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Achieving Better Care and Lower Costs in Health Care for Low-Income Populations

The Case of the New Jersey Medicaid ACO Demonstration Project

Public Health & Preventive Medicine Grand Rounds
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Outline

- What is “accountable care”?
- Can accountable care models work for low-income populations?
- The NJ Medicaid ACO Demonstration Project
- Findings from the *Advancing Safety Net ACOs Project*
- Conclusions & Implications

"Accountable Care"

- Core strategy to achieve the "Triple Aim"[1]
  - Improving patient experiences (quality, satisfaction)
  - Improving population health
  - Reducing per capita cost
- Three distinguishing features
  - Financial incentives to reduce cost (typically "shared savings")
  - Defined populations
  - Quality standards and metrics to guard against stinting
- Goal is to reduce spending on services of dubious medical value and to redirect resources to…
  - High-value but under-provided services (e.g., primary care, preventive services)
  - Savings to payers.

[1] Institute for Healthcare Improvement, see: http://www.ihi.org/offerings/initiatives/tripleaim/pages/default.aspx

"Accountable Care" (continued)

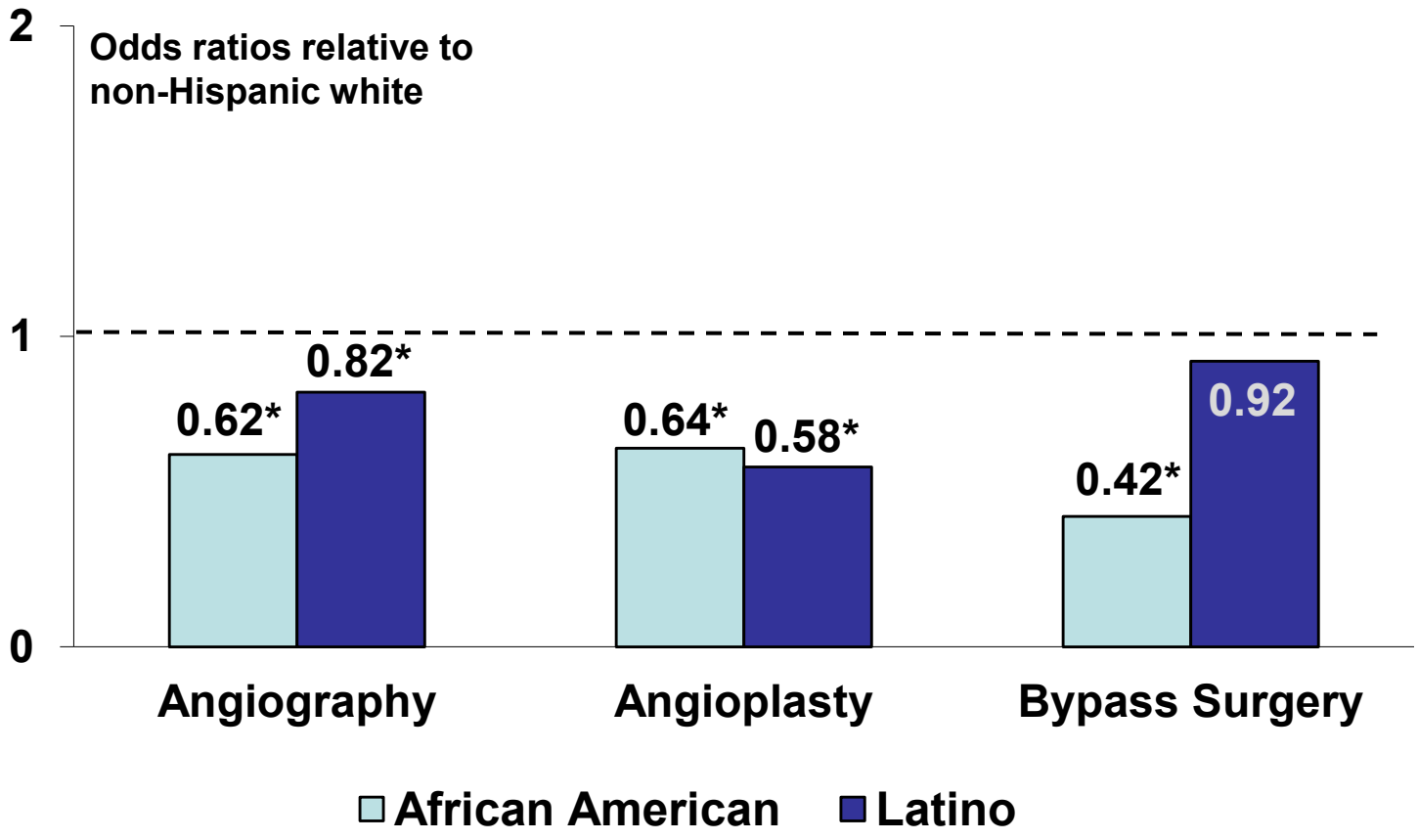
- A major focus of the Affordable Care Act (ACA)
  - Medicare Shared Savings Program
  - Pioneer Accountable Care Organization (ACO) demonstration program
  - Comprehensive Primary Care Initiative demonstration program
  - And others
- Emerging initiatives of other payers
  - Privately insured
  - Medicaid.

Can accountable care work for low-income populations?

On one hand…

- The poor do not over-utilize expensive/high margin specialty care and procedures that can be reduced to achieve savings
- High prevalence of undiagnosed and untreated health problems that better care would uncover, possibly leading to added cost

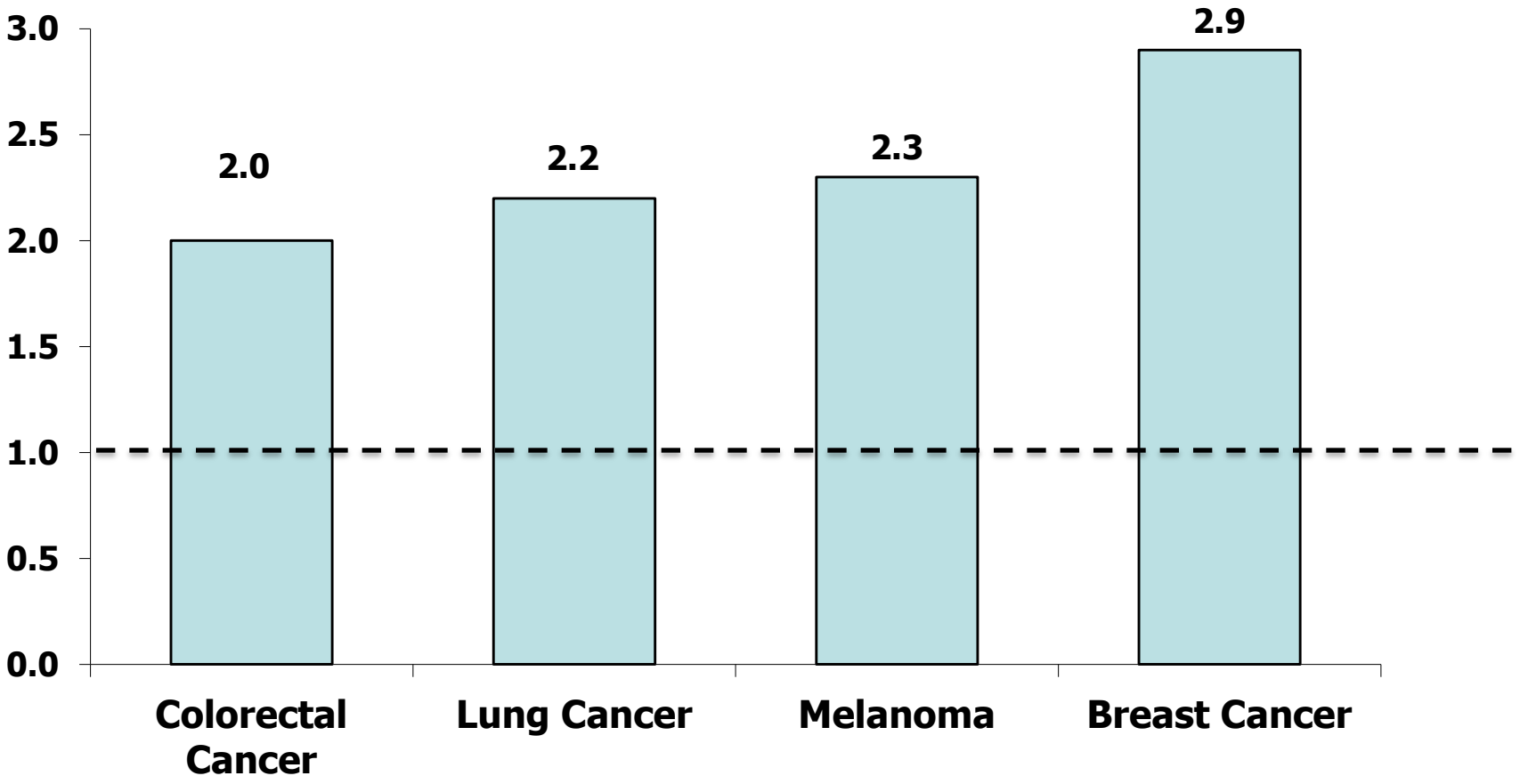
Ratio of Cardiac Interventions Among Medicare Patients Hospitalized with an Acute Myocardial Infarction, by Race/Ethnicity



