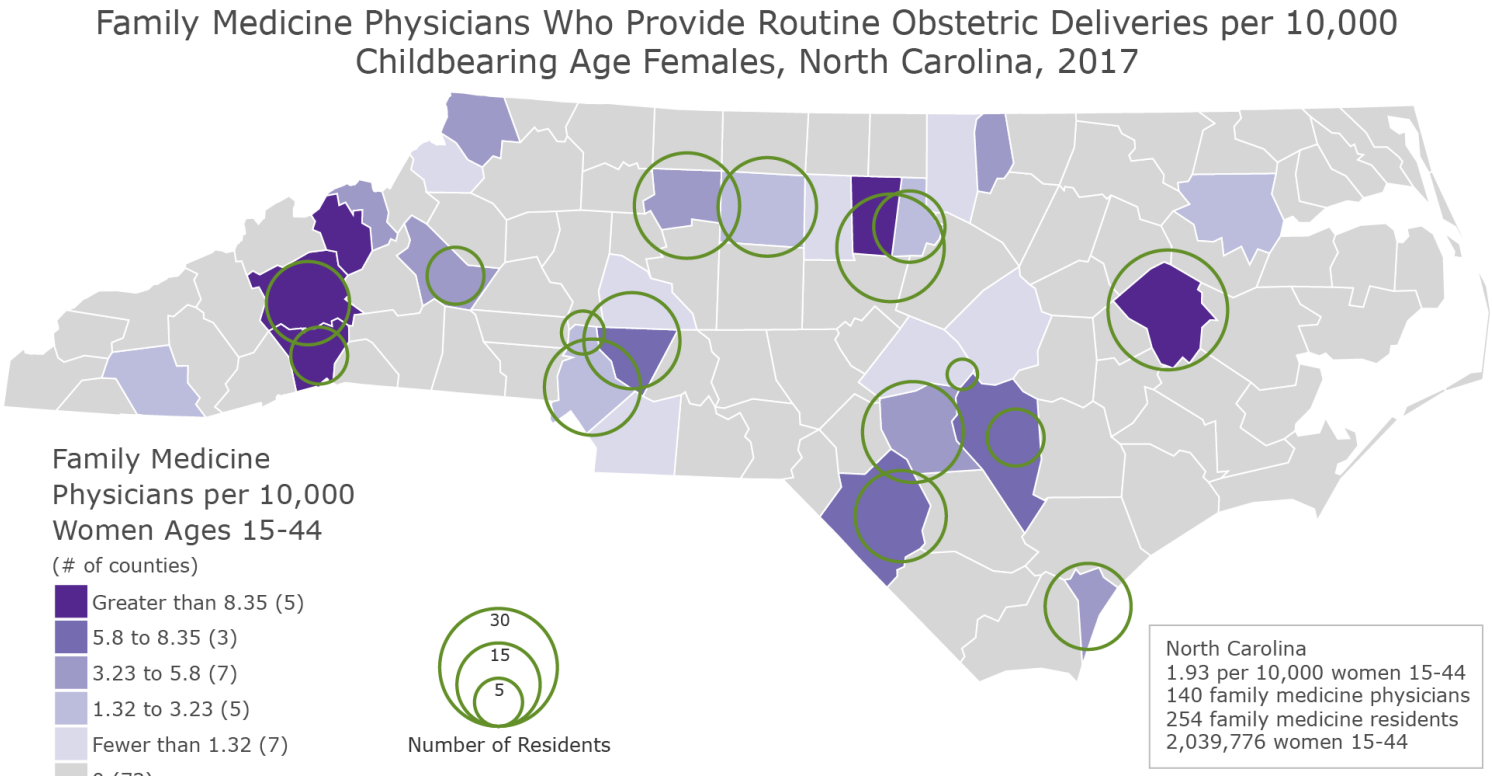
Source: North Carolina Health Professions Data System, with data from the North Carolina Medical Board (2000-2017)

