

### Combining Data from National Surveys to Improve Estimates of the Population Eligible for Medicaid

#### **Brett Fried, MS**

State Health Access Data Assistance Center/SHADAC University of Minnesota

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#### Co-Authors

Sharon Long, Urban Institute Jesse Kemmick Pintor, SHADAC Peter Graven, SHADAC Lynn Blewett, SHADAC



#### Overview

- Policy context
- Focus of this study
- Data & methods
- Preliminary findings
- Conclusions
- Future research plans



Significant expansion of Medicaid in 2014 under the Affordable Care Act (ACA)

- Nearly all non-elderly adults with family income at or below 138% of poverty will be eligible
- I7 million new Medicaid enrollees predicted by 2016 (CBO, 2012)



## Medicaid expansion includes most but not all low-income adults

- Excluded from Medicaid and, thus, from this expansion:
  - Legal immigrants who have been in the US for less than five years
  - Unauthorized immigrants
    - Individuals who entered the country without approval by immigration authorities
    - Individuals who violated the terms of a temporary admission (e.g., overstaying visa w/out adjusting)



## Need information on population eligible for the Medicaid expansion in 2014

- Federal & state budget projections
- State preparations for expansion
  - Outreach
  - Enrollment processes
  - Care delivery
- Health plan and provider preparations for expanded enrollment & new populations



# Also need information on low-income population NOT eligible for Medicaid in 2014

- Implications for federal, state & community budgets
- States, communities & safety net providers will need to prepare to serve remaining safety net population
- Researchers can use this information to exclude this population from eligibility estimates from national surveys

# Challenge of estimating eligibility for Medicaid expansion across states in 2014

- National surveys include undocumented immigrants but typically do not ask legal status
- For example, not asked in key national surveys that support state estimates of insurance coverage
  - American Community Survey (ACS)
  - Current Population Survey (CPS)
  - National Health Interview Survey (NHIS)
  - Behavioral Risk Factor Surveillance System (BRFSS)



### One national survey does ask legal status: the SIPP

- The Survey of Income and Program Participation is a longitudinal survey where the primary focus is income and public program participation
- The SIPP does ask for immigration status upon entry to the US and if this status has changed to permanent resident
- However, the SIPP is not designed to produce state estimates



### Focus of this Study

 Take advantage of data on legal status in the SIPP and large state sample sizes in the ACS to estimate the populations eligible for and not eligible for the 2014 Medicaid expansion



### Methods

- Apply logical edits to identify non-citizens whose circumstances imply legal status
  - For example, occupation or receipts of public benefits that require legal status
- Use regression-based imputation for remaining non-citizens
  - Estimate model of legal immigration status for adults using data from the 2009 SIPP
  - Use the parameters of the SIPP model to predict immigration status for adults in the 2009 ACS
- Calibrate the ACS predictions to match national estimates of unauthorized population by age and sex from the Office of Immigration Statistics



### Methods (cont'd)

- Use Multiple Imputation (MI) methods to incorporate uncertainty in predicted immigration status
  - Create multiple predictions for each person
  - Combine these predictions to create estimated results
  - Generate standard errors that reflect the uncertainty in estimated legal status due to using predictions from the regression model

# Improvements over existing strategies for imputing legal status in national surveys

- Relies on data on individual's on their immigration status rather than administrative data on population estimates
- Incorporates individual characteristics in the assignment of legal status to support a richer assessment of the populations eligible for and not eligible for Medicaid under the ACA
- Incorporates the uncertainty associated with assigning immigration status using imputation methods.



### **Regression model**

- Predictive model based on prior work at the US Census Bureau and Pew Hispanic Center
  - Variables included: year of entry, place of birth, income, age, race/ethnicity and household variables
  - Model legal status for non-citizen population





## Low-income non-elderly adults likely eligible under the Medicaid expansion<sup>§</sup>

<sup>§</sup> Includes all non-elderly adults with family income at or below 138% of poverty except for undocumented immigrants and legal immigrants subject to the 5-year ban



\*Indicates a significant difference from the US average at the 95% level Source: SHADAC estimates based on ACS, 2009



16

### Percent of eligible low-income non-elderly adults who are uninsured<sup>§</sup>

<sup>§</sup> Percent of all non-elderly adults with family income at or below 138% of poverty except for undocumented immigrants and legal immigrants subject to the 5-year ban who are uninsured



\*Indicates a significant difference from the US average at the 95% level Source: SHADAC estimates based on ACS, 2009



### Percent of excluded low-income non-elderly adults who are uninsured<sup>§</sup>

<sup>§</sup> Percent of low-income undocumented immigrants and legal immigrants who have been in the U.S. for 5 years or less who are uninsured



Source: SHADAC estimates based on ACS, 2009



### Conclusions

- Regression-based imputation is a viable strategy for combining data across national surveys
- States differ in the characteristics of the percent eligible for and not eligible for the Medicaid expansion in 2014
- Better estimates of the size and characteristics of populations eligible for and not eligible for the Medicaid expansion will help states, communities, and providers do a better job in preparing for the changes coming in 2014



#### Next steps

- Explore methods for improving the model specification
- Expand analysis to include eligibility for the Health Insurance Exchanges
- Extend method to impute legal status in other surveys to expand information available to states (e.g., NHIS, CPS)



#### Brett Fried, MS

#### **Senior Research Fellow**

bfried@umn.edu



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