*Difference is statistically significant after adjustment.
NOTE: Odds ratios are adjusted for age, sex, insurance, health status, and disease severity. Data for 1994-95.
DATA: Ford et al. 2000.
SOURCE: Kaiser Family Foundation, *Key Facts: Race, Ethnicity and Medical Care*, 2003, Figure 23

Insurance Coverage and Late-Stage Cancer Diagnosis

Relative odds of late stage Dx for uninsured vs. privately insured



NOTE: Odds ratios were adjusted for age, sex, race/ethnicity, facility type, region, and income and education on basis of postal code. They represent the odds of being diagnosed with stage III or state IV cancer vs. stage I cancer. Analysis based on cases occurring between 1998-2004.
SOURCE: Kaiser Family Foundation, based on Halpern MT et al, Association of insurance status and ethnicity with cancer stage at diagnosis for 12 cancer sites: a retrospective analysis." *The Lancet Oncology*. March 2008.

Can accountable care work for low-income populations?

On the other hand…

- Health care for low-income populations is frequently fragmented and occurs late in the course of illness
- High rates of avoidable emergency department and hospital care

Medicaid ACO D ect

NJ PL 2011, Ch. 114

THE NEW YORKER

MEDICAL REPORT

THE HOT SPOTTERS

Can we lower medical costs by gi

by Atul Gawande JANUARY 24, 2011

In Camden, New Jersey, medical costs. Photograp
If Camden, New Jersey, medical costs, it will hav 2001, a twenty-two-year- station wagon through a campus. The victim lay driver's side, as if the ca therapist and a volunteer police waved them back.
"He's not going to m
"He's pretty much dead." She called a physician, and he ran to the scene with a stethoscope and a p

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Primary Care Physician

Founder and Executive Director

Camden Coalition of Healthcare Providers

Camden, NJ

Age: 44

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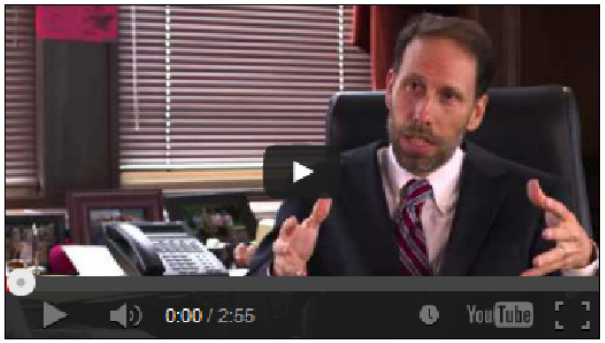

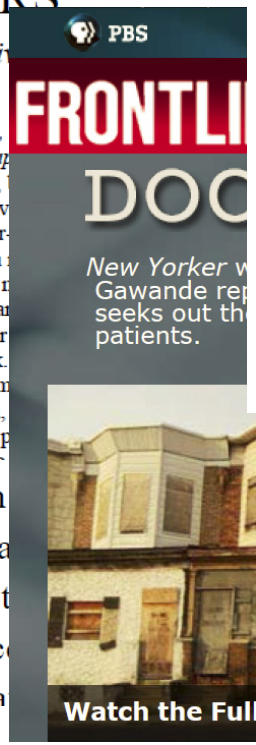

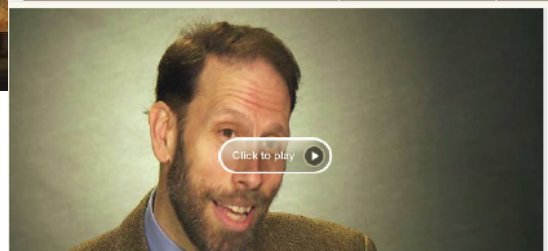

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Key Features of the NJ Medicaid ACO Demonstration

- Three year demonstration
- Geographically defined population with 5,000+ Medicaid beneficiaries
- Accountable for all fee-for-service spending, managed care plans may voluntarily participate
  - Most enrollment is in managed care
- Must incorporate as NJ non-profit with multi-stakeholder board
  - Hospitals, clinics, private physicians, behavioral health providers, dentists, social service agencies or organizations, and patients
- 21 required quality measures, plus 6 from list of optional measures
- ACOs propose operational and gainsharing plans
- State reviews plans, certifies ACOs, confers anti-trust immunity, evaluates, recommends next steps.

Comparison of key features of Medicare and NJ Medicaid ACOs

Program Features	Medicare Shared Savings Program	NJ Medicaid ACO Legislation
Patients	Passive assignment by plurality of primary care	All patients in defined geographic area
Providers	Providers of primary medical care, others optional	All area hospitals, 75% of Medicaid private practices, & behavioral health providers
Managed Care	Excludes Medicare Advantage	Voluntary participation
Financing	Complex shared savings formula, favors Medicare and larger ACOs[1]	Shared savings formula to be proposed by ACOs, approved by Medicaid

[1]DeLia D, D Hoover, JC Cantor. 2012. "Statistical Uncertainty in the Medicare Shared Savings Program" *Medicare & Medicaid Research Review*. 2(4) E1-E16.

Comparison of key features of Medicare and NJ Medicaid ACOs (continued)

Program Features	Medicare Shared Savings Program	NJ Medicaid ACO Legislation
Financial Risk	Two tracks: "one-sided" and "two sided", all must bear some risk	"One sided" only, no risk if costs increase
Minimum savings rate	Must achieve 2% to 3.9% savings (depending on # patients & risk model) before sharing in savings	No MSR required
Treatment of outliers	Exclude top 1% from savings calculations	Included in savings calculations

Implementation of the NJ Medicaid ACO Demonstration

- Application guidance, quality metrics, etc. posted by Medicaid[1]
- Final regulations due out next month
- ACO certification expected by mid-2014
  - Camden, Trenton, Newark, and perhaps others
- One managed care plan (United Healthcare) has contracted with Camden to participate, other discussions underway
- Toolkit for ACO business planning by the Center for Health Care Strategies and CSHP[2]
- CSHP guidance on savings measurement[3] and evaluation plans in collaboration with NJ Medicaid.

[1] Available at: http://www.state.nj.us/humanservices/dmahs/info/aco.html

[2] Houston R, McGinnis T, et al. *The New Jersey Medicaid Accountable Care Organization Business Planning Toolkit.* Hamilton NJ: Center for Health Care Strategies, 2013. Available at: http://www.chcs.org/publications3960/publications_show.htm?doc_id=1261530#.UtakldJDt8E

[3] DeLia D and Cantor JC. *Recommended Approach for Calculating Savings in the NJ Medicaid ACO Demonstration Project*. New Brunswick, NJ: Rutgers Center for State Health Policy, 2012. Available at: http://www.cshp.rutgers.edu/Downloads/9290.pdf

Advancing Safety Net ACOs Project

Objective

- Identify opportunities to save *hospital costs* by improving care in selected low-income areas of New Jersey

Approach

- Select 13 local potential "Medicaid ACO regions" with at least 5,000 Medicaid beneficiaries
  - Collectively 47% of Medicaid enrollment
- Examine potentially avoidable hospital utilization & cost savings from improving care.

Data and Measures

- New Jersey Uniform Billing Hospital Discharge Data: 2008-2010
  - Longitudinal, linked to Charity Care program and mortality records
- Measures of potentially avoidable hospital use among adults
  - Avoidable inpatient admissions[1]
  - Avoidable treat-and-release emergency department (ED) visits[2]
  - Non-traumatic oral care visits to the ED (*all ages*)
  - Inpatient "high use" (top 95.7th percentile, 4+ stays 2008-10)
  - ED treat-and-release "high use" (top 95.0th percentile, 6+ visits 2008-10)
- Potential cost savings estimated by comparing each community to the region with best cost performance
  - Lowest cost for care delivered to high users per hospital user.

