

# Assessing the Rural Implications of the Implementation of the ACA on Choices in Health Insurance Markets

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  - ▣ **RUPRI Center for Rural Health Policy Analysis**
    - University of Iowa College of Public Health, Department of Health Management and Policy
    - <http://www.public-health.uiowa.edu/rupri>



# Background and Model

# Introduction

- The Patient Protection and Affordable Care Act (ACA) will be fully implemented in 2014, but the law may have major implications for rural communities: potentially increasing health insurance coverage of large numbers of rural households, and affecting the availability of health care services in rural areas and health care costs and quality.
- This paper: how will Health Insurance Exchanges (HIEs) influence access to affordable health insurance for rural people?
  - ▣ Consider entry of insurance firms into rural markets, focusing on the characteristics of rural areas that make entry more or less likely. How much competition will there be?

# Background: ACA and Health Insurance Exchanges (Marketplaces)

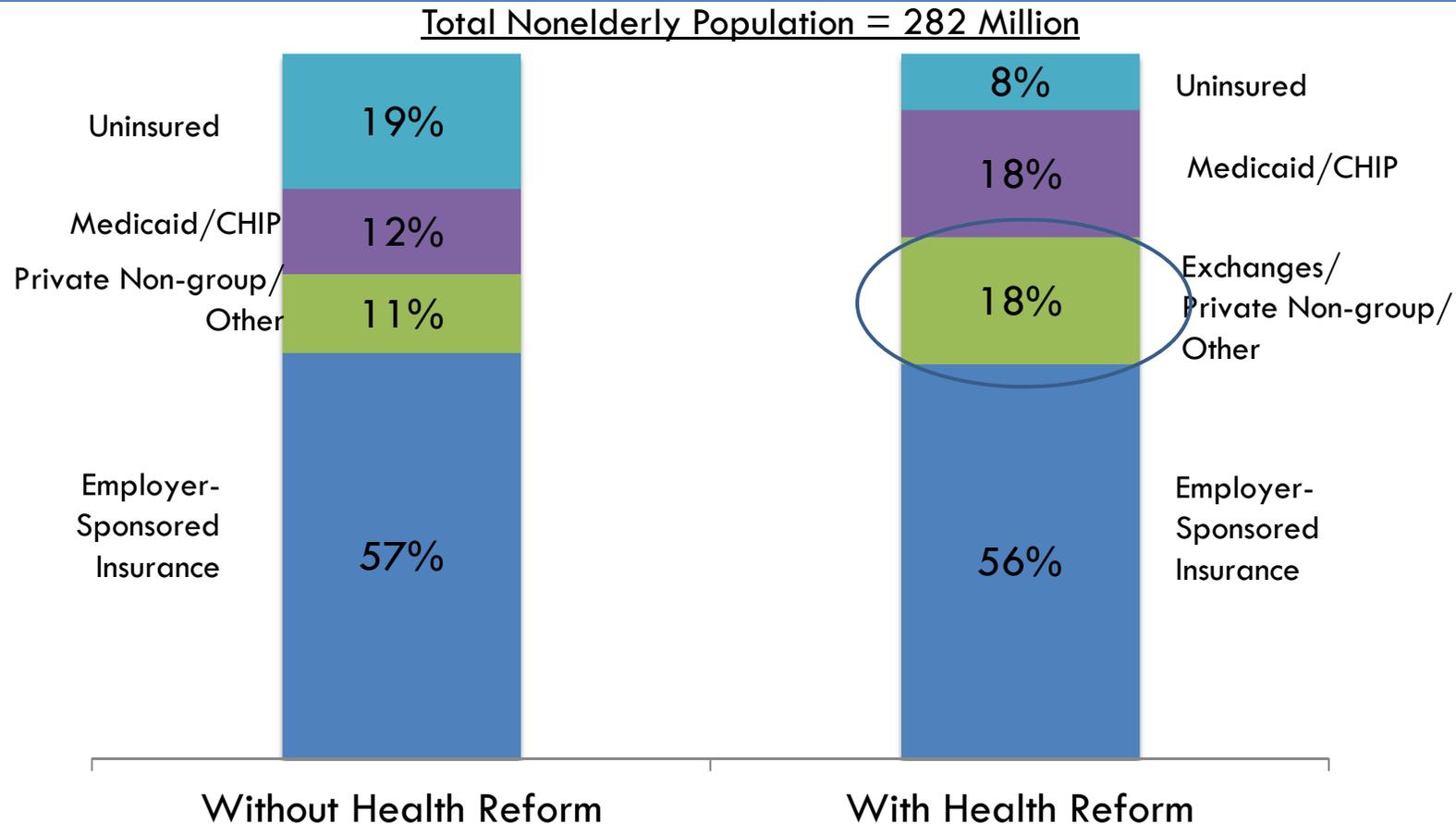
- **By January 1, 2014, states will establish Affordable Insurance Exchanges for individuals and for small business employees**
  - If not, the DHHS Secretary will establish and operate an Exchange in the state
- **Exchanges are entities for**
  - purchasing health insurance in a structured and competitive market,
  - emphasizing choice of health plans,
  - rules for offering and pricing of insurance, and
  - transparency – providing information to help consumers better understand and navigate through options available to them.
- **Eligibility:** U.S. citizens, Legal immigrants, Small business employees
- **Legal Obligations:**
  - Certify qualified health plans (QHP), Transparency, Communicate with beneficiaries, Administrative Tasks, Consult with stakeholders
- Per rule for Exchanges: *“Section 1334(a) of the Affordable Care Act establishes multi-State plans; the Office of Personnel Management (OPM) will enter into contracts with health insurance issuers to offer **at least two multi-State QHPs through each Exchange in each State.**”*

# Why FEHBP?

- FEHB Plan has been held up as model for Exchanges for years:
  - *“The HIE concept is broadly similar to the popular and successful Federal Employees Health Benefits Program (FEHBP), the consumer-driven system that covers Members of Congress, federal workers and retirees, and their families...The FEHBP is the only large group insurance system in the nation in which individuals can choose the plans and benefits that they want at prices they wish to pay. As state officials work to reform their health insurance markets, they should take the best features of the FEHBP and apply them to their own markets...”*
- FEHBP program is:
  - Nationwide, offers private plans , broad choice of plans and benefits, offered to a mixed set of enrollees (individuals, families)
  - Not as heavily regulated as other models (e.g. Medicare Advantage)
  - Excellent at provision of consumer information
  - Key differences?
    - FEHBP is group purchasing agent, restricts entry of plans, not as bound by state benefit mandates,
    - FEHBP Federal employees: not much exposure to low-income population

SOURCE: Robert Moffitt, “State-Based Health Reform: A Comparison of Health Insurance Exchanges and the Federal Employees Health Benefits Program,” Heritage Foundation, June 2007.

