Disparities in Cancer Screening: The Role of Medicaid Policy

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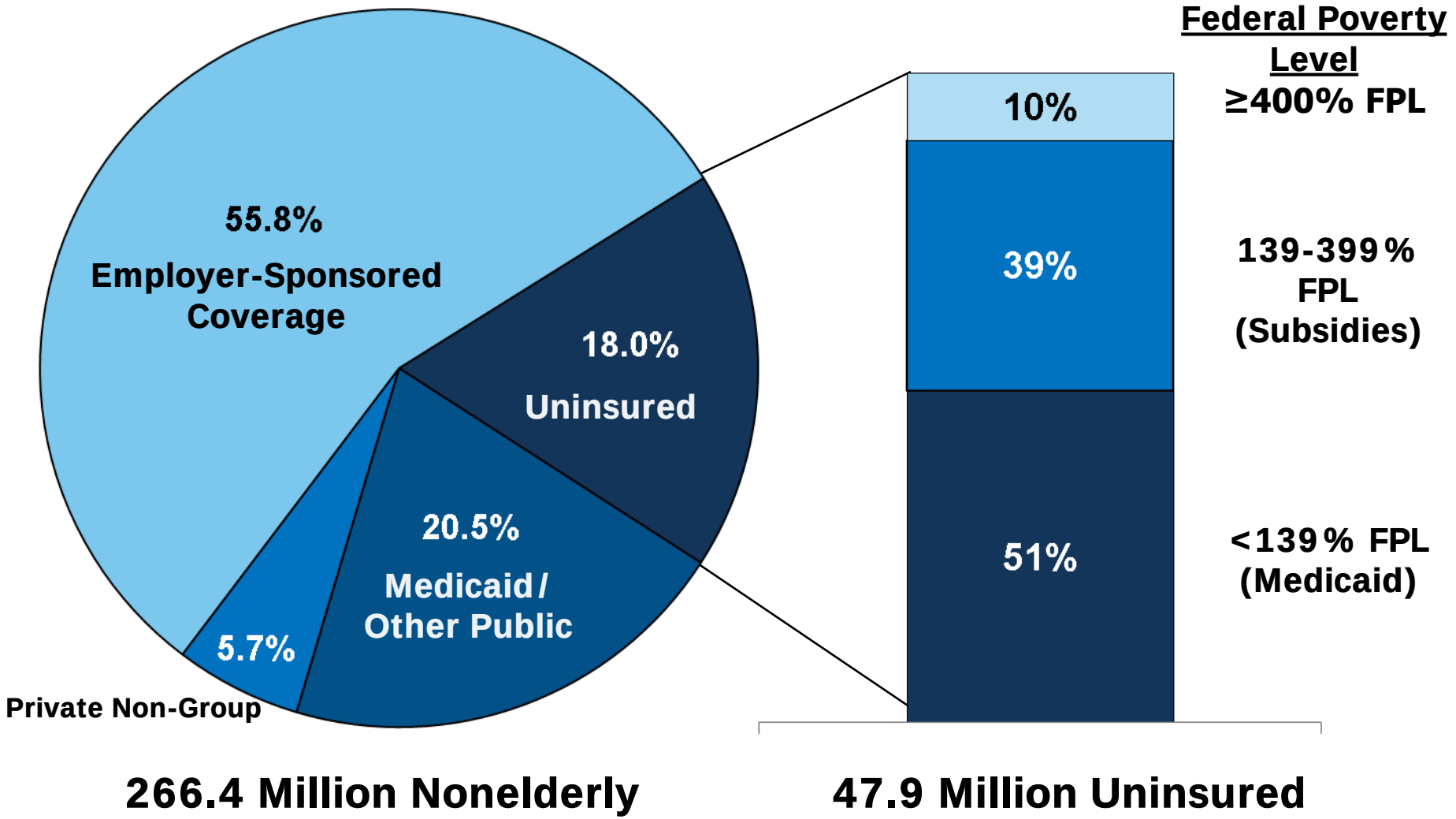
Expanding Coverage Under the ACA



*Medicaid also includes other public programs: CHIP, other state programs, Medicare and military-related coverage. The federal poverty level for a family of four in 2011 was $22,350.
Numbers may not add to 100 due to rounding.
SOURCE: KCMU/Urban Institute analysis of 2012 ASEC Supplement to the CPS.