[1] AHRQ Prevention Quality Indicators Technical Specifications - Version 4.4, March 2012; http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx

[2] New York University avoidable ED visit methodology, available at: http://wagner.nyu.edu/faculty/billings/nyued-background.php

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13 Candidate ACO Regions
Camden*
Greater Newark**
Trenton***
Asbury Park-Neptune
Atlantic City-Pleasantville
Elizabeth-Linden
Jersey City-Bayonne
New Brunswick-Franklin
Paterson-Passaic-Clifton
Perth Amboy-Hopelawn
Plainfield, North Plainfield
Union City-W. NY- Guttenberg-N. Bergen
Vineland-Millville

*Camden zip codes (08102, 08103, 08104 & 08105)

**Newark zip codes (07102, 07103, 07104, 07105, 07106, 07107,07108, 07112, & 07114)
East Orange zip codes (07017, 07018)
Irvington zip code (07111)
Orange zip code (07050)

***Trenton zip codes (08608, 08609, 08611, 08618, 08629 & 08638)

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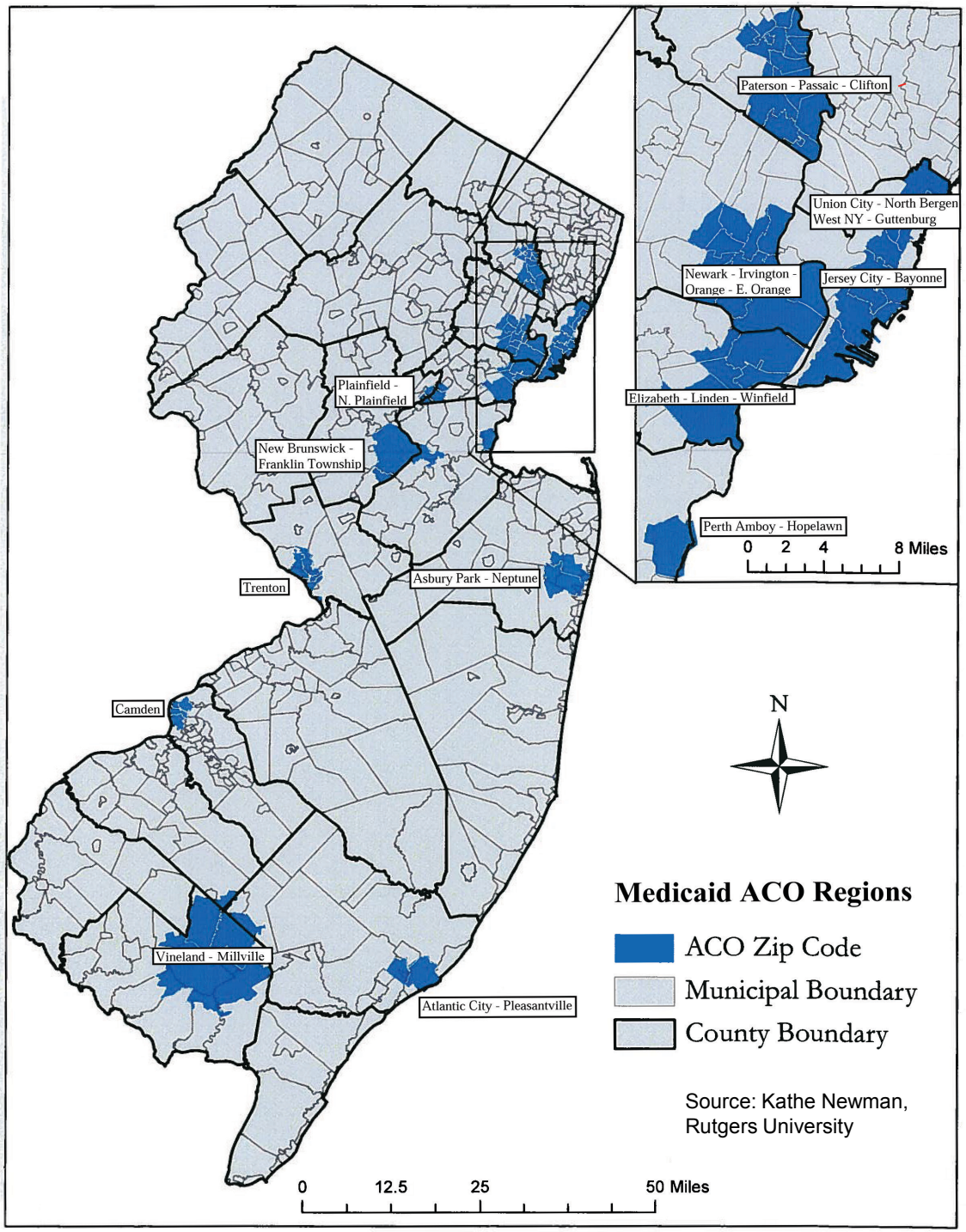
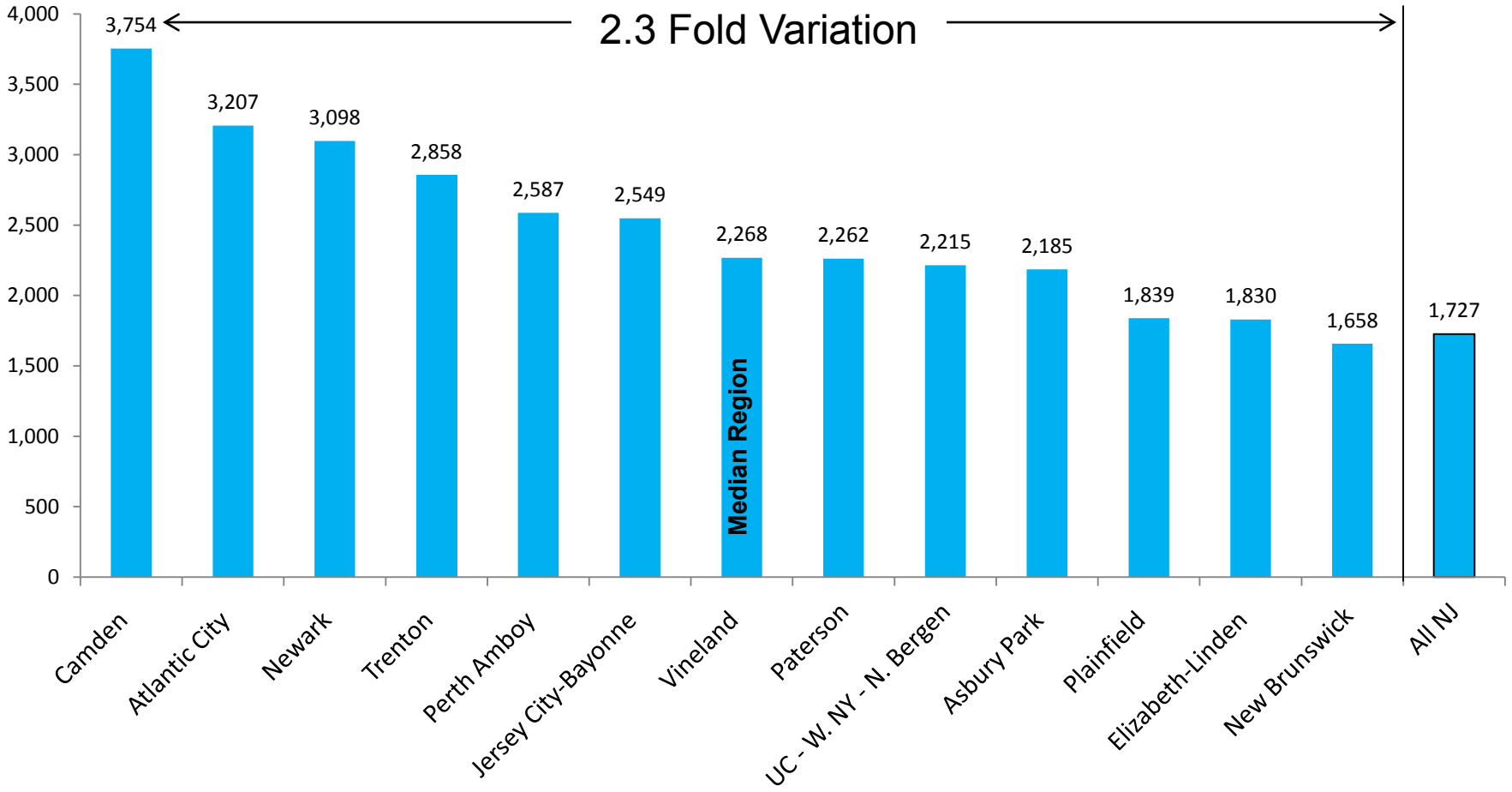
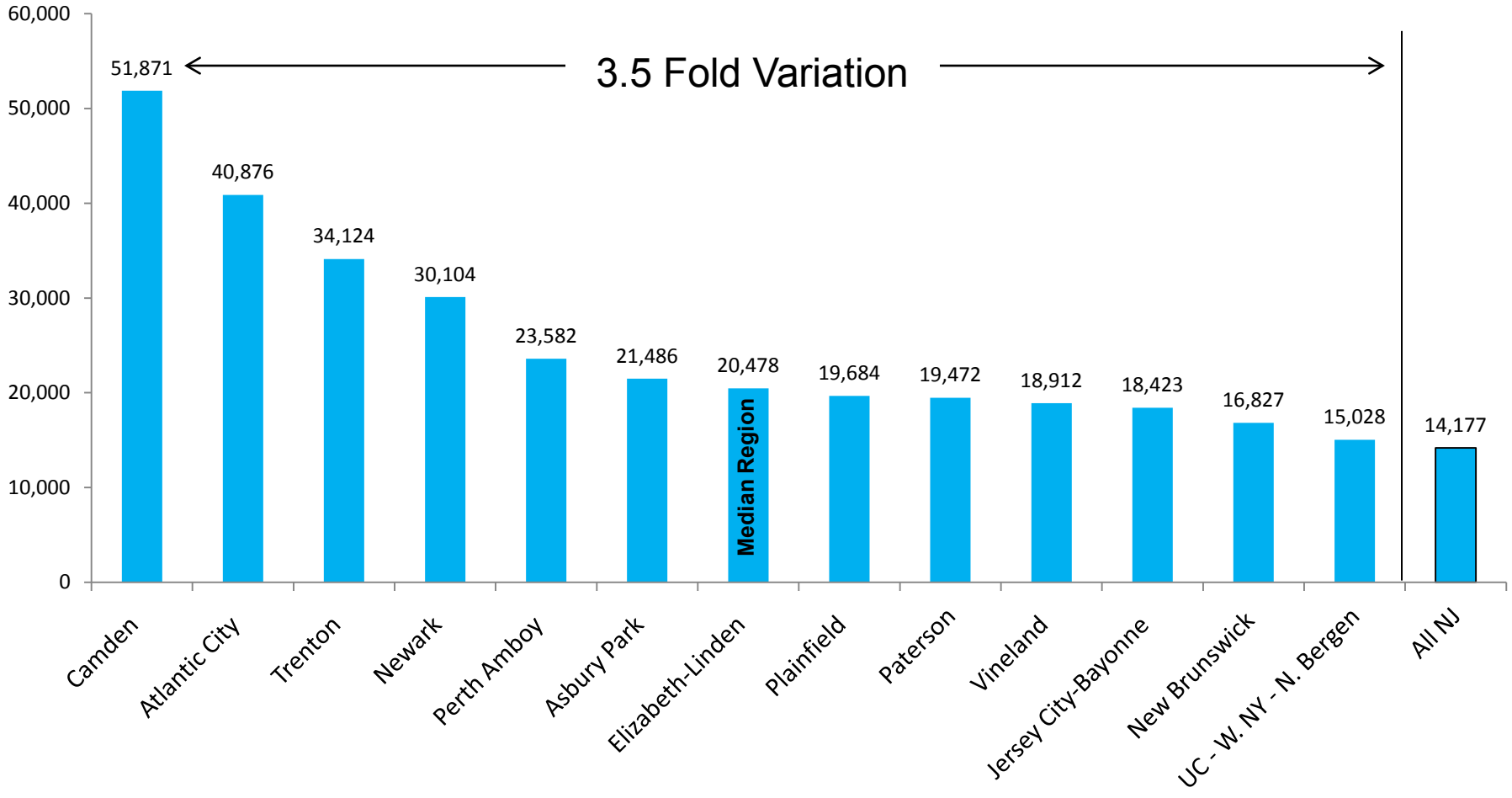


