Medicaid and Crowding-Out

University of Alabama

October 20, 2016

Last Class

- Social insurance origins in the world and the U.S.
- Medicare
  - A social insurance program to cover health needs of the elderly and those that qualify for SSDI.
  - Approximately 15% of the federal budget.
  - Financed through payroll taxes and from a trust fund held by the U.S. treasury.
- Effects of Medicare on outcomes (mortality rates of the elderly compared to the near elderly, health spending, etc.)
- Finkelstein and McKnight (2008) find no improvements of mortality, however lower out-of-pocket expenditure risk.
- Card et al. (2009) find that due to preferential treatment given to Medicare patients, treatment intensity is higher, and mortality rates are lower.

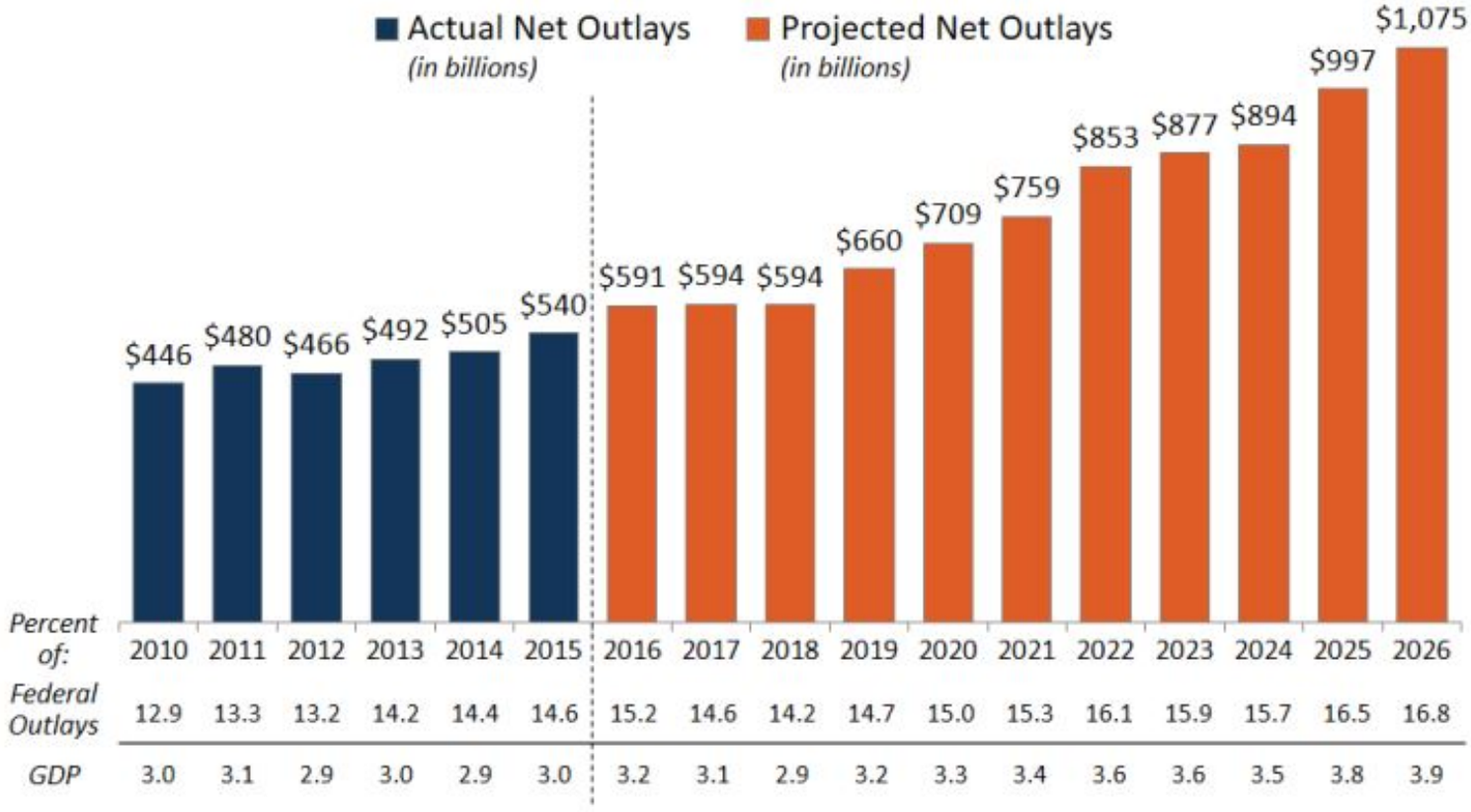
Future of Medicare

There are a number of concerns with Medicare going forward.

1. Rising costs of Medicare across time.
2. An aging population.
3. Life expectancy is going up, and people spend more on health care during end-of-life years.
4. As our population ages, we have less workers to tax.

Figure 4

Actual and Projected Net Medicare Spending, 2010-2026



NOTE: All amounts are for federal fiscal years; amounts are in billions and consist of mandatory Medicare spending minus income from premiums and other offsetting receipts.
SOURCE: Congressional Budget Office, Updated Budget Projections: 2016 to 2026 (March 2016); March 2016 Medicare Baseline.

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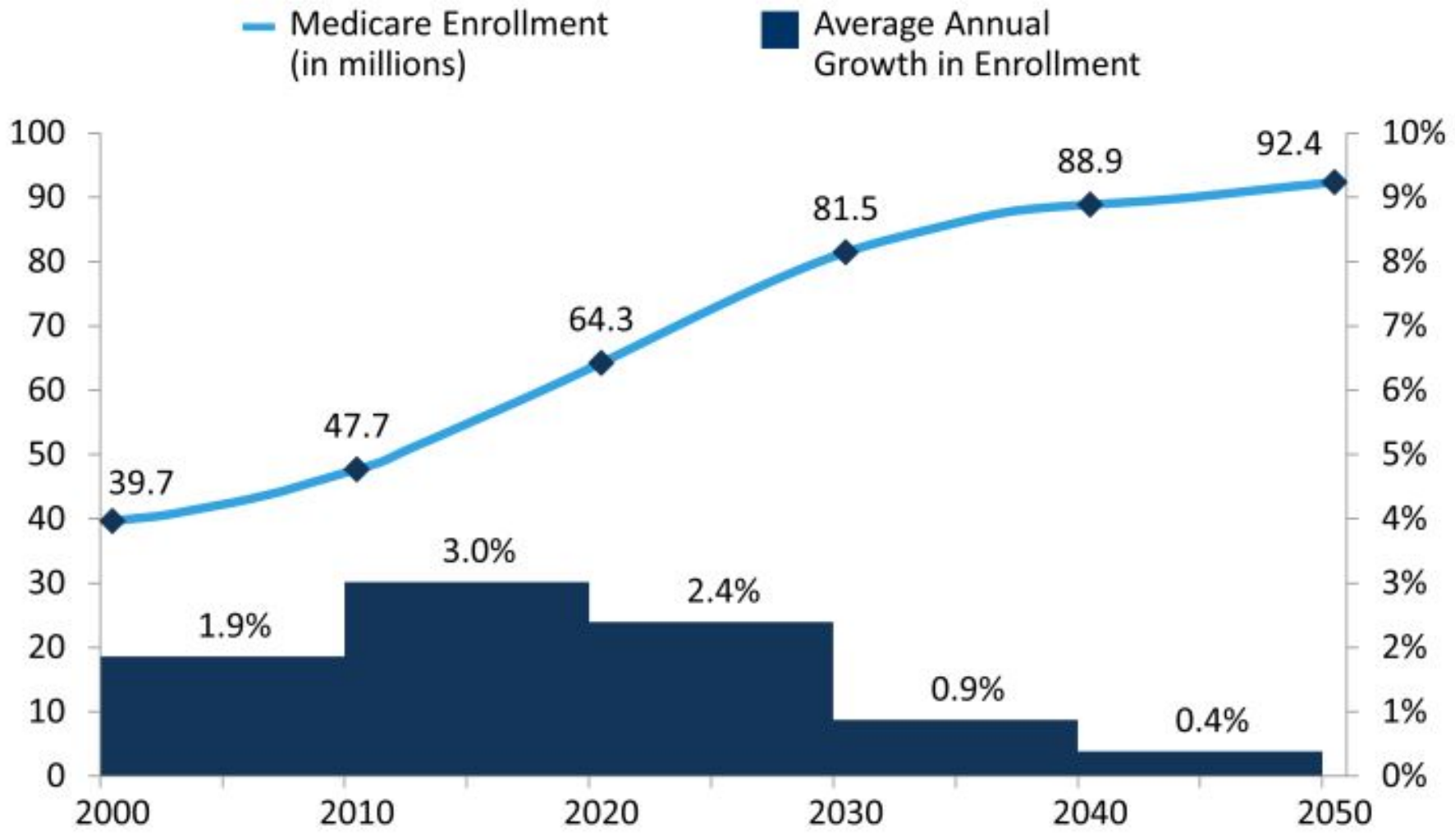
Projected Change in Medicare Enrollment, 2000-2050



SOURCE: 2013 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds.

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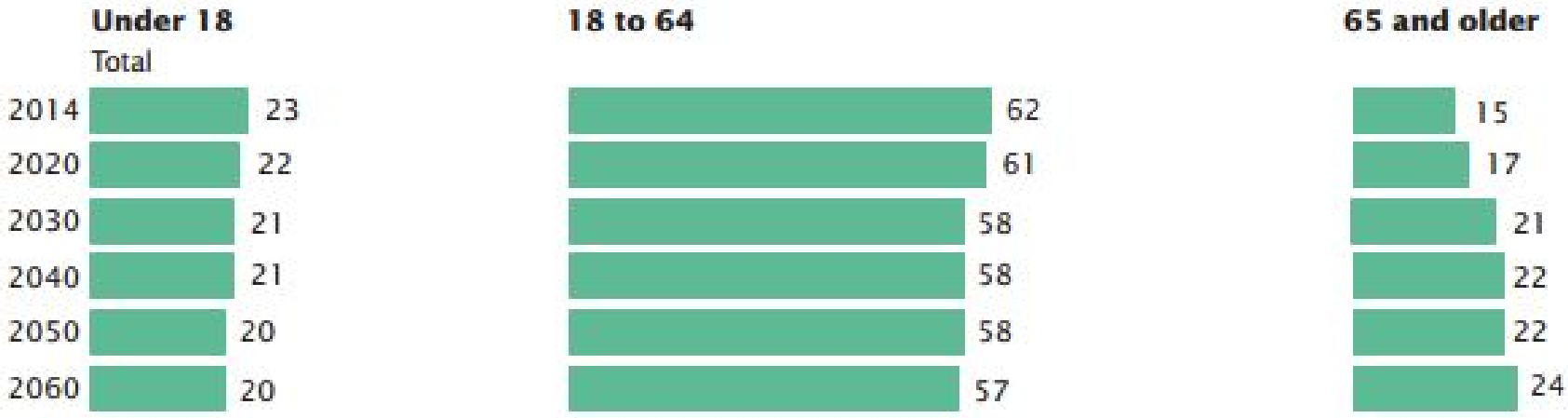
Figure 4.

