

# Assessing Change in the Primary Care Service Delivery Profile in South Carolina

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At the Heart of Public Health Policy

# Background & Purpose

- In the past decade, primary care physicians (PCPs) have increasingly moved from self-employment in solo practices toward employment within hospitals, health systems, or other health care settings. [1,2]
- The shift towards physician employment is occurring nationwide in rural and urban areas; however, the distribution of PCPs has not been examined by level of rurality over time.
- The purpose of our analysis was to describe changes in the proportion of PCPs working in solo or group practice versus employment by a larger entity over time, by level of rurality in South Carolina.

## Methods

# **Data**

 Data on type of practice organization was obtained from the physician license renewal form collected by the South Carolina Revenue and Fiscal Affairs Office on a biennial basis (collected annually between 1996 and 2007)

#### **Inclusion Criteria**

 Only post-residency PCPs in South Carolina were included in this analysis. PCP specialties were defined as family medicine, internal medicine, and pediatrics.

#### **Definitions**

- PCPs were divided into four categories based on the type of practice organization where they worked: self-employed in a solo practice, employed in a group practice, employed by private employer, and other. "Private employer" is the category for hospital and health systems networks. See table below.
- Rurality was defined at the county level as metropolitan, micropolitan or small adjacent/remote rural using Urban Influence Codes.

Categories for Type of Practice Organization Obtained from Physician License Renewal Form				
Category	Form of Practice			
Solo	Self, Solo			
Group	Self, Partnership/Group			
	Self, Group, Same Specialty			
	Self, Group, Multi-Specialty			
Private Employer	Other Private Employer			
Other	State Government			
	County Government			
	Non-profit Health Agency			
	Federal Civilian (includes USPHS)			
	Federal, Military			
	Volunteer			
	Other			

### Results

- Small adjacent/remote rural counties experienced the greatest growth in the proportion of PCPs employed by a private employer compared to metropolitan and micropolitan counties, from 5.1% to 25.4%.
- Small adjacent/remote rural counties also had the greatest decline in the proportion of PCPs self-employed in solo practices and were the only level of rurality that saw an increase in the proportion of PCPs employed in group practices between 1996 and 2015.

#### Proportion of PCPs by Type of Practice Organization and Level of Rurality, 1996, 2006, and 2015

Type of Practice Organization	1996 (n=5,821)	2006 (n=7,796)	2015 (n=10,118)	% Change, 1996-2015		
Metropolitan						
Private Employer	7.1%	10.6%	24.7%	+247.9%		
Group Practice	50.9%	61.8%	49.0%	-3.7%		
Solo Practice	18.7%	12.2%	8.2%	-56.1%		
Other	23.2%	15.4%	18.1%	-22.0%		
Micropolitan						
Private Employer	4.8%	6.3%	19.6%	+308.3%		
Group Practice	51.7%	64.4%	51.8%	+0.2%		
Solo Practice	30.2%	19.0%	10.6%	-64.9%		
Other	13.3%	10.3%	18.0%	+35.3%		
Small Adjacent/Remote Rural						
Private Employer	5.1%	12.5%	25.4%	+398.0%		
Group Practice	33.3%	49.8%	46.1%	+38.4%		
Solo Practice	40.0%	23.0%	11.8%	-70.5%		
Other	21.5%	14.8%	16.7%	-22.3%		

#### Discussion

- The changes in type of practice organization in South Carolina parallel national trends.
  - The decline in solo practitioners in smaller rural counties, accompanied by a growth in group practice and employment, may reflect the retirement of older practitioners.
- Future Directions:
  - Assess the impact of changes in the primary care delivery system on patient outcomes by using claims data to quantify travel for care and receipt of appropriate services among Medicaid patients.

