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Advancing New Jersey Safety Net ACOs: New Findings on Opportunities for Better Care and Lower Costs

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Objective

- Identify opportunities to save hospital costs by improving care in candidate ACO regions within New Jersey

Approach

- Select candidate ACO regions with at least 5,000 Medicaid beneficiaries
  - Camden, Greater Newark, and Trenton
  - 10 other low-income communities
- Examine patterns of hospital utilization
- Estimate potential cost savings from improving care in the community

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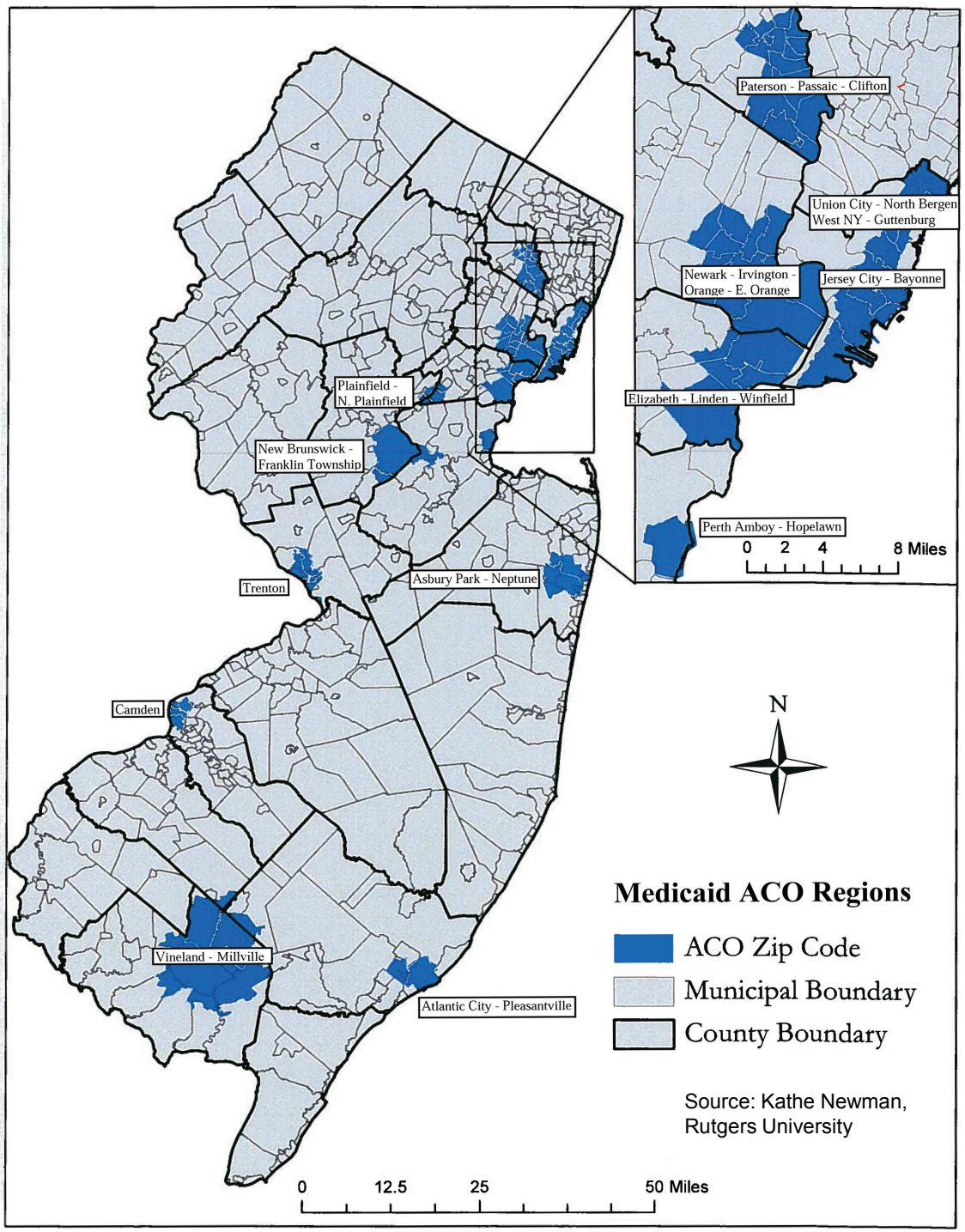
13 Candidate ACO Regions
Camden*
Greater Newark**
Trenton***
Asbury Park-Neptune
Atlantic City-Pleasantville
Elizabeth-Linden
Jersey City-Bayonne
New Brunswick-Franklin
Paterson-Passaic-Clifton
Perth Amboy-Hopelawn
Plainfield, North Plainfield
Union City-W. NY- Guttenberg-N. Bergen
Vineland-Millville

*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)

Center for State Health Policy



Measures

- New Jersey Uniform Billing Hospital Discharge Data: 2008-2010
- Five measures of potentially avoidable hospital use among adults living in the 13 regions
  - Avoidable inpatient admissions
  - Avoidable treat-and-release emergency department (ED) visits
  - Inpatient high use
  - ED treat-and-release high use
  - 30-day all-cause readmissions
- Potential cost savings estimated by comparing each community to the region among them with the best cost performance

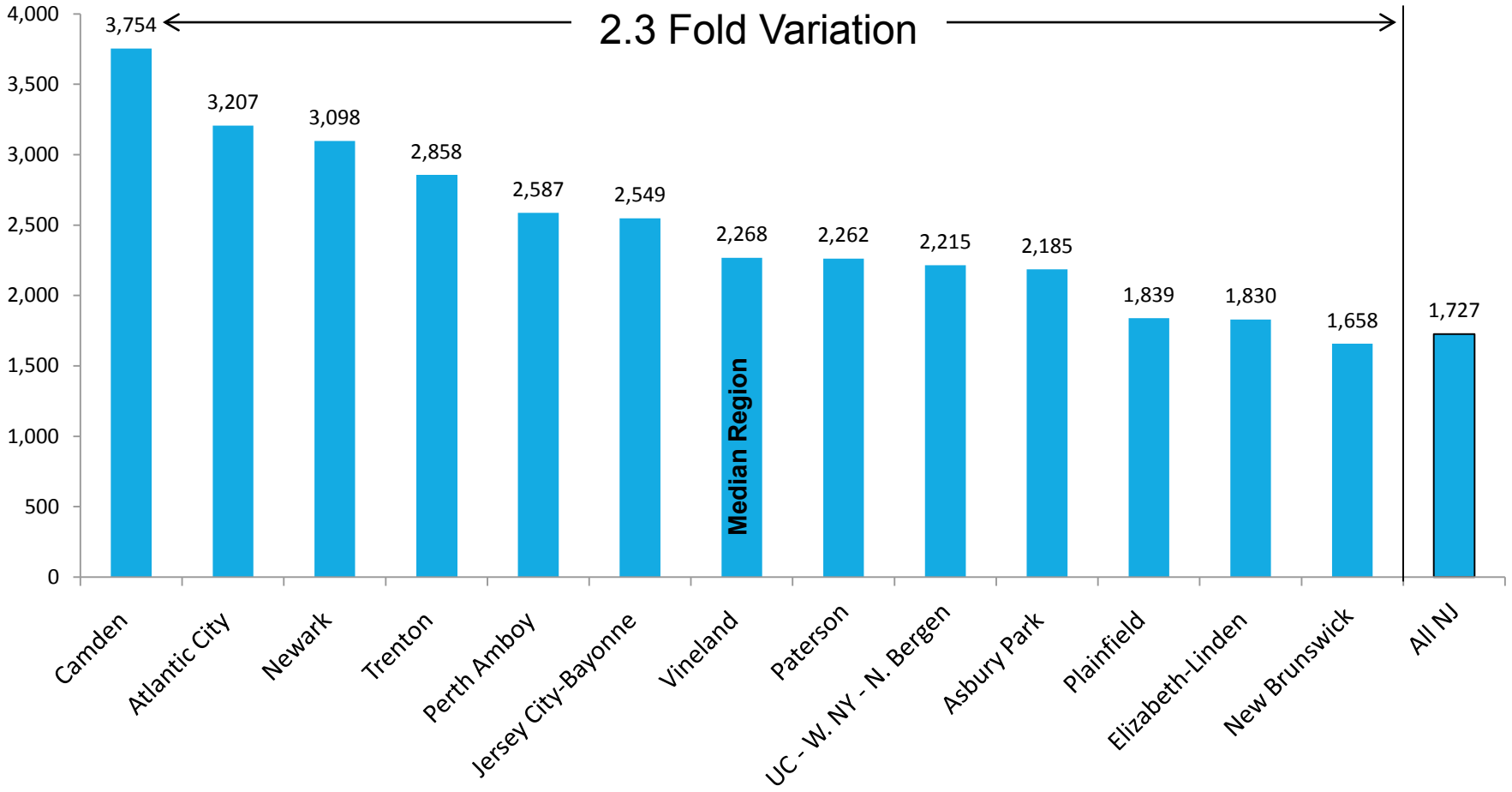
Findings: Performance Across 13 NJ ACO Regions