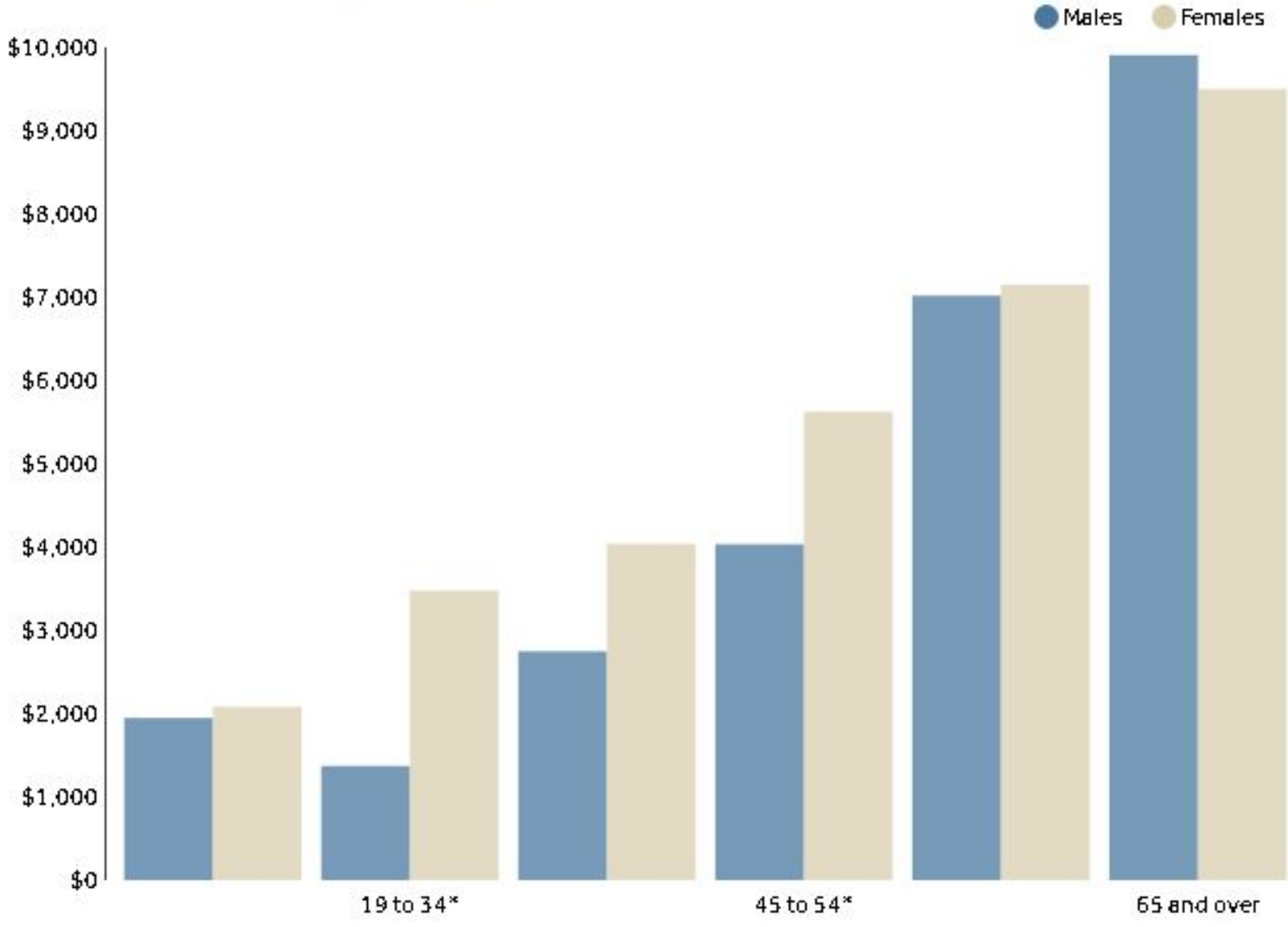
Age Distribution of the Population by Nativity: 2014 to 2060

(Percent of group's total population)



The elderly are making up a larger share of our population going forward. This means more people to support through Medicare and less workers to tax.

Average health spending by age and gender, 2013



Policy Options

So we have an aging population, life expectancy is improving across time, and most health care spending occurs during later life years. Moreover, the ratio of working aged individuals to the elderly is decreasing across time, so we have less people to tax going forward. What are some potential policy options to deal with such concerns?

- We could raise the eligibility of Medicare from 65 to 67. This would save an estimated $113 billion over ten years (William N. Evans).
- Some are concerned that costs would simply shift onto other government programs.

Policy Options

- We could raise Part B and Part D premiums. Raising enrollees costs from 25% to 35% would save $241 billion over ten years (William N. Evans).
- We could raise Medicare payroll taxes from 2.9% to 3.9% for everyone, with an additional 0.9% tax for high wage earners (more than $200,000 for individuals or $250,000 for couples). This would raise $651 billion in tax revenue over ten years (William N. Evans).

What is Medicaid?

- Medicaid is a federal-state matching program that pays for medical assistance for certain vulnerable and needy individuals and families with low incomes and resources.
- Medicaid provides "aid" to the poor, blind, and disabled.
- This program is the largest source of funding for medical and health-related services for America's poorest people.
- In 2015, it provided health care assistance to nearly 70 million people, and Medicaid expenditure in 2015 was approximately $532 billion.

What is Medicaid?

Gruber (2002) described Medicaid as four public insurance programs in one:

1. The provision of coverage of most medical expenses for low-income women and children families.
2. The provision of public insurance for the portions of medical expenditures not covered by Medicare for the low-income elderly.
3. Coverage of most medical expenses for the low-income disabled.
4. Payment of nursing home expenditures of many of the institutionalized elderly.

Medicaid

Medicaid is a jointly-funded program by the federal government and each state government. Moreover, Medicaid is the largest source of federally-provided money to states.

Though Medicaid is a federally mandated program, it gives each state the option to offer "extra" services. Federally mandated Medicaid benefits include inpatient and outpatient hospital services, physician services, laboratory and X-ray services, and home health services. Optional services include prescription drugs, physical therapy, dental and vision care, etc.

Each state:

1. establishes its own eligibility standards.
2. determines the type, amount, duration, and scope of services.
3. sets the rate of payment for services.
4. administers its own program.

Medicaid Eligibility

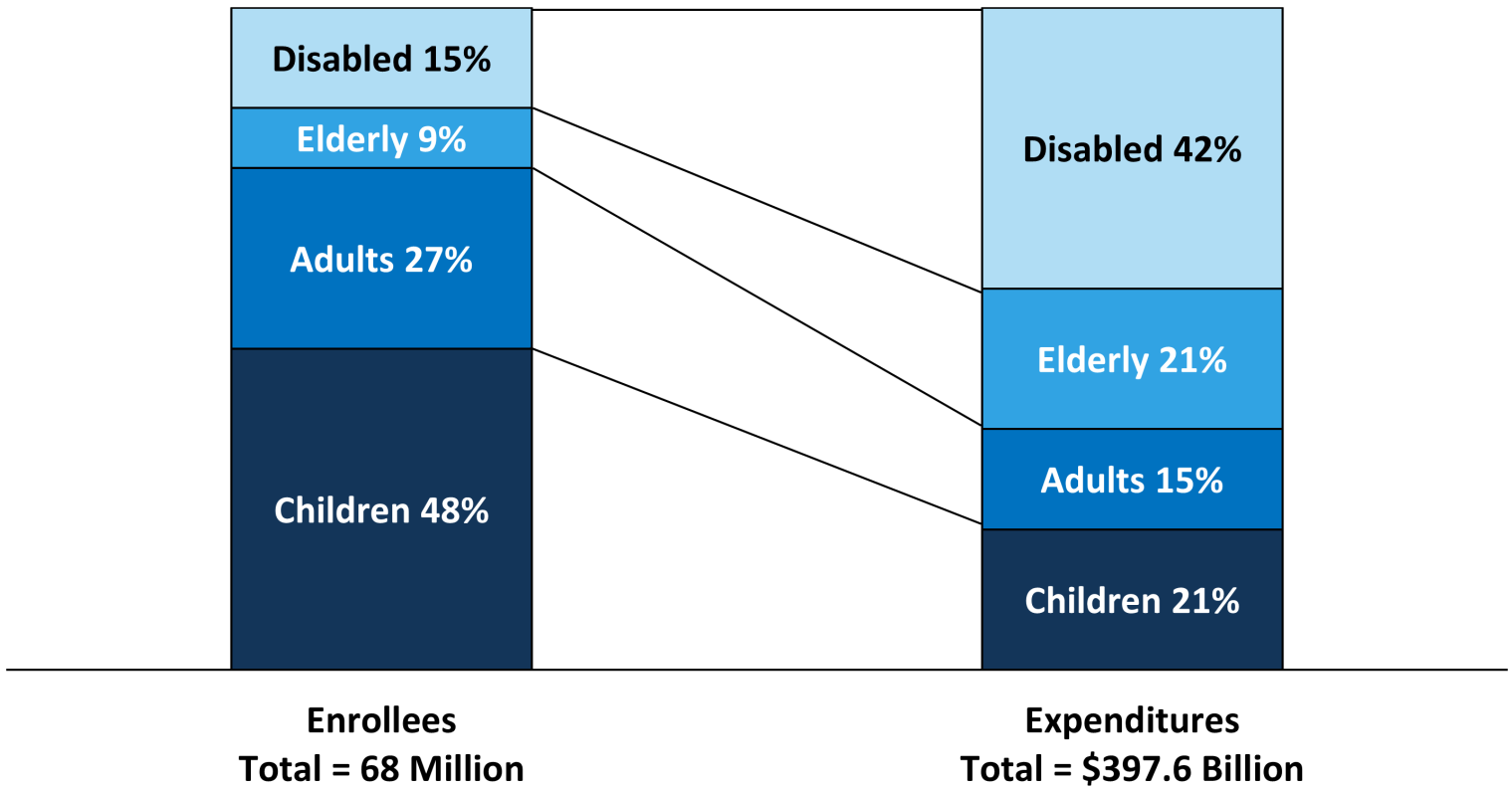
Medicaid was not designed to provide medical assistance for all poor persons. Moreover, low income is only one test for Medicaid eligibility for those within these groups; their resources also are tested against threshold levels. Medicaid effectively offers coverage to members of these groups:

- Low income families with children under the age of 19. Eligible families will have income below some state-chosen threshold.
- Pregnant women whose family income is at or below 133% FPL
- "Dual eligible" Medicare beneficiaries

Outside of these categories, states generally have broad discretion in determining which groups their Medicaid programs will cover and the financial criteria for Medicaid eligibility.