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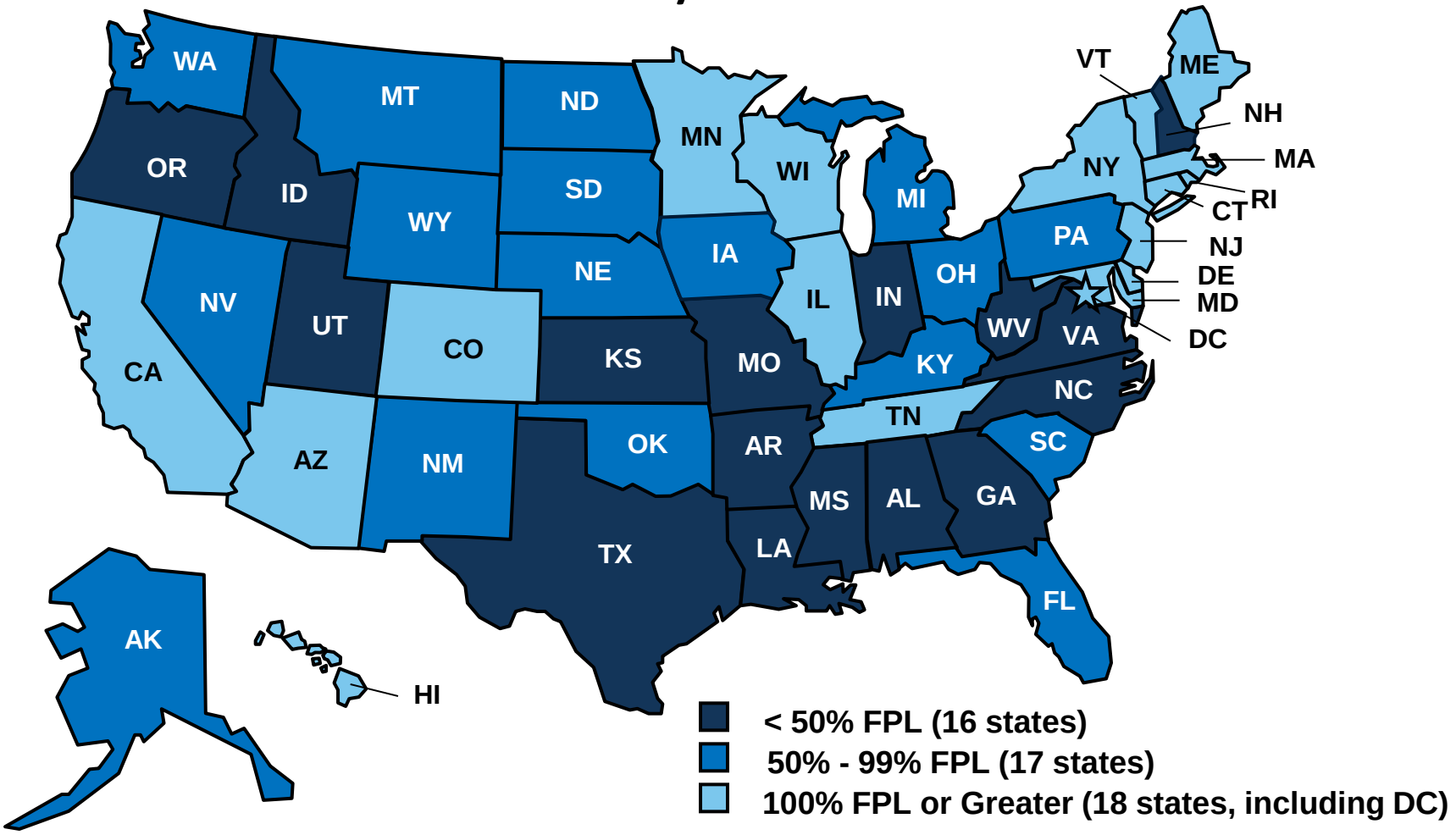
Medicaid Eligibility for Working Parents by Income, January 2013



NOTE: The federal poverty line (FPL) for a family of three in 2012 is $19,090 per year. Several states also offer coverage with a benefit package that is more limited than Medicaid to parents at higher income levels through waiver or state-funded coverage.
SOURCE: Based on the results of a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2013.