# Estimated Health Insurance Coverage in 2019



So ACA builds on existing coverage; employer plans remain intact;  
 no public option; Exchanges expand private insurance market  
 (Note: these are estimates of coverage before SCOTUS decision)

# Impact of ACA on Coverage in Rural and Urban Areas

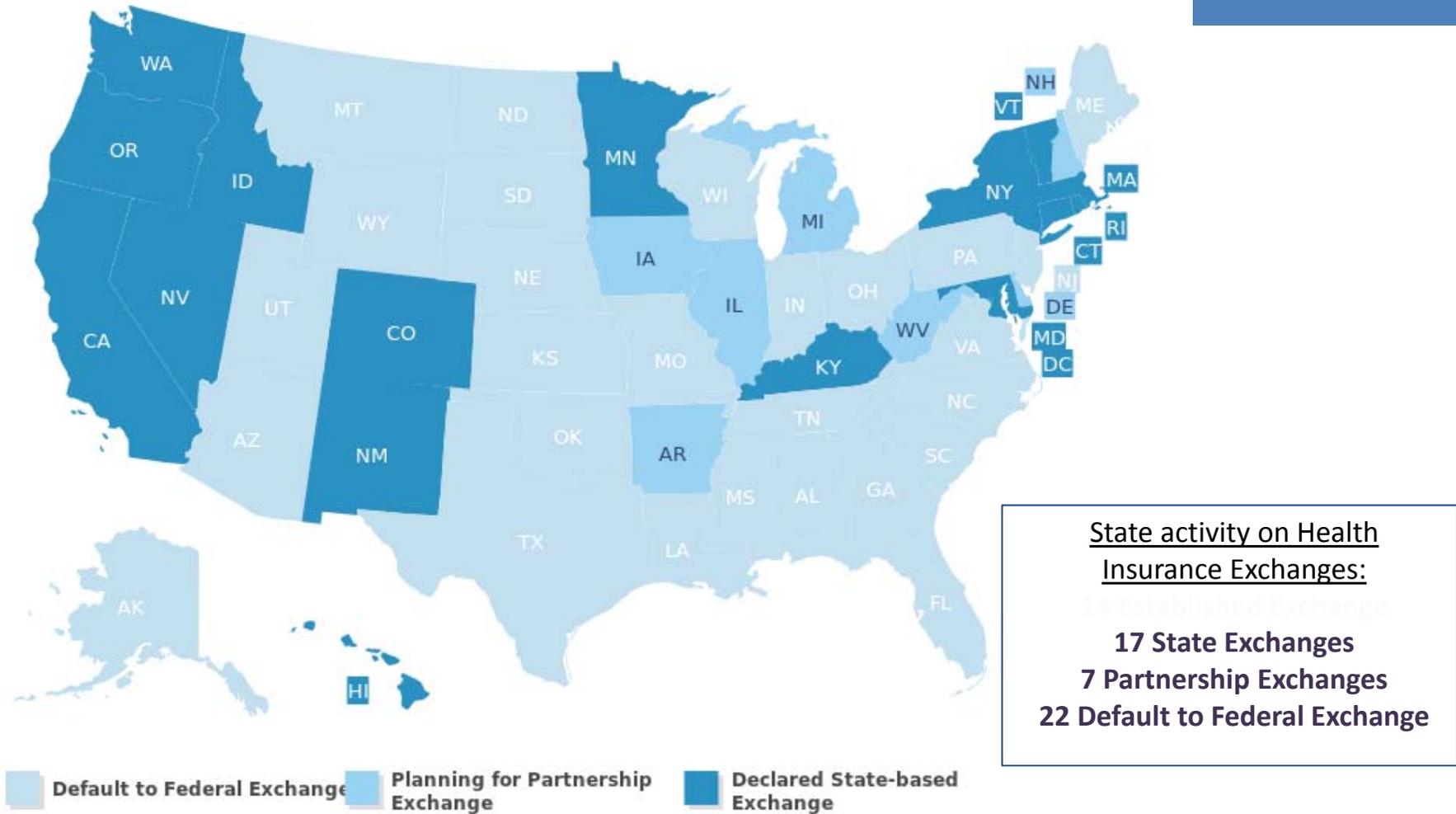


	Rural	Urban	U.S.
<b>Number of uninsured persons (in millions)</b>			
Before reform	8.1	41.9	50.0
After reform	2.9	16.5	19.4
Reduction in uninsured persons	5.2	25.4	30.6
<b>Insured rate after reform</b>			
Before reform	17.0%	16.9%	16.9%
After reform	5.9%	6.6%	6.5%
<b>Proportion of persons obtaining coverage through:</b>			
Health Insurance Exchanges	44%	46%	45%
With subsidies or tax credits	37%	36%	36%
Employer or individual responsibility	7%	10%	9%
Medicaid expansion	56%	54%	55%

SOURCE: RUPRI Health Reform Simulation Model.

Timothy D. McBride. 2009. "Impact of the Patient Protection and Affordable Care Act on Covered Persons, As Amended," Robert Wood Johnson Foundation and RUPRI Issue Brief, December 22, 2009.