Figure 2

Medicaid Enrollees and Expenditures, FY 2011



SOURCE: KCMU/Urban Institute estimates based on data from FY 2011 MSIS and CMS-64. MSIS FY 2010 data were used for FL, KS, ME, MD, MT, NM, NJ, TX, UT, OK but adjusted to 2011 spending levels.

Paths to Eligibility and Participation

There are essentially two "paths" to become eligible for Medicaid:

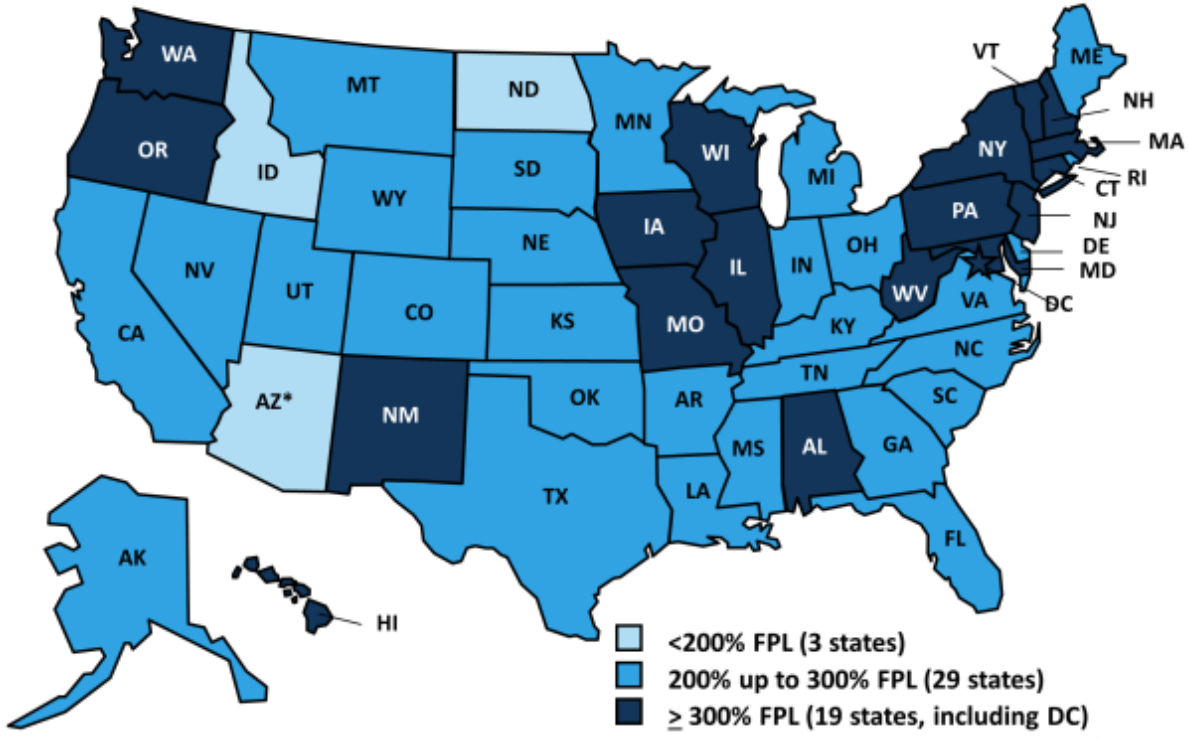
- Categorical eligibility: if people participate in Temporary Assistance for Needy Families (TANF) or Supplemental Security Income (SSI)
- Income/Assets tests

Medicaid Participation

- Out of adults that are eligible, about 63% actually participate in Medicaid.
- Some low income families are not aware of the program, or are not aware that they are eligible. Additionally, there is a stigma associated with welfare that may prevent some from enrolling.
- Medicaid also requires renewal, so this "churning" disrupts coverage.

Figure 4

Income Eligibility Levels for Children in Medicaid/CHIP, January 2016



NOTE: Eligibility levels are based on 2015 federal poverty levels (FPLs) for a family of three. The FPL for a family of three in 2015 was $20,090. Thresholds include the standard five percentage point of the FPL disregard. * Arizona provides coverage up to 200% FPL through a separate CHIP program but enrollment is closed.

SOURCE: Based on results from a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2016.

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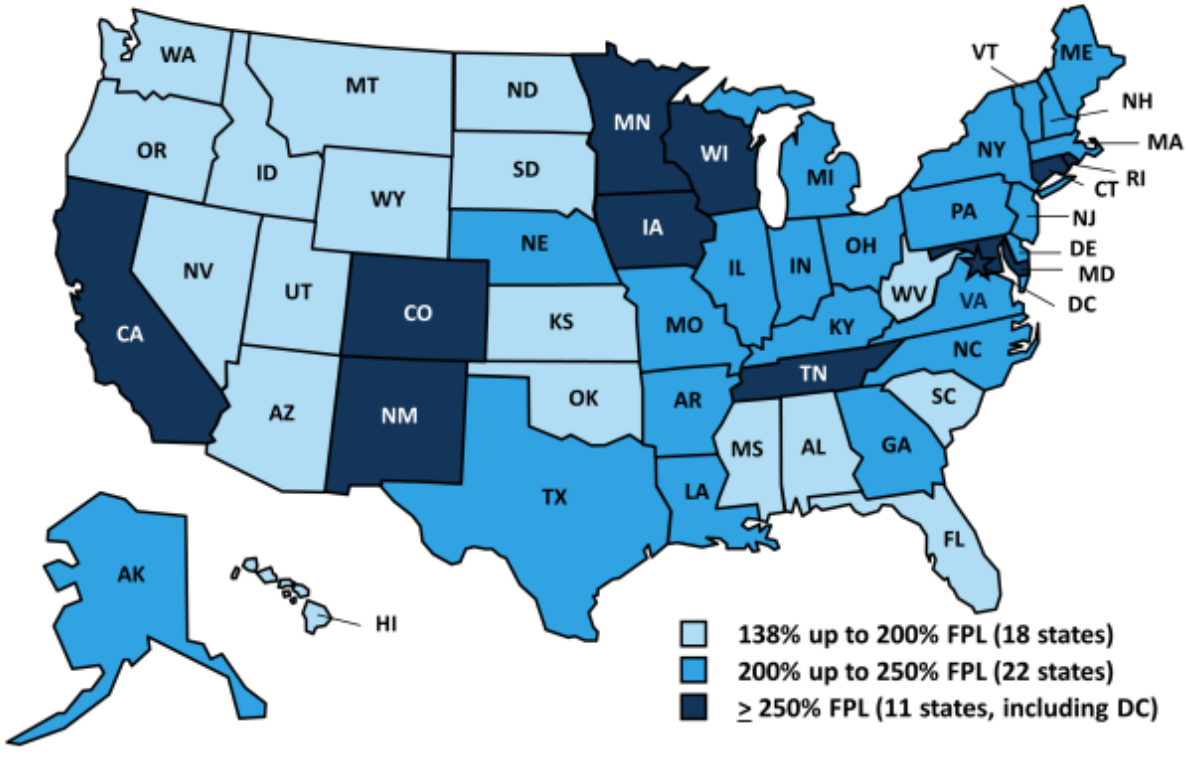
Figure 6

Income Eligibility Levels for Pregnant Women in Medicaid/CHIP, January 2016



NOTE: Eligibility levels are based on 2015 federal poverty levels (FPLs) for a family of three. The FPL for a family of three in 2015 was $20,090. Thresholds include the standard five percentage point of the FPL disregard.

SOURCE: Based on results from a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2016.

