

The background of the slide features a large, faint, circular seal of Rutgers University. The seal contains the text 'RUTGERS UNIVERSITY' and 'THE STATE UNIVERSITY OF NEW JERSEY' around its perimeter, with a central emblem. The seal is rendered in a light red color, matching the background.

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# BEHAVIORAL HEALTH CONDITIONS IN AVOIDABLE HOSPITAL USE AND COST

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Sujoy Chakravarty, Ph.D.  
Joel C. Cantor, Sc.D.  
Jamie Walkup, Ph.D.  
Jian Tong, M.S.

Presented by Rutgers Center for State Health Policy

# Acknowledgements

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# Motivating issues

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- Our previous research identified substantial cost saving opportunities from reducing high hospital use
- Such avoidable and frequent hospitalizations may arise from barriers to ambulatory care, inadequate care coordination and presence of behavioral health conditions
- Effective management of behavioral health conditions and integration of behavioral and physical healthcare may be critical to reducing avoidable hospitalizations and costs

## Study questions & data

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- To what extent are behavioral health (BH) conditions associated with:
  - Preventable hospitalizations and costs?
  - Inpatient and ED high use and costs?
- Data from NJ Discharge Data Collection System and Charity Care Claims, 2008-2011
- Focus on 13 low income regions in New Jersey

## 13 Low-Income NJ Areas

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

\*Newark zip codes (07102,07103,07104, 07105, 07106, 07107,07108, 07112, & 07114)