ACO Regions	Avoidable Hospitalizations	Avoidable ED Visits	Inpatient High Use	ED High Use	Hospital Readmissions
Atlantic City	3,207	40,876	5.0	12.0	14.2
Greater Newark	3,098	30,104	4.8	9.0	16.4
Trenton	2,858	34,124	4.6	11.4	15.4
Camden	3,754	51,871	3.9	16.8	14.5
Asbury Park	2,185	21,486	5.2	8.1	14.2
Perth Amboy	2,587	23,582	4.0	6.3	13.9
Jersey City-Bayonne	2,549	18,423	4.6	5.9	14.8
Vineland	2,268	18,912	3.9	6.5	12.4
Paterson	2,262	19,472	3.9	6.0	13.7
Elizabeth-Linden	1,830	20,478	3.3	6.2	12.6
Plainfield	1,839	19,684	3.1	6.3	12.1
Union City-W. NY - N. Bergen	2,215	15,028	4.0	3.6	12.5
New Brunswick	1,658	16,827	3.1	5.9	12.5
13 ACO regions combined	2,504	23,836	4.2	7.7	14.4
All NJ	1,727	14,177	4.3	5.0	12.7

Rankings: Red Worst three Yellow: Next three Green: Best three

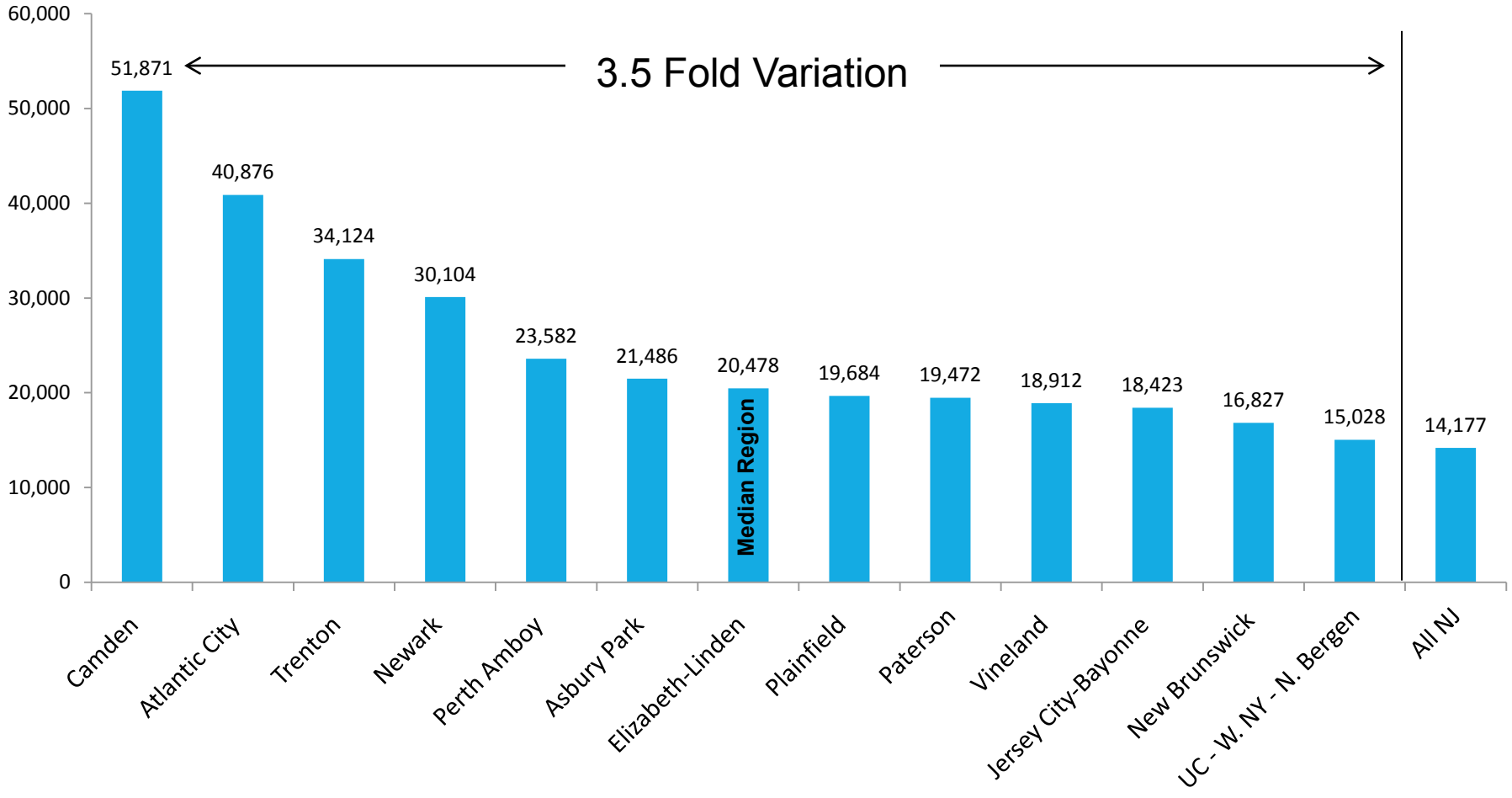
Regions are arranged in order of worst to best performance based on average of individual measure rankings.
Rates of avoidable hospitalizations and ED visits are calculated per 100,000 population and are age-sex adjusted.
High inpatient use is defined as 4 or more stays over 2008-10 and high ED use is 6 or more visits over 2008-10. High-user rates denote number per 100 hospital users.
Readmission rates are 30-day all-cause, age-sex adjusted per 100 index (initial) hospitalizations.

