Characterizing the U.S. Medicaid Population by Federal Poverty & Eligibility Pathway:

Demographics, Regional Patterns, and Affordable Care Act (ACA) Expansion Status to Assess Policy Shifts under the One Big Beautiful Bill Act (H.R.1)

Poster # PT20

Douglas L. Leslie[1], Emily Dennis[1], Sameer Kotak[2] 1. Department of Public Health Sciences, Penn State College of Medicine; 2. Yorker Health

BACKGROUND

- Medicaid eligibility is based on income [as a % of Federal Poverty Level (FPL)], categorical eligibility (e.g., disability, age), and state-specific rules.[1]
- Affordable Care Act (ACA) expansion reshaped Medicaid coverage structure.[2]
- Policy proposals such as H.R.1 may alter eligibility and enrollment patterns.[3]

OBJECTIVE

- To characterize Medicaid beneficiaries across FPL strata and eligibility pathways and develop a reproducible framework to identify populations potentially affected by H.R.1-related policy changes.

METHODS

Data Source: 100% MEDICAID (ALL 50 STATES + DC) - FULLY ADJUDICATED CLAIMS VIA CMS VRDC

Population: ~59M Medicaid beneficiaries (Year 2022)

Design: Cross-sectional descriptive analysis

Variables:
- Age
- Sex
- Race/Ethnicity
- FPL category
- State expansion status

- A cohort of 59,089,575 enrollees was analyzed by expansion status and FPL using demographic and regional variables from administrative data across all 50 states and DC via the Penn State CMS VRDC.
- Descriptive statistics characterized proportional distributions and geographic clustering.

RESULTS

Overview:

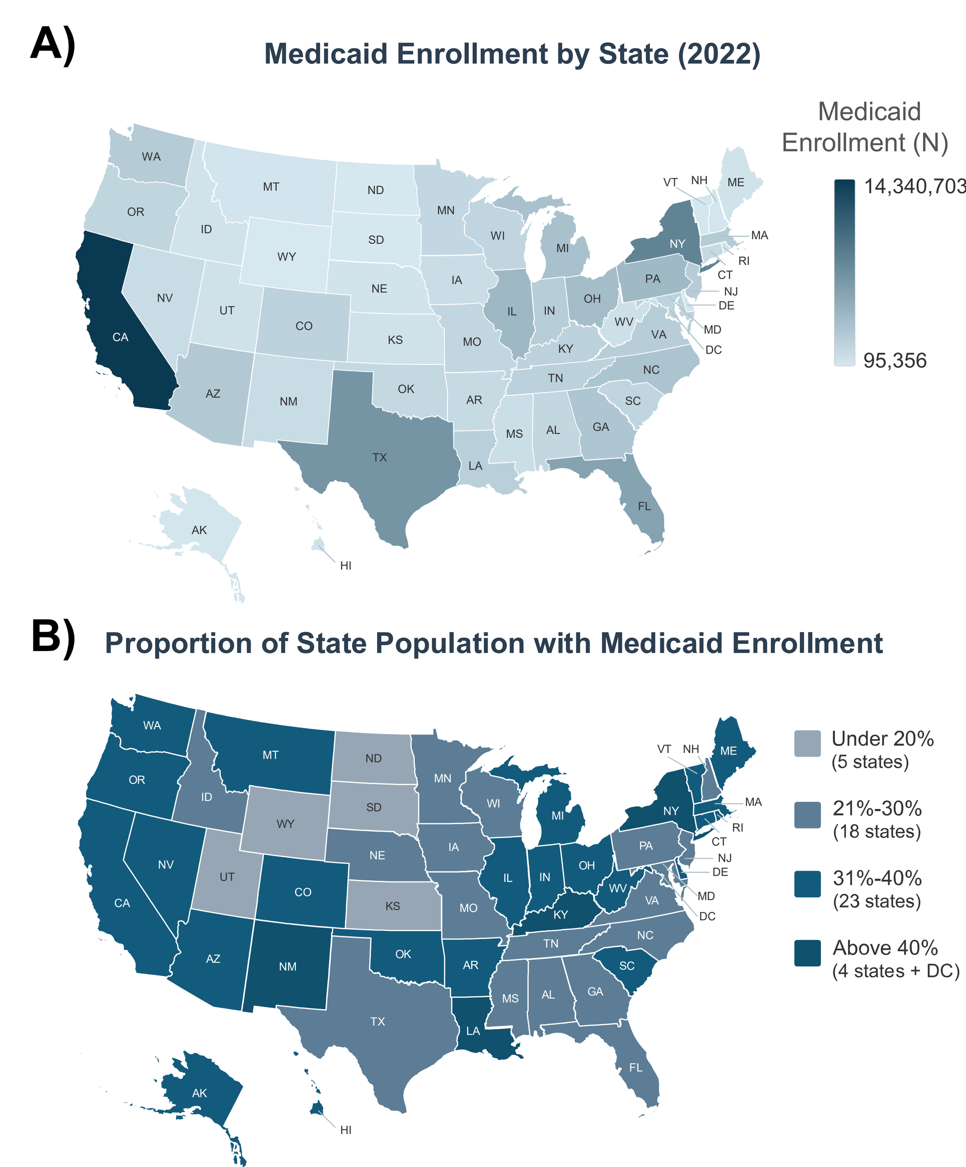
- Nearly 87% (~51M) of beneficiaries had income ≤133% FPL; the majority were <40 years old, female, White, non-Hispanic, and in the South.