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



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



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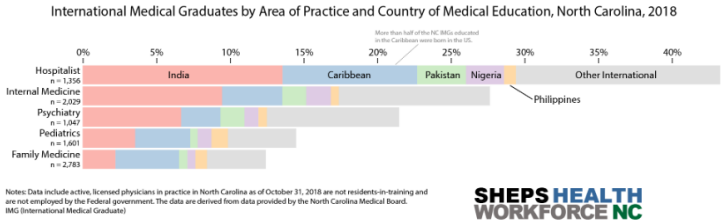
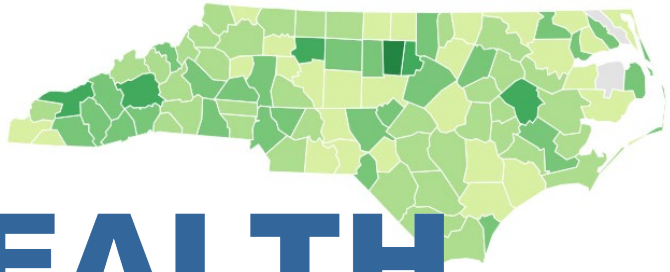
Check out our website for NC Health Workforce info, maps and graphics!





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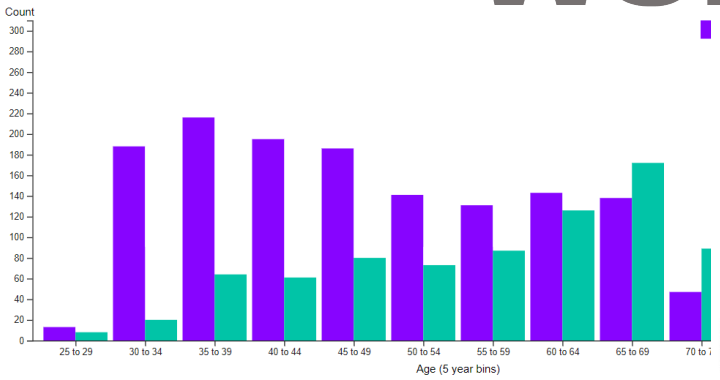

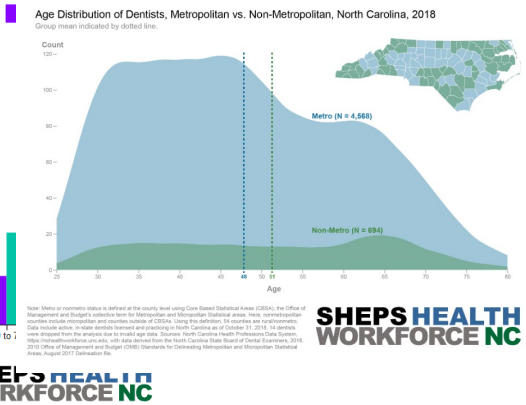

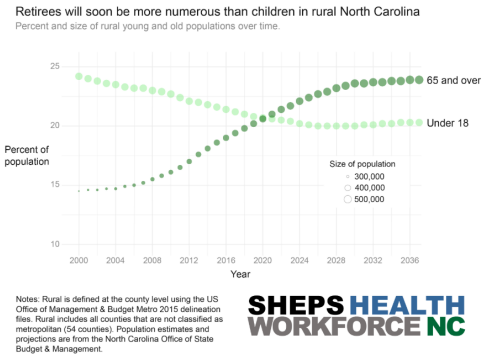

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The Evolving Role of Medical Assistants (MAs) in Primary Care: Divergent and Concordant Perspectives from MAs and Family Physicians

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MAs play an important role in healthcare transformation

- Medical assistants (MAs) are flexible and low-cost resource for primary care practices
- Robust literature has identified gap between potential of MA role expansion in primary care and implementation in practice
- Gap has been attributed to role confusion, shortcomings in MA training, physician resistance to delegate tasks, and MA reluctance to take on new roles

Previous work explored issue from either physician or MA perspectives

- This study investigated MA role transformation in primary care in NC from perspectives of both MAs and physicians
- Surveyed both MAs and family physicians to gauge whether they agreed on roles MAs were currently performing and identify their level of confidence in MAs' ability to perform these tasks.
- For those tasks not being currently being performed, we assessed physician willingness to transition tasks to MAs with additional training and MA willingness to pursue that training
- Tasks surveyed included activities related to visit planning; direct patient care; documentation; patient education, coaching or counseling; quality improvement; population health and communication

