

# Research on Redesigning Graduate Medical Education to Better Meet Population Health Needs

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## Overview

This brief summarizes research conducted by the Program on Health Workforce Research and Policy on graduate medical education (GME).

The mission of the Program on Health Workforce Research and Policy is to conduct objective, timely health workforce research to inform national and state policy. The Program is based at [The Cecil G. Sheps Center for Health Services Research](#),<sup>1</sup> one of the nation's leading institutions dedicated to conducting policy-relevant research on health care access, cost, quality and value.

## National Graduate Medical Education Studies

### A Methodology for Using Workforce Data to Decide Which Specialties and States to Target for Graduate Medical Education Expansion

Fraher EP, Knapton A, Holmes GM. January 2017.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5269545/>

This manuscript describes how the nation could distribute the proposed 3,000 new GME slots over 5 years—15,000 total positions—by state and specialty to address population health needs. Findings suggest that if new slots were allocated based on workforce shortages, they would be directed toward states with poor health outcomes (AL, AR, MS); large, growing populations (TX, CA); and older populations (FL). The results also suggest the need to expand GME in western states with relatively low physician and resident supply (AK, ID, MT, NV, WY).



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<sup>1</sup> [http://www.shepscenter.unc.edu/wp-content/uploads/2017/03/ShepsOverview2017\\_revised022617\\_small.pdf](http://www.shepscenter.unc.edu/wp-content/uploads/2017/03/ShepsOverview2017_revised022617_small.pdf)

## Program on Health Workforce Research & Policy

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— **A Methodology for Using Workforce Data to Decide Which Specialties and States to Target for GME Expansion: Health Workforce Policy Brief**

Fraher EP, Knapton A, Holmes GM. April 2016. [http://www.shepscenter.unc.edu/workforce\\_product/methodology-using-workforce-data-decide-specialties-states-target-gme-expansion/](http://www.shepscenter.unc.edu/workforce_product/methodology-using-workforce-data-decide-specialties-states-target-gme-expansion/)

This two-page brief describes a data-driven, evidence-based methodology that could be used to allocate new GME positions by specialty and state to meet population health needs.

— **State-Based Approaches to Reforming Medicaid-Funded Graduate Medical Education**

Fraher EP, Spero JC, Bacon T. January 2017. [http://www.shepscenter.unc.edu/workforce\\_product/state-based-approaches-reforming-medicaid-funded-graduate-medical-education/](http://www.shepscenter.unc.edu/workforce_product/state-based-approaches-reforming-medicaid-funded-graduate-medical-education/)

This study summarizes how policy makers in ten states are redesigning Medicaid-funded GME. Findings suggest that while interest is high in reforming Medicaid-funded GME, more states are in the planning stages of reform than have implemented changes. In most states, some type of oversight body has been created to bring stakeholders together, reach consensus on workforce needs, decide how funds could be targeted to needed specialties, geographies and populations; and educate the legislature. State interviewees voiced a strong desire for increased accountability and transparency to evaluate the return on investment (ROI) for public funds invested in GME but they emphasized the need for technical assistance to make it a reality.

— **DocFlows: A Web-Based, Interactive App to Explore the Interstate Migration of Residents-in-Training and Practicing Physicians**

Fraher E, Richman E, Galloway E, Knapton A. August 2017.

[http://www.shepscenter.unc.edu/workforce\\_product/docflows-policy-brief/](http://www.shepscenter.unc.edu/workforce_product/docflows-policy-brief/)

States seek better data to evaluate the ROI for public funds spent on GME. The DocFlows App fills this gap by providing information about where a state's physician workforce was trained and where its trainees move. Data from the app suggest that although the market for physicians is national, there is significant migration between states and within regions. Findings indicate that any change one state makes to expand GME or increase retention will affect other states.

— **FutureDocs: Nation has Enough Physicians to Meet the Nation's Overall Needs – For Now. Distribution to Worsen.**

Tierney EK, Ricketts TC, Knapton A, Fraher EP. April 2017. [http://www.shepscenter.unc.edu/wp-content/uploads/2017/04/FutureDocs\\_IssueBrief1\\_April2017.pdf](http://www.shepscenter.unc.edu/wp-content/uploads/2017/04/FutureDocs_IssueBrief1_April2017.pdf)

The FutureDocs Forecasting Tool is a workforce model that estimates the supply of physicians, use of physician services, and capacity of the physician workforce to meet future use of health services from 2013 to 2030. Currently, there is near balance between physician supply and demand; the bigger issue is the maldistribution of physicians by geography and specialty. Because physicians tend to practice in the places where they train, policies that increase funding for GME can help states attract and retain more physicians.