Rates of Avoidable Inpatient Hospitalizations



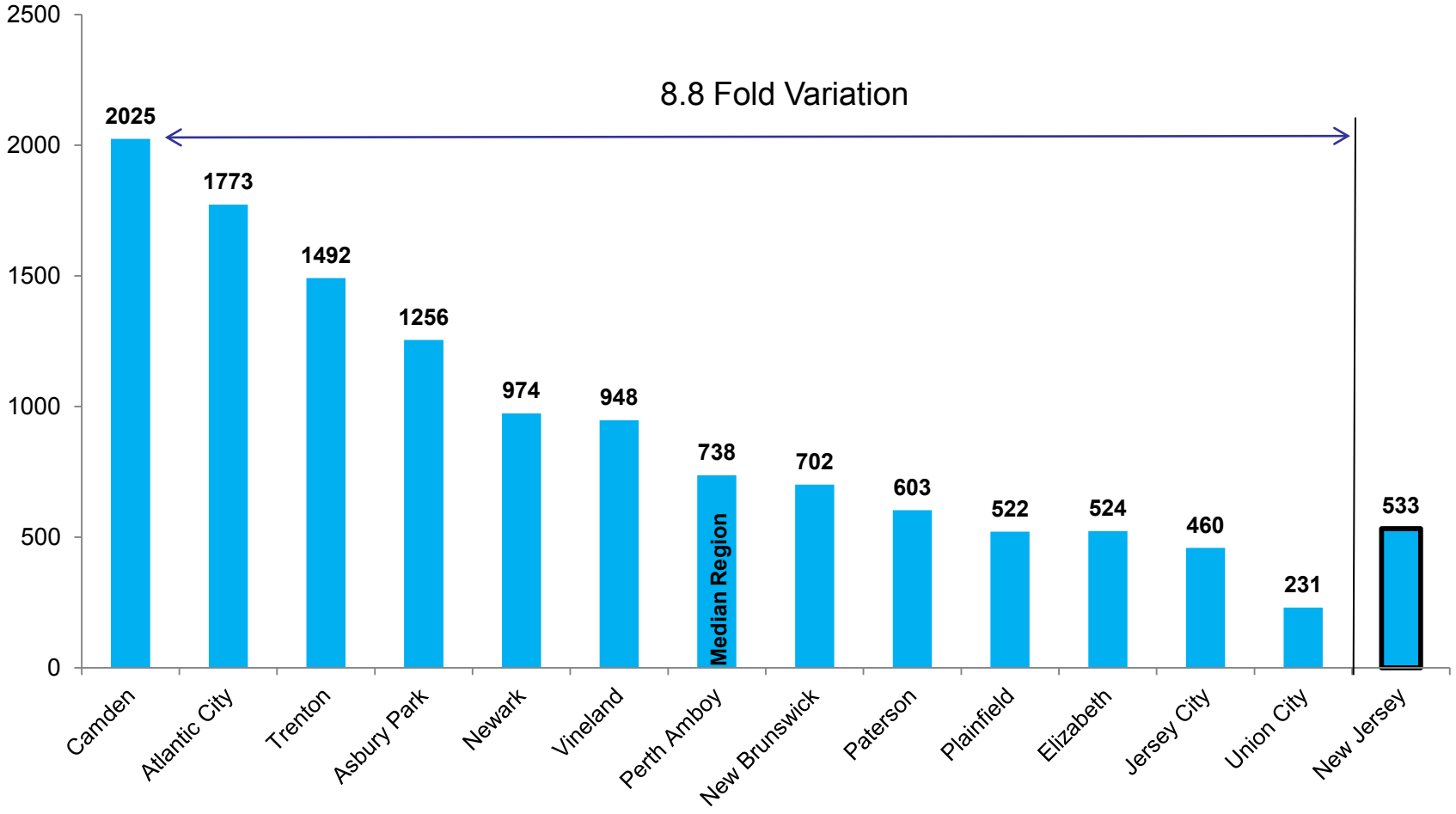
Rate per 100,000 adult population, age-sex adjusted