Rates of Avoidable Inpatient Hospitalizations



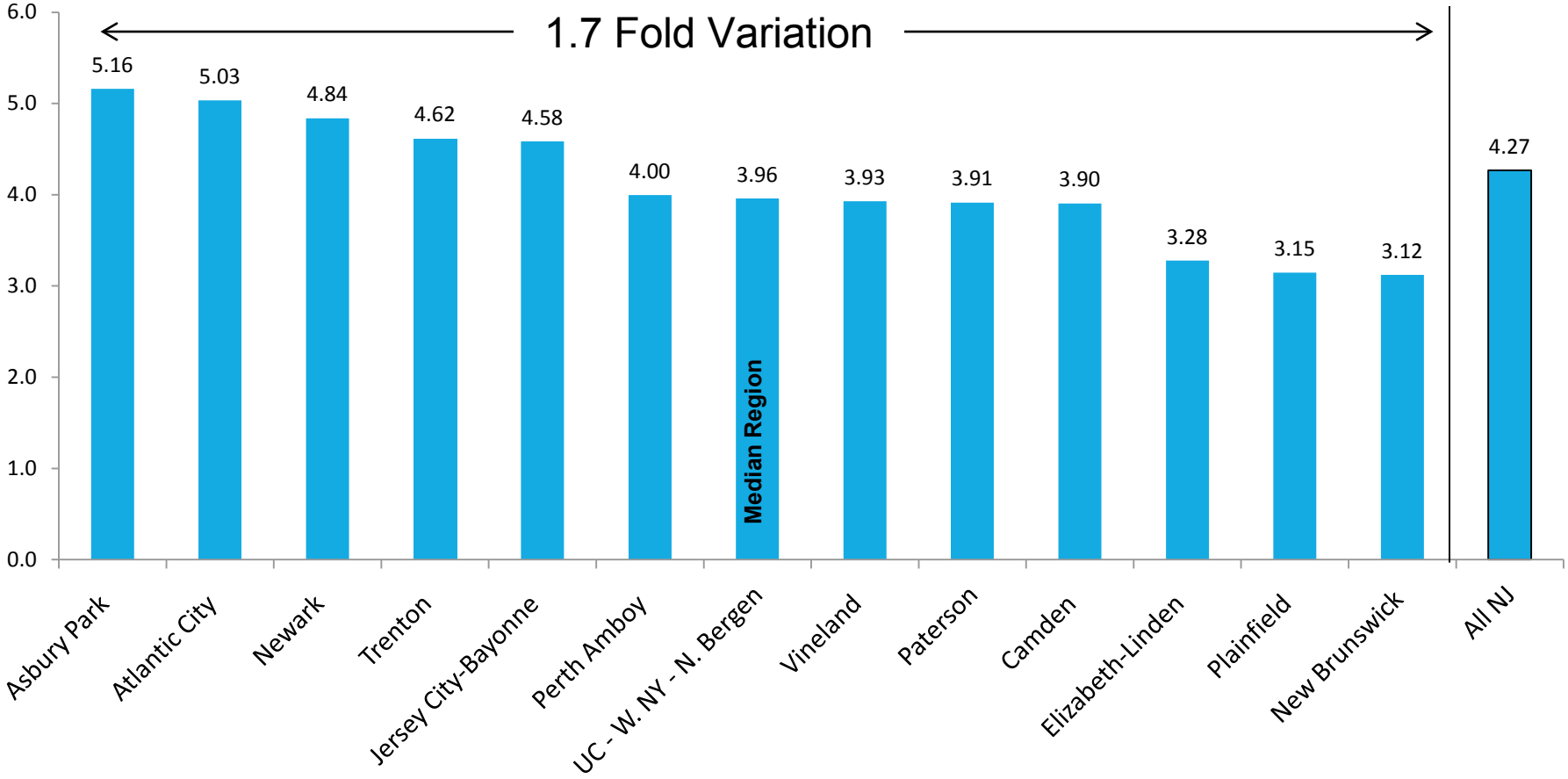
Rates calculated per 100,000 population

Rates of Avoidable Emergency Department Visits



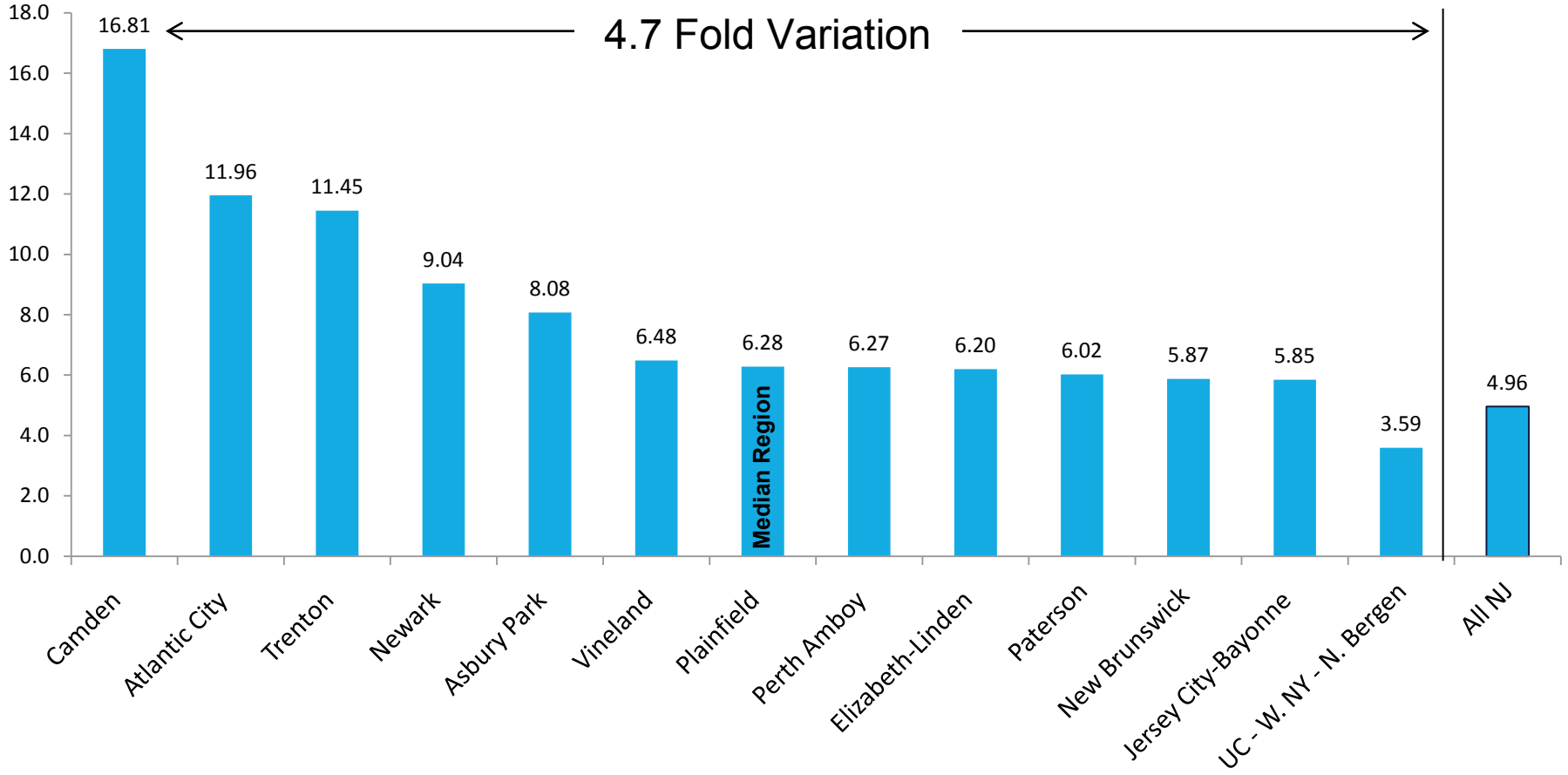
Rates calculated per 100,000 population

Rates of Inpatient High Use



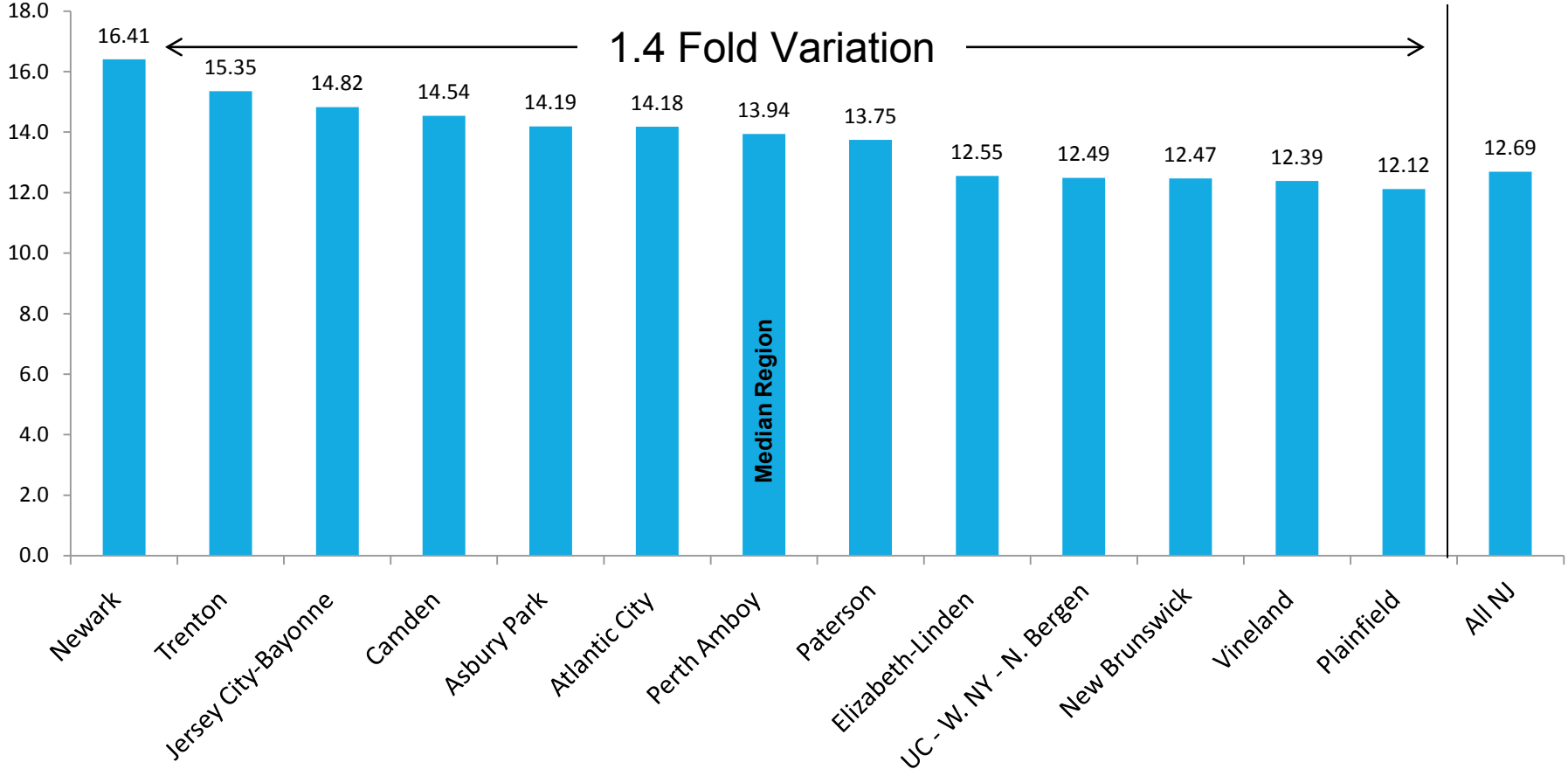
Rates calculated per 100 hospital users