Methods

- Reached MAs through AHEC practice facilitators and Family Physicians through NCAFP newsletter
- Despite different sampling frames and relatively low response rates:
  - MAs and Family Physician respondents were generally in same types of practices

Demographic and Practice Characteristics of MAs and Physicians Surveyed

	Medical Assistants (n=118)*	Family Physicians (n=175)
Race and Sex		
Female	94%	51%
White/Non-Hispanic	56%	82%
African American	35%	11%
Hispanic	5%	0%
Asian/Pacific Islander	3%	5%
Native American	1%	1%
Age Categories		
18-28	23%	1%
29-38	36%	23%
39-48	25%	22%
49-58	12%	27%
59-65	4%	19%
Over 65	0%	7%
Setting		
Single Provider Practice	6%	8%
Small group practice (<10 providers)	47%	50%
Group outpatient practice (10 or more providers)	31%	31%
Other practice type	16%	11%
Affiliated with hospital or health system	55%	66%
MA to Provider Ratio		
Less than 1 MA: 1 Provider	20%	22%
1 MA: 1 Provider	62%	59%
2 MAs: 1 Provider	12%	18%
More than 2 MAs: 1 Provider	6%	1%
Work with same team		
Never	0%	2%
Less than half the time	9%	9%
About half the time	9%	9%
More than half the time	10%	17%
Almost always	71%	64%

Methods (2)

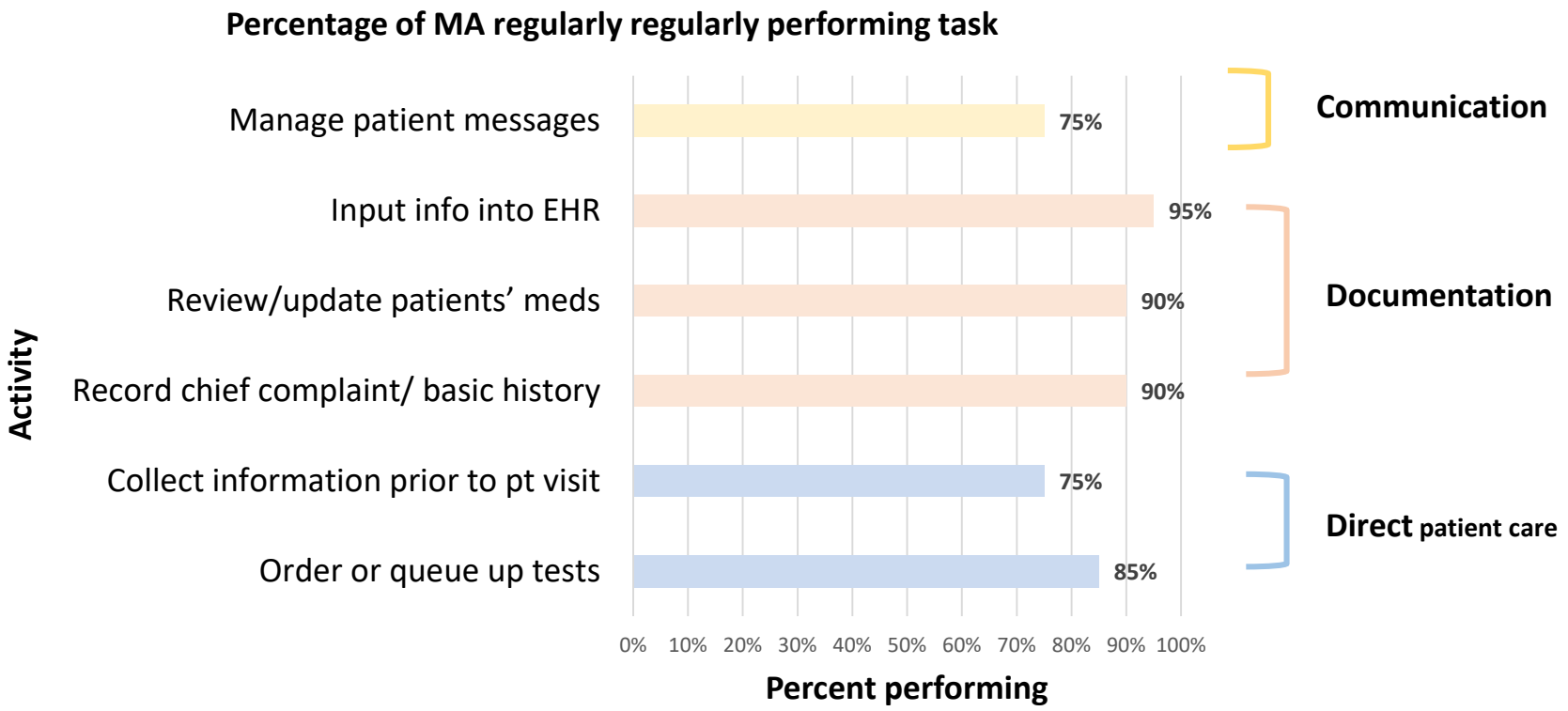
- Family physician respondents were generally representative of NC's family physician population