Rates of Avoidable Emergency Department Visits



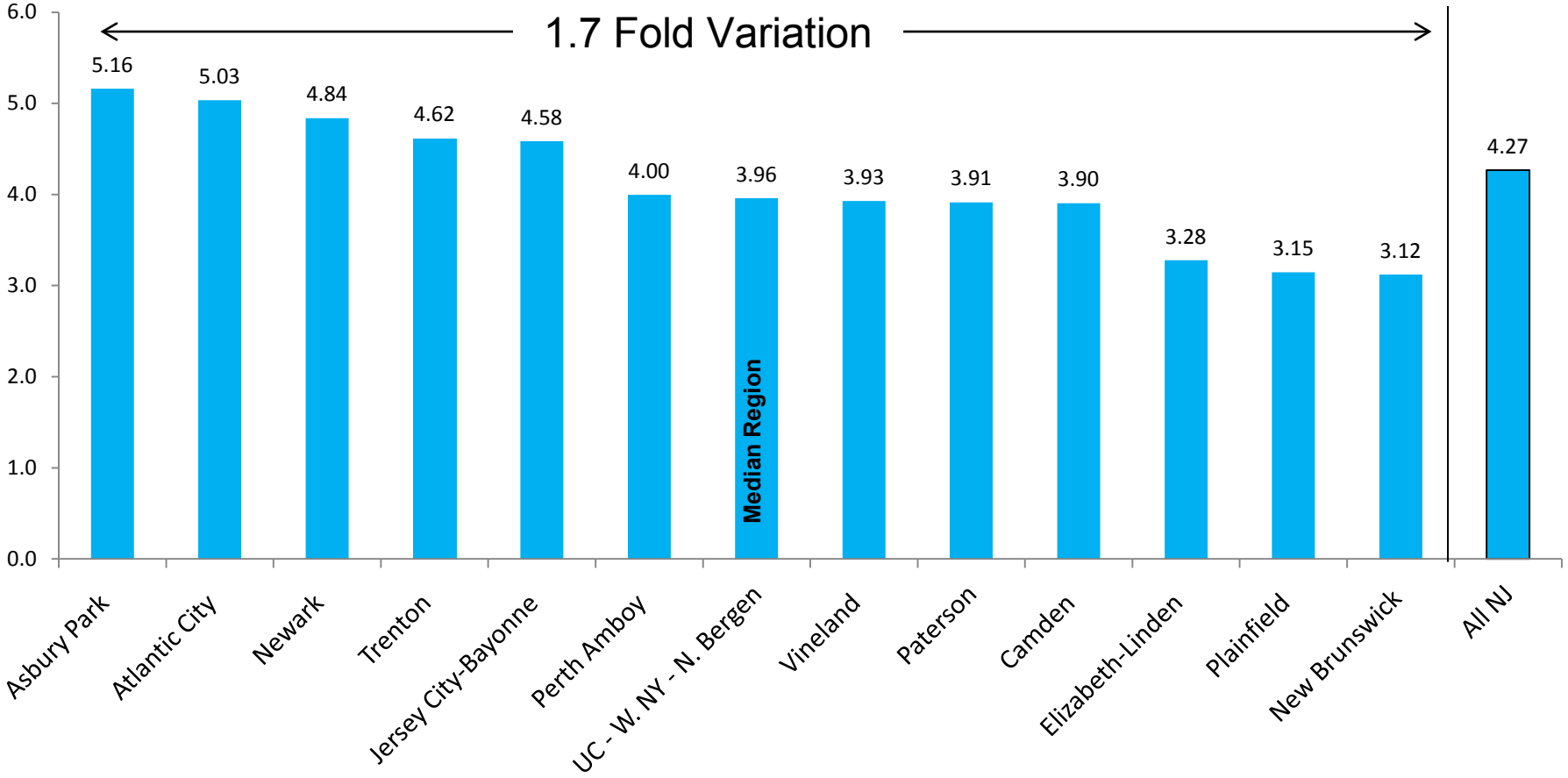
Rate per 100,000 adult population, age-sex adjusted

ED Visits for Non-Traumatic Oral Care



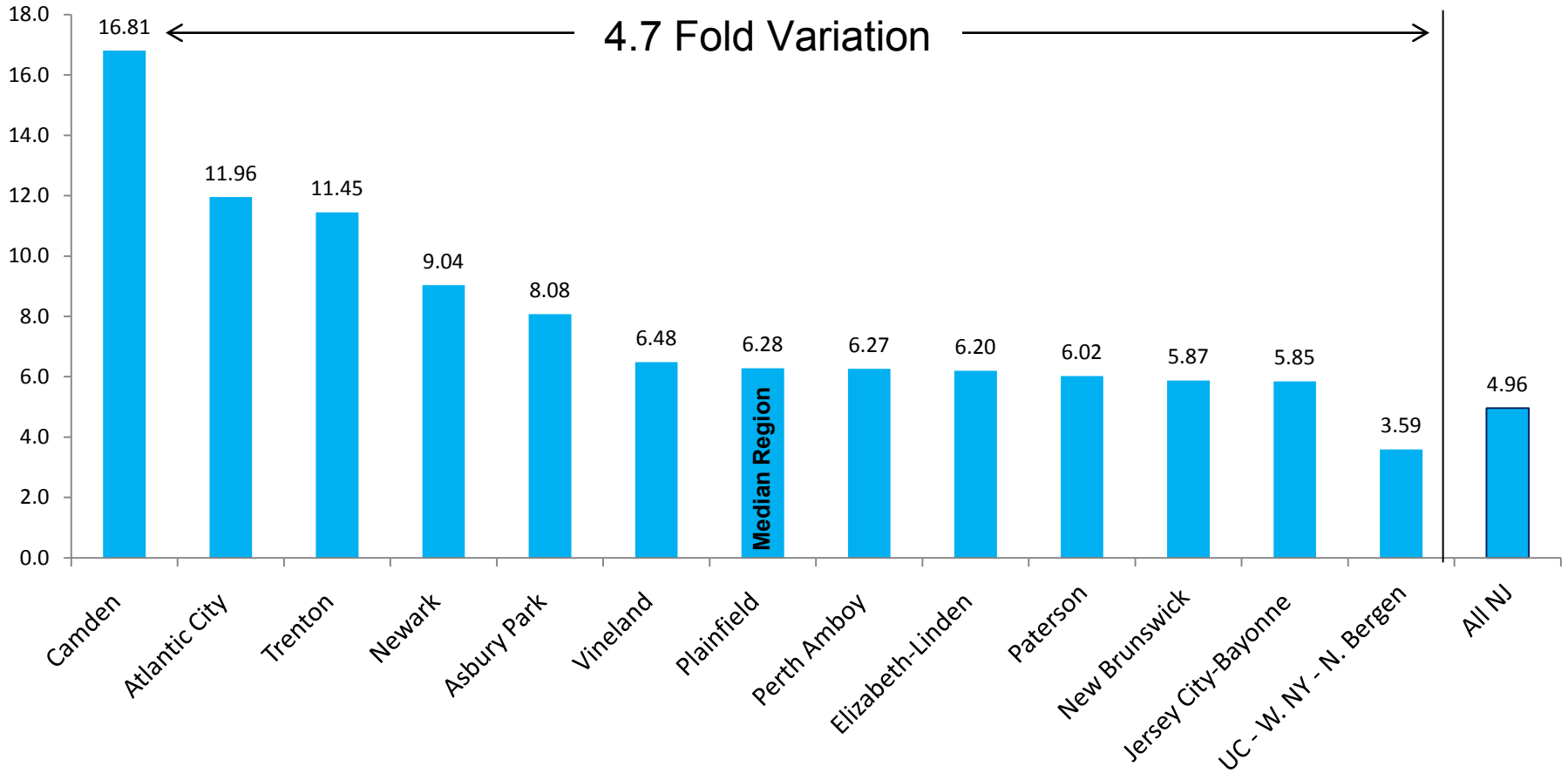
Rate per 100,000 population (all ages), age-sex adjusted