## — **GME in the United States: A Review of State Initiatives**

Spero JC, Fraher EP, Ricketts TC, Rockey PH. September 2013.

[http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview\\_Sept2013.pdf](http://www.shepscenter.unc.edu/wp-content/uploads/2013/09/GMEstateReview_Sept2013.pdf)

This study summarizes interviews with GME experts in 17 states. The study paints a picture of states having much to risk and much to gain but often missing out on important opportunities to reform GME. Findings suggest that most states are investigating alternative funding models to support GME expansion but Medicaid and all-payer payment systems are often implemented in the same “hands off” way that Medicare dollars are treated, with individual teaching hospitals in the state driving decisions about how new dollars are allocated. In all states interviewed, efforts to track the accountability for spending of public GME dollars are minimal or under development. While state policymakers control a much smaller GME purse than that of Medicare, there are opportunities for states to take significant action. The report makes five recommendations for future GME reforms.

## **State Graduate Medical Education Studies**

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### — **The Workforce Outcomes of Physicians Completing Residency Programs in North Carolina**

Fraher EP, Spero JC, Galloway E, Terry J. January 2018. [http://www.shepscenter.unc.edu/workforce\\_product/workforce-outcomes-nc-physician-residency-graduates/](http://www.shepscenter.unc.edu/workforce_product/workforce-outcomes-nc-physician-residency-graduates/)

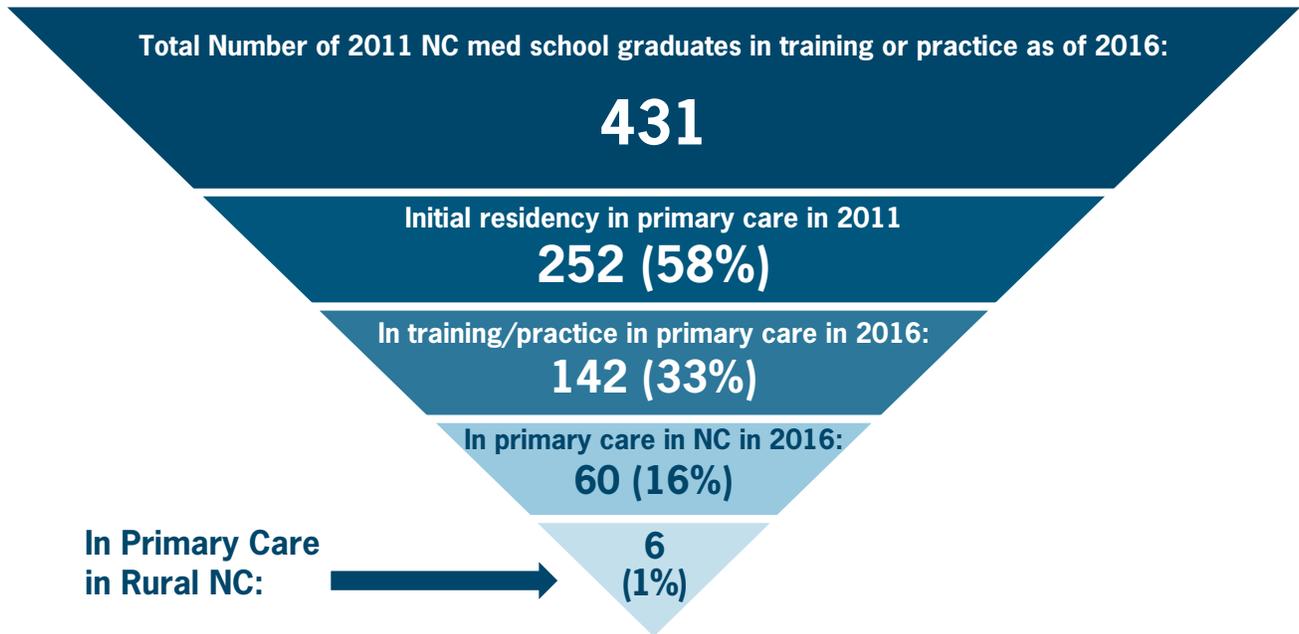
This study represents an important first step in helping North Carolina evaluate the degree to which physician training programs are producing the workforce required to meet population health needs. To our knowledge, this study is the first to report on the workforce outcomes for all residencies in a state at the residency program-level. The study finds a high level of variation between training programs in the number of residency graduates who end up in practice in the state, in rural settings, and in practice as generalist physicians.