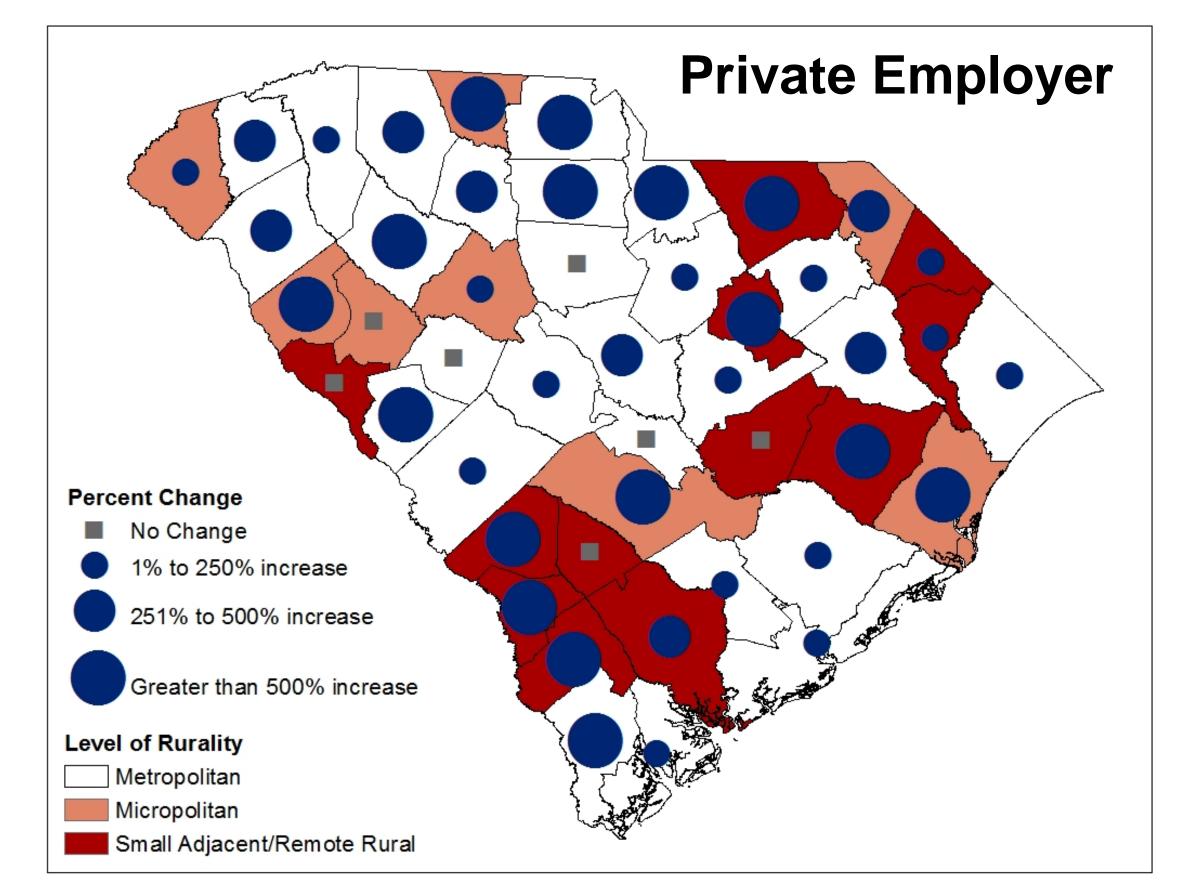
### References

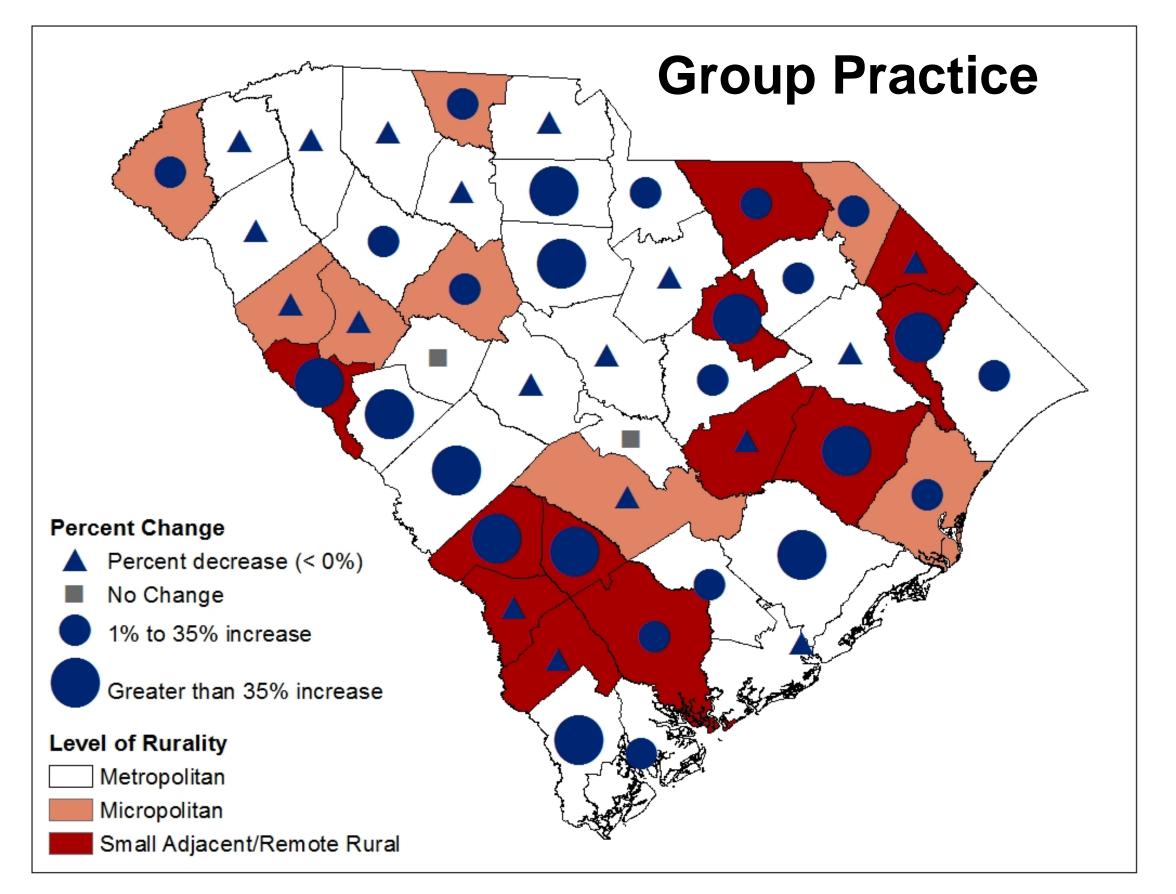
- 1.1.Kash, B. & Tan, D. (2016). Physician group practice trends: A comprehensive review. Journal of Hospital & Medical Management, 2:1
- 2.2. The Physicians Foundation. (2016). 2016 Survey of America's physicians: Practice patterns and perspectives. Retrieved from https://physiciansfoundation.org/wp-content/uploads/2017/12/Biennial\_Physician\_Survey\_2016.pdf. Dallas, TX: Merritt