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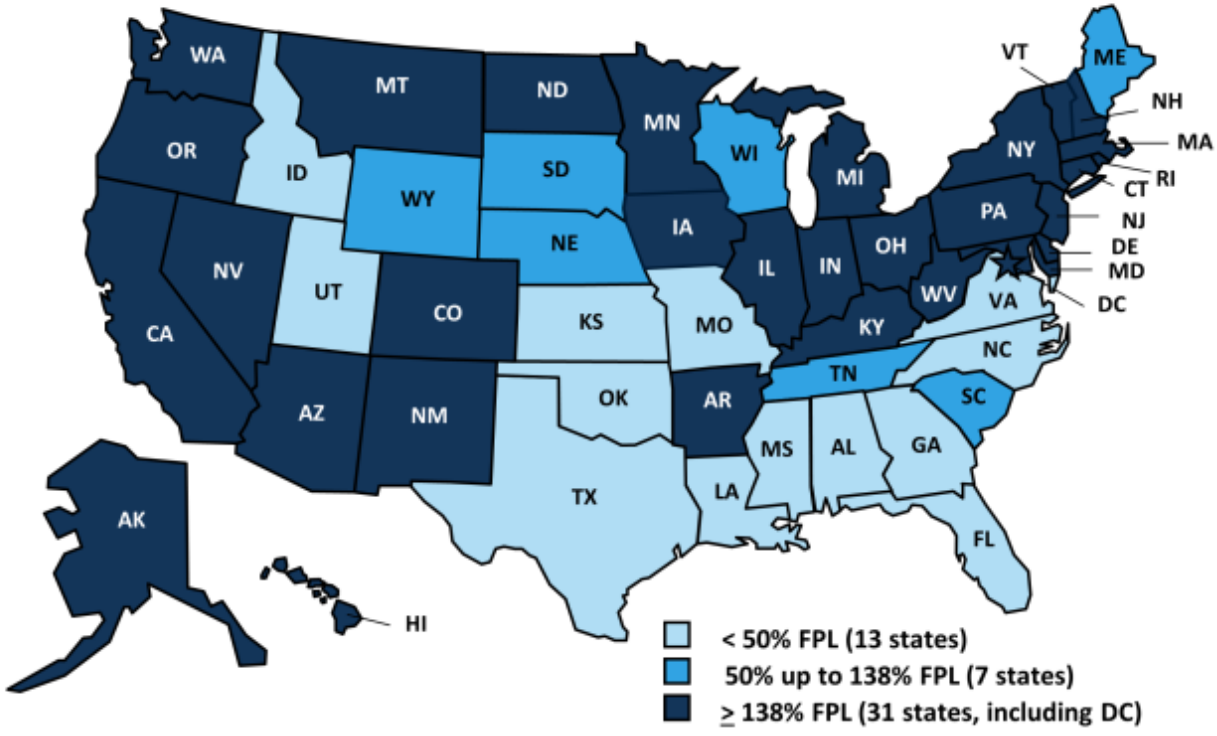
Figure 7

Medicaid Income Eligibility Levels for Parents of Dependent Children, January 2016



NOTE: Eligibility levels are based on 2015 federal poverty levels (FPLs) for a family of three. The FPL for a family of three in 2015 was $20,090. Thresholds include the standard five percentage point of the FPL disregard.
SOURCE: Based on results from a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2016.

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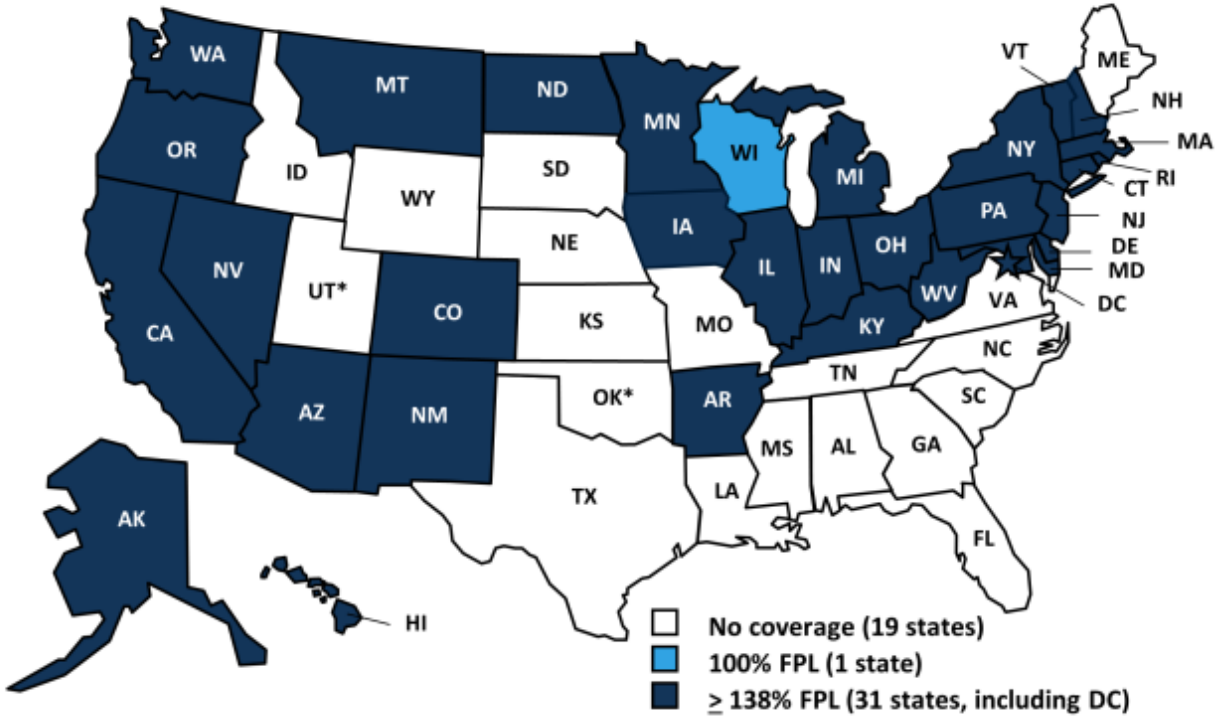
Figure 8

Medicaid Income Eligibility Levels for Childless Adults, January 2016



NOTE: Eligibility levels are based on 2015 federal poverty levels (FPLs) for an individual. The FPL for an individual in 2015 was $11,770. Thresholds include the standard five percentage point of the FPL disregard.

*OK and UT provide more limited coverage to some childless adults under Section 1115 waiver authority.

SOURCE: Based on results from a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2016.

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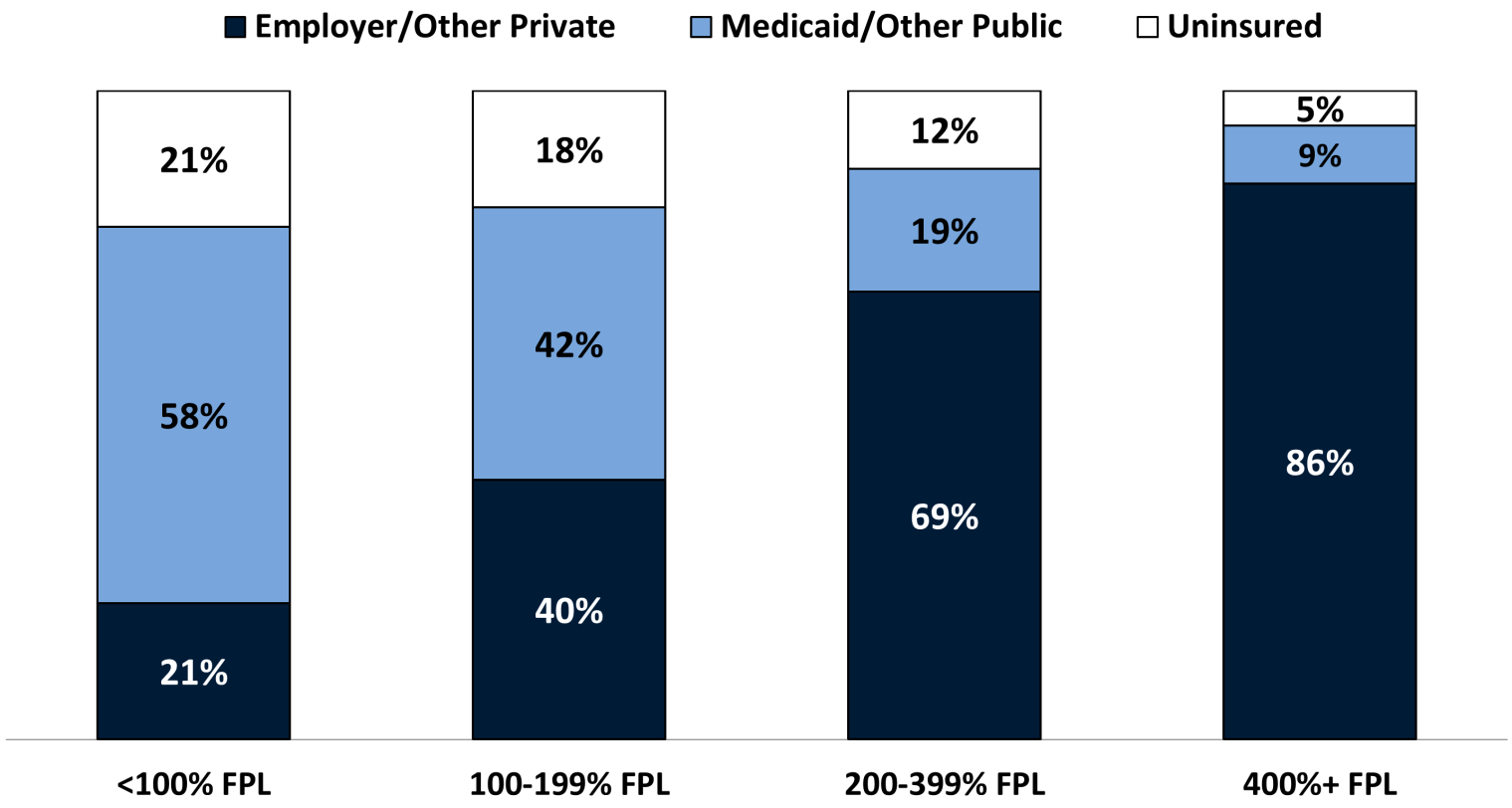
Health Insurance Coverage of the Nonelderly by Poverty Level, 2014



FPL -- The U.S. Census Bureau's poverty threshold for a family with two adults and one child was $19,055 in 2014. Data may not total 100% due to rounding.
SOURCE: Kaiser Family Foundation analysis of the 2015 ASEC Supplement to the CPS.