Core Population Structure:

- Medicaid enrollment is concentrated in a limited number of large states (**FIGURE 1**).

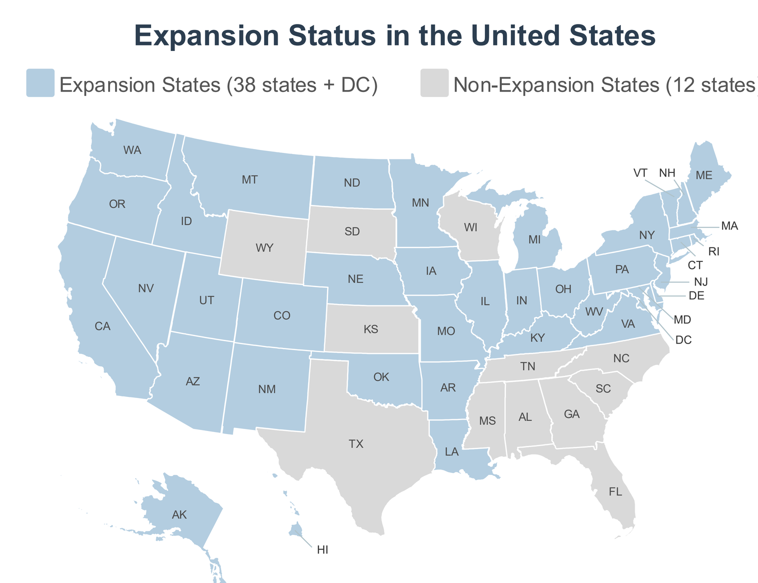
RESULTS (CONT'D)

FIGURE 1. Medicaid Enrollment by State A) Number Enrolled, B) Percent of State Population



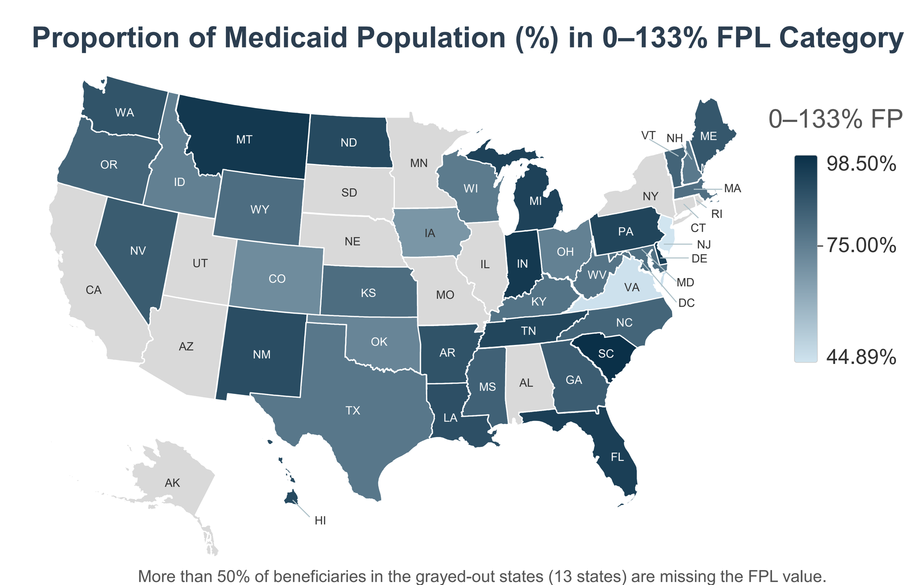
- ACA expansion status varies by region and helps explain differences in Medicaid population composition across states (**FIGURE 2**).

