The Effect of Medicaid Expansion on Demand for VA Care

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Acknowledgement

- This work was funded by the VA HSR&D (Project # MRC 13-427) and supported by the VHA Office of the Assistant Deputy Under Secretary for Health for Policy and Planning (10P1A)

Objective

- To estimate the historical relationship between Medicaid expansion and demand for VA care
- To use our estimate to simulate the effect of the Affordable Care Act's (ACA's) Medicaid expansion on VA enrollment and utilization

Background

- The ACA aims to increase access to affordable health insurance, expanding coverage
- One in ten nonelderly veterans were uninsured in 2010 (Haley & Kenney 2012)
- 2.8 million of 12.5 million of nonelderly veterans have VA coverage (Haley & Kenney 2013)

Background

- Medicaid available to persons with income <138% FPL, but only where states expand
  - 4 in 10 unins veterans would qualify (Haley & Kenney 2013)
  - >50% don't live in expansion states (Haley & Kenney 2013)
- Individual-market plans with subsidies for persons income 100%-400% FPL and cost sharing assistance for <250% FPL
  - 90% nonelderly VA users qualify (Haley & Kenney 2012)

Background

- What is the effect on VA demand of these other options for coverage?
- Extensive margin: Substituting non-VA coverage for VA coverage
- Intensive margin: Substituting some non-VA care for VA care
  - Dual enrollment among nonelderly VA enrollees: 34% private, 4% Medicaid, 17% Medicare (ADUSH 2011)

Data/Methods

- We combined historical:
  - Medicaid eligibility rules (Urban/TRIM + MEPS)
  - Annual, sector-level VA enrollment, inpatient (days), outpatient (clinic stops) utilization (Milliman)
  - VetPop
  - Housing purchase price index (FHA, normalized to 1 in 1991)
  - Employment-to-population ratio (BLS)

Data/Methods

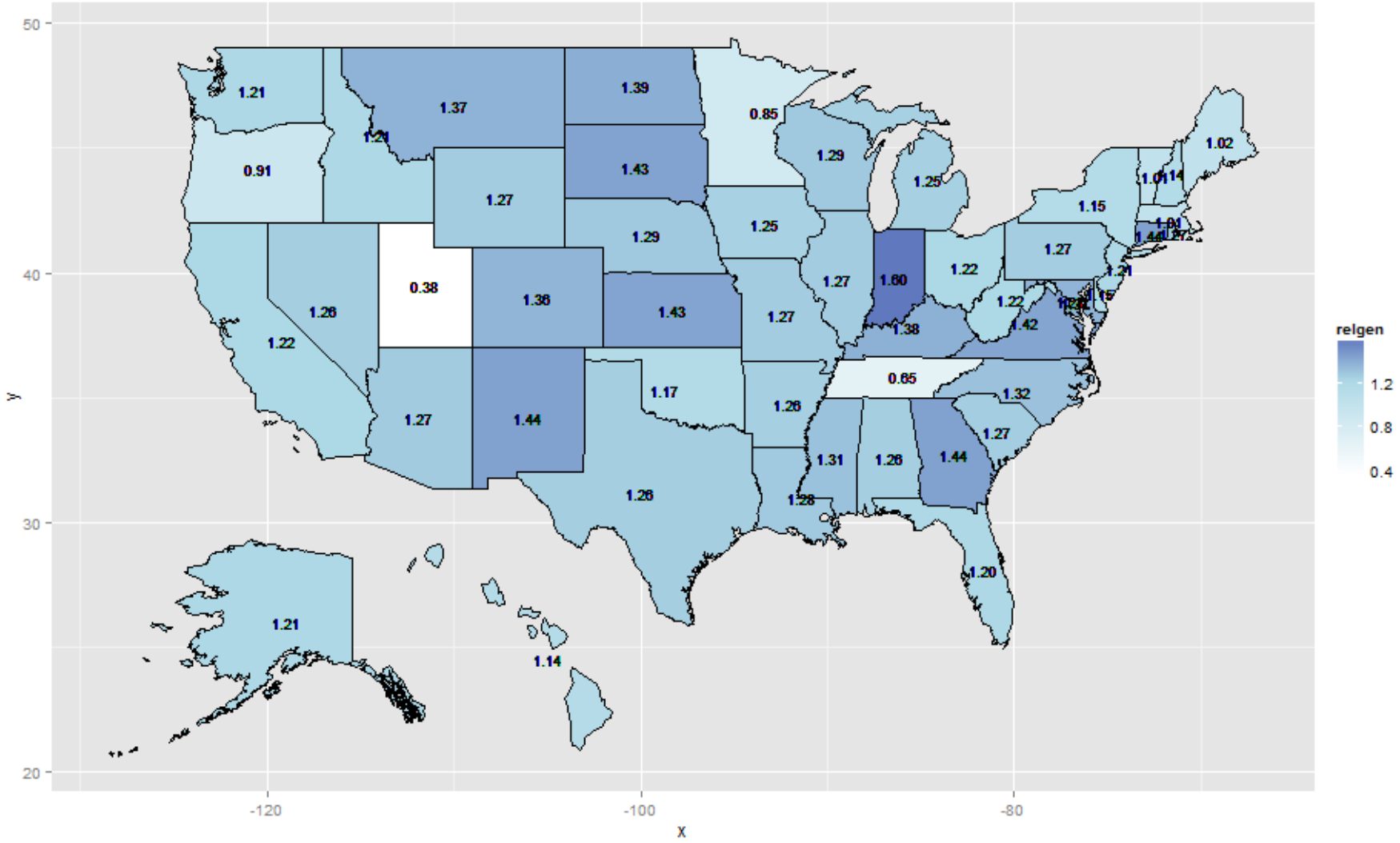
- Data from all sources overlapped 2002-2008
- Estimated year-sector level models, though independent variables are state level
  - 566 sectors, 7 years: 3,962 year-sector observations
- Used year and sector fixed effects
- Focus on <65, post-4/1/1999 enrollees
  - This is where ACA impact will be concentrated