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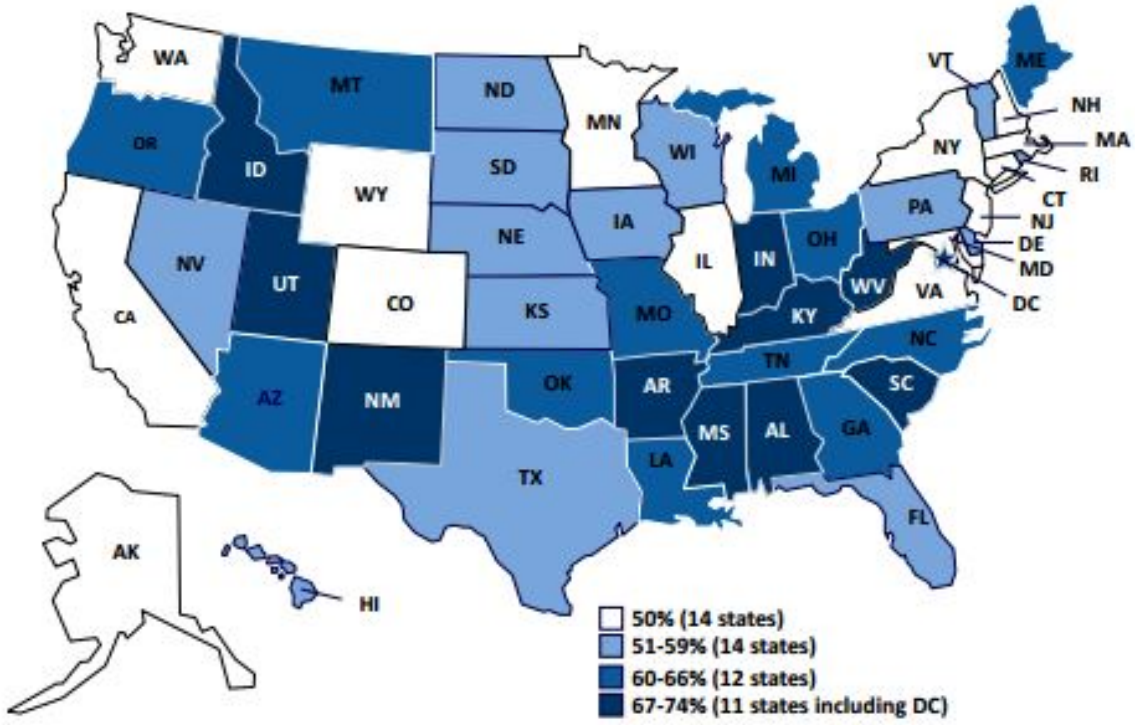
Medicaid Reimbursement

- Medicaid is funded jointly by the federal and state governments. The federal government pays states for a specified percentage of program expenditures.
- The regular percentage paid, or the Federal Medical Assistance Percentage (FMAP), is 57%, however in some states with lower per capita incomes it is 75%
- Payment methodology and reimbursement practices can vary across states, and payment practices can follow either a FFS or MCO type setup.
- About 75% of Medicaid beneficiaries are enrolled in some MCO-type program.

Figure 16

Federal Medical Assistance Percentages (FMAP)
FY 2013



NOTE: Rates are rounded to nearest percent. These rates will be in effect October 1, 2012 through September 30, 2013.
SOURCE: Federal Register, Nov, 30, 2011 (Vol. 76, No. 230), pp. 74061-74063.
http://www.gpo.gov/fdsys/pkg/FR-2011-11-30/pdf/2011-30860.pdf

Medicaid Reimbursement

- In general, states will pay medical providers following either a FFS payment system, or a "capitated" rate (per month/per member) MCO system, and generally the amount paid by Medicaid will be lower than the rate that doctors may charge private insurers.
- Because of this lower payment, the flurry of paperwork necessary to treat Medicaid patients, and the long waiting time for reimbursement, many medical providers prefer to avoid Medicaid patients.
- One provision of the ACA increased Medicaid payment rates to match those of Medicare for the years 2013 and 2014. The reason for this is to support fee payment during a time of large-scale Medicaid expansion. This increase was funded entirely by the federal government. Whether these rates remained elevated after 2014 was left up to each state government.

The Children's Health Insurance Program

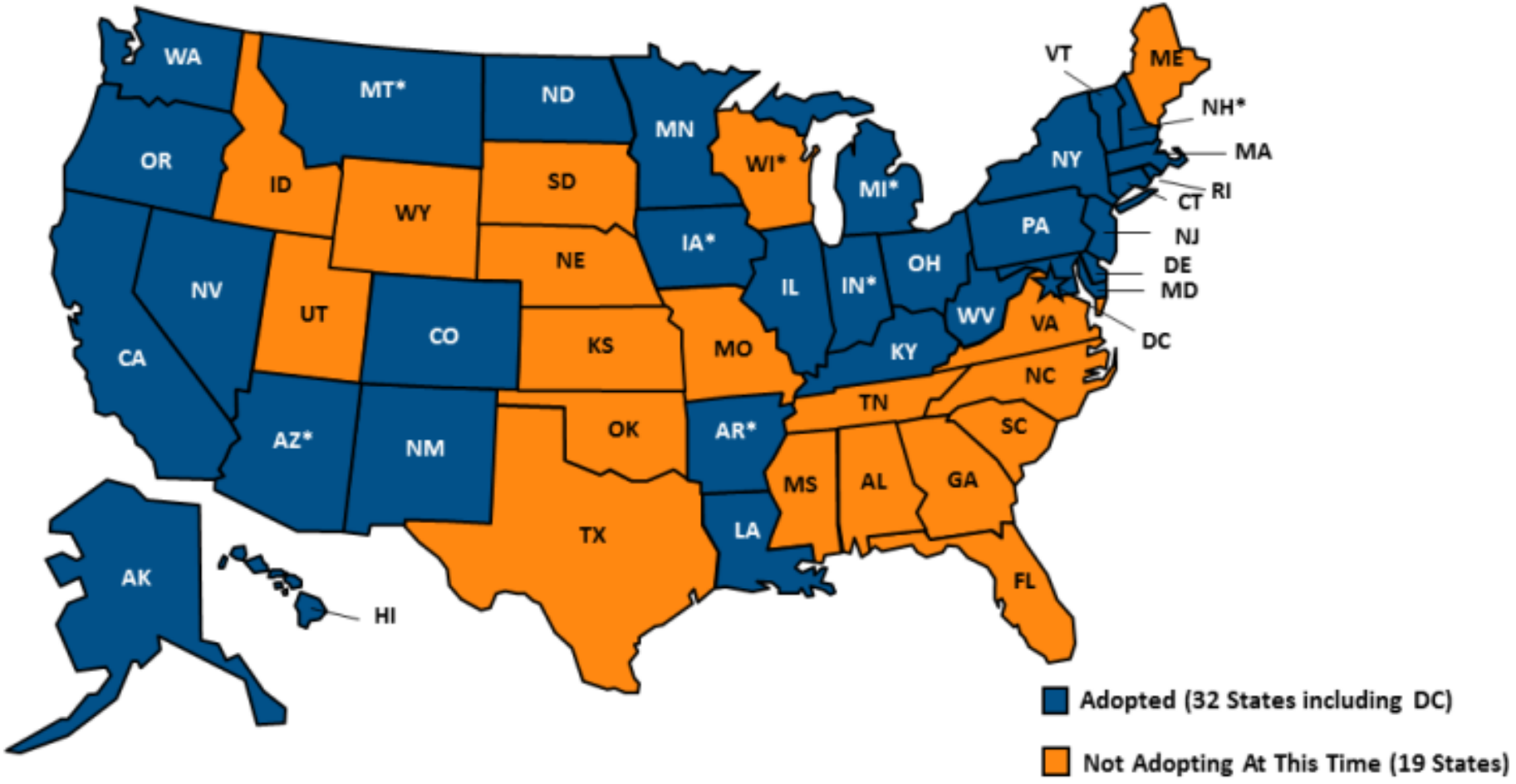
- Established in 1997, CHIP is a program that is very similar to Medicaid. CHIP provides health insurance to children from families that earn too much to be eligible for Medicaid, however earn to little to afford private insurance.
- CHIP was the largest expansion in health insurance coverage for children since the initiation of Medicaid in 1965.
- CHIP proves coverage to targeted children in families earning below 200% FPL, or whose family has an income 50% higher than the state's Medicaid eligibility threshold.
- CHIP essentially operates identically to Medicaid, and currently covers health care costs for about 8.4 million children.

How the ACA Impacts Medicaid

Recall that under the ACA, Medicaid expansion is recommended to the states by the federal government.

- Medicaid is expanded to cover adults earning up to 133% FPL, extending coverage to about half of the uninsured population.
- Medicaid expansion is effectively a state decision. If no states adopted Medicaid expansion, the ACA would reduce the number of uninsured in 2022 by an estimated 15 million people. If all states adopted expansion, the number would be 25 million.
- Many states claim that they already cannot afford Medicaid, so expansion would render it even more unaffordable.

Current Status of State Medicaid Expansion Decisions



NOTES: Current status for each state is based on KCMU tracking and analysis of state executive activity. *AR, AZ, IA, IN, MI, MT, and NH have approved Section 1115 waivers. WI covers adults up to 100% FPL in Medicaid, but did not adopt the ACA expansion.
SOURCE: "Status of State Action on the Medicaid Expansion Decision," KFF State Health Facts, updated October 14, 2016.
http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/

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Coverage Gap

Some individuals living in states that elect to not expand Medicaid may find themselves in the so-called coverage gap. In this gap, they make too much to qualify for their state's Medicaid program, and too little to receive federal subsidies to help pay for insurance.

Currently, there are an estimated 2.6 million people in the coverage gap, with about 90% of these people living in the south.