Rates of Inpatient High Use



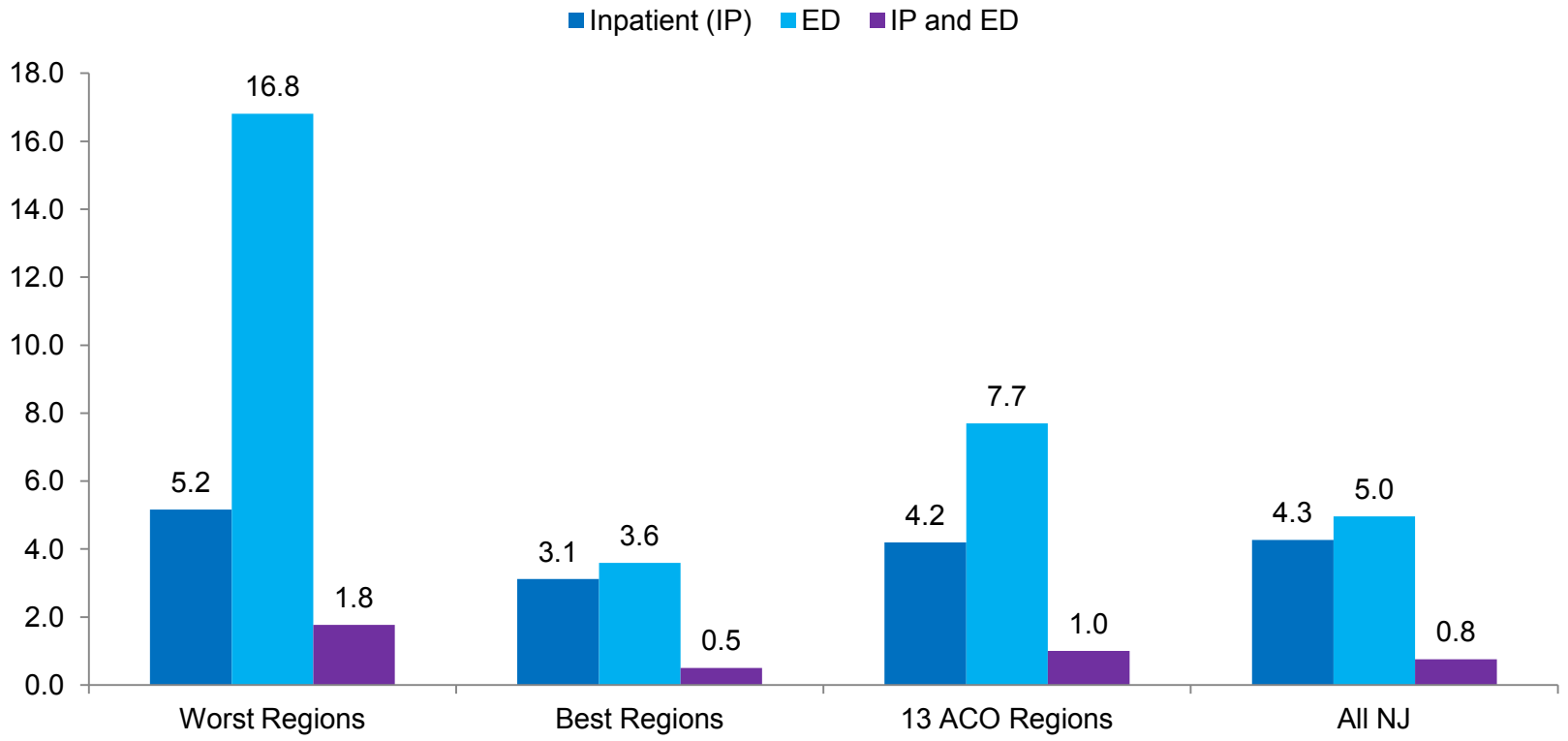
Rate per 100 adult hospital users

Rates of Treat-and-Release ED High Use



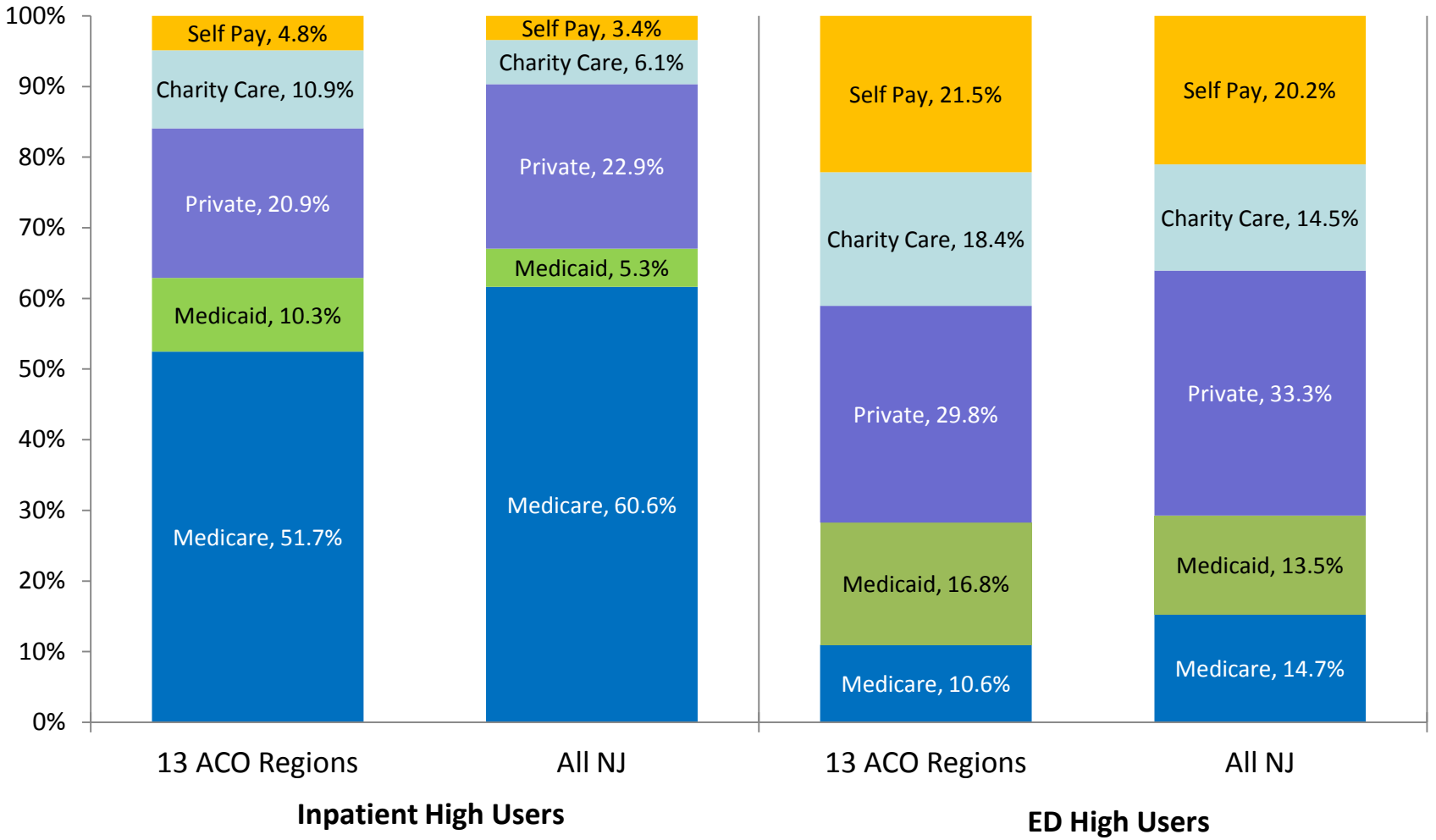
Rate per 100 adult hospital users

Few Patients are *Both* Inpatient and ED High Users



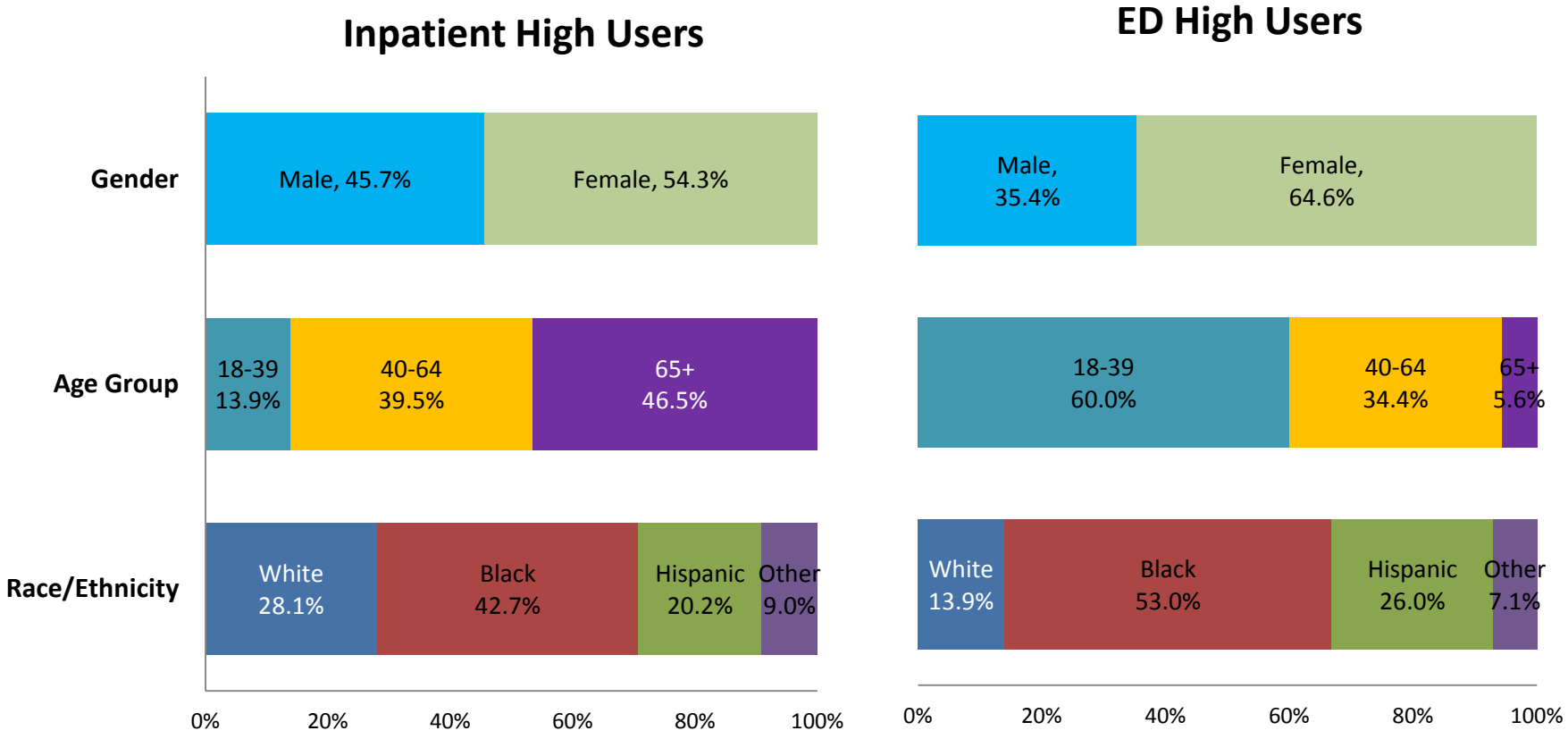
High users per 100 adult hospital users with high inpatient use (IP), high treat-and-release ED use, or *both* high IP and ED use.
Worst performing regions for these three measures are Asbury Park, Camden and Atlantic City.