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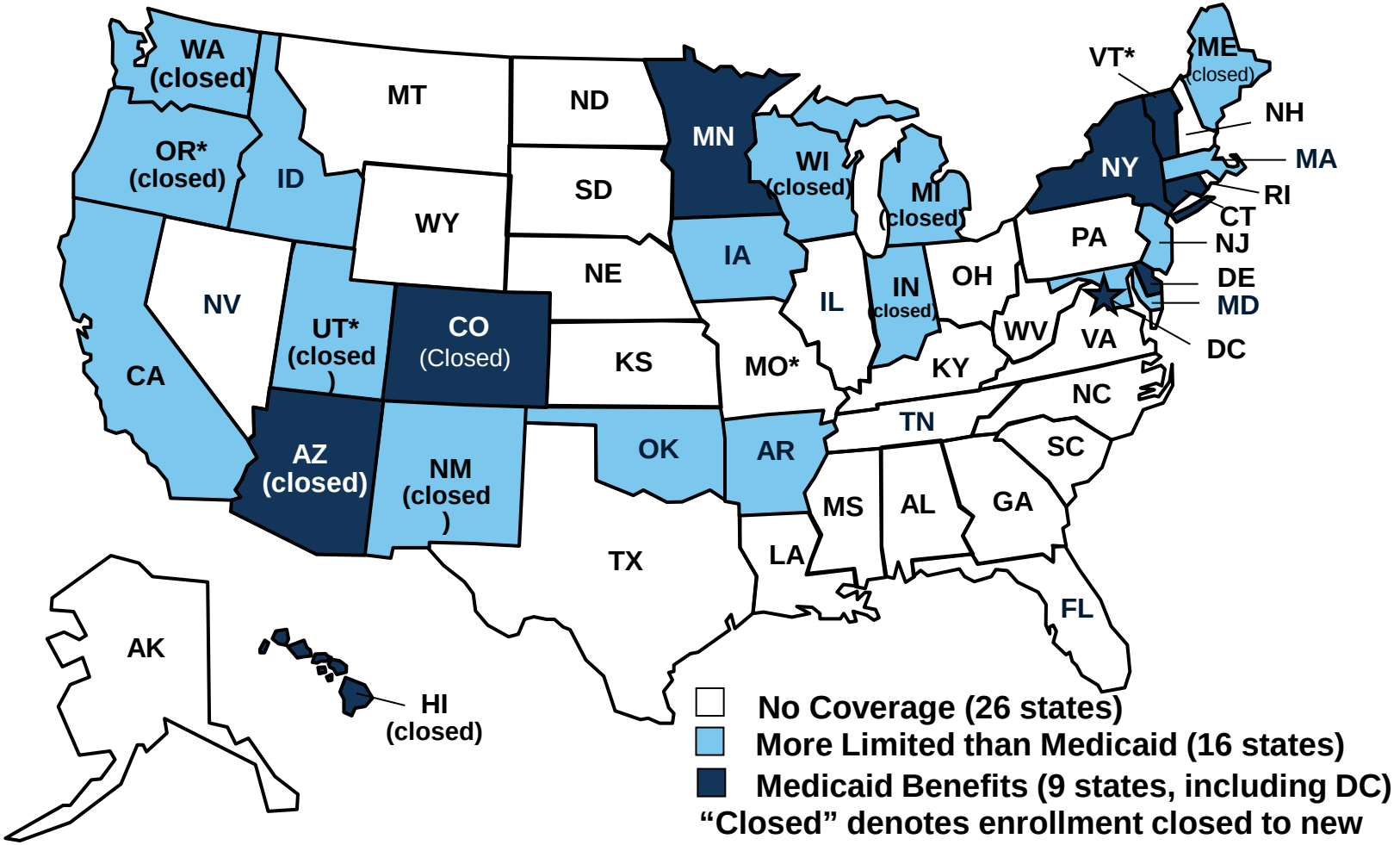
Coverage of Low-Income Adults, January 2013



NOTE: Map identifies the broadest scope of coverage in the state. MN and VT also offer waiver coverage that is more limited than Medicaid. OR and UT also offer "premium assistance" with open enrollment. IL, LA, and MO offer coverage limited to adults residing in a single county or area.

SOURCE: Based on the results of a national survey conducted by the Kaiser Commission on Medicaid and the Uninsured and the Georgetown University Center for Children and Families, 2013.