Figure 2

Gap in Coverage for Adults in States that Do Not Expand Medicaid under the ACA

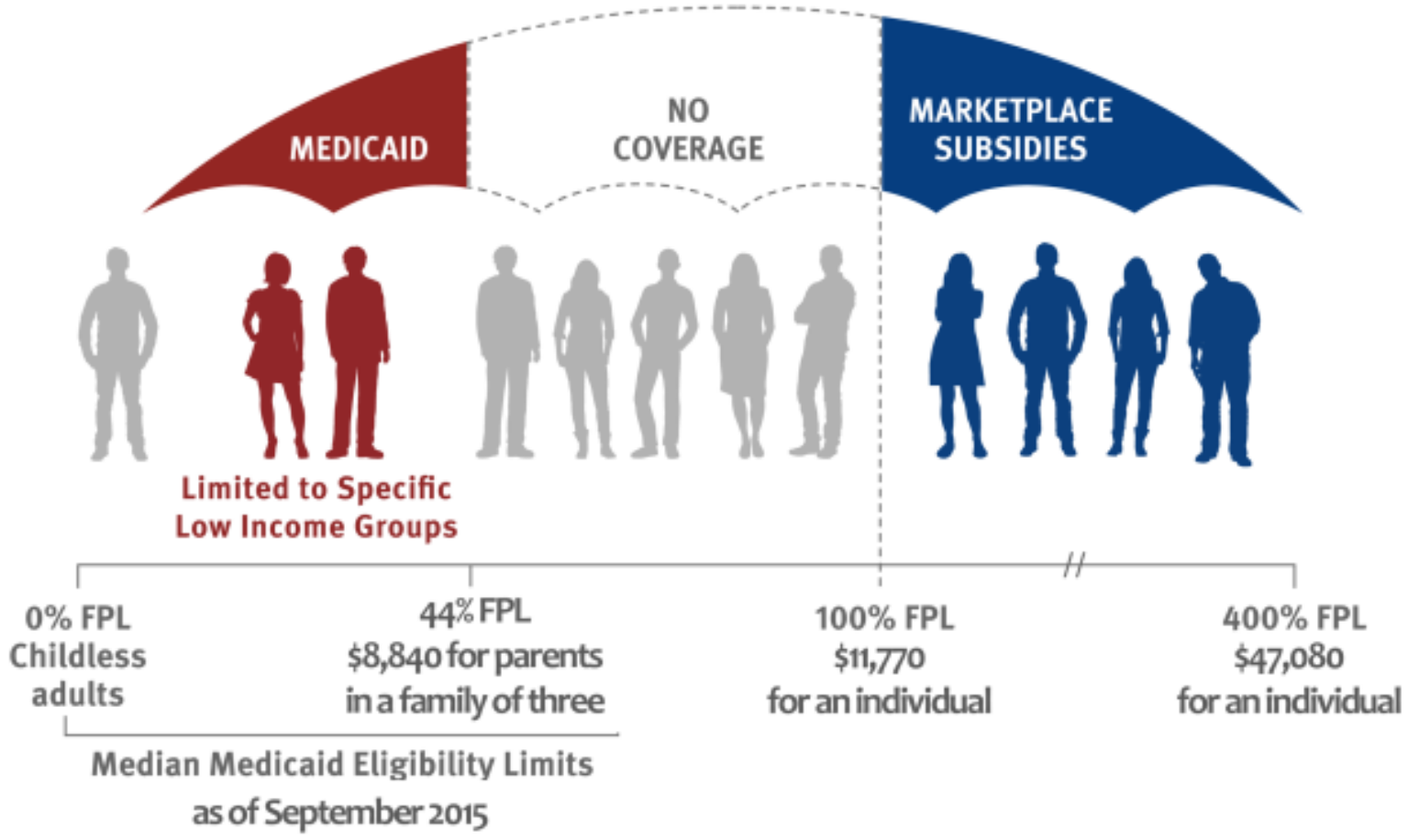
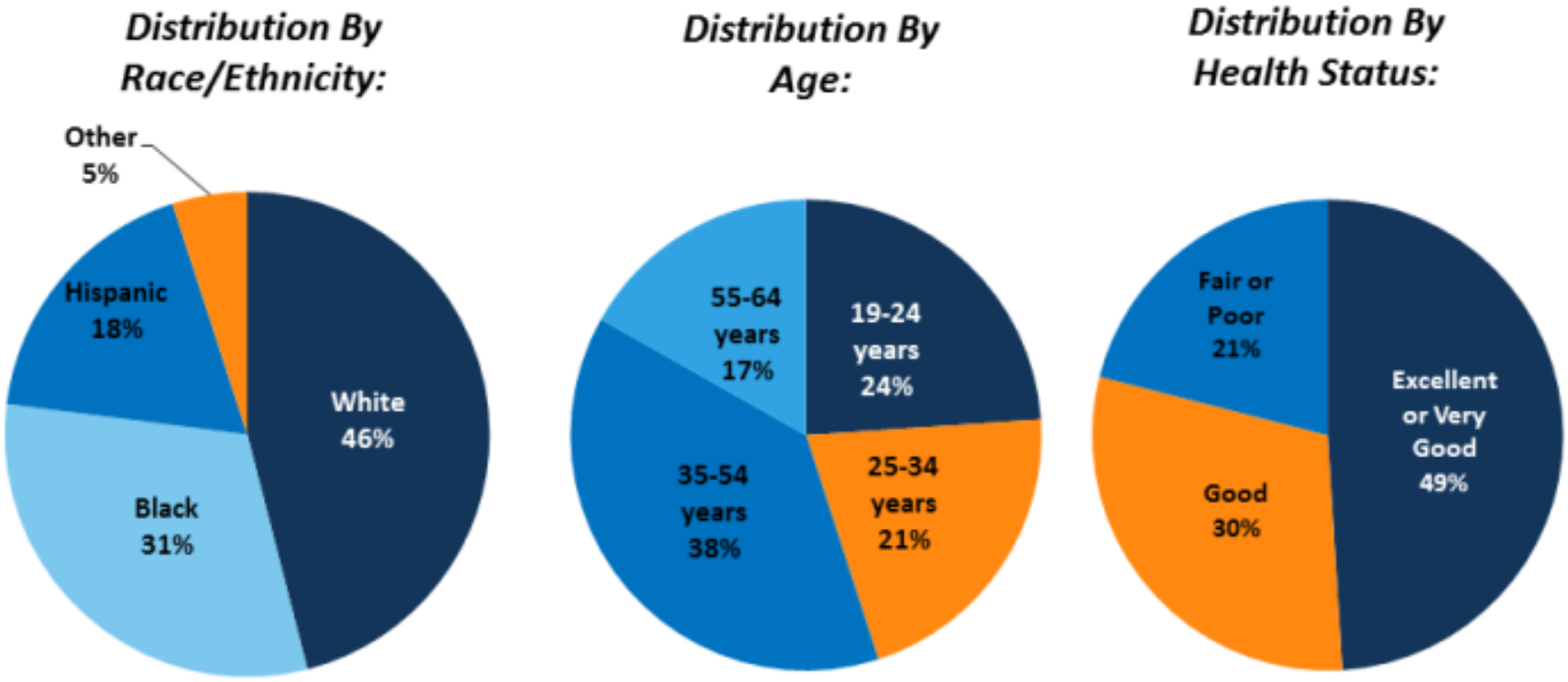


Figure 3

Demographic Characteristics of Adults in the Coverage Gap

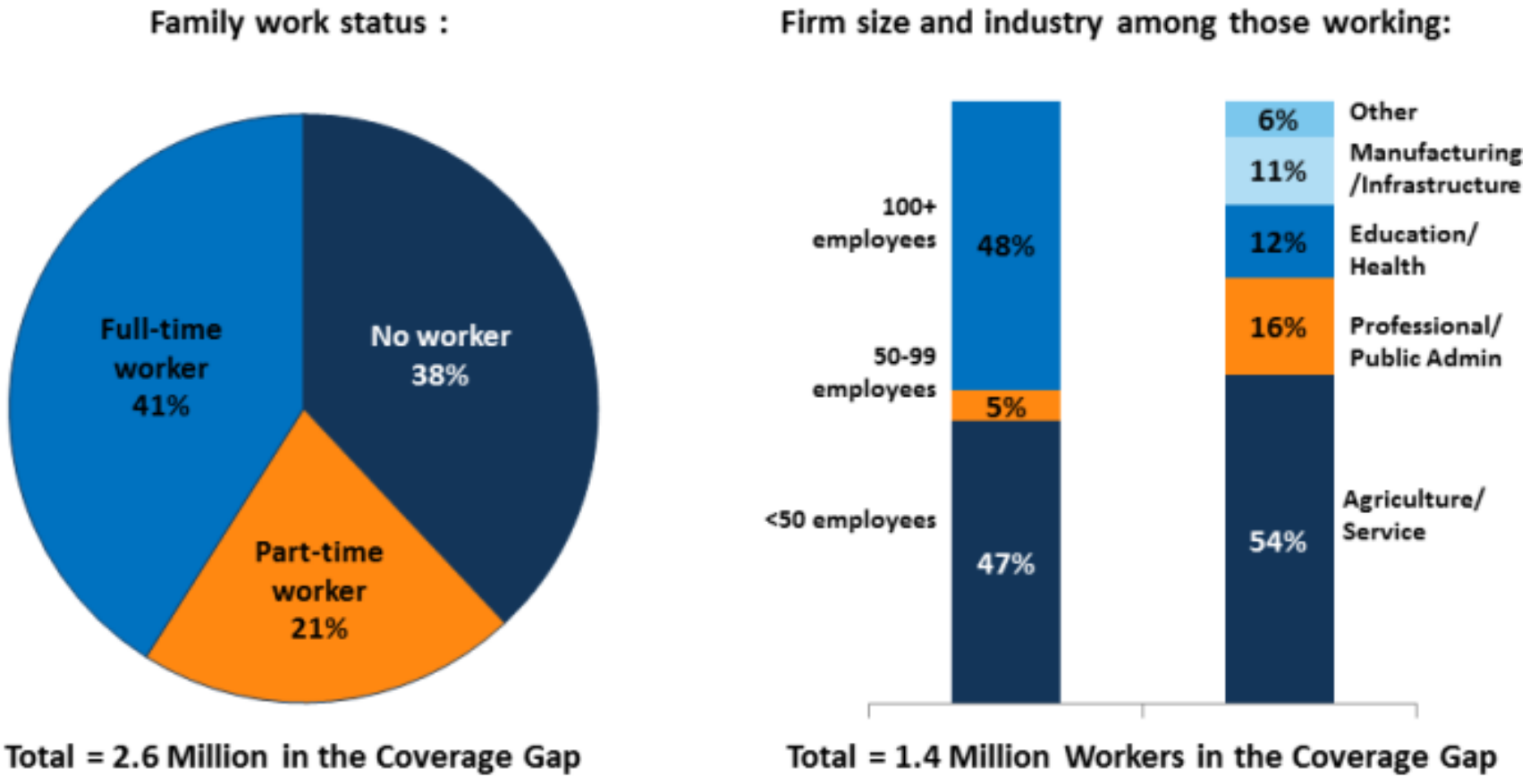


Total = 2.6 Million in the Coverage Gap

Note: Totals may not sum to 100% due to rounding.
Source: Kaiser Family Foundation analysis based on 2016 Medicaid eligibility levels and 2016 Current Population Survey.