Rates of Treat-and-Release ED High Use



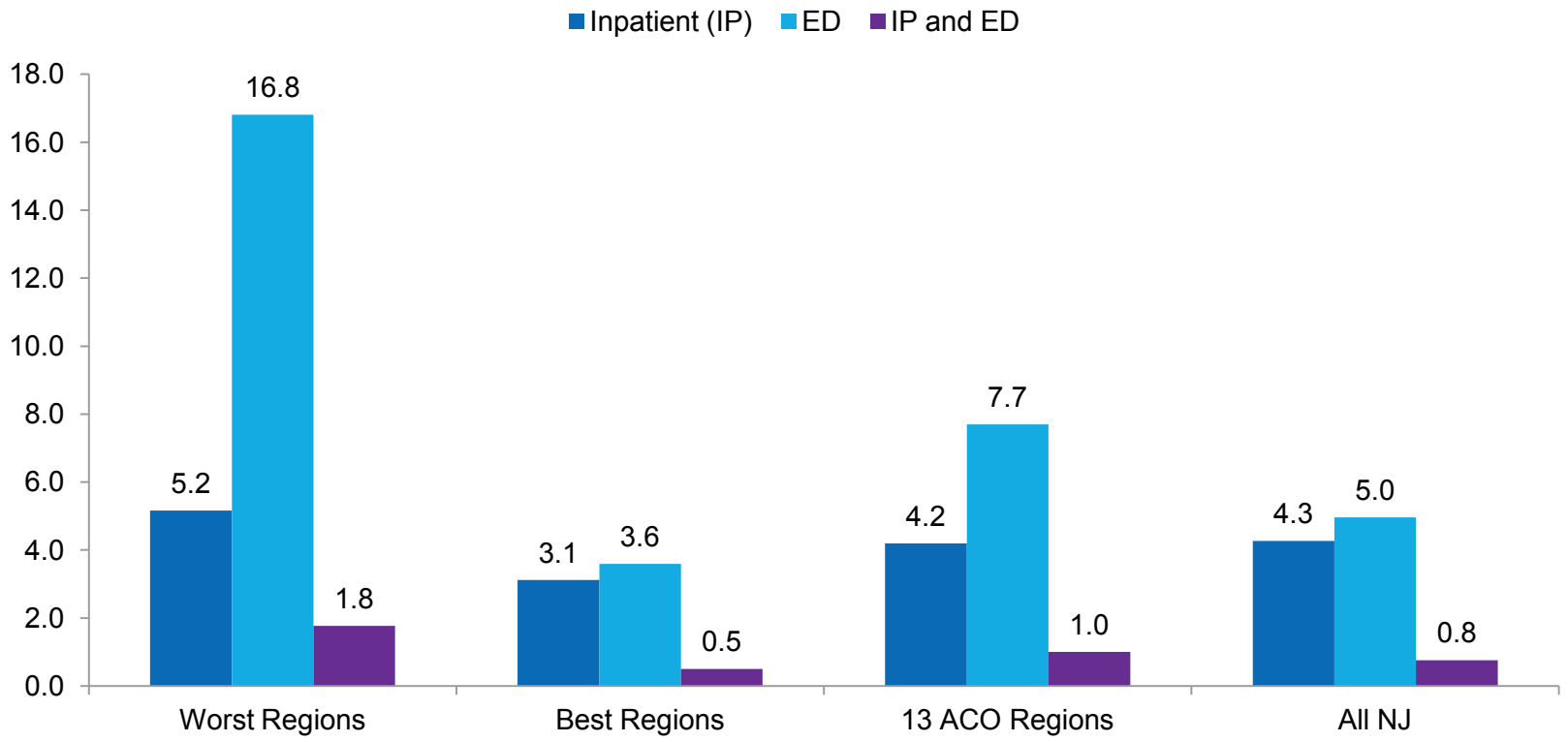
Rates calculated per 100 hospital users

30-Day All-Cause Readmission Rates



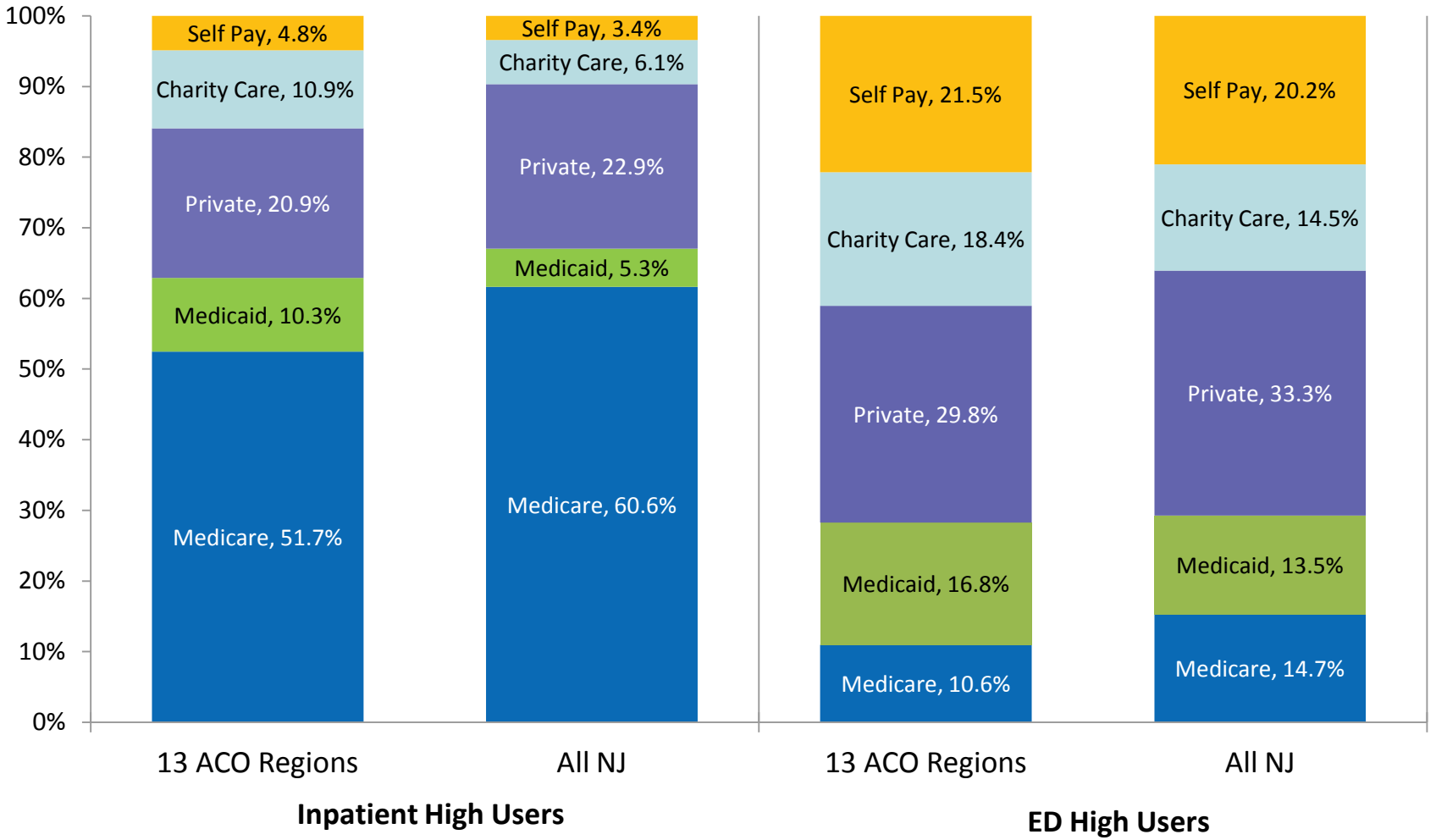
Age-sex adjusted rates per 100 'index' (initial) hospitalizations

Inpatient and Treat-and-Release ED High Users

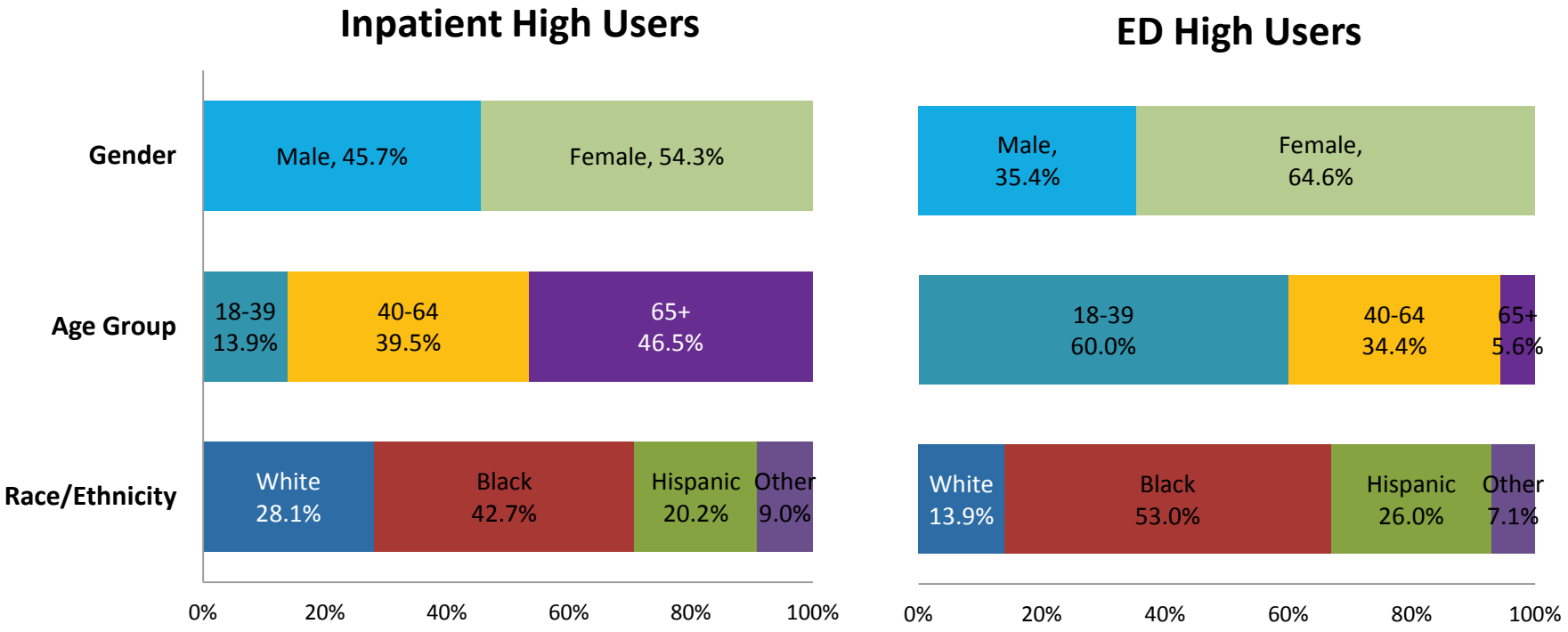


High users per 100 hospital users with high inpatient use (IP), high ED use, or *both* high IP and ED use.
High inpatient use is defined as 4 or more stays over 2008-2010.
High ED use is 6 or more visits over 2008-2010.
The worst performing regions for these three measures are Asbury Park, Camden and Atlantic City.
The best performing regions for the first measure is New Brunswick, and for the remaining two is Union City.