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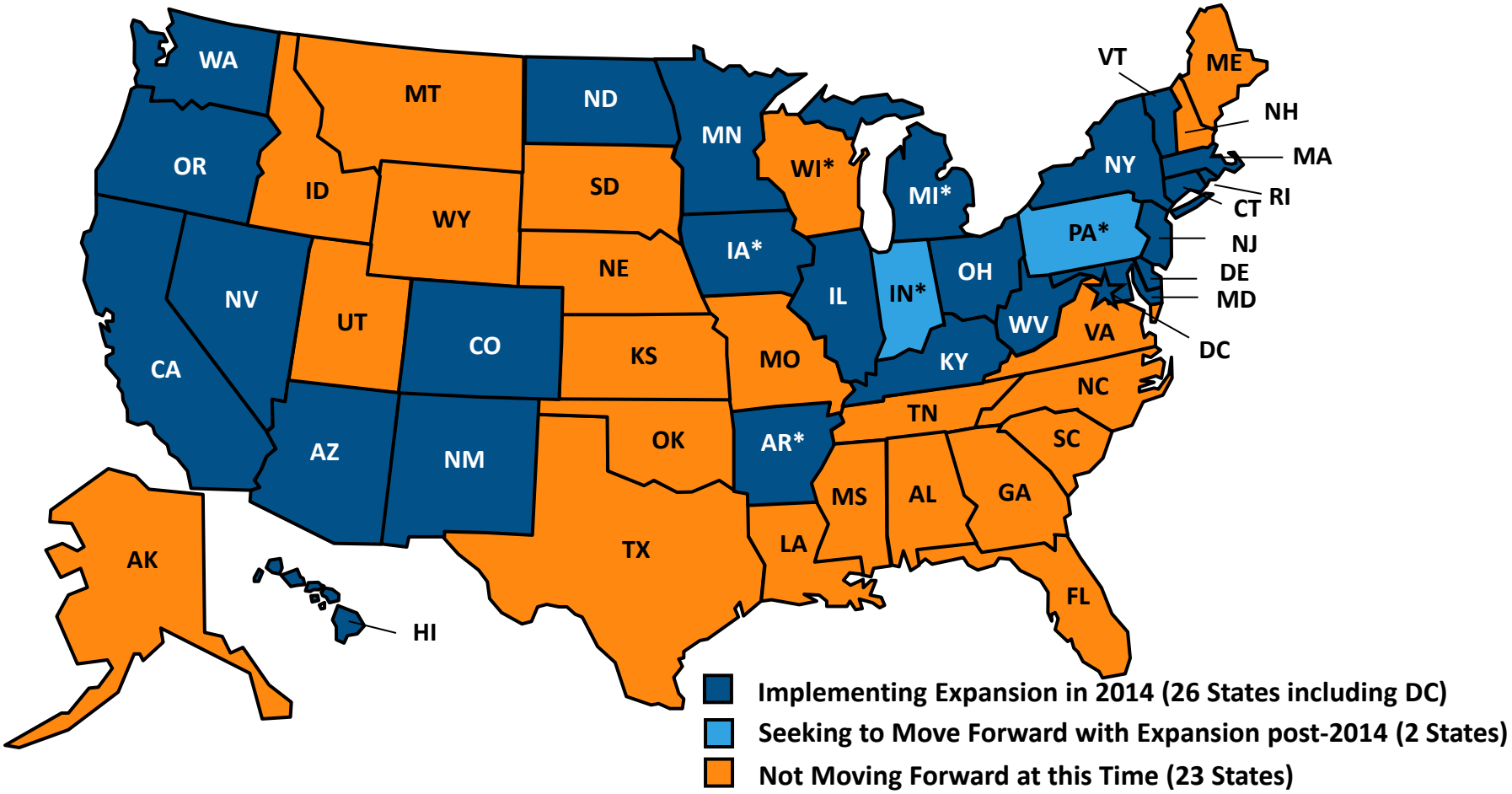
Status of State Medicaid Expansion Decisions, as of December 11, 2013



NOTES: *AR and IA have approved Section 1115 waivers for Medicaid expansion; MI has a pending waiver for expansion and plans to implement in April 2014; IN and PA have pending waivers for Medicaid expansion plans that would be implemented post-2014; WI amended its Medicaid state plan and existing Section 1115 waiver to cover adults up to 100% FPL in Medicaid, but did not adopt the expansion.
SOURCES: State decisions on the Medicaid expansion as of December 11, 2013. Based on data from CMS, available at: http://medicaid.gov/AffordableCareAct/Medicaid-Moving-Forward-2014/Medicaid-and-CHIP-Eligibility-Levels/medicaid-chip-eligibility-levels.html. Data have been updated to reflect more recent activity.