Medicaid Eligibility Variable Details

- Similar to work of Currie and Gruber (1996) and Cutler and Gruber (1996)
- Proportion of standardized pop (1998 MEPS) eligible for each state's program in each year
- Working age (25-62)
- Not affected by demographic/economic variation
- Eligibility rules from Urban/TRIM model

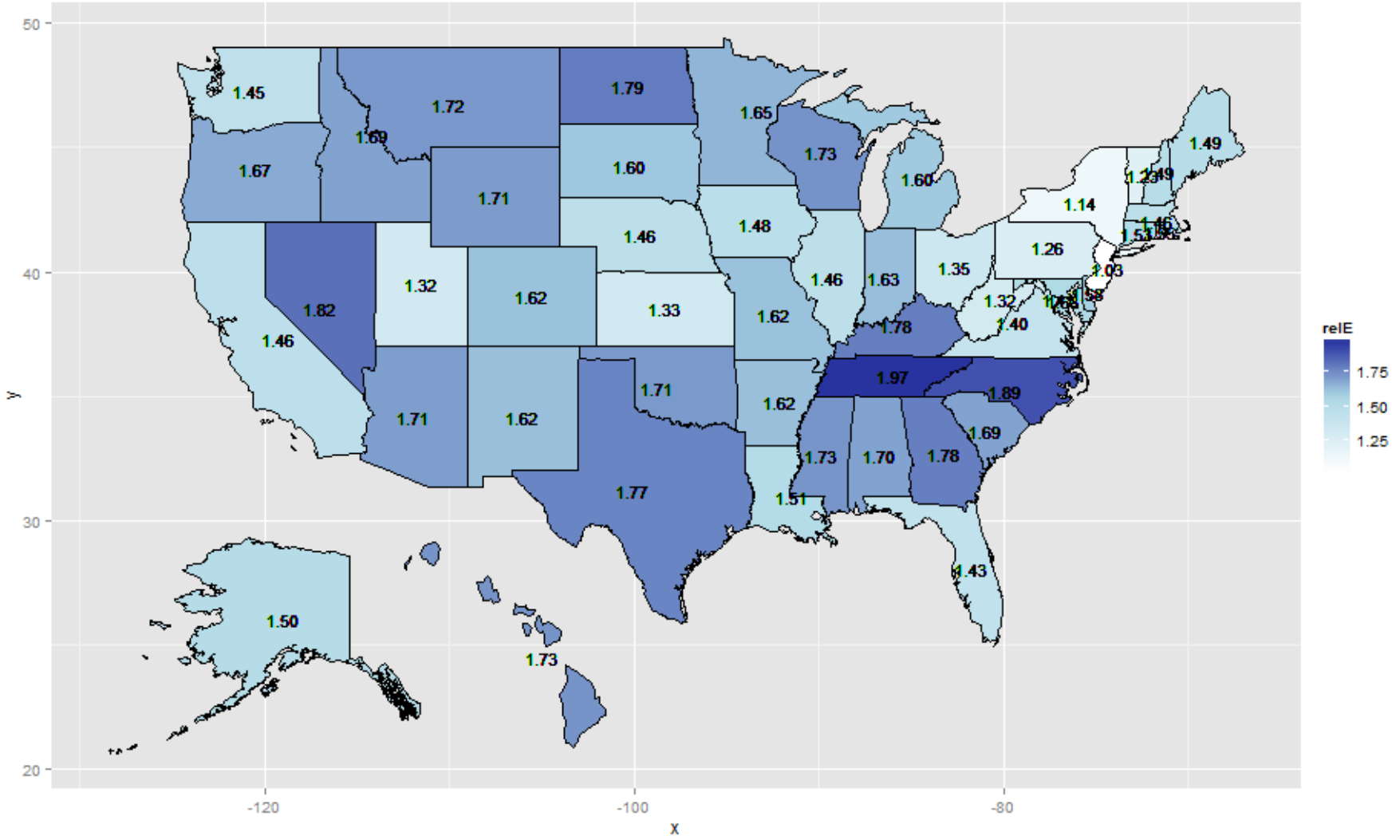
Medicaid Eligibility Trends

(Ratio of 2008 to 2002 value: ↑23%)