# Establishment of State Health Exchanges, as of May 2013



SOURCE: Kaiser Family Foundation,  
<http://www.statehealthfacts.org/comparetable.jsp?ind=962&cat=17&sub=205&yr=1&typ=5>

# Conceptual Approach

- Firms enter state marketplaces
  - ▣ If firm feels plan will be profitable (or at least breakeven)
    - $\text{Profits} = N * \text{Premiums}(\text{Competition}, X) - N * \text{Costs}(\text{Competition}, X)$ 
      - $N = \text{number of enrollees in plan}$
- What we observe:
  - ▣ Number of plan choices and enrollment in these plan choices
  - ▣ “Concentration” of plan choices using Herfindahl Index
    - Recall: Herfindahl Index is a measure of concentration/competition in a given area
    - Our measure calibrated to between 0 and 1
    - Higher levels indicate more concentration (less competition)

SOURCE: Robert Moffitt, “State-Based Health Reform: A Comparison of Health Insurance Exchanges and the Federal Employees Health Benefits Program,” Heritage Foundation, June 2007.

# Preliminary work and Descriptive Results

By Timothy D. McBride, Abigail R. Barker, Lisa M. Pollack, Leah M. Kemper, and Keith J. Mueller

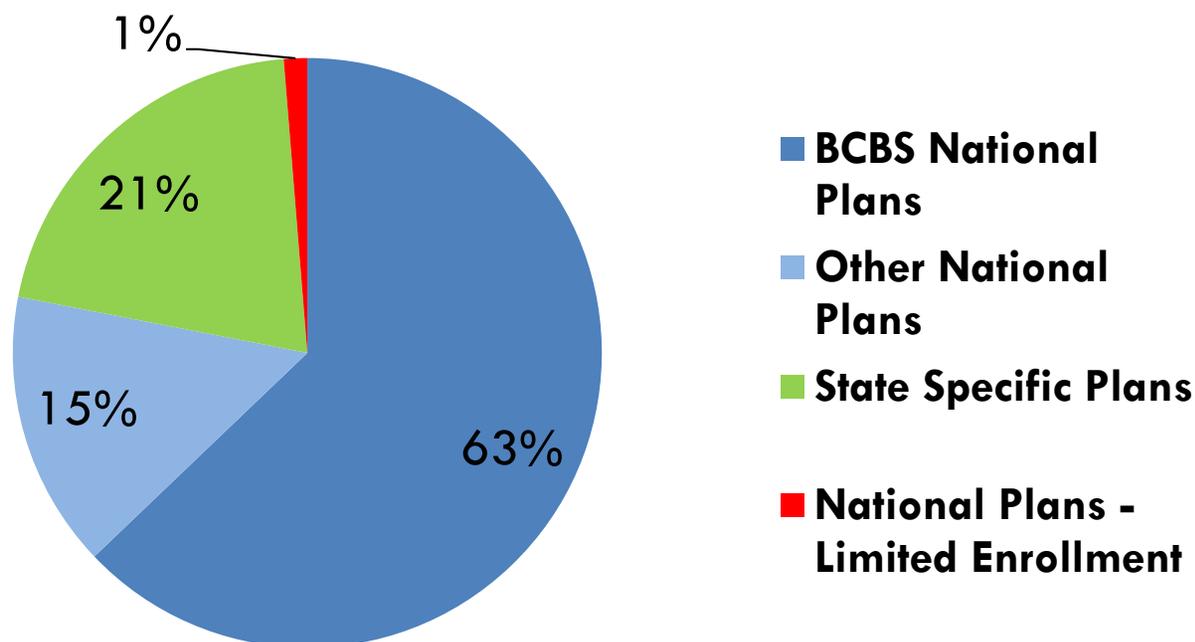
## **Federal Employees Health Program Experiences Lack Of Competition In Some Areas, Raising Cost Concerns For Exchange Plans**

**DOI:** 10.1377/hlthaff.2011.1265  
HEALTH AFFAIRS 31,  
NO. 6 (2012): 1321-1328  
©2012 Project HOPE—  
The People-to-People Health  
Foundation, Inc.