Figure 5

Work Status of Adults in the Coverage Gap



Notes: Industry classifications: Agriculture/Service includes agriculture, construction, leisure and hospitality services, wholesale and retail trade. Education/Health includes education and health services. Professional/Public Admin includes finance, professional and business services, information, and public administration. Manufacturing/Infrastructure includes mining, manufacturing, utilities, and transportation. Totals may not sum to 100% due to rounding.
Source: Kaiser Family Foundation analysis based on 2016 Medicaid eligibility levels and 2016 Current Population Survey.

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Gruber on the ACA

In a 2016 interview with Politico, Jonathon Gruber said the following:

"In 2015, about 20 million extra people have health insurance."

The CBO projected that Medicaid coverage would grow by 12 million by 2015, when it has grown by 15 million.

"One big reason for Medicaid's surge is the so-called 'woodwork' effect: increased enrollment among people who were eligible under the old system but who didn't "come out of the woodwork" to sign up until the concentrated effort to get people enrolled under the new law. This woodwork effect has occurred in both expansion and conservative non-expansion states. And it likely arises from factors like the individual mandate to get covered, streamlined enrollment which makes it easier to sign up and general attention to health insurance coverage under the law."

Gruber on the ACA

"The second point missed by the CBO — again, surprising many of us — is how slowly the insurance exchanges would grow. CBO projected more than 20 million people would be enrolled in these new online markets by this year. In fact, only about half that many are covered."

"One big reason is yet another ACA surprise, and a fortunate one: The employer insurance market is much more stable than expected. A lot of the controversy around the ACA was the expectation on the right that it would erode existing employer insurance. CBO's estimates were smaller than some conservatives but even it estimated a reduction in employer coverage of about 4 percent, or about 7 million people. CBO also assumed, as far as I can tell, that most of the people leaving employer insurance would turn to the exchanges instead. That's not what happened. In fact, employer coverage has not eroded at all"

Gruber on the ACA

"Insurance premiums on the exchanges have also surprised me — but not in the way that most readers would think. Most press coverage recently has focused on the high premium increases in exchange plans, and the exits of some insurers losing money on the exchanges, notably United Healthcare. But what those articles tend to ignore is that exchange premiums in 2014 came in much lower than expectations — about 15 percent below what CBO projected. So even with recent increases, premiums are probably still lower than what would have been expected before the exchanges began. That gets overlooked."

Gruber on the ACA

"the case for the rest of the states to adopt the Medicaid expansion is stronger than ever. Even when states don't adopt those expansions, they are seeing large Medicaid enrollment increases — partly on their own dime. It makes no sense for states to increase coverage for the populations that cost them the most, while leaving uncovered the new expansion populations that are much more heavily subsidized by the federal government."

"Any objective analysis of the ACA will find that it vastly improved the lives of millions of Americans who could not previously rely on the security of employer or government-provided insurance – while leaving the vast majority of Americans able to still rely on the insurance arrangements that they enjoy. And that should be no surprise."

Effects of Medicaid on Health

Currie and Gruber (1996)

"Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women" *Journal of Political Economy*

This paper revisits a question that we are all familiar with, however within the context of Medicaid: Does expanded health care eligibility lead to improved health outcomes?

Currie and Gruber (1996)

- Uses data from the Current Population Survey (CPS) from 1979-1992.
- Studies whether instances in Medicaid expansion over the period increased health insurance coverage of pregnant mothers, and if it did how did this impact health outcomes.
- Outcome variables: infant mortality rate and low birth weight (less than 5.5 pounds).
- Low birth weight is a key indicator for the health of the fetus. Infants that are low birth weight are at higher risk of neonatal mortality as well as suffering from handicaps such as cerebral palsy, blindness, deafness, and learning disorders.
- Infant mortality is a function of not only fetus health, but also the effectiveness of interventions that occur during or shortly after birth.

Currie and Gruber (1996)

Medicaid Policy Changes:

- Historically, Medicaid eligibility for women and children has been closely tied to participation in the Aid to Families with Dependent Children (AFDC) program.
- The linkage between AFDC restricted access in a three different ways. First, AFDC typically only went to female-headed households. Second, income cutoffs for cash welfare varied across states. Third, the stigma associated with applying for cash welfare may have prevented eligible families from receiving Medicaid benefits.

Currie and Gruber (1996)

During the 1980s, states had the option to expand Medicaid coverage either of two ways.

First, "targeted changes" related to family structure and income level that affected very specific groups of people (women pregnant for the first time, teenagers in families with income below the AFDC cutoff regardless of family structure, etc.).

Second, "broad changes" in the late 1980s that greatly expanded income eligibility for pregnant women regardless of family structure. These relaxations of income requirements were widespread across states, and hence affected many different groups of people.

They rely on this variation of Medicaid expansion across states and across time to study impacts on health outcomes.

Currie and Gruber (1996)

They run OLS regressions to estimate the effect of eligibility changes (expansions in Medicaid) on birth outcomes (low birth weight and infant mortality). By regressing these state/year outcomes on an index of Medicaid eligibility generosity, they are able to answer the question "as Medicaid makes a larger fraction of pregnant women eligible in a state and year, do birth outcomes improve?"

$$Outcomes = \beta Eligibility + \beta_2 X + \varepsilon$$

They use simulation strategies to estimate the annual fraction of women ages 15-44 who would have been eligible for Medicaid had they become pregnant. Because this fraction depends on socioeconomic and demographic characteristics of the state, which may also be correlated with birth outcomes (if this is the case, then the annual fraction that is eligible variable is endogenous).

Currie and Gruber (1996)

In an attempt to overcome this potential endogeneity, they instrument the annual fraction eligible with a measure of the generosity of Medicaid in a state and year that depends only on the state's eligibility rules. They argue that because Medicaid generosity depends only on a state's legislative environment, it is unaffected by other state-level characteristics that affect birth outcomes, and hence it does not suffer from endogeneity.

Here, they essentially assume that Medicaid generosity is highly correlated with the fraction of those eligible for Medicaid, while it is uncorrelated with unobservables that influence birth outcomes.

OLS Regressions of Low Birth Weight and Infant Mortality on Eligibility Using *Vital Statistics* Data for Each State and Year

	Low Birth Weight		Infant Mortality			
	Actual Eligibility (1)	Simulated Instrumental Variables (2)	Actual Eligibility (3)	Simulated Instrumental Variables (4)	Actual Eligibility (5)	Simulated Instrumental Variables (6)
	A. Models Using Fraction Eligible					
Fraction eligible	−2.711	−4.347	−1.875	−3.031	−1.741	−2.822
	(2.124)	(2.601)	(.571)	(.702)	(.563)	(.691)
Low birth weight					.049	.048
					(.010)	(.011)
Adjusted R^2	.968	.968	.915	.914	.917	.917

To calculate test-statistics, divide the coefficient by the standard error (in parentheses). T-stats above 1.96 are significant at the 5% level. Here, results for the low birth weight outcome are insignificant, while those for infant mortality are negative and significant.

Currie and Gruber (1996)

Conclusions:

- While Medicaid expansions seemingly had little to no effect on low birth weight outcomes, they did seem to significantly reduce infant mortality rates.
- Specifically, a 30-percentage-point increase in the fraction of women eligible for Medicaid was associated with a decrease in infant mortality of 8.5%
- Targeted increases in Medicaid insurance eligibility were an effective means to improve infant health.
- Estimated costs of saving an infant life through targeted eligibility changes was $840,000. Since this amount is below most estimates of the value of a human life (about $9 million in 2015), we might conclude that these were cost-effective policies.

Crowding-Out

A heavily researched topic related to government provided health insurance such as that of Medicaid is called "crowd-out."

Crowding-out refers to a phenomenon in which a newly eligible individual obtains public insurance and this replaces their private insurance.

For example, when Medicaid is expanded, this will typically lead to increased eligibility of the poor or the young. Some of them may have been previously uninsured, and this group of people will "take up" the newly available coverage. Others, however, may have already had private insurance, and they may choose to substitute the newly available public insurance for their private plan. This is called crowd-out.

