

# Supply, Demand, and New Roles for the Pharmacist Workforce: A North Carolina Case Study

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**Julie Spero, MSPH**

**Christopher Del Grosso, BS & Erin Fraher, PhD, MPP**

*Program on Health Workforce Research & Policy*

*Cecil G. Sheps Center for Health Services Research, UNC*

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# Overview

- NC Pharmacist Supply
- NC Pharmacist Demand
- New and Emerging Roles for Pharmacists



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# Supply

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# So, how many pharmacists are there?

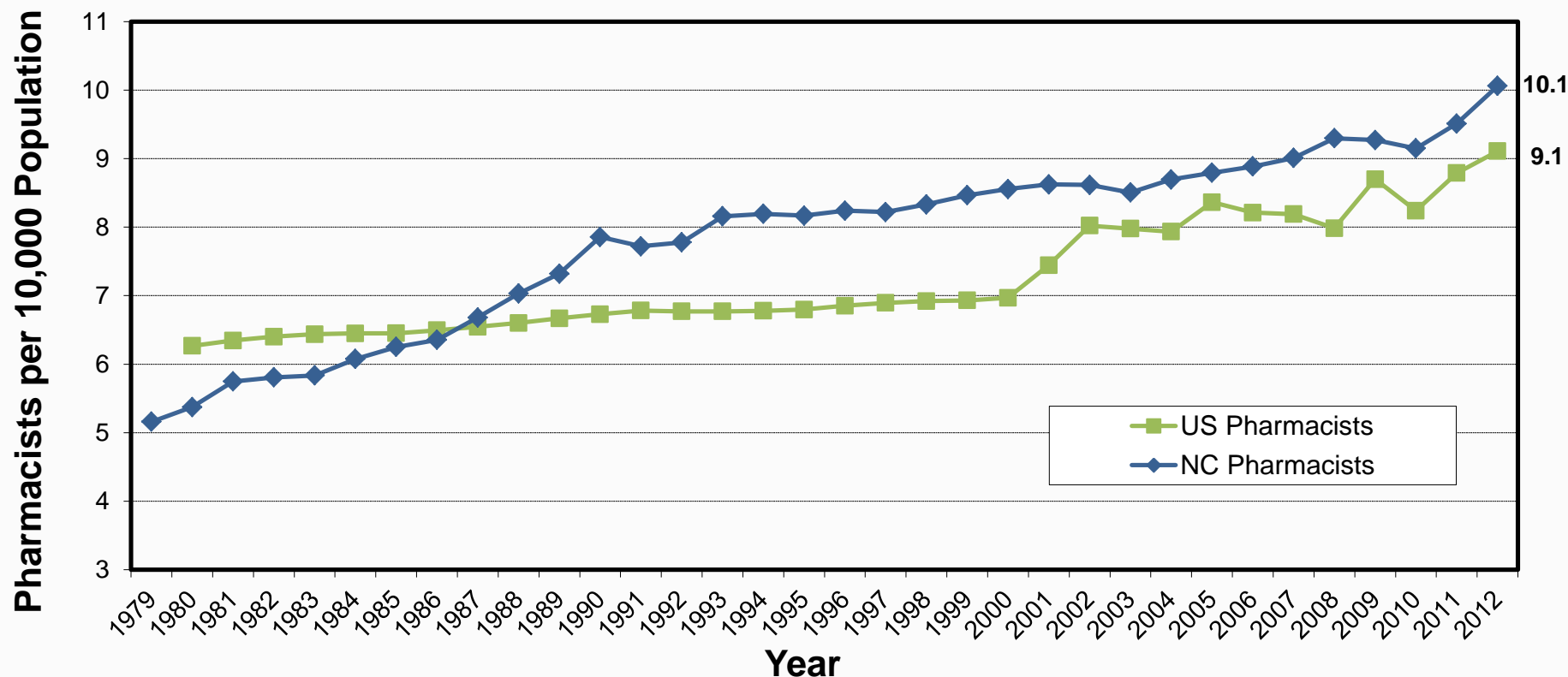
Licensed, active, instate pharmacists in North Carolina:



Sources: North Carolina Health Professions Data System, with data derived from the North Carolina Board of Pharmacy, 2012. Data include all, active, in-state pharmacists.