# Concentration in FEHBP, by Type of Plan

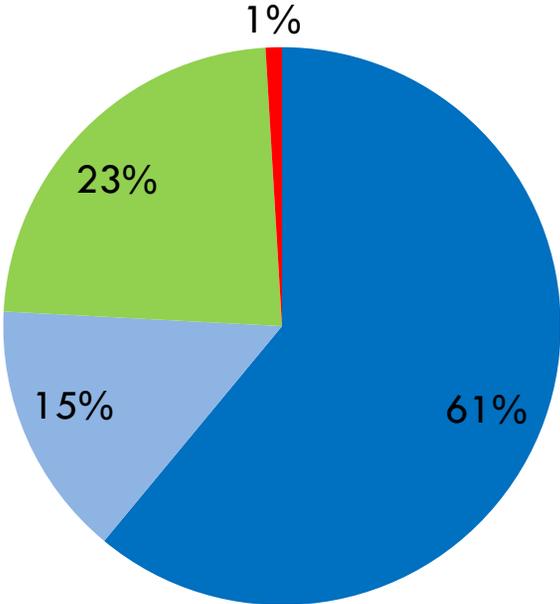
## □ FEHBP Enrollment by Type of Plan

**Total Enrollment= 7.942 million**

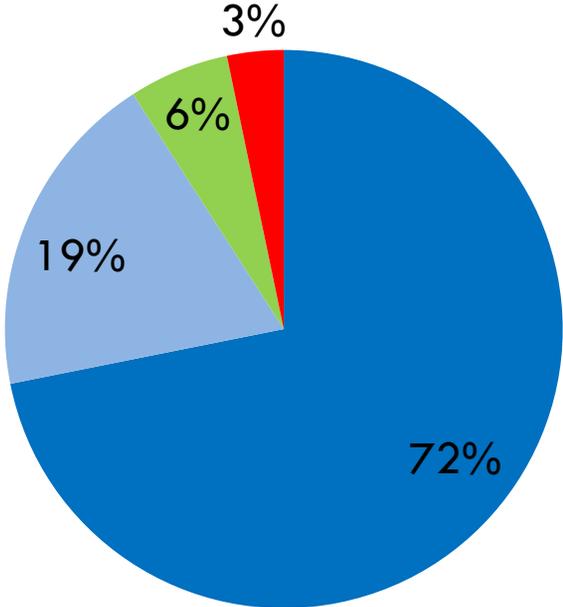


# Concentration, by Rural/Urban

**Urban**  
Enrollment = 6,869,000 (86%)

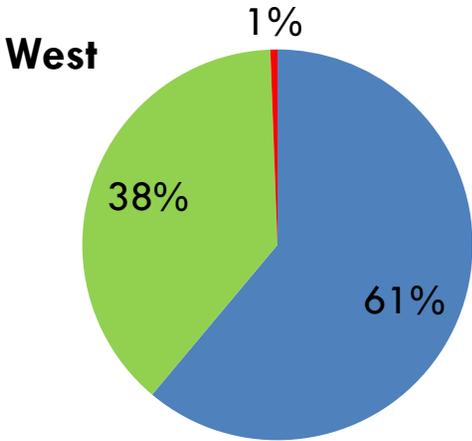
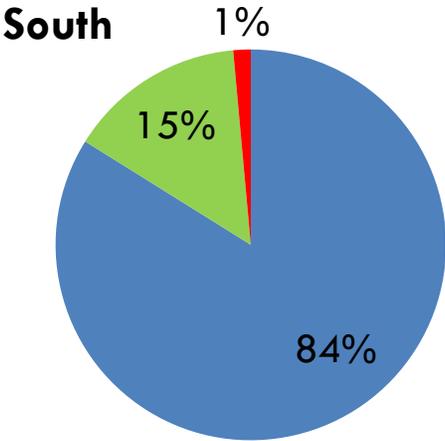
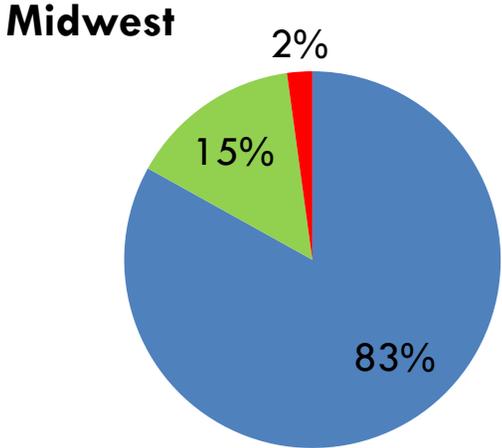
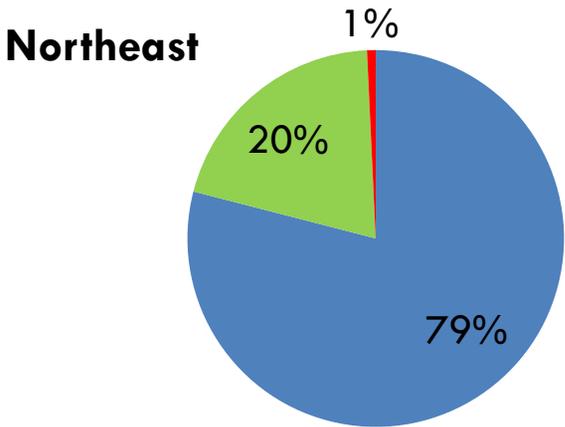


**Rural**  
Enrollment = 1,072,000 (14%)



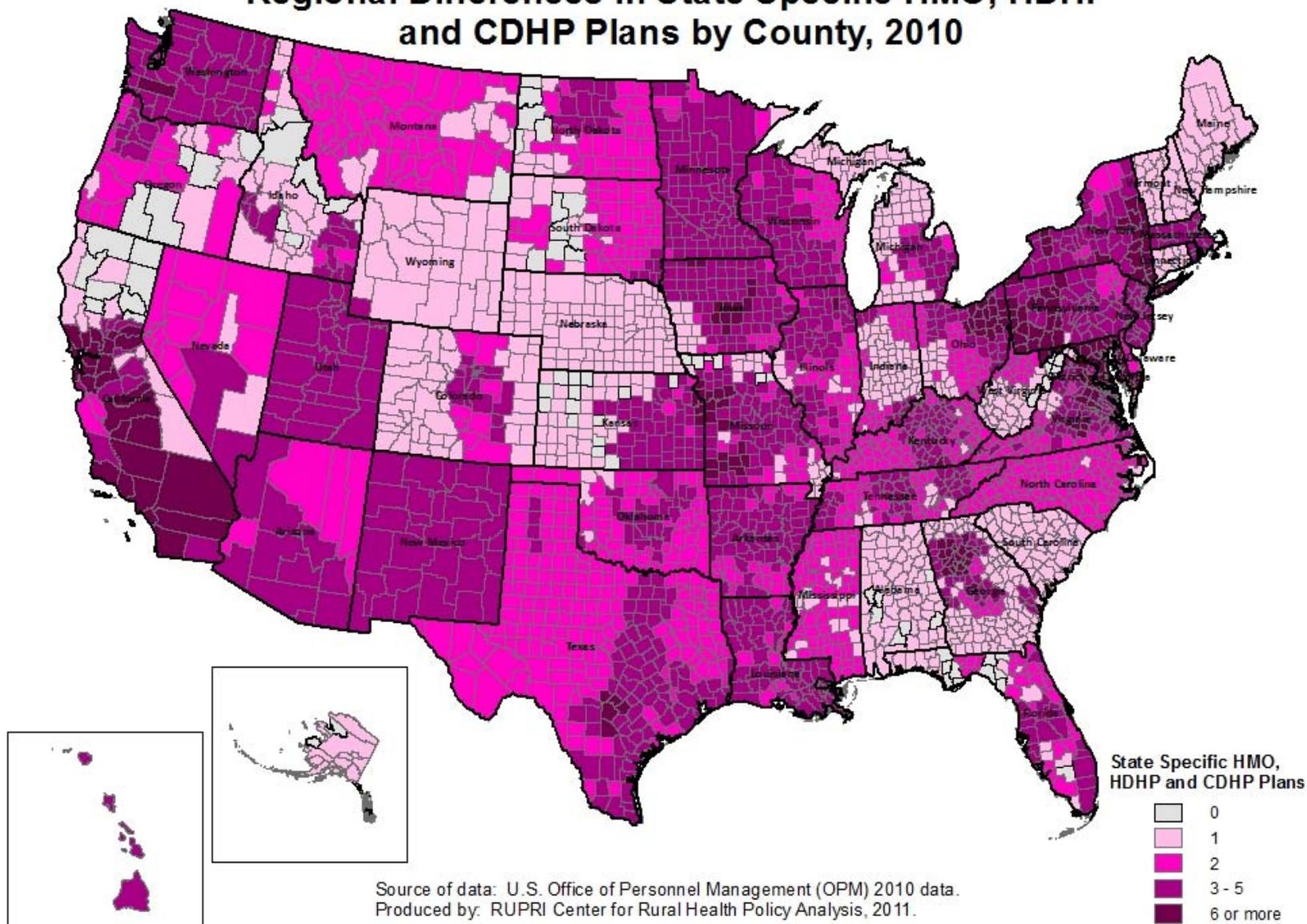
- BCBS Plans
- Other National Plans
- State Specific Plans
- National - Limited Enrollment Plans