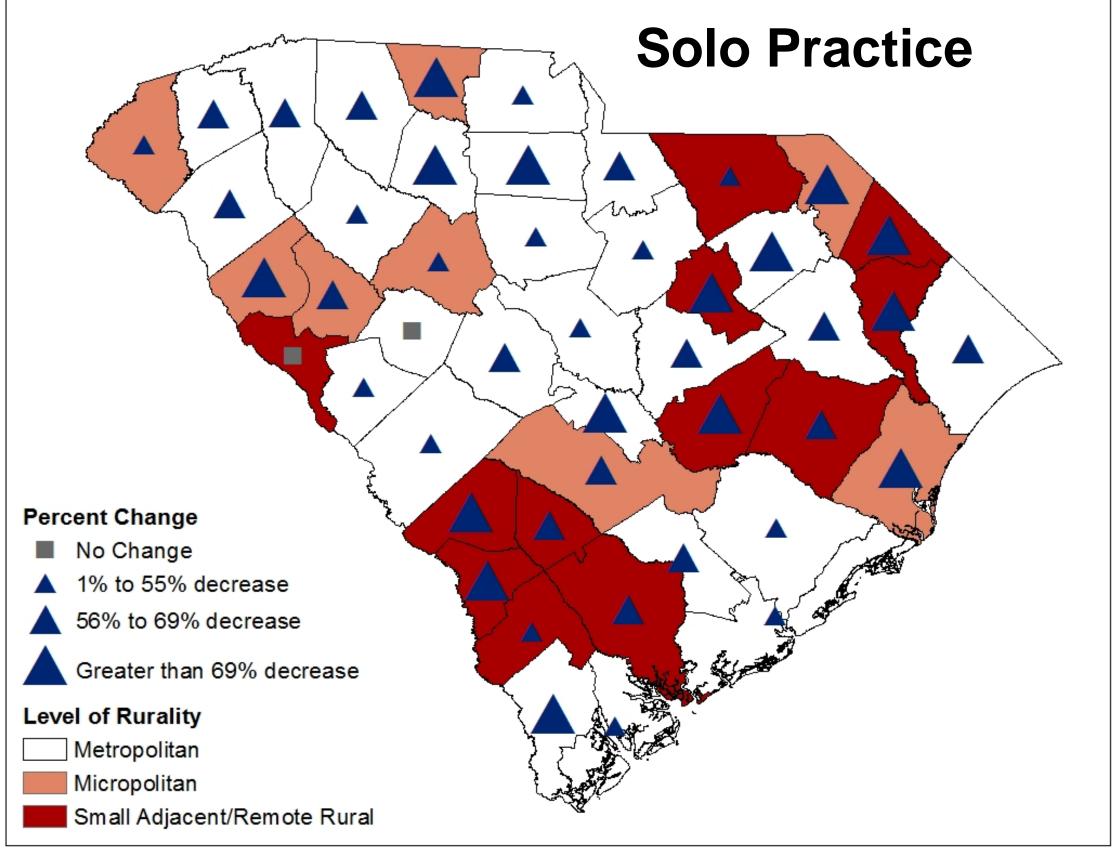


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# Percent Change in the Proportion of PCPs by Type of Practice Organization between 1996 and 2015







Sources: SC Revenue and Fiscal Affairs Office—Physician License Renewal Form, 1996 and 2015; U.S. Census Bureau, 2010 TIGER/Line shapefiles; United States Department of Agriculture, Economic Research Service, 2013 Urban Influence Codes.