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Evidence on Adult Medicaid Coverage

- Expansions to adults using 1115 waivers increased coverage and decreased uninsurance
- Evidence regarding effects of Medicaid on healthcare access and health outcomes is mixed
  - Observational studies have found Medicaid coverage is associated with poorer outcomes
    - subject to bias from enrollment of sicker individuals
  - Recent experimental or quasi-experimental studies suggest Medicaid improves access and outcomes
- Need better understanding of mechanisms, including role of preventive care

Breast and Cervical Cancer in the US

- Breast cancer
  - Second leading cause of cancer deaths in US women
  - Substantial economic burden
- Cervical cancer
  - One of few cancers that could be practically eliminated with screening and early treatment
- Disparities in diagnosis, treatment, outcomes
  - Income, SES, insurance, race/ethnicity
- Lack of insurance coverage impedes access to care, including preventive services

Cancer Screening

- Breast and cervical cancer screening can reduce morbidity and mortality
- Key indicator of preventive health behavior and patient investment in health
- Requires interaction with healthcare system not precipitated by a health condition
- Stand-alone program covering screening for low-income US women (NBCCEDP)

Impact of Medicaid Policy on Screening

- Programs vary across states and over time in eligibility, physician payment, cost-sharing
  - Baseline differences
  - Medicaid expansions under the ACA
- Both sources of variation provide natural experiment for studying effect of Medicaid on screening for low-income women
- May impact screening and related outcomes

Medicaid Eligibility

Aim 1: Examine the effect of state Medicaid eligibility on breast and cervical cancer screening rates among low-income women.

- H_1: Screening rates among low-income women are higher in states with expanded Medicaid eligibility for parents and childless adults.
- H_2: Socioeconomic and racial/ethnic disparities in screening decrease among low-income women in states with expanded eligibility.

Cost-sharing and Reimbursement

Aim 2: Assess how physician and patient financial incentives affect the receipt of breast and cervical cancer screening among low-income women.

- H_1: States with higher Medicaid reimbursement rates have higher rates of screening.
- H_2: National increases in Medicaid primary care reimbursement rates (such as those anticipated under the ACA) will increase screening rates.
- H_3: States with lower patient co-payments have higher rates of screening.

Effect on Outcomes

Aim 3: Examine the effect of Medicaid generosity on breast cancer stage at diagnosis and breast and cervical cancer incidence for low-income women.

- H_1: Women in states with more generous eligibility, payment, and cost sharing will be diagnosed with breast cancer at earlier stages.
- H_2: States that expand Medicaid will experience lower rates of breast and advanced stage cervical cancer incidence among women in low-income counties.

Complementary Data Sources

- State infrastructure, policy, and program variables
  - Kaiser Family Foundation
  - Centers for Medicare and Medicaid Services
  - Urban Institute
  - Area Resource File
- Behavioral Risk Factor Surveillance System (BRFSS)
- Medicaid Analytic eXtract (MAX) claims files
- Surveillance, Epidemiology, and End Results (SEER)

Methods

- Quasi-experimental design examining how changes in policies affect receipt of Pap tests and mammograms among low-income women
- Exploit variation in Medicaid policy across states and within states over time to identify the effects of policy changes on our outcomes of interest
- Difference-in-difference-in-differences (DDD) methods to examine effects of eligibility
- State and year fixed effects models to examine effects of payment rates, or cost sharing

Policy Implications

- Will provide evidence on how Medicaid policy affects women's cancer prevention & health outcomes
- ACA aims to increase use of preventive services while giving flexibility to states
  - Early evidence important for identifying effective policies
- Timely analysis given recent policy changes & trends
  - Temporary Medicaid primary care pay increase
  - Emphasis on wellness coupled with increases in cost-sharing under recent Medicaid waivers
  - State-level experimentation with Medicaid expansions

Summary

- Consider effect of range of Medicaid policies on breast and cervical cancer screening
  - Eligibility, physician payment, and cost sharing
- Consider effect of pre- and post-health reform variation in policies across and within states
- Examine outcomes including stage at diagnosis and incidence of invasive cancer
- Provide timely evidence on screening changes in relation to key provisions of ACA

Acknowledgements

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Thank you!