FIGURE 2. ACA Expansion vs Non-Expansion States



- Low-income Medicaid populations cluster differently across states (**FIGURE 3**).

FIGURE 3. % Medicaid Population in 0–133% FPL



- Key differences were noted for age, and race/ethnicity when stratifying by Medicaid expansion status (**TABLE 1**).

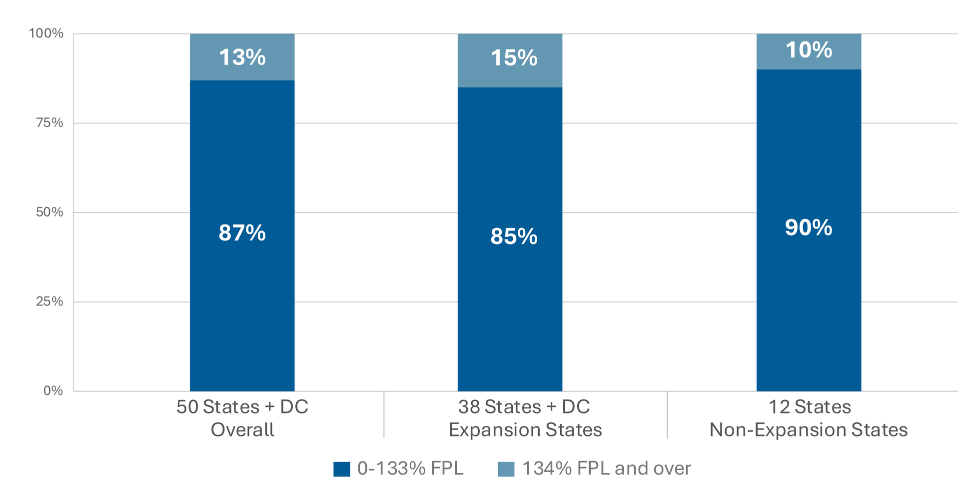
TABLE 1. Key Demographic Differences by Medicaid Expansion Status

	Overall	Expansion States	Non-Expansion States	
	50 States + DC N= 59,089,575	38 States + DC N= 36,660,977	12 States N= 22,428,598	
Category	**% of Total**	**62%**	**38%**	**Absolute Difference**
Age (y)				
<40	71%	68%	76%	9%
≥40	29%	32%	24%	
Race/Ethnicity				
White, Non-Hispanic	39%	43%	32%	-11%
Black, Non-Hispanic	21%	17%	26%	9%
Hispanic, All Races	24%	22%	26%	4%
Remaining Categories	17%	17%	16%	-2%
Sex				
Male	45%	46%	42%	-4%
Female	55%	54%	58%	

Income Structure & Policy Implications:

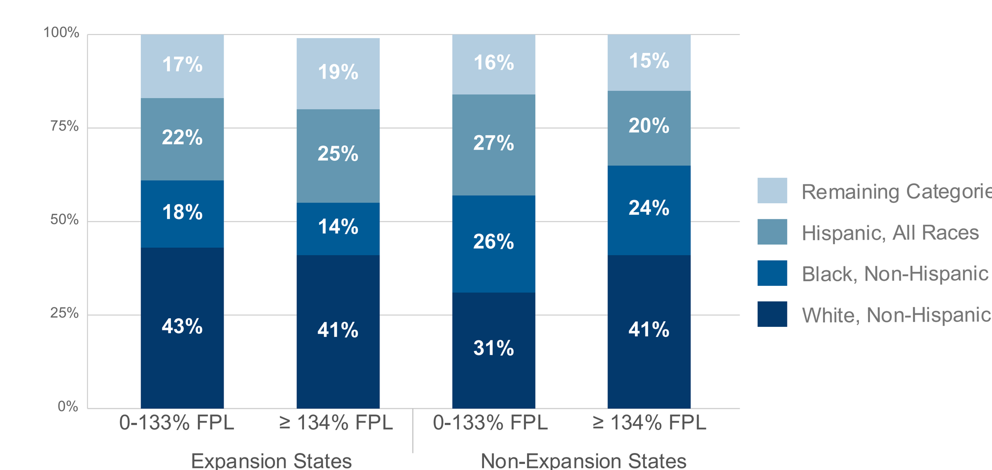
- Income composition differs between expansion and non-expansion states (**FIGURE 4**).

FIGURE 4. Medicaid Income Distribution by Expansion Status



- Demographic differences persist even within identical income strata.
- Expansion states had a higher proportion of non-Hispanic Whites in the 0–133% FPL group than the ≥134% FPL group (43% vs 31%). In the ≥134% FPL group, expansion states had a lower proportion of non-Hispanic Blacks (14%) than non-expansion states (24%) (**FIGURE 5**).

FIGURE 5. Race/Ethnicity by FPL Band and Expansion Status



- Medicaid eligibility pathways are defined using Transformed Medicaid Statistical Information System (T-MSIS) eligibility group codes, capturing income- and category-based qualification criteria (**FIGURE 6**).

FIGURE 6. T-MSIS Eligibility Group Codes across Medicaid Qualification Pathways

Analytic Framework to Identify Policy-Relevant Medicaid Population

- **Step 1: Define Policy-Relevant Population**
  Restrict to adults aged 19–64 years
  ↓
- **Step 2: Isolate Non-Categorical Enrollment**
  Exclude beneficiaries qualifying through disability, pregnancy, pediatric, or other categorical pathways
  ↓
- **Step 3: Apply ACA-aligned Income Screen**
  Use the **0–133% FPL band** as the analytic screen corresponding to the ACA adult group in T-MSIS/CMS eligibility definitions
  ↓
- **Step 4: Restrict to Expansion States**
  Limit to states that adopted ACA Medicaid expansion
  ↓
- **Step 5: Confirm Eligibility Pathway Using T-MSIS Codes**
  Identify ACA expansion adults using eligibility group codes

CONCLUSIONS

- Medicaid populations are heterogeneous across states, with expansion status driving meaningful differences in income distribution and demographic composition.
- ACA expansion adults [non-categorical individuals aged 19–64 enrolled via income-based eligibility (≤133% FPL) in expansion states] represent the population most directly exposed to H.R.1-related policy changes.
- The framework enables precise identification of patients at risk of coverage loss or eligibility redetermination.
- This approach provides a scalable foundation to quantify H.R.1 impact at the therapeutic and product level, supporting evidence generation for access planning and revenue risk assessment using real-world ALL 50 US State (+DC) Medicaid claims data.

DISCLOSURES:
DL and ED are employees of Pennsylvania State University (PSU); SK is an employee of Yorker Health. Study was conducted under a collaborative research agreement between PSU and Yorker Health. No external funding was received.

REFERENCES:
1. Roberts ET, et al. *JAMA*. 2022;328(11):1085-1099.
2. Kishore S, et al. *Am J Public Health*. 2023;113(5):482-483.
3. Soni A, et al. *JAMA Health Forum*. 2025;6(3):e250092.

ABBREVIATIONS:
ACA, Affordable Care Act; CMS, Centers for Medicare and Medicaid Services; FPL, Federal Poverty Level.

Contact details:
Douglas L. Leslie, PhD; **Email:** dleslie@pennstatehealth.psu.edu
Sameer Kotak, MS, MBA; **Email:** sameer@yorkerhealth.com

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