Best performing regions for the first measure is New Brunswick, and for the remaining two is Union City.

Very Different Payer Mix of Inpatient and ED High Users



Demographics also vary for Inpatient and ED High Users

13 ACO Regions



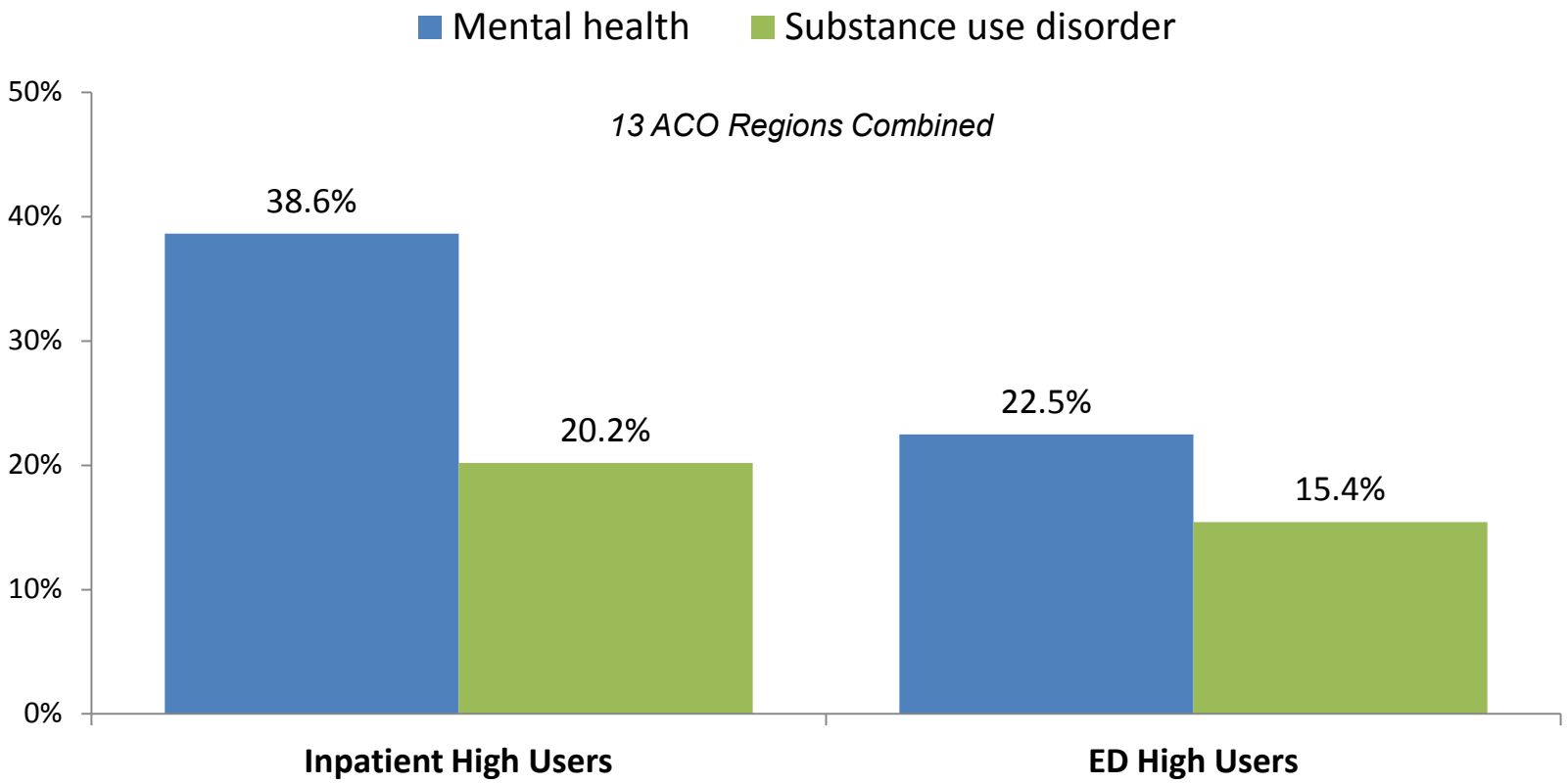
High ED users are more likely to be women, younger, and minority compared to high inpatient users

Top Five Principal Diagnoses

Chronic conditions common among inpatient high users and vague symptoms common among ED high users