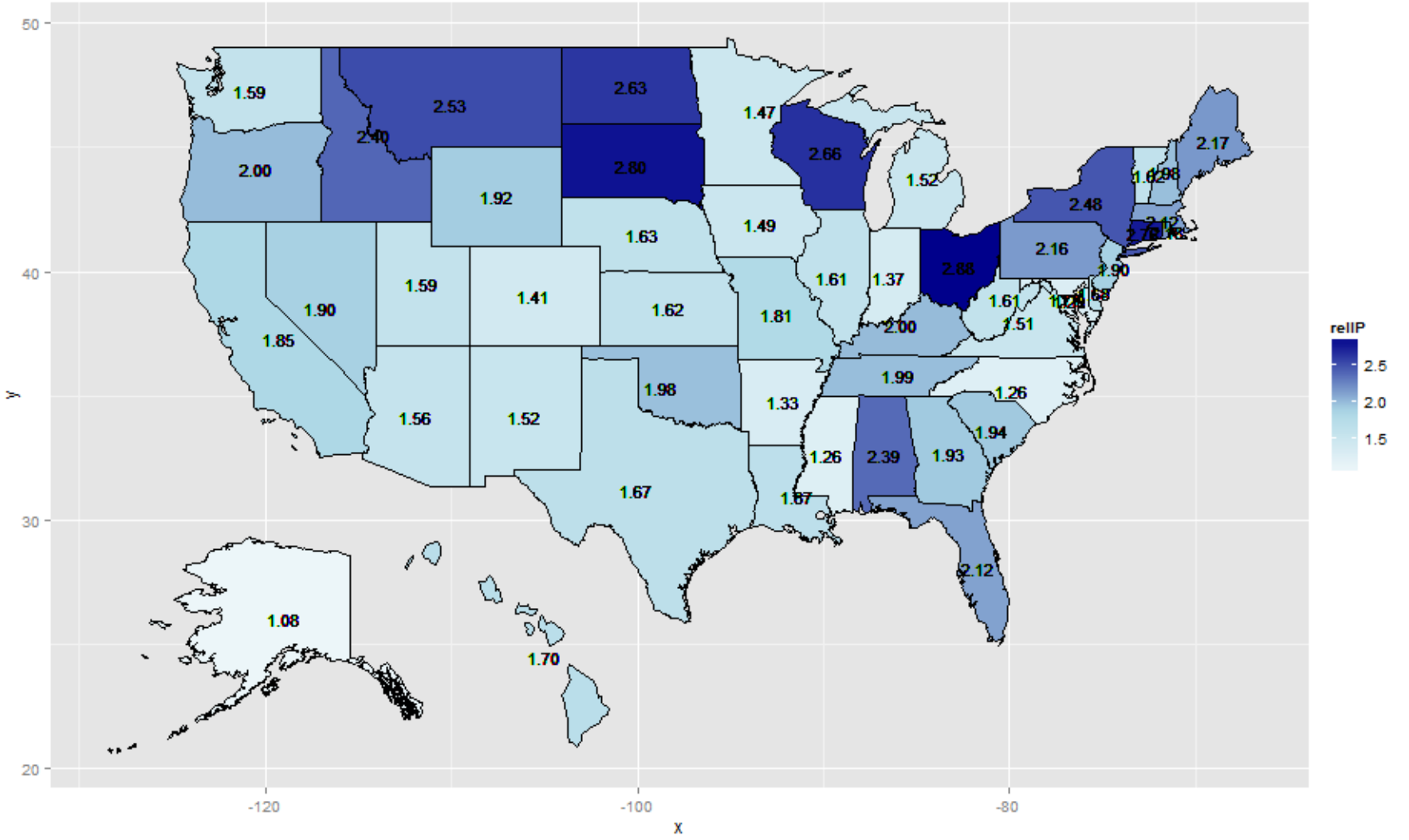
VA Enrollment Trends (<65, post)

(Ratio of 2008 to 2002 value: ↑56%)