Demographic and Practice Characteristics of Physicians Surveyed Vs. NC Family Physicians

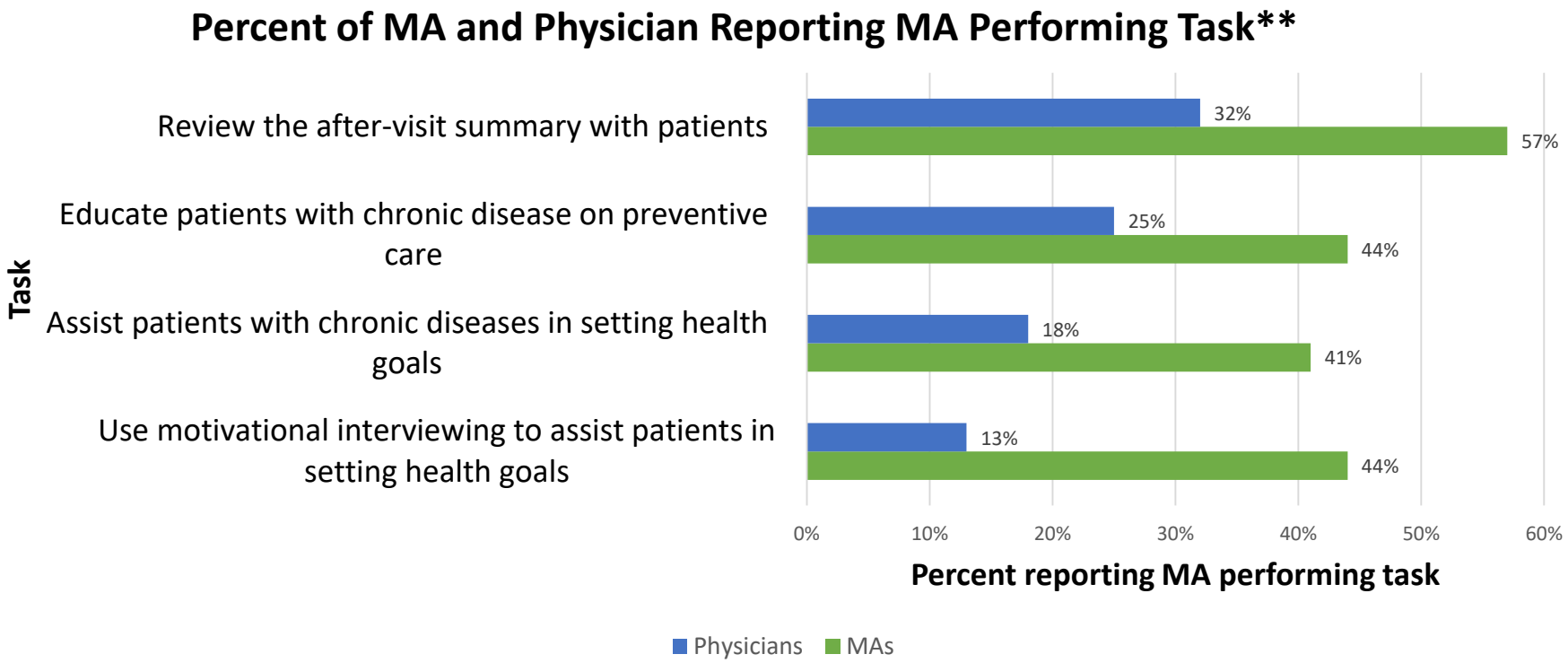
	Family Physicians (n=175)	NC Family Physicians** (n=2,700)
Race and Sex		
Female	51%	43%
White/Non-Hispanic	82%	74%
African American	11%	12%
Hispanic	0%	3%
Asian/Pacific Islander	5%	8%
Native American	1%	1%
Age Categories		
18-28	1%	1%
29-38	23%	21%
39-48	22%	26%
49-58	27%	25%
59-65	19%	16%
Over 65	7%	10%
Setting		
Single Provider Practice	8%	10%
Small group practice (<10 providers)	50%	78%
Group outpatient practice (10 or more providers)	31%	
Other practice type	11%	12%