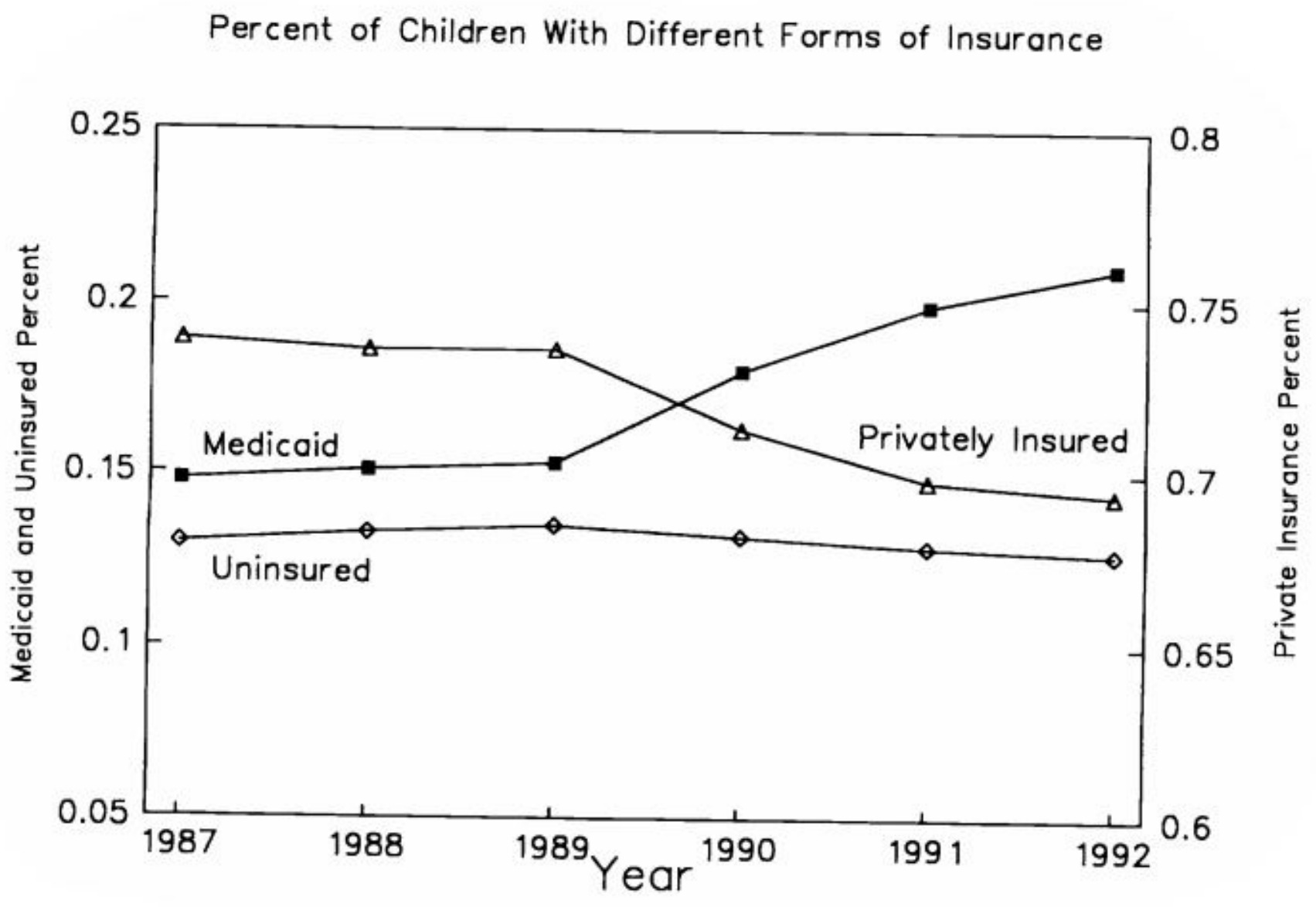
Crowding-Out

Cutler and Gruber (1996) is considered to be the classical "crowd-out" paper within health economics.

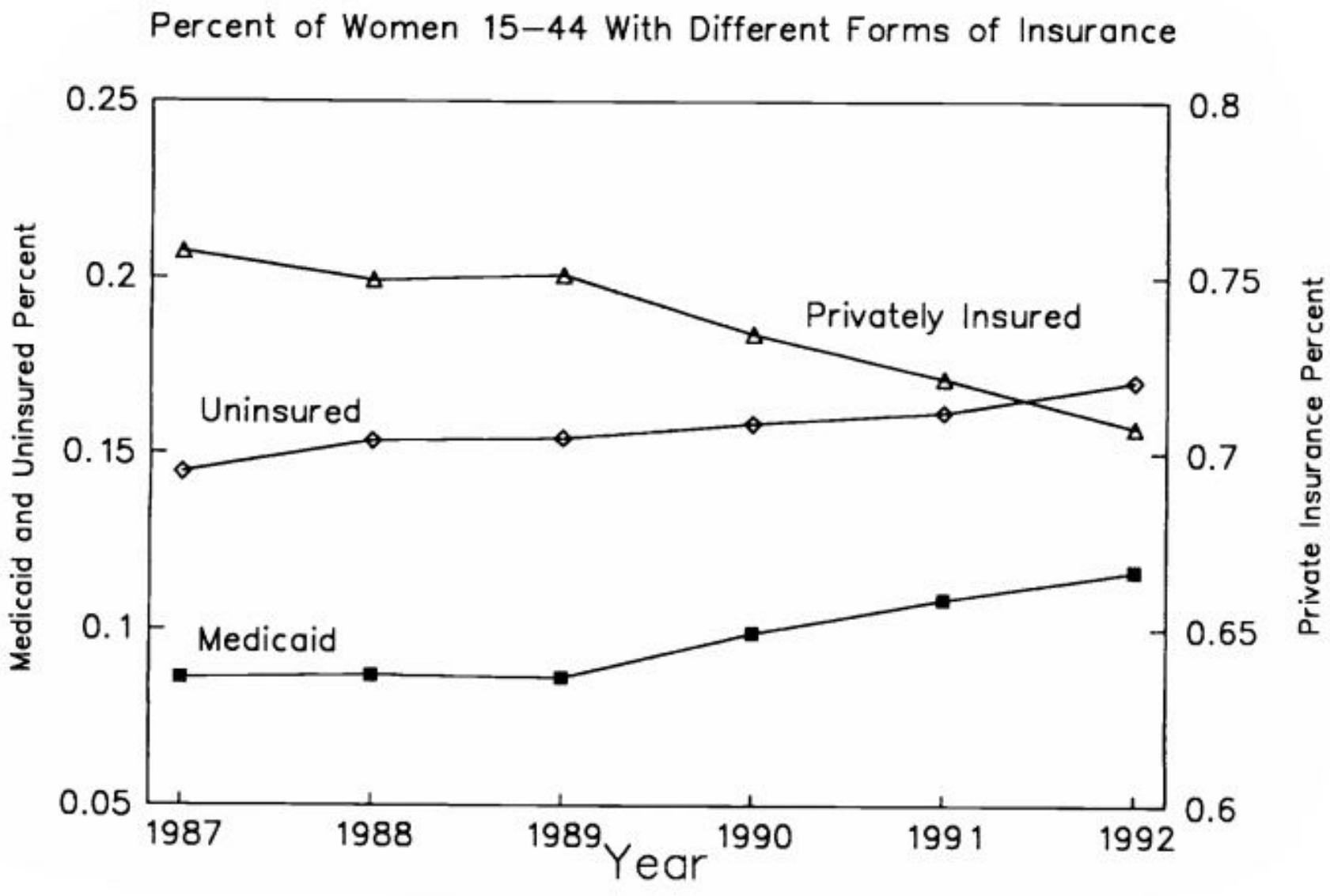
"Does Public Insurance Crowd Out Private Insurance?" *Quarterly Journal of Economics*

Cutler and Gruber (1996)

- Uses data from the Current Population Survey (CPS) from 1987-1992.
- Keep in mind that from 1987-1992, Medicaid eligibility among children rose by 50% and the percent of women eligible for Medicaid if they were pregnant more than doubled.
- Data is on children and women of childbearing age (15-44), and the question is: "did access to Medicaid lead to decreased consumption of private insurance, i.e. was their crowding-out?"
- Similarly to the previous article by Currie and Gruber (1996), this identification strategy relies on variation in Medicaid expansion both across states and across time.



Among children, it visually seems that Medicaid eligibility has led to crowding-out.



Visually, crowd-out has also occurred among pregnant women.

Cutler and Gruber (1996)

Their empirical specification takes the form:

$$COV_i = \beta_1 ELIG_i + X_i\beta + \sum \alpha_0 state_i + \sum \alpha_t time_i + \varepsilon_i,$$

where COV is an indicator of insurance coverage either through Medicaid, private insurance, or uninsured. X is a set of demographic controls including race, sex, marital status, number of persons and number of workers in the household, and whether the family is male or female-headed. The coefficient of interest is β_1, and it captures the marginal take-up rate of public insurance when Medicaid is the dependent variable, and for other dependent variables it measures the crowd-out effects.

Table 4: Regressions Explaining Coverage for Women and Children

	Children			Women		
Independent Variable	Medicaid	Private	Uninsured	Medicaid	Private	Uninsured
Eligible for Medicaid	**0.235**	**-0.074**	**-0.119**	**0.008**	**-0.045**	**0.046**
	(0.014)	**(0.018)**	**(0.016)**	**(0.018)**	**(0.027)**	**(0.025)**
Demographics						
Male	0.002	-0.003	0.001	---	---	---
	(0.001)	(0.002)	(0.001)			
White	-0.069	0.081	-0.019	-0.058	0.086	-0.024
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
Married	---	---	---	0.013	-0.070	0.018
				(0.008)	(0.012)	(0.011)
Health Ins. Unit						
Number of People	0.025	-0.032	0.010	0.051	-0.037	-0.007
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)
Male/Female	-0.151	0.176	-0.056	-0.135	0.140	-0.023
	(0.004)	(0.006)	(0.005)	(0.004)	(0.007)	(0.006)
Male Head	-0.124	0.030	0.063	---	---	---
	(0.004)	(0.005)	(0.004)			
0 Workers	0.392	-0.536	0.113	0.513	-0.650	0.084
	(0.007)	(0.010)	(0.009)	(0.001)	(0.015)	(0.014)
1 Worker	0.044	-0.156	0.109	0.064	-0.158	0.076
	(0.003)	(0.004)	(0.003)	(0.004)	(0.006)	(0.006)
2 Workers	0.004	-0.051	0.003	0.045	-0.040	0.005
	(0.002)	(0.003)	(0.004)	(0.003)	(0.004)	(0.004)

Once again, t-stats can be obtained by dividing the coefficient by the standard error. Here, effects for children are significant.

Cutler and Gruber (1996)

Conclusions:

- During the period 1987-1992, there was a substantial increase in Medicaid eligibility extended to children and pregnant women.
- These expansions increased Medicaid coverage by about 2.3 million people.
- These expansions came at a cost. Private insurance coverage decreased over the period on the order of one-half to three-quarters of the Medicaid coverage increase.
- These private insurance decreases came from people choosing to drop their private coverage, i.e. public insurance crowded-out private insurance.

Mixed Results in Literature

Later studies have found mixed results related to crowd-out. Results are largely dependent on the methodology, the data set, and the definition of crowd-out (how the overlap population is handled).

- Other studies find smaller or no crowd-out effects (Dubay and Kenney, 1996, 1997; Thorpe and Florence, 1998; Yazici and Kaestner, 2000)
- In a paper using SIPP data over the period 1996-2002, Gruber and Simon (2008) revisit the topic.
- They find that after large SCHIP expansions, private insurance coverage is reduced by 60% as much as public insurance coverage rises.
- This is evidence that perhaps crowd-out is still a problem associated with the provision of social insurance.

Next Class

Self-Assessed Health