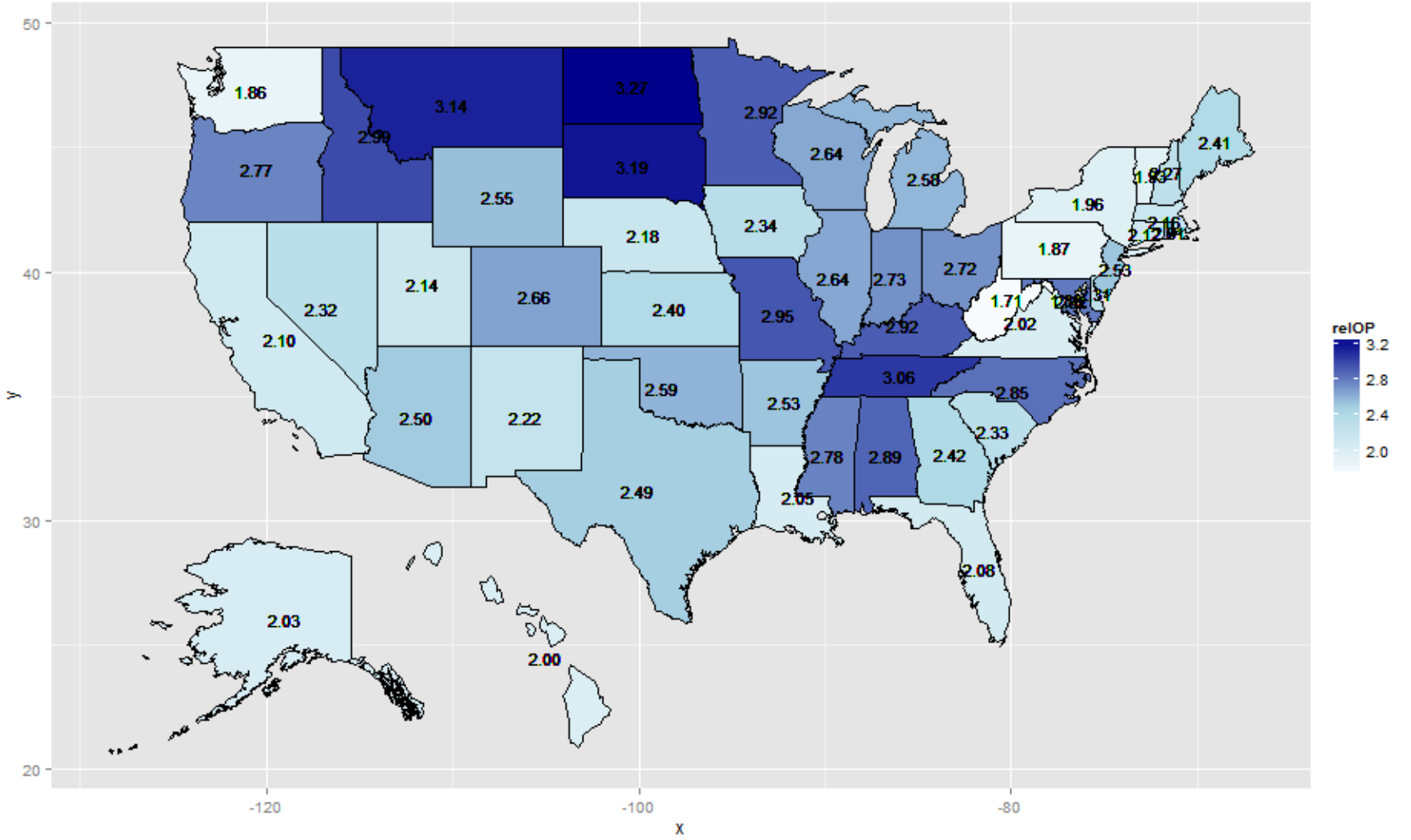
VA Inpatient Util Trends (<65, post)

(Ratio of 2008 to 2002 value: ↑87%)



VA Outpatient Util Trends (<65, post)

(Ratio of 2008 to 2002 value: ↑146%)



Descriptive Statistics

Descriptive Statistics				
Variable	**Mean**	**Std. Dev.**	**Min**	**Max**
Proportion Medicaid eligible: baseline	0.090	0.055	0.018	0.36
Proportion Medicaid eligible: ACA-simulated	0.18	0.030	0.17	0.36
Housing sales price index (1=1991)	1.97	0.40	1.069	3.48
Employment-pop ratio	62.72%	3.51%	52.28%	71.58%
VetPop	26,705	22,631	132	287,567
Enrollment	4,457	3,849	36	49,337
Inpatient util (days)	1,564	1,632	9	19,332
Outpatient util (clinic stops)	17,620	16,702	85	235,711

N=3,962 sector-year observations (2002-2008, 567 sectors/year)

Estimation Method

- VA enrollment, IP utilization and OP utilization are *counts* (positive whole numbers)
- Statisticians use Poisson models to explain variations in count data
- Poisson models take the form $Y = \exp(xb + \varepsilon)$
  - Y constrained to be positive

Specification

- Poisson models with year-sector non-elderly veteran pop (VetPop) as exposure variable
  - Accounts for fact that some sectors have more veterans, so we expect more enrollment and utilization there
- Enrollment or utilization = f(Medicaid eligibility, housing price index, employment-to-pop ratio, year and sector fixed effects)

Measuring Results: Elasticity Reflects Sensitivity to Change

- Elasticity = (% change in y)/(% change in x)
- If y doubles when x doubles,
  - elasticity = 1
- If x doubles and y grows by half,
  - elasticity = 0.5
- If x doubles and y drops by half,
  - elasticity = -0.5

Estimation Results: Elasticities

Elasticities with respect to Medicaid eligibility	
Enrollment	-0.11 (0.0090)***
Inpatient util	-0.065 (0.028)*
Outpatient util	-0.14 (0.020)***