What do MAs report doing?

Visit planning, direct patient care, and documentation activities that were once considered extended roles are functions that MAs report performing routinely on most days

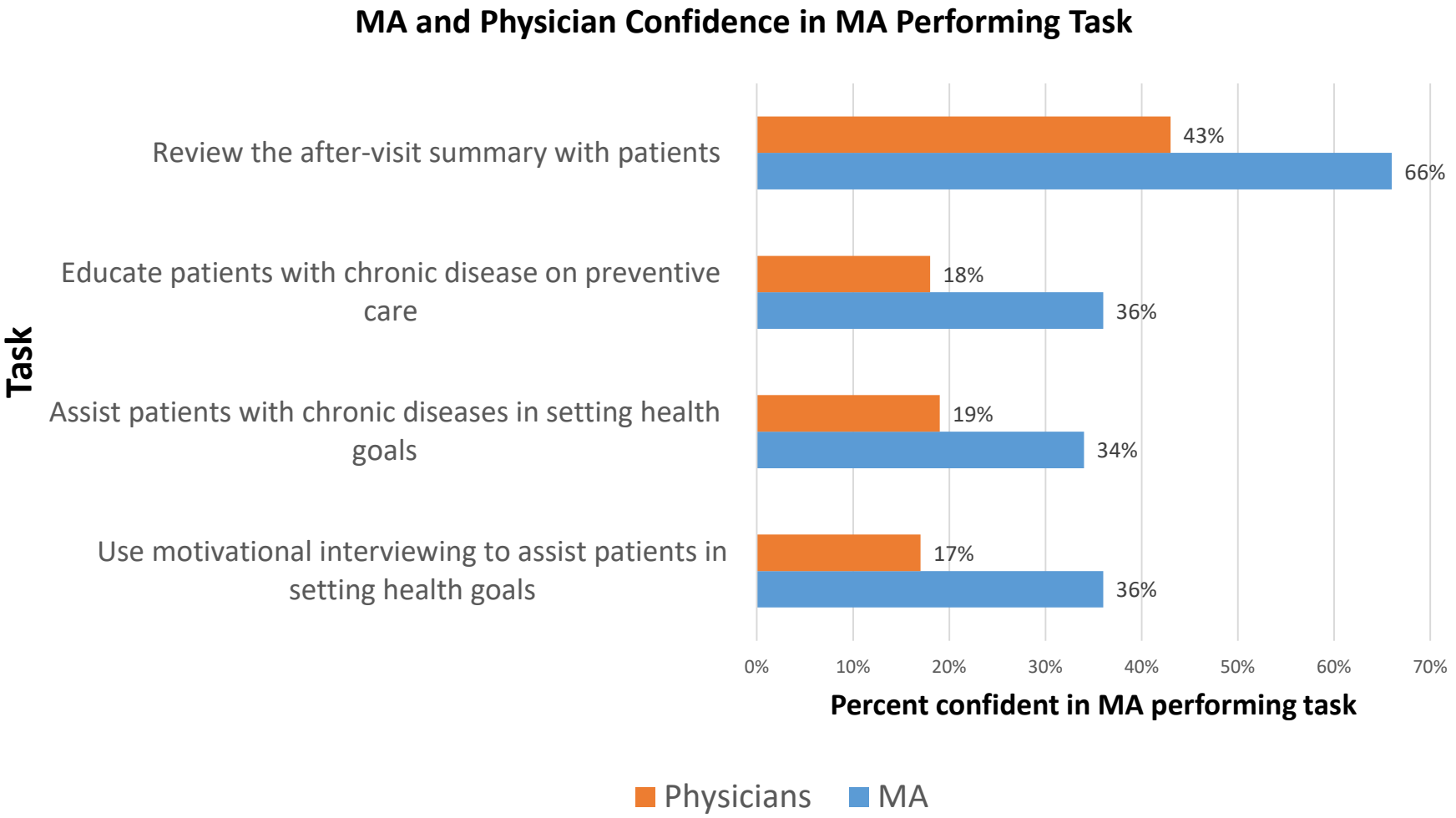


But MAs and Physicians don't always agree about what MAs are doing



*MAs report performing most days; physicians say "yes, performing"

And they have divergent levels of confidence in MA competence to perform these activities at current level of training



But there is alignment between physician willingness to delegate and MAs willingness to purse more training

Patient Education, Coaching and Counseling

Task	MA interest** in more training?	Physician willing to transition task?
Screen for depression	57%	84%
Use motivational interviewing to assist patients in setting health goals	65%	63%
Assist patients with chronic diseases in setting health goals	68%	75%
Educate patients with chronic disease on preventive care	67%	71%
Review the after-visit summary with patients	55%	85%

Population Health Activities

Task	MA interest** in more training?	Physician willing to transition task?
Review Patient Lists to Identify Patients	60%	91%
Find patients due for A1c and pend A1c order	55%	90%
Extract Information from Electronic Health Record to Manage Patient Lists	60%	84%

Scribing

Task	MA interest** in more training?	Physician willing to transition task?
Scribe during examination/visit	56%	67%

Summary of findings

- We identified three areas where the gap between potential and actual implementation of MA role transformation could be narrowed—population health and panel management; patient education, coaching and counseling; and scribing
- Closing these gaps will become even more important as our health care system moves toward value-based and risk-based payment models that emphasize addressing the upstream, preventive and chronic care needs of patients

Implications for practice

- To transform MA roles, we need to consider
  - Increasing provider to MA ratios (currently the majority of MAs and physicians work in 1:1 ratio, with about one fifth working in a ratio of less than that)
  - Improving compensation for new roles
  - Developing career ladder for MAs