# North Carolina has consistently outpaced the US average in supply of pharmacists

Pharmacists per 10,000 Population, US and NC, 1979 to 2012



Sources: North Carolina Health Professions Data System, 1979 to 2012; HRSA, Bureau of Health Professions; US Census Bureau; North Carolina Office of State Planning. Figures include all licensed, active, in-state pharmacists. National pharmacist data from the Statistical Abstract of the United States, 1979-2012.

# High Growth in PharmD Programs in NC & US

- Doctor of Pharmacy degree = entry to practice
- North Carolina
  - All 3 pharmacy schools have expanded enrollment since 2011
  - New pharmacy school opens in 2016
- United States
  - Between 2000 & 2012:
    - the annual number of PharmD grads doubled<sup>1</sup>
    - the number of accredited pharmacy schools increased by 65%<sup>2</sup>

1. Taylor DA, Taylor J. American Association of Colleges of Pharmacy Profile of Pharmacy Students 2011-2012. Alexandria, Virginia. April 2013. [http://www.aacp.org/resources/research/institutionalresearch/Documents/Fall12\\_Degrees%20Conferred.pdf](http://www.aacp.org/resources/research/institutionalresearch/Documents/Fall12_Degrees%20Conferred.pdf). Accessed 16 December 2013.

2. Walton SM, Mott DA, Knapp KK, Fisher G. Association between increased number of US pharmacy graduates and pharmacist counts by state from 2000-2009. *American Journal of Pharmaceutical Education*. May 10 2011;75(4):76.

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# Demand

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# Demand is in balance with supply in North Carolina and nationally