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

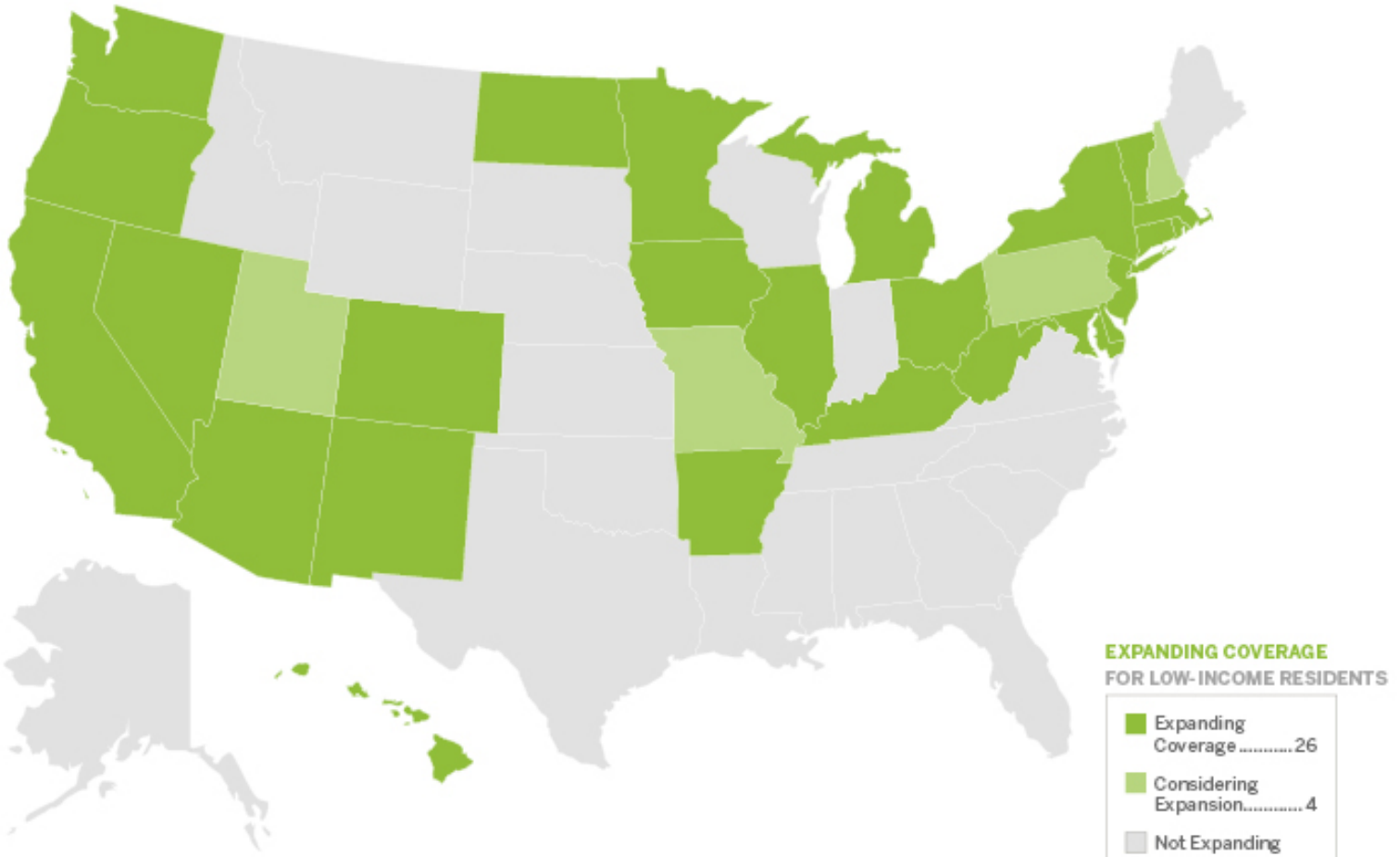
Interpretation:
Under ACA, Medicaid eligibility could double (100% increase). Elasticities imply VA enrollment decreases by 11%, VA inpatient utilization decreases by 6.5%, and VA outpatient utilization decreases by 14%.

State-Level Simulation

- Assume ACA's Medicaid expansion in 2008
- Account for current expansion/non-expansion state status
- Predict enrollment/utilization under status quo
- Predict it under ACA's Medicaid expansion
- Ratio is the percent change