Comments welcome

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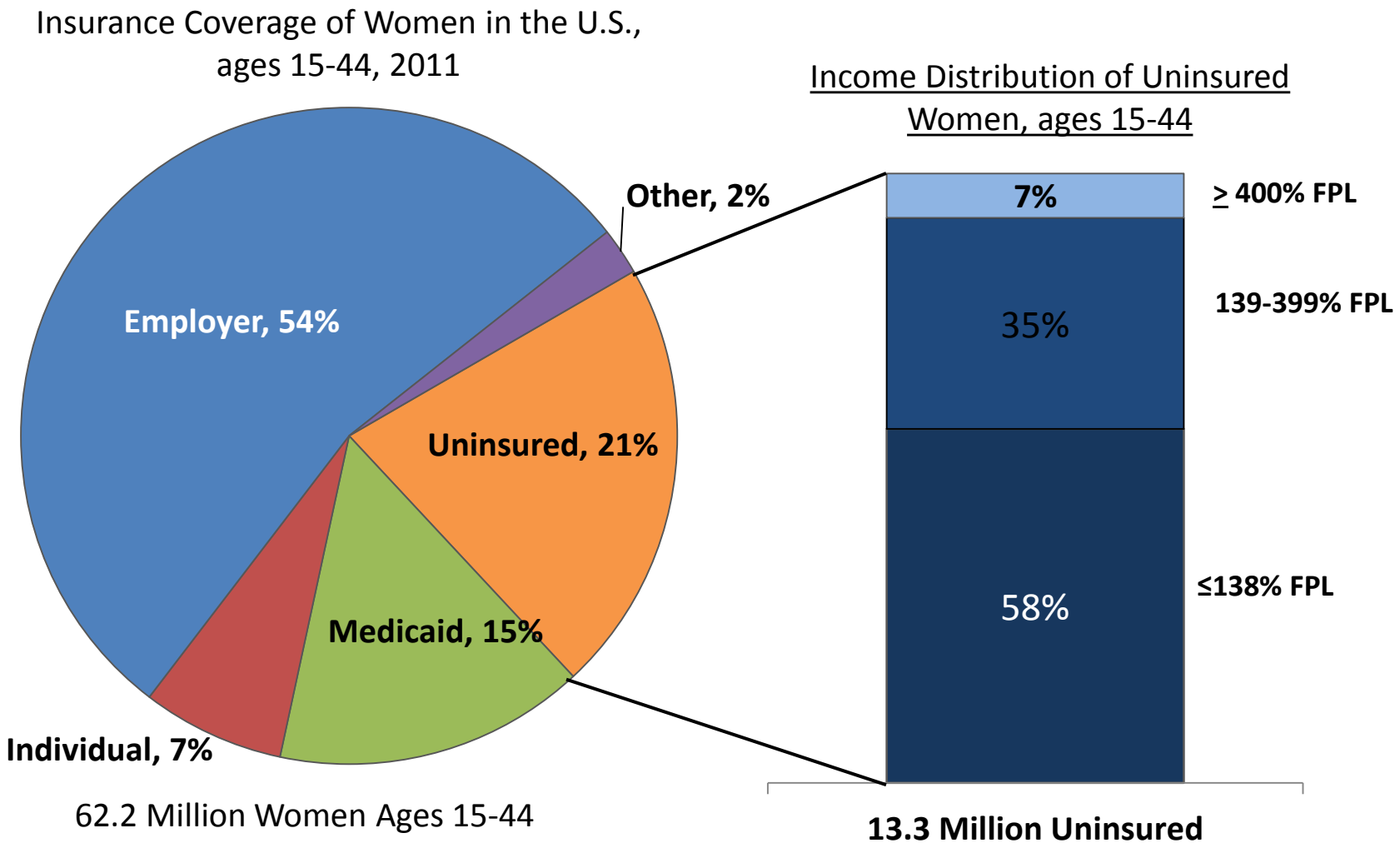
Extra Slides

How People Get Covered Under the ACA

	With Medicaid Expansion	Without Medicaid Expansion
Up to 100% of poverty	Medicaid	Unsubsidized
100-138% of poverty*	Medicaid	Exchange
138-400% of poverty	Exchange	Exchange
>400% of poverty	Unsubsidized	Unsubsidized