# FEHBP Enrollment, By Region and Plan Type



- National Plans
- State Specific Plans
- National Plans-Limited Enrollment

# Federal Employees Health Benefits Program (FEHBP): Regional Differences in State Specific HMO, HDHP and CDHP Plans by County, 2010

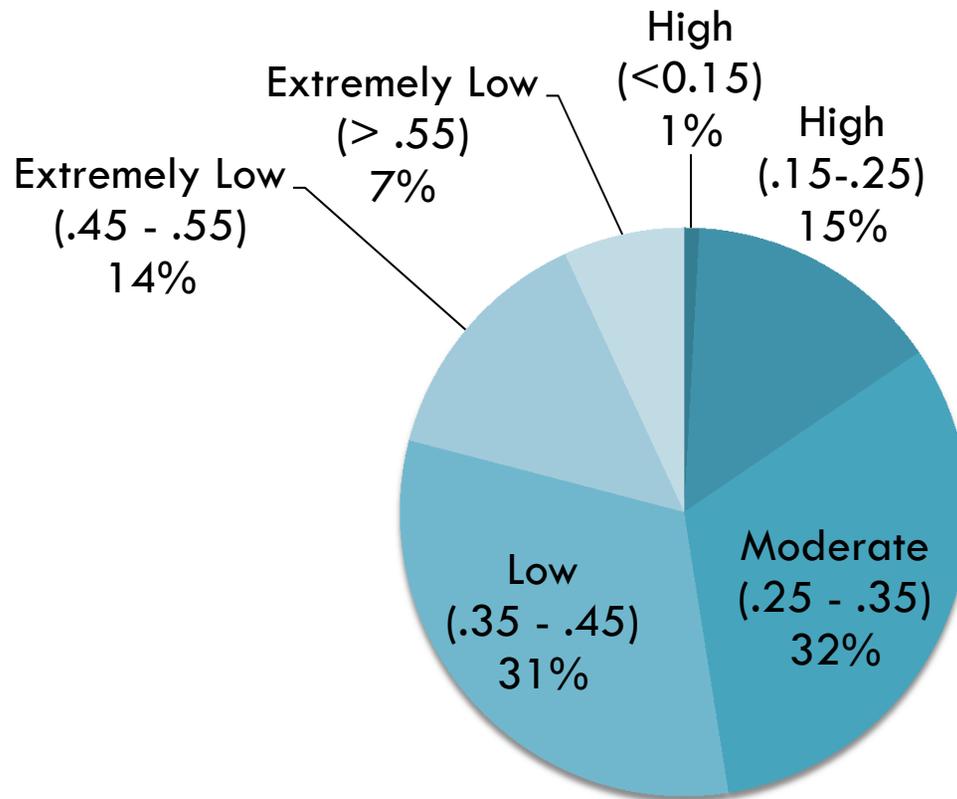


Source of data: U.S. Office of Personnel Management (OPM) 2010 data.  
Produced by: RUPRI Center for Rural Health Policy Analysis, 2011.

Note: Alaska and Hawaii are not to scale.