Where the States Stand on Medicaid Expansion

25 states, DC, Expanding Medicaid—February 7, 2014

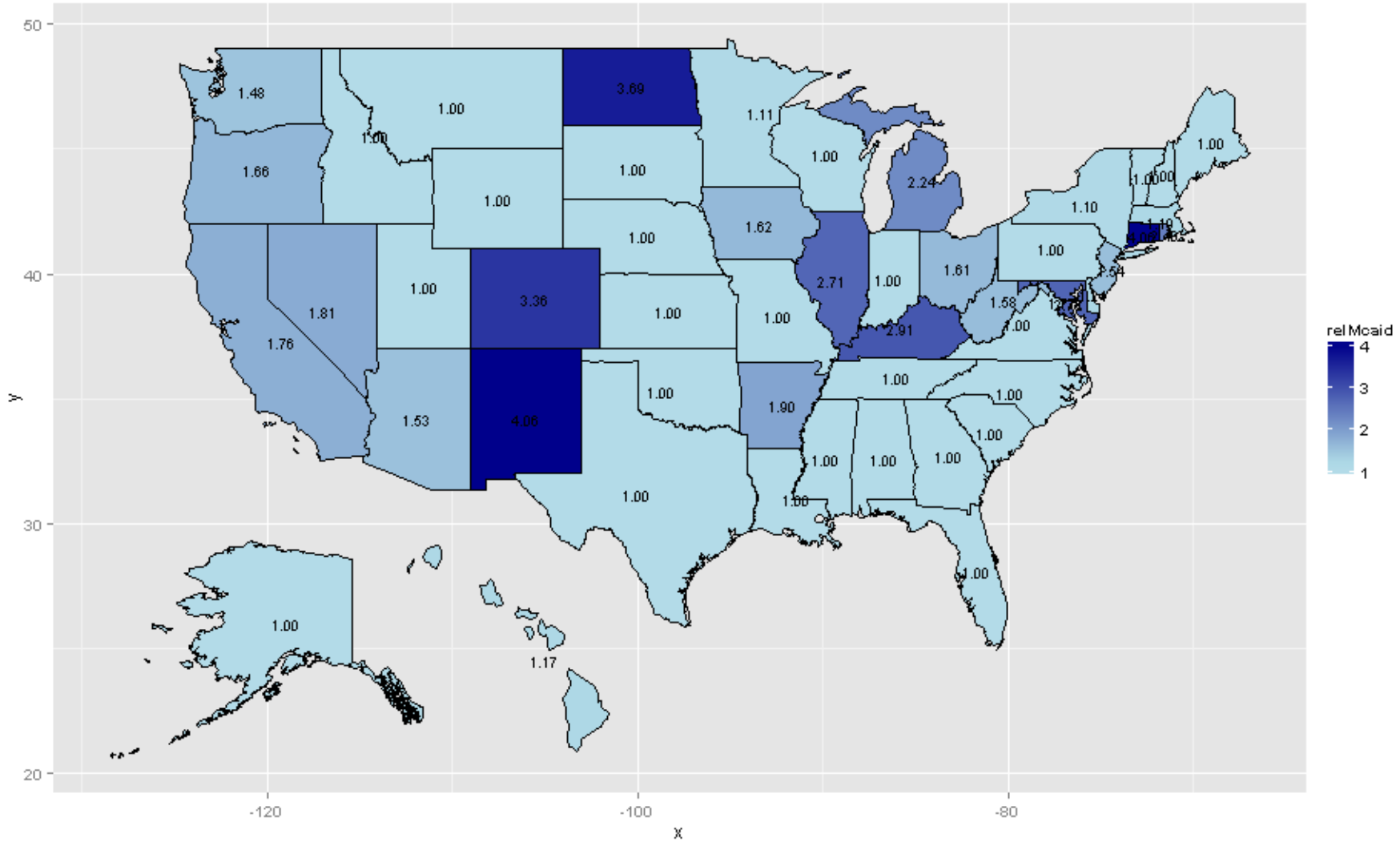


Notes: Based on literature review as of 2/7/14. All policies subject to change without notice.
HHS has announced that states can obtain a waiver to use federal funds to shift Medicaid-eligible residents into private health plans.
The District of Columbia plans to participate in Medicaid expansion and will operate its own exchange.