Payer Mix of Inpatient and ED High Users



Demographic Distribution within the 13 ACO Regions

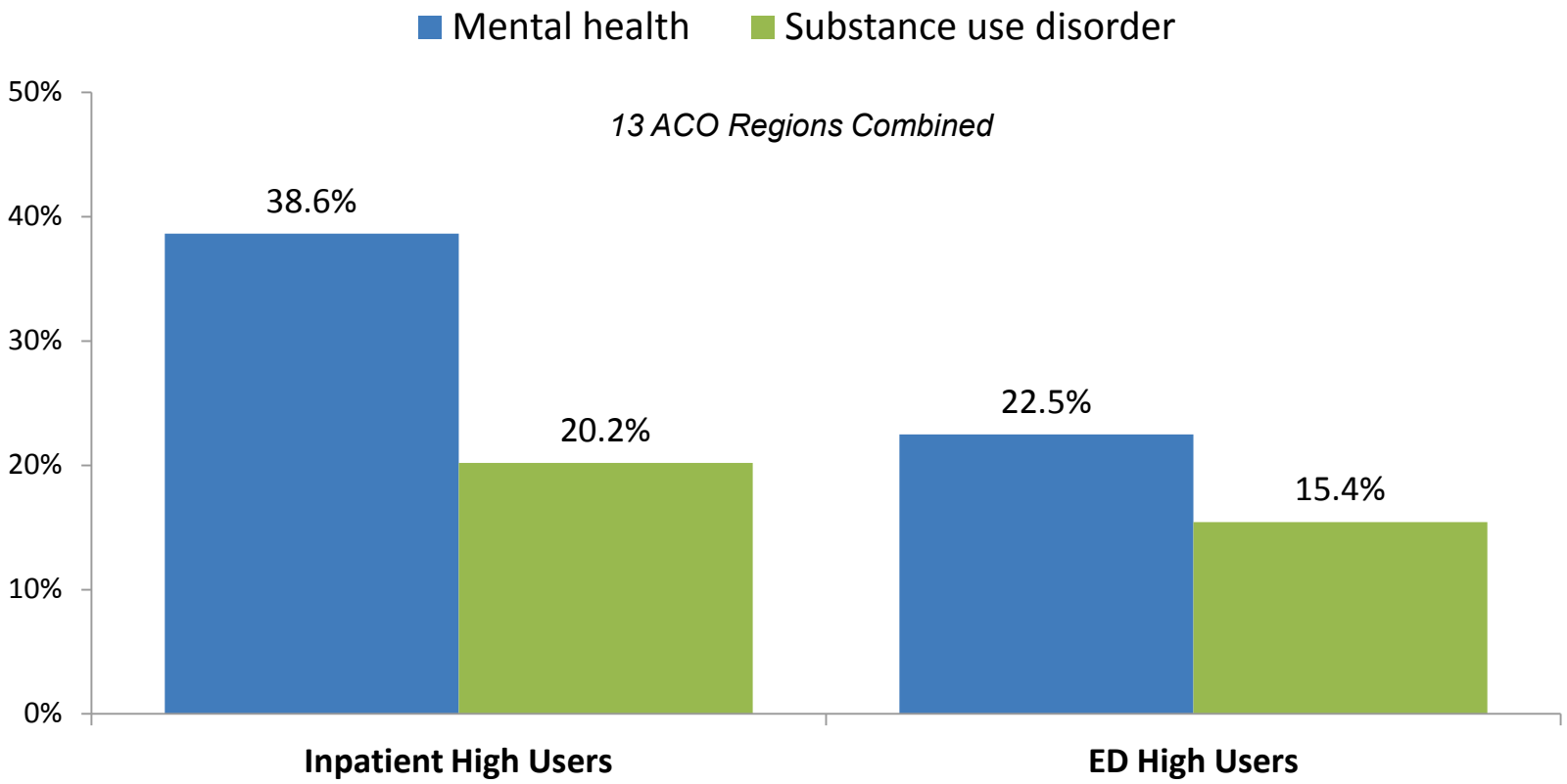


High ED users are more likely to be women, younger, and minority compared to high inpatient users

Most Common Principal Diagnoses

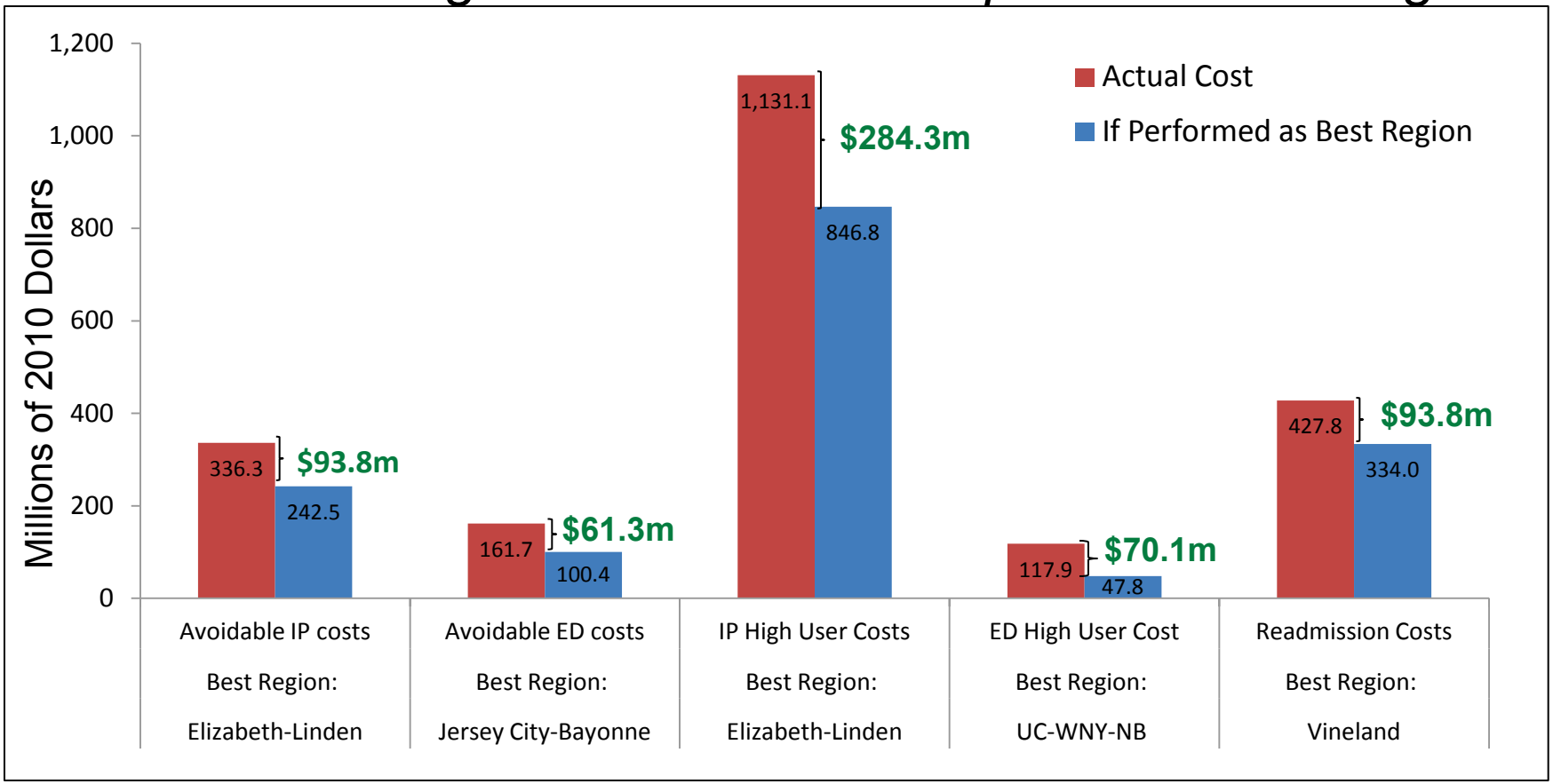
Inpatient High Users	ED High Users
Heart failure	Other symptoms involving abdomen and pelvis
Septicemia	Symptoms involving respiratory system and other chest symptoms
Diabetes mellitus	Other and unspecified disorders of back
Other forms of chronic ischemic heart disease	Asthma
Symptoms involving respiratory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