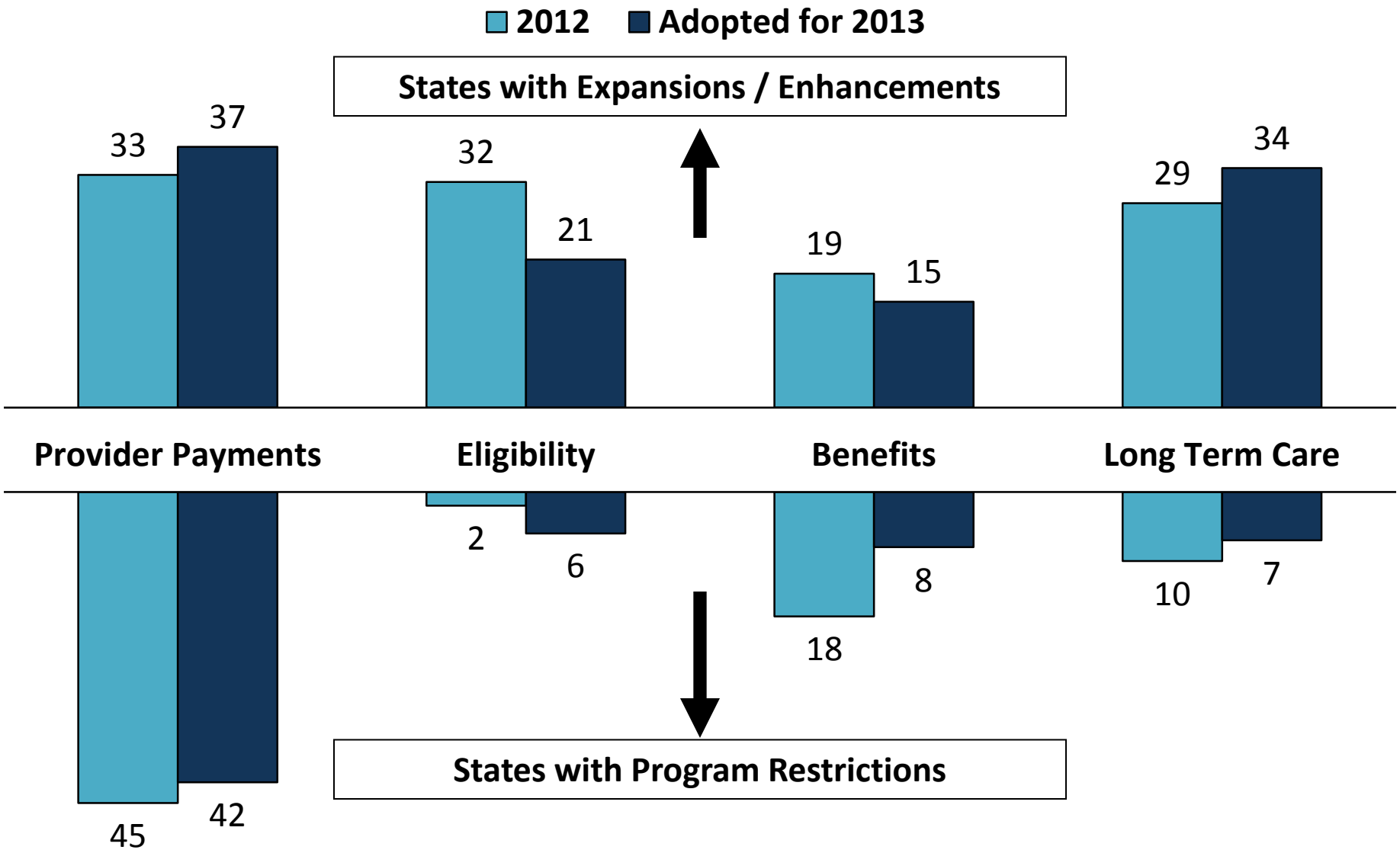
NOTES: Poverty Level is $11,170 for a single person and $23,050 for a family of four
*Medicaid eligibility cut off is 133% FPL, however 5% of income is disregarded, making the threshold 138% FPL
SOURCE: Kaiser Family Foundation