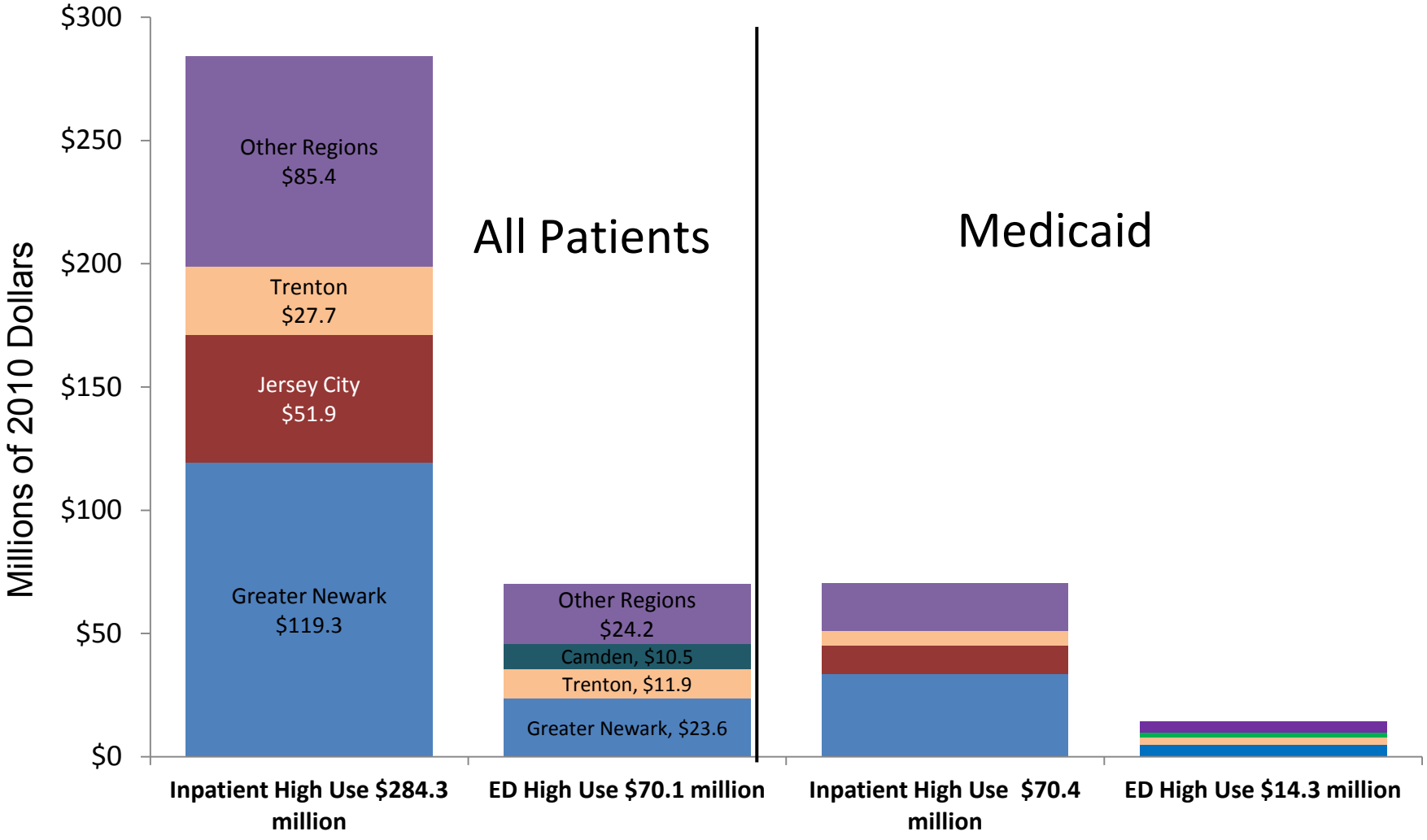
Inpatient High Users	ED High Users
Heart failure	Other symptoms involving abdomen and pelvis
Septicemia	Symptoms involving respiratory system and other chest symptoms
Diabetes mellitus	Other and unspecified disorders of back
Other forms of chronic ischemic heart disease	Asthma
Symptoms involving respiratory system and other chest symptoms	General symptoms

High Users Commonly have Behavioral Health Co-Morbidities

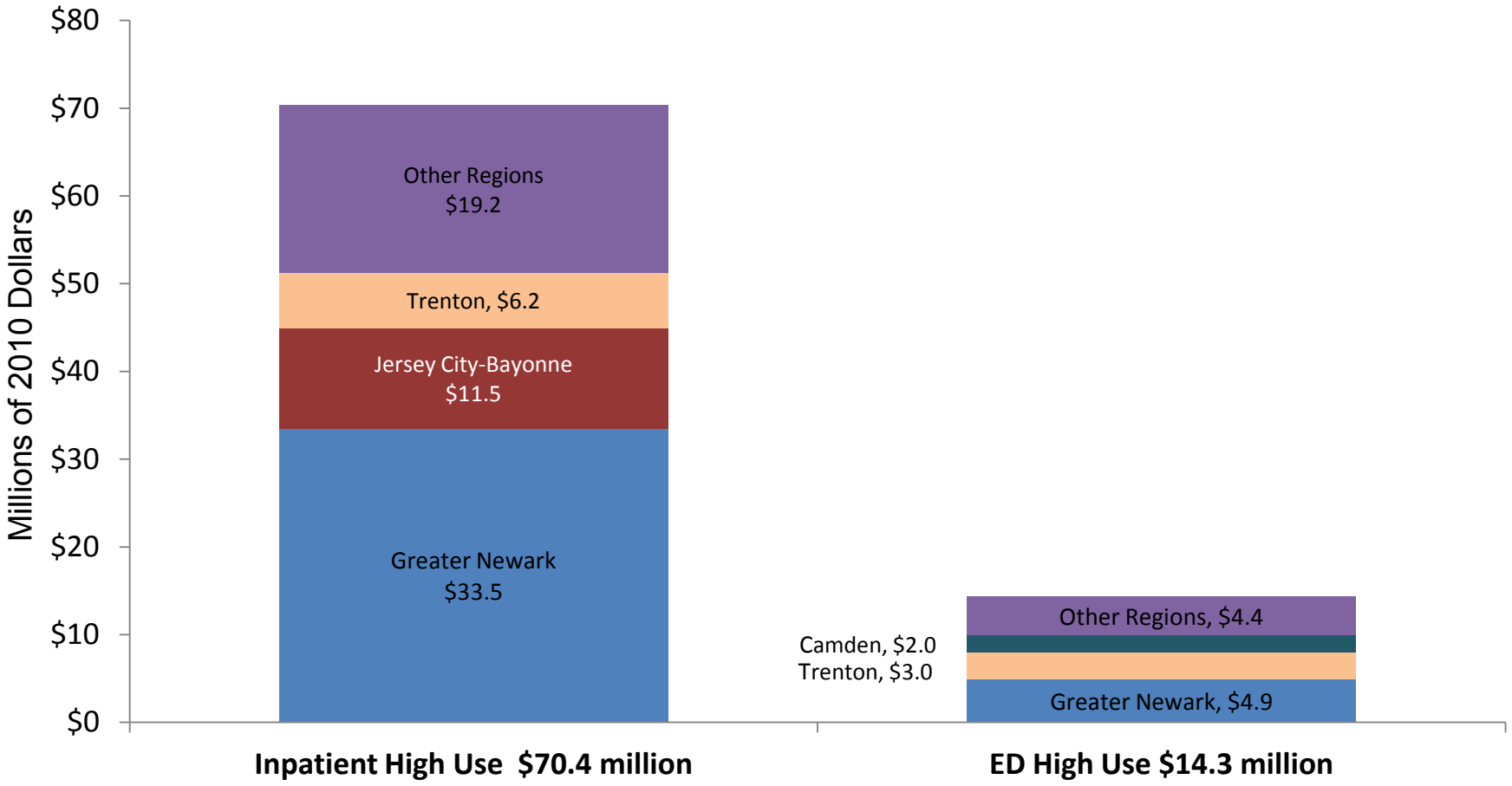


"Mental health" diagnoses includes substance use diagnoses
Percentages represent proportion of high use inpatient stays or ED visits

Regions with highest savings potential



Regions with highest Medicaid savings potential



Implications & Discussion

- **Wide variation across the 13 communities suggests improvement is achievable**
  - The best performing communities do about as well as state average, but on average, ACO regions perform much worse than state average
  - Poor performance most evident in Camden, Atlantic City, Newark, Trenton
- **Substantial hospital savings if the 13 communities achieved the cost profile of the best performing area among them**
  - $284 million from reduced **inpatient high user** costs (2010 $)
  - $155 million from reduced **avoidable inpatient and emergency department** costs
  - $70 million from reduced **emergency department high user** costs
- **Degree to which policy/practice interventions can reduce variations unclear**
  - Additional work under way to identify sources of variation

Implications & Discussion

- **Utilization patterns can inform interventions**
  - High burden of behavioral health problems among high users
  - Payer mix and demographics different for inpatient and ED users
  - Potential savings greatest from reducing avoidable *inpatient* use
- **NJ Medicaid ACO Demonstration offers the opportunity to test the extent to which interventions can achieve the Triple Aim**
  - Managed care participation may be limiting factor
  - Initial grant support for ACOs should lead to strong test of concept

Thank You

More NJ Medicaid ACO resources available at:
http://www.cshp.rutgers.edu/content/medicaid-acos