High Users with Mental Health and Substance Use Disorders



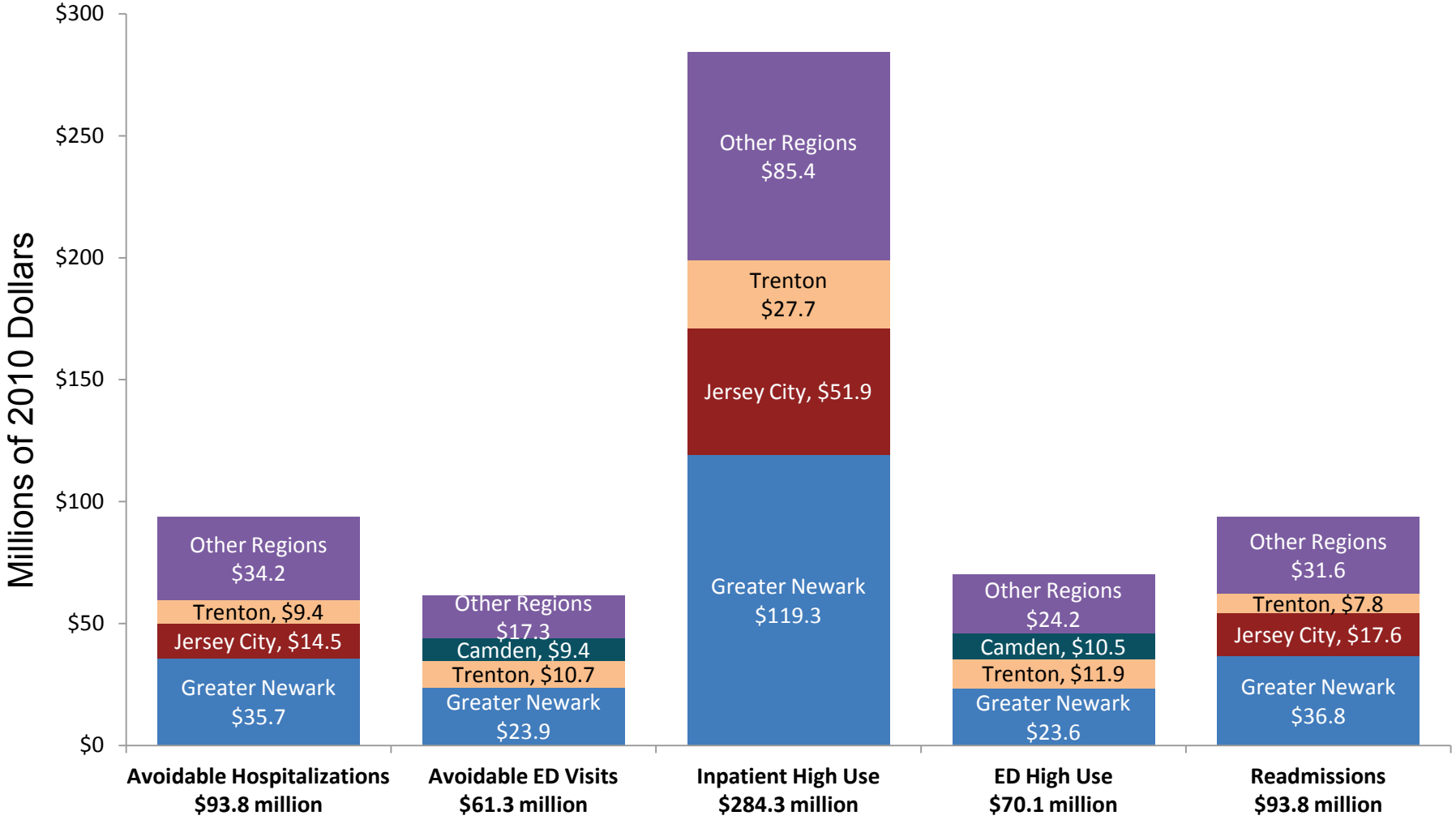
Percentages represent proportion of high use inpatient stays or ED visits
Category of Mental health diagnoses includes substance use diagnoses

Potential Savings if Performance *on par* with Best Region

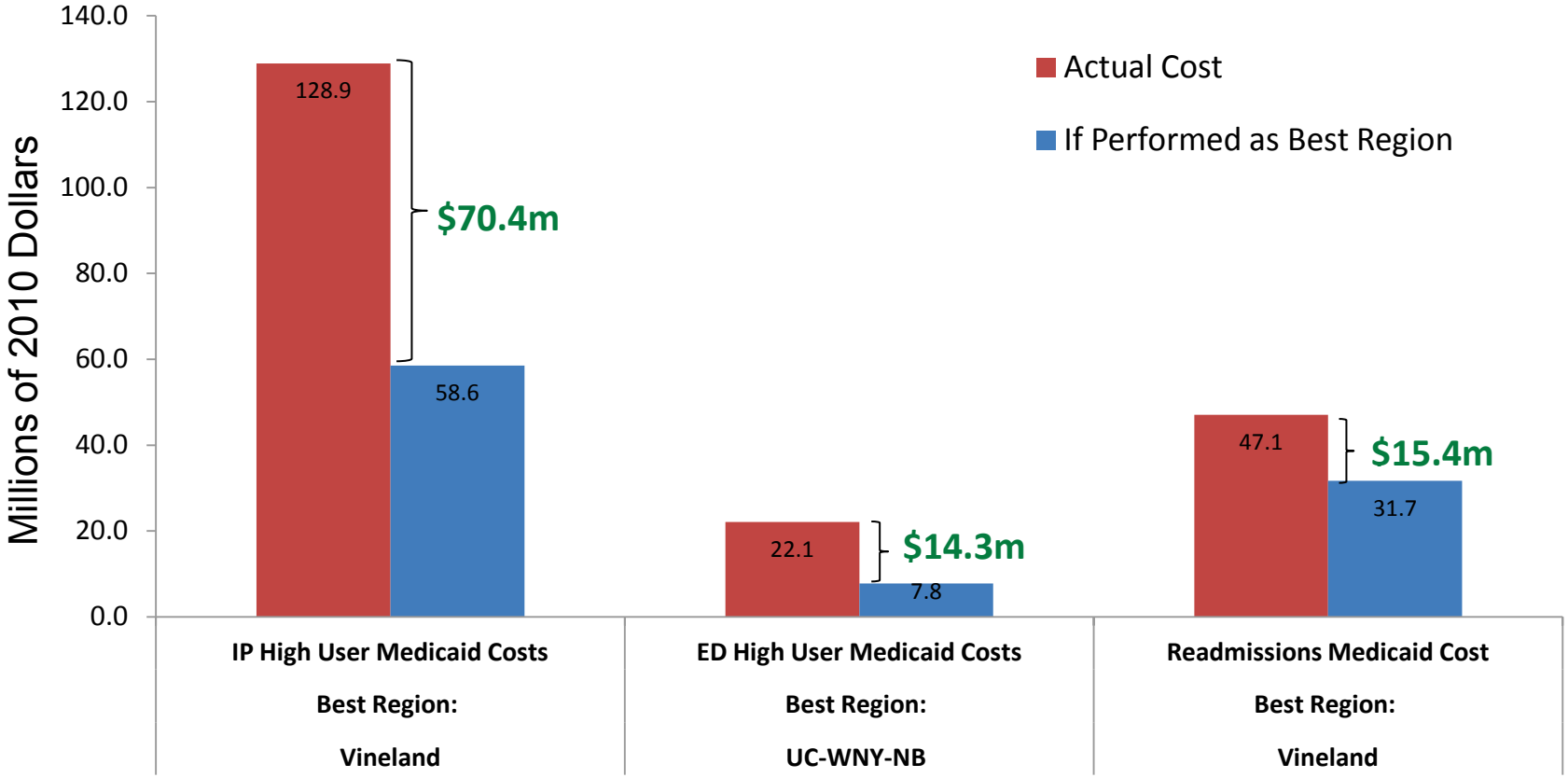


Potential savings (for the 13 regions combined) if each of them achieved rates of best performing region in each of the 5 measures above. Based on 2008-2010 data for area residents regardless of hospital visited. Figures are annualized and adjusted to 2010 dollars using the CPI-Medical Care. **Savings should not be aggregated across all measures due to overlap of populations**.