Health Insurance Coverage of Young Women



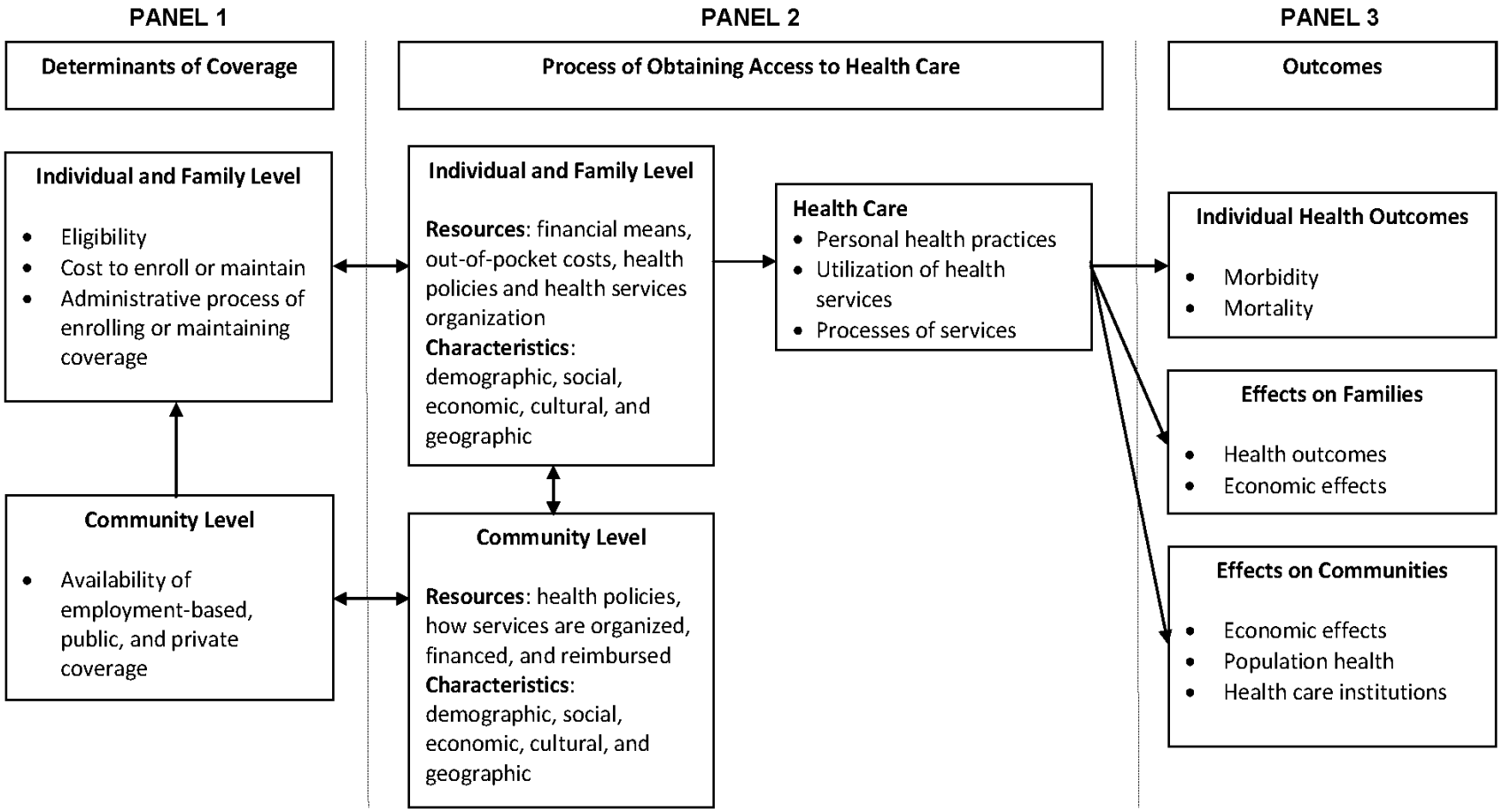
"Other" includes programs such as Medicare and military-related coverage. The federal poverty level for a family of three in 2011 was $18,530.
SOURCE: KFF/Urban Institute (UI) tabulations of 2012 ASEC Supplement to the CPS revised data.

State Policy Actions FY 2012 and FY 2013



NOTE: Past survey results indicate not all adopted actions are implemented. Provider payment restrictions include rate cuts for any provider or freezes for nursing facilities or hospitals.
SOURCE: KCMU survey of Medicaid officials in 50 states and DC conducted by Health Management Associates, October 2012.

Conceptual Model of Healthcare Coverage, Access, and Outcomes



Methods (Aim 1)

- Difference-in-difference-in difference models
  - compares changes in screening in expansion states before & after reform to non-expansion states

$$Y_{ijt} = \beta_0 + \beta_1 X_{ijt} + \beta_2 \text{EXP\_ELIGIBLE}_{ij} + \beta_3 \text{EXP\_STATE}_j + \beta_4 \text{POST}_{jt} + \beta_5(\text{EXP\_ELIGIBLE}_{ij} \times \text{EXP\_STATE}_j) + \beta_6(\text{EXP\_ELIGIBLE}_{ij} \times \text{POST}_{jt}) + \beta_7(\text{EXP\_STATE}_j \times \text{POST}_{jt}) + \beta_8(\text{EXP\_ELIGIBLE}_{ij} \times \text{EXP\_STATE}_j \times \text{POST}_{jt}) + \gamma_j + \tau_t + \mu_{jt} + \varepsilon_{ijt}$$

- *i* indexes individuals, *j* indexes states, *t* indexes years
- EXP_ELIGIBLE_{ij} is an indicator equal to one for individuals whose eligibility status would change from ineligible to eligible due to a Medicaid expansion
- EXP_STATE_j is an indicator equal to one in expansion states
- POST_t = 1 if after state expansion
- *X* = vector of demographics
- γ_j = state fixed effects
- τ_t = year fixed effects
- ε_{ijt} = random error term