- Our study did not delve into MA involvement in QI initiatives and leadership in workflow- that is another window of opportunity in staffing models transformed MA roles

Developing the workforce to meet the health *and social care needs* of NC's population: How do we get there from here?

Need to shift from "old school" to "new school" workforce planning approaches

This section draws on this work:
Fraher EP, Brandt BF. Toward a System Where Workforce Planning, Education and Practice Are Designed around Patients and Populations Not Professions. Journal of Interprofessional Care. 2019 Jan 23:1-9.

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Reframe #1: From a focus on shortages to addressing the demand-capacity mismatch

Old School

- Will we have enough (nurses, doctors, *insert other health professional*) in the future?

New School

- How can we more effectively and efficiently deploy the workforce already employed in the health care system on interprofessional teams?

Reframe #2: From a focus on provider type to recognizing plasticity of provider roles

Old School

- Assumes professions and specialties have fixed and unique scopes of practice

New School

- Recognizes “plasticity” of real-world practice—professions and specialties have overlapping and dynamic scopes of practice

Workforce is highly flexible. We need to encourage practicing to fullest scope

- Plasticity recognizes that roles can dynamically change depending on patients' need for services, the setting and the availability of other providers
- Instead of retrofitting care models to meet existing competencies of the existing workforce, need to ask:
  - what are patients' needs for services?
  - how might health professional roles be redesigned to meet those needs?
- This is already happening, particularly in capitated and value-based care delivery models

To do this, we need to redesign structures to support team-based care → Practice

To design teams around patients, not professions:

- Job descriptions must be rewritten or created
- Workflows must be redesigned
- Minimize role confusion by clearly defining competencies and training for new functions
- Existing staff won't delegate or share roles if don't trust other staff members are competent
- Culture change ***is possible*** as successful models spread and are scaled