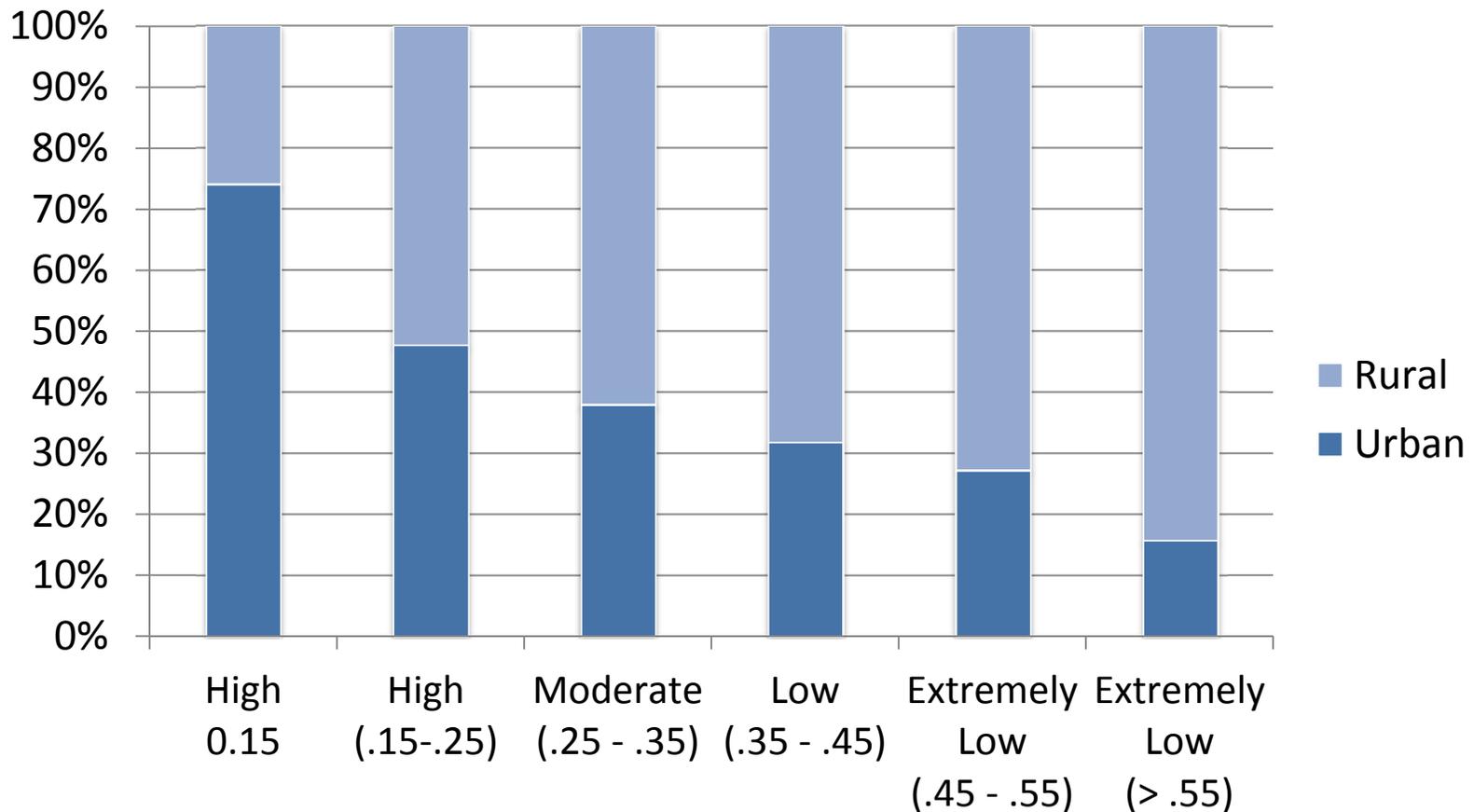
Coordinate System: North America Albers Equal Area Conic

# Level of Competition in FEHBP Market, by County



\*\*Competition levels derived from Herfindahl index values, which measure concentration of firms. "High competition" refers to low-to-moderate Herfindahl indices (under 0.25), while "Moderate", "Low", and "Extremely Low" categories correspond to high Herfindahl indices of 0.25-0.35, 0.35-0.45, and above 0.45, respectively.

# Level of Competition by Urban and Rural Counties



\*\*Competition levels derived from Herfindahl index values, which measure concentration of firms. "High competition" refers to low-to-moderate Herfindahl indices (under 0.25), while "Moderate", "Low", and "Extremely Low" categories correspond to high Herfindahl indices of 0.25-0.35, 0.35-0.45, and above 0.45, respectively.

# Out of Pocket Costs Do Seem Impacted by Level of Competition (FEHBP data)

Level of Competition (Based on Herfindahl Index)	Premium (individual's share)	Copayments for:		
		Primary Visits	Specialist Visits	Inpatient Hospital
High (<.15)	\$57.27	\$18.90	\$27.78	\$348
High (.15-.25)	\$62.50	\$19.66	\$29.19	\$317
Moderate (.25-.35)	\$60.72	\$20.55	\$30.74	\$381
Low (.35-.45)	\$61.94	\$21.20	\$31.12	\$389
Extremely Low (.45-.55)	\$65.24	\$21.04	\$31.10	\$355
Extremely Low (>.55)	\$60.24	\$18.90	\$29.36	\$325