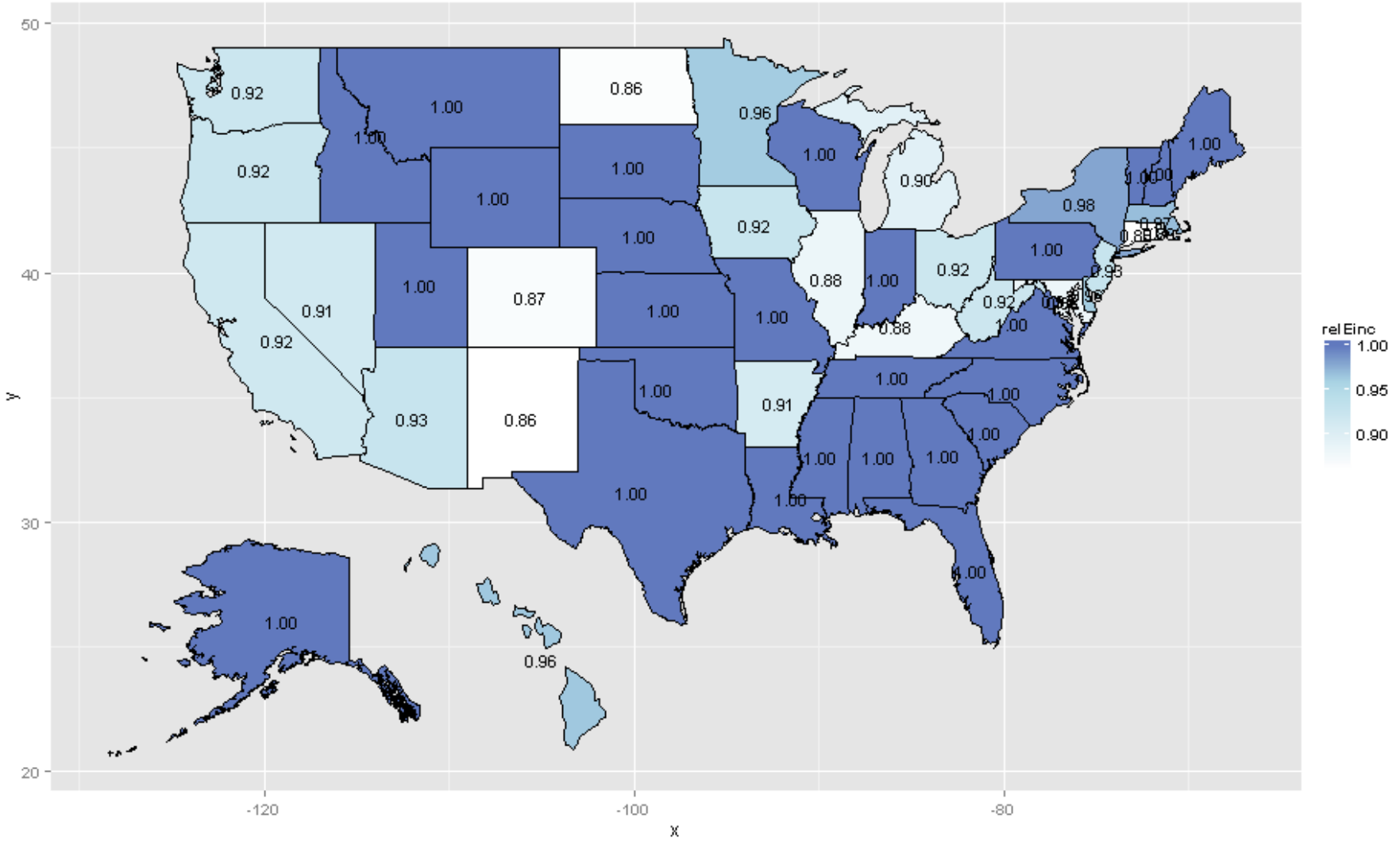
Simulation Results: Summary

- Enrollment would fall to between 85%-98% of baseline, depending on state
- Inpatient days would fall to between 91%-99% of baseline
- Outpatient clinic stops would fall to between 81%-97% if baseline
- (All excluding Vermont: no change)