And redesign structures to support new roles? ⇨ Regulation

> *"The workforce innovations needed to implement ACA programs require an adaptable regulatory system capable of evolving with the health care environment. The health profession regulation system in place today does not have the flexibility to support change*

- To create a more dynamic regulatory system, we need to:
- develop evidence to support regulatory changes, especially for new roles
- evaluate new/expanded roles to understand if interventions improve health, lower costs and enhance satisfaction (patient and provider)

Source: Dower C, Moore J, Langelier M. It is time to restructure health professions scope-of-practice regulations to remove barriers to care. *Health Aff* (Millwood). 2013 Nov;32(11); Fraher E, Spetz J, Naylor M. Nursing in a Transformed Health Care System: New Roles, New Rules. LDI/INQRI Research Brief. June 2015.

Reframe #3: From a focus on workforce planning for professions to workforce planning for patients/people, families and communities

Old School

- Silo-based workforce planning for individual professions

New School

- Workforce planning for services, patients, families and communities

Increased focus on social determinants of health is shifting narrative from health workforce to "workforce for health"

- Expand workforce planning efforts to include workers in home- and community-based settings
- Embrace the role of patient navigators, community health workers, home health workers, community paramedics, dieticians, medical lawyers and other community-based workers
- Integrated behavioral health and primary care models are spawning new team structures and new roles.
  Example: social workers who are serving as:
  - Behavioral health specialists: providing interventions for mental, behavioral health and substance abuse disorders
  - Care Managers: coordinating, monitoring and assessing treatment plans
  - Referral role: connecting patients to community resources, transportation, food etc.

Fraser MW, Lombardi BM, Wu S, Zerden LD, Richman EL, Fraher EP. Social work in integrated primary care: A systematic review. *Journal of Social Work and Research.* 2018; 9(2):0-36.

Reframe #4: From a focus on redesigning curriculum for students in pipeline to concurrently retooling and retraining the existing workforce

Old School

- Redesigning curriculum only for pre-licensure and foundational education programs

New School

- New models of continuing professional development and interprofessional clinical learning environments that support retooling the existing workforce at the same time as preparing future workforce

Because workforce already employed in the system will be the ones who transform care

- Embed learning in collaborative practice environments that benefit patients, learners and the health care system
- Need continuing education modules in care coordination, population health management, behavioral health, patient education and engagement, health coaching, quality improvement, geriatrics, oral health and other new skill sets
- Also need to focus on educating learners about health system transformation

Number of Health Professionals in the Workforce Versus New Entrants to the Workforce, Select Professions, 2012

Profession	Total workforce	New entrants	New entrants as a percentage of total workforce
Physicians	835,723	21,294[a]	2.5%
Physician assistants	106,419	6,207	5.8%
Registered nurses	2,682,262	146,572	5.5%
Licensed practical nurses and licensed vocational nurses	630,395	60,519	9.6%
Dentists	157,395	5,084	3.2%
Chiropractors	54,444	2,496	4.6%
Optometrists	33,202	1,404	4.2%
Social workers	724,618	41,769	5.8%
Physical therapists	198,400	10,102	5.1%
Occupational therapists	90,483	6,227	6.9%

Fraher E, Ricketts TC. Building a Value-Based Workforce in North Carolina. *North Carolina Medical Journal*. 2016; 77(2): 94-8.

To do this, we need to redesign structures to support team-based care ⇨ Education

- Clinical rotations need to include "purposeful exposure" to high-performing teams in ambulatory and community settings
- Foundational and continuing education must be convenient – timing, location, and financial incentives must be taken into consideration
- Need to prepare faculty to teach new roles and functions
- Close partnerships between educators and employers needed to:
  - not produce more workers than market demands
  - identify professions, settings and roles in which the workforce over- and under-skilled
  - ensure new grads are ready for practice in transformed system

Source: Fraher E, Spetz J, Naylor M. Nursing in a Transformed Health Care System: New Roles, New Rules. LDI/INQRI Research Brief. June 2015; Ladden et al. The Emerging Primary Care Workforce. Preliminary Observations from the Primary Care Team: Learning from Effective Ambulatory Practices Project". *Academic Medicine*; 1013, 88(12): 1830-1835.

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