Regions with Highest Savings Potential

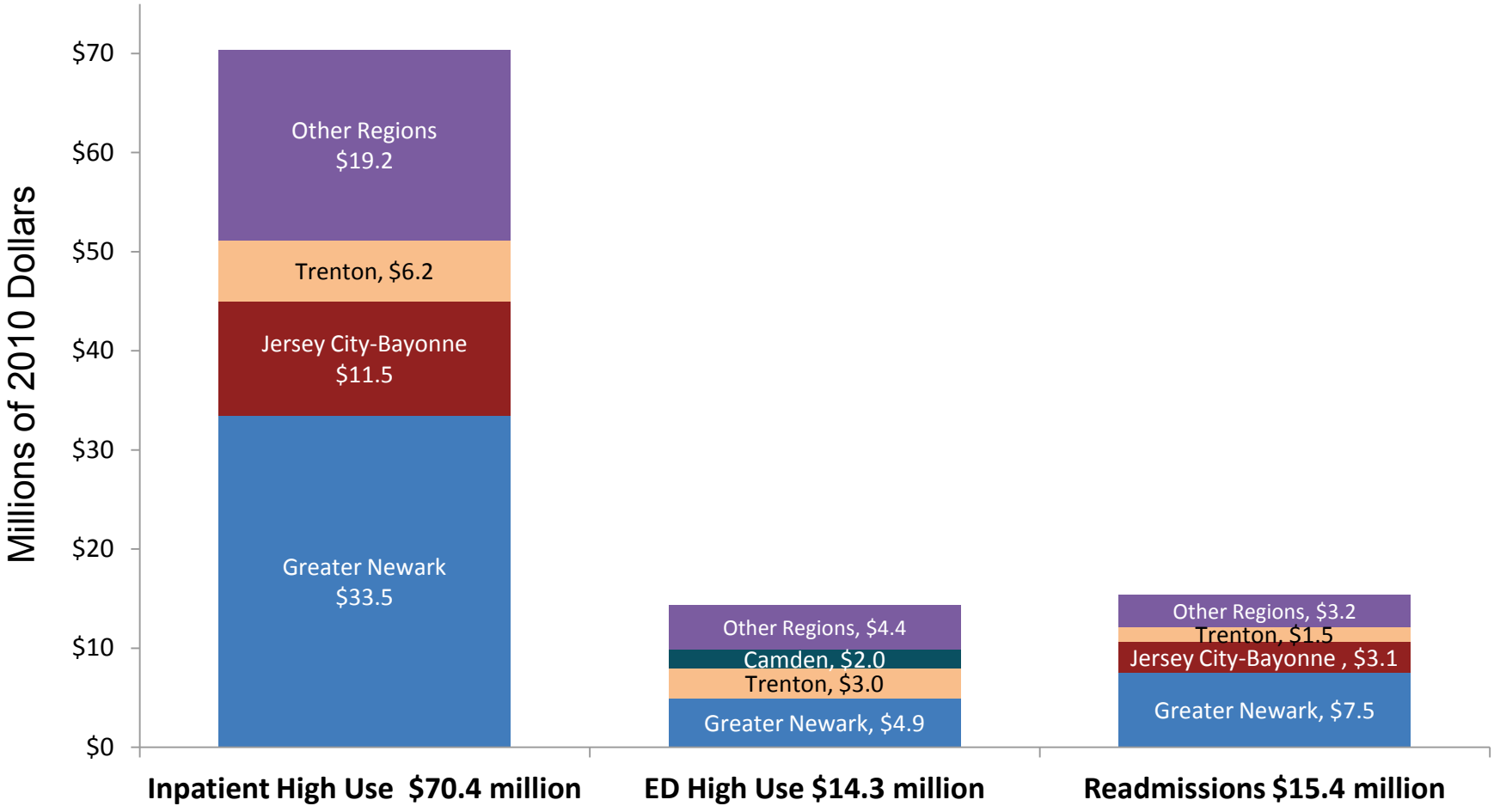


Potential *Medicaid* Savings if Performance *on par* with Best Region



Potential inpatient, ED high use, and readmission savings (for the 13 regions combined) if each of them achieved rates of best performing region . Based on 2008-2010 data for area residents regardless of hospital visited. Figures are annualized and adjusted to 2010 dollars using the CPI-Medical Care. **Savings should not be aggregated across measures due to overlap of populations**.

Regions with Highest *Medicaid* Savings Potential



How do the ACO communities compare?

- Best performing ACO regions do about as well as overall NJ average
- Compared to NJ overall, on average ACO regions perform worse in…
  - Avoidable ED visits (68% higher)
  - ED high users (56% higher)
  - Avoidable inpatient stays (45% higher)
  - Readmissions (14% higher)
  - Inpatient high use *not substantially different* from statewide average
- Wide variation in performance across ACO regions – shows potential for improvement
  - ED high users (4.7 fold variation)
  - Avoidable ED visits (3.5x)
  - Avoidable inpatient stays (2.3x)
  - Inpatient high use (1.7x)
  - 30-day readmissions (1.4x)

How do the ACO communities compare?

- Substantial savings potential from achieving best performance
  - Highest potential savings from inpatient high users
    - $284 million in 2010 cost reductions across 13 regions overall
    - Cost reductions for Medicaid patients of $70.4 million
    - Greatest potential in Newark, Jersey City, Trenton, Camden
  - But, high behavioral health co-morbidities underscore challenges

Thank You

Complete Findings at

http://www.cshp.rutgers.edu/MedicaidACO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Center for State Health Policy
A Unit of the Institute for Health, Health Care Policy and Aging Research

Hospital Utilization Patterns in 13
Low Income Communities in New Jersey:
Opportunities for Better Care and Lower Costs


OPPORTUNITIES FOR BETTER CARE AND LOWER COSTS

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Center for State Health Policy

Data Brief March 2013
Hospital Utilization and Costs in
Atlantic City-Pleasantville City

Key findings

- *High variation in utilization of hospital inpatient and emergency department resources across 13 New Jersey low-income communities suggests substantial room for improvement in system performance.*
- *Atlantic City-Pleasantville City ranked worst in overall performance on key indicators of*

Background

The New Jersey Medicaid Accountable Care Organization Demonstration Program (NJ P.L. 2011, Ch.114) provides new opportunities to improve the delivery of healthcare services through Accountable Care Organizations (ACOs), which create the potential for better population health and containment of healthcare costs. This data brief highlights key findings from a project that examined specific patterns of hospital utilization for 13 New Jersey low-income communities including Atlantic City-Pleasantville City, to identify opportunities to improve care and reduce costs. The