### — **North Carolina’s Physician Training Programs Are Not Producing the Workforce Needed to Meet Population Health Needs**

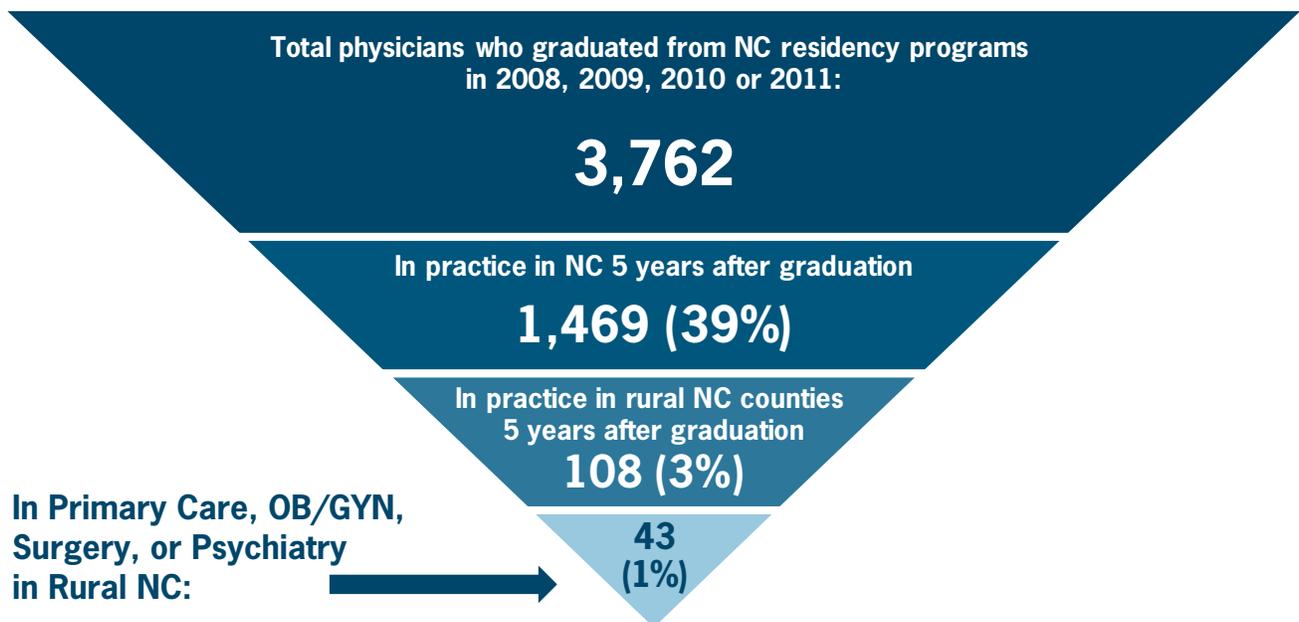
Presentation to the Joint Oversight Subcommittee on Medical Education Programs and Medical Residency Programs, North Carolina General Assembly. Fraher EP. February 12, 2018. [http://www.shepscenter.unc.edu/workforce\\_product/fraher-presentation-to-ncga-medical-education-outcomes/](http://www.shepscenter.unc.edu/workforce_product/fraher-presentation-to-ncga-medical-education-outcomes/)

This presentation summarizes findings from our work evaluating whether North Carolina’s medical schools and residency training programs are meeting the state’s health workforce needs. Key findings include: North Carolina does not face an overall physician shortage; the state faces a shortage of physicians in rural areas and needed specialties, particularly in primary care, psychiatry, and general surgery. Some residency programs are producing workforce needed for our state, but most are not. North Carolina can fix this—but the state needs greater transparency and accountability for public funds spent on training physicians, both transparency in the public funds going to individual programs and these programs’ success rates at getting graduates into needed communities and specialties.

**Exhibit 1.  
NC Medical Students: Retention in Primary Care in NC's Rural Areas**



**Exhibit 2.  
NC GME Graduates: Retention in NC's Rural Areas**



*Sources: North Carolina Health Professions Data System with data derived from the NC Medical Board and Association of American Medical Colleges; CBSA rural definitions from Census and OMB. Produced by the Program on Health Workforce Research and Policy, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill.*