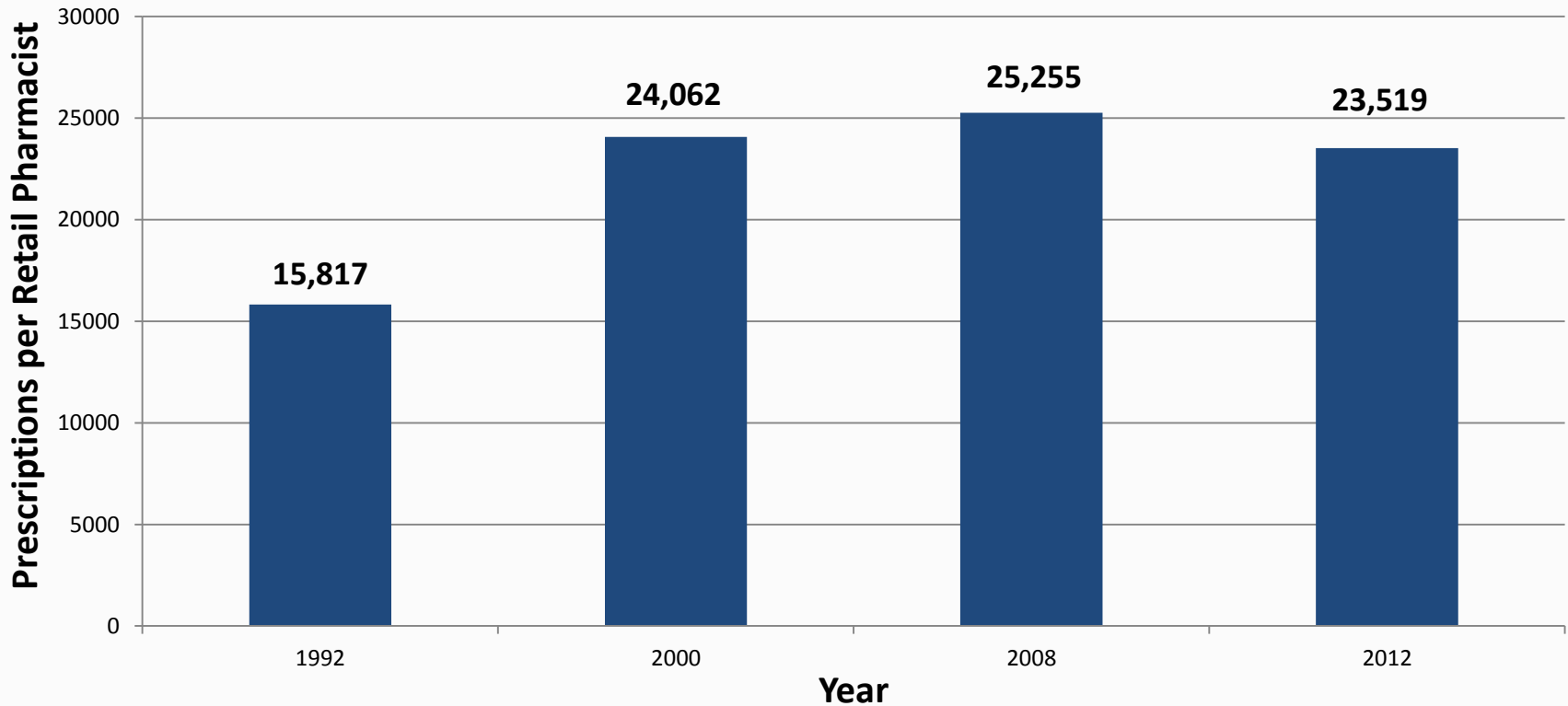


Source: Time-Based Trends in Aggregate Demand Index, supported by Pharmacy Manpower Project Inc.  
Accessed 28 April 2014 at: <http://www.pharmacymanpower.com/trends.jsp>.



# More Retail Pharmacists Doing Less?

## Annual Retail Prescriptions Dispensed per Active, Instate Retail Pharmacist in North Carolina, 1992 to 2012



Source: North Carolina Health Professions Data System, with data derived from the North Carolina Board of Pharmacy, 2012; 2012 prescription data-Xponent™, January 2012-December 2012, IMS Health Incorporated. All Rights Reserved. Pharmacist data include active, in-state pharmacists licensed in North Carolina as of October 31, 2012 reporting an employment setting of chain or independent pharmacy. Data do not include prescriptions dispensed at hospitals, clinics, long-term care facilities or mail order operations. Data include new prescriptions and refills dispensed. 1992-2008 prescription data: March 2010. "Figure 19. Annual Retail Prescriptions Dispensed per Active, Instate Retail Pharmacist in North Carolina, 1992 to 2008" (pg 13). *In Trends in the Supply of Pharmacists in North Carolina*. Cecil G. Sheps Center for Health Services Research.

# Increased Competition for Existing Pharmacist Jobs

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- New grads take part-time & “floater” positions
- Signing bonuses have disappeared
- “Pharmacists are looking for jobs that don’t exist”<sup>1</sup>

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# Pharmacists and New Models of Care

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# 3 “Branches” of Pharmacy

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- Community Pharmacists
- Hospital Pharmacists
- Ambulatory Care Pharmacists

# Pharmacist Delivered Medication Therapy Management Services

- The Affordable Care Act authorizes pharmacists in primary care practices to provide<sup>1</sup>:
  - Patient assessment
  - Medication therapy review
  - Develop written treatment plan
  - Discuss plan & follow up with patient

...but need larger scale payment mechanisms and state-level regulatory changes to broadly expand these models

# In NC, Clinical Pharmacist Practitioners (CPPs) Provide Direct Patient Care

- Regulated by Board of Pharmacy & Board of Medicine
- Expanded authority
  - Start/stop medications
  - Change medications
  - Order tests
- Only **1.3%** of NC's pharmacists in 2012

# The Mountain AHEC Model in Western NC

- Clinical Pharmacist Practitioners (CPPs) do:
  - Employee wellness visits
  - Medicare wellness visits
  - Transitional care
  - Anticoagulation visits
  - Osteoporosis clinic visits
- CPPs don't:
  - Dispense medications



# Reimbursement Challenges

- Reimbursement has not caught up
  - Traditionally paid via dispensing fees
    - Focus: “fast, cheap, accurate”
  - Current system does not reimburse for “cognitive services”
  - MAHEC model has 5 reimbursement sources, but still an issue
- H.B. 4190 introduced
  - amend Social Security Act to recognize & reimburse pharmacists for clinical services



# In Sum...

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- The pharmacist workforce is highly educated & growing
- Pilot programs have successfully integrated pharmacists into patient care teams
- Regulation & payment systems need to change for broad implementation of new pharmacist roles

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# Thank you

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Julie Spero

Program on Health Workforce Research and Policy

Cecil G. Sheps Center for Health Services Research

University of North Carolina at Chapel Hill

e-mail: [juliespero@unc.edu](mailto:juliespero@unc.edu)

[www.healthworkforce.unc.edu](http://www.healthworkforce.unc.edu)