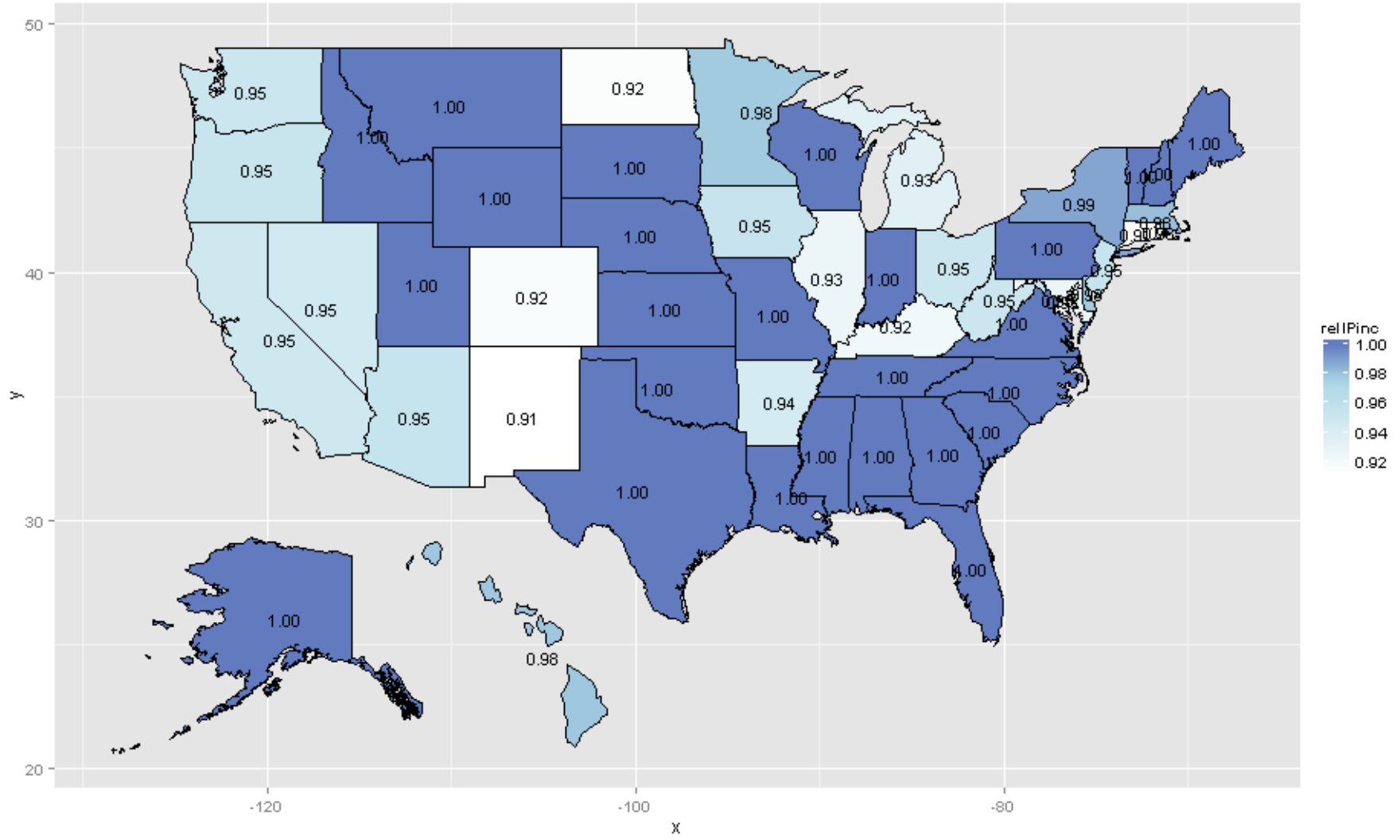
Change Under ACA: M'caid Eligibility



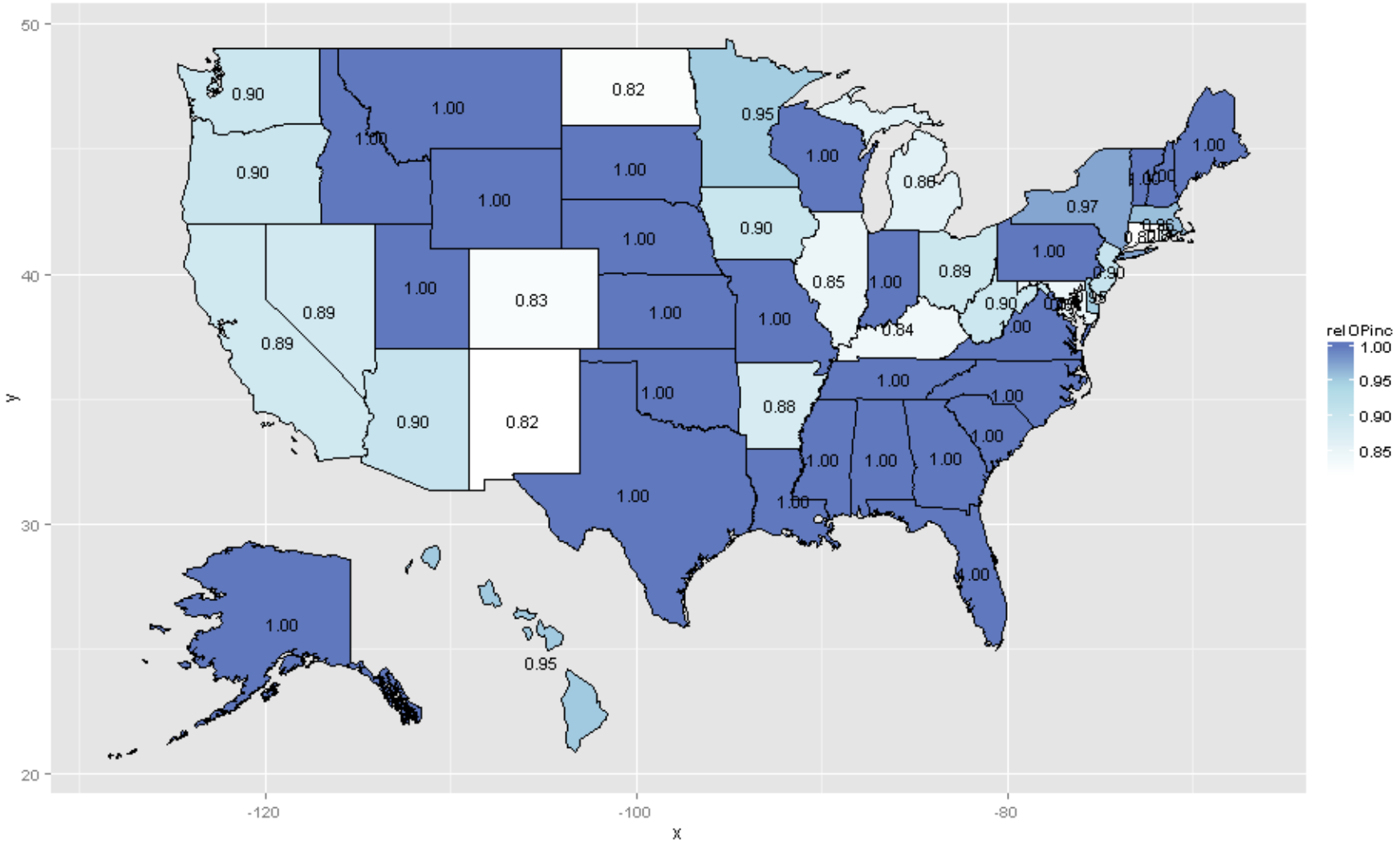
Change Under ACA: Enroll (<65, post)



Change Under ACA: IP Util (<65, post)



Change Under ACA: OP Util (<65, post)



Key Limitations

- Historical Medicaid expansion data only available through 2008
- Simulate ACA Medicaid expansion as if it occurred in 2008
- Compared to ACA Medicaid expansions, historical Medicaid expansions were modest in magnitude and scale: unclear if increased demand will be met
- Unable to simulate effect of ACA's coverage mandate and other features of the law

Discussion

- Accounting for Medicaid expansion alone, had it occurred in 2008, VA enrollment, IP, and OP utilization would have fallen in expansion states
- No effect in non-expansion states
- Analysis does not consider possibly countervailing effects
  - VA enrollment is creditable coverage, satisfying the mandate
  - Coverage expansion outreach could increase knowledge of VA and demand for it
- Analysis also does not consider availability of coverage through exchanges

Discussion

- Study years (2002-2008) coincide with period of rapid VA enrollment growth
- Results could be driven by a reduction of that growth where and when Medicaid eligibility was relatively more expansive (extensive margin)
- Perhaps there was little effect on existing VA enrollees (intensive margin)
- VA enrollment growth has abated somewhat
- Might expect a more modest effect