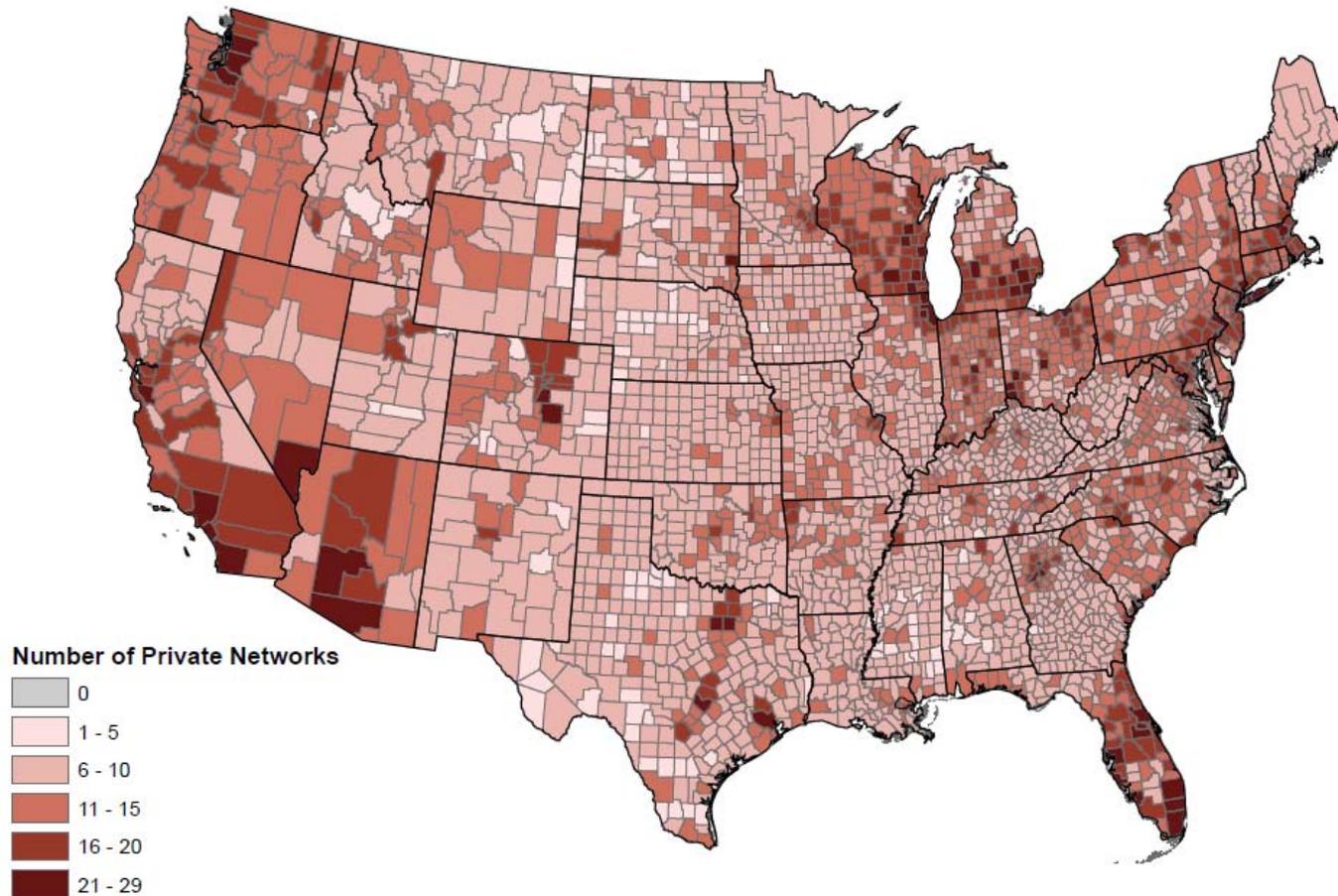
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DATA SOURCE: U.S. Office of Personnel Management (OPM) 2010 data. Produced by: RUPRI Center for Rural Health Policy Analysis, 2011

# Descriptive Results:

## Private Insurance Plan Availability by County

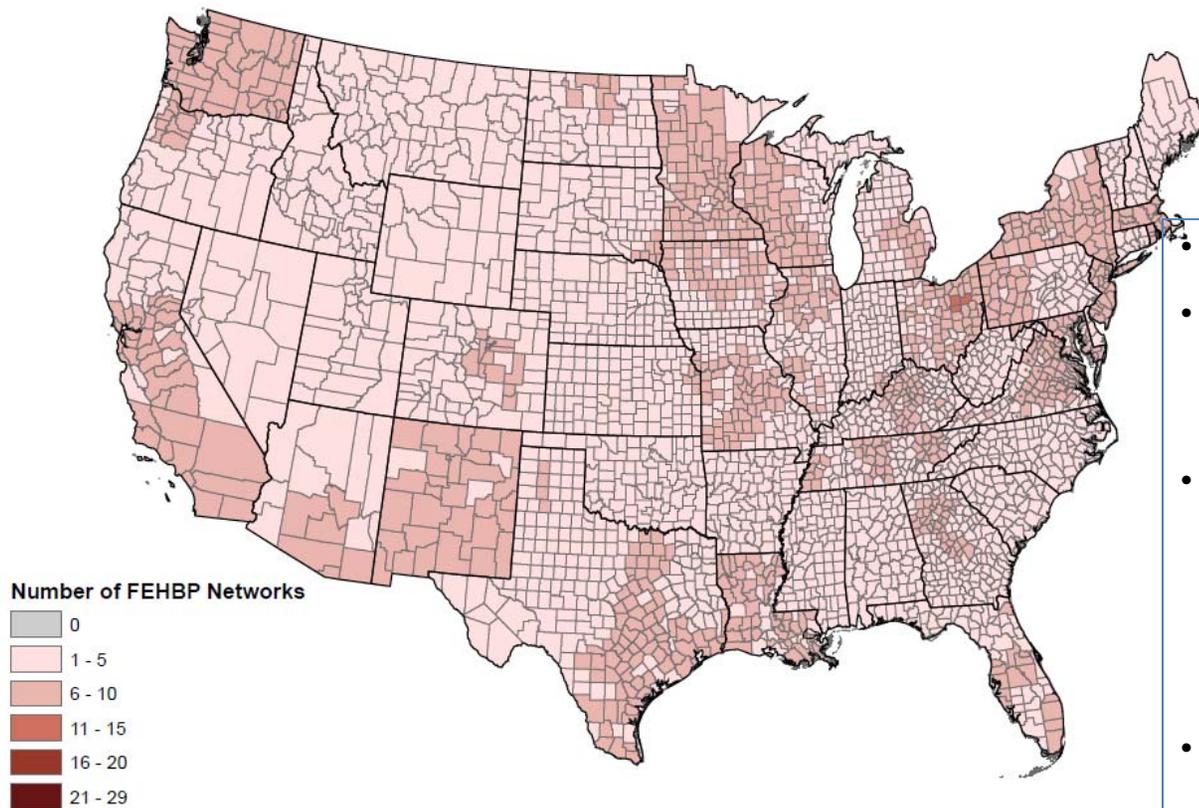
Private Insurance Networks  
Availability by County



# Descriptive Results:

## FEHBP Plan Availability by County

FEHBP Insurance Networks  
Availability by County

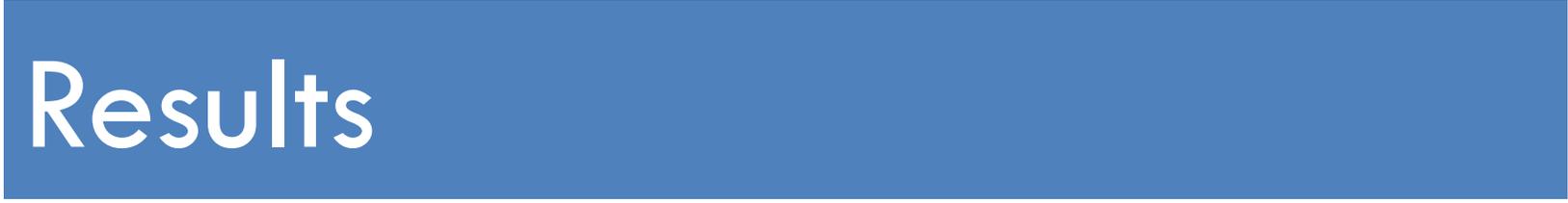


- Competition will depend on whether insurers participate in national-level plan.
- Only three companies in the current data other than BCBS have widespread geographic coverage in both the private market and FEHBP (Aetna, Cigna, and Coventry) .
- Other insurers: more diffuse
  - Kaiser: diffuse nationwide, significant presence in West and DC
  - Humana: significant presence in the South, SW, and MW, limited elsewhere
  - United HealthCare: has national presence: but heavier presence in NE, SE, less so in MW and South
- Urban/rural differences: plans more available in urban areas
- Even where insurers have entered, few have found it worthwhile to expand to rural areas

SOURCE: FEHBP Data, 2010, enrollment sorted by name of the plan and displayed at county level



# Results



# Estimation Results:

## Factors Associated with Concentration (Herfindahl Index)

Variable	RURAL			MICRO			METRO		
	Coeff.	Std.Err.	P(B=0)	Coeff.	Std.Err.	P(B=0)	Coeff.	Std.Err.	P(B=0)
Number of GPs	<b>-0.0388**</b>	0.0151	0.0103	-0.0324	0.0178	0.0689	<b>-0.0469**</b>	0.0148	0.0015
Number of Specialists	<b>0.0378**</b>	0.0132	0.0041	0.0212	0.0134	0.1125	<b>0.0339**</b>	0.0112	0.0025
Mortality (death per capita)	-0.0187	0.0428	0.6616	-0.0446	0.0469	0.3417	<b>0.0796**</b>	0.0305	0.0091
Population density	<b>-0.0769**</b>	0.0137	<.0001	<b>-0.0758**</b>	0.0140	<.0001	<b>-0.0459**</b>	0.0097	<.0001
Total Enrollment	<b>-0.0306**</b>	0.0083	0.0002	-0.0025	0.0075	0.7347	<b>-0.0140**</b>	0.0050	0.0056
Intercept	<b>0.6790**</b>	0.0895	<.0001	<b>0.5391**</b>	0.1013	<.0001	<b>0.7651**</b>	0.0637	<.0001

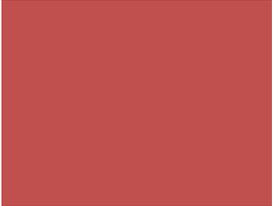
- More GPs less concentration; more specialist more concentration
- Concentration declines as population density increases
- Concentration declines as more people in area enroll in plans
- Health status weakly significant.

# Estimation Results:

## Factors Associated with Concentration (Herfindahl Index)

Variable	RURAL			MICRO			METRO		
	Coeff.	Std.Err.	P(B=0)	Coeff.	Std.Err.	P(B=0)	Coeff.	Std.Err.	P(B=0)
Number of GPs	<b>-0.0586</b>	0.0176	0.0009	<b>-0.0469</b>	0.0204	0.0215	<b>-0.0529</b>	0.0176	0.0026
Number of Specialists	<b>0.0316</b>	0.0140	0.0236	-0.0138	0.0187	0.4612	0.0002	0.0153	0.9896
Number of NPs	-0.0068	0.0160	0.6705	<b>0.0457</b>	0.0208	0.0284	<b>0.0380</b>	0.0162	0.0190
Hospital beds	<b>0.0349</b>	0.0161	0.0306	0.0253	0.0165	0.1261	0.0151	0.0139	0.2789
Mortality rate (deaths/per capita)	-0.0271	0.0521	0.6030	-0.0551	0.0507	0.2769	<b>0.0925</b>	0.0368	0.0119
Population density	0.0574	0.0371	0.1218	<b>-0.0658</b>	0.0351	0.0611	<b>-0.1278</b>	0.0312	<.0001
Unemployment rate	<b>-0.0894</b>	0.0159	<.0001	<b>-0.0704</b>	0.0147	<.0001	<b>-0.0509</b>	0.0101	<.0001
Total Enrollment	<b>-0.0272</b>	0.0092	0.0032	0.0006	0.0076	0.9359	<b>-0.0144</b>	0.0053	0.0070
Intercept	<b>0.5804</b>	0.1169	<.0001	<b>0.514</b>	0.1279	<.0001	<b>0.8991</b>	0.0945	<.0001

- Concentration still dependent on supply of providers (more GPs less concentration; more specialists more concentration, more NPs more concentration, more hospital beds in rural areas, more concentration)
- Concentration declines as pop. density increases (less significant), declines as more people in area enroll in plans
- Health status not very significant
- Concentration drops as unemployment increases



# Conclusions, Implications and Limitations

# Discussion and Implications

- Preliminary findings before ACA is implemented show concerns about concentration of enrollment in plans
  - ▣ Concern: if plan enrollment is more concentrated, premiums could be higher
- Analysis shown here concentration affected by population density
  - ▣ Availability of health providers
- This raises caution or potential concerns for people living in rural areas
  - ▣ Will competition in Marketplaces be more concentrated?

# Limitations and future work

- Current structure of insurance market: a good indicator of how ACA Marketplaces will play out?
- We see current entrants into Marketplaces. Will ACA inspire more entry?
- Future work:
  - In October 2014, look at actual plan availability and concentration of plans
  - And costs of plans: premiums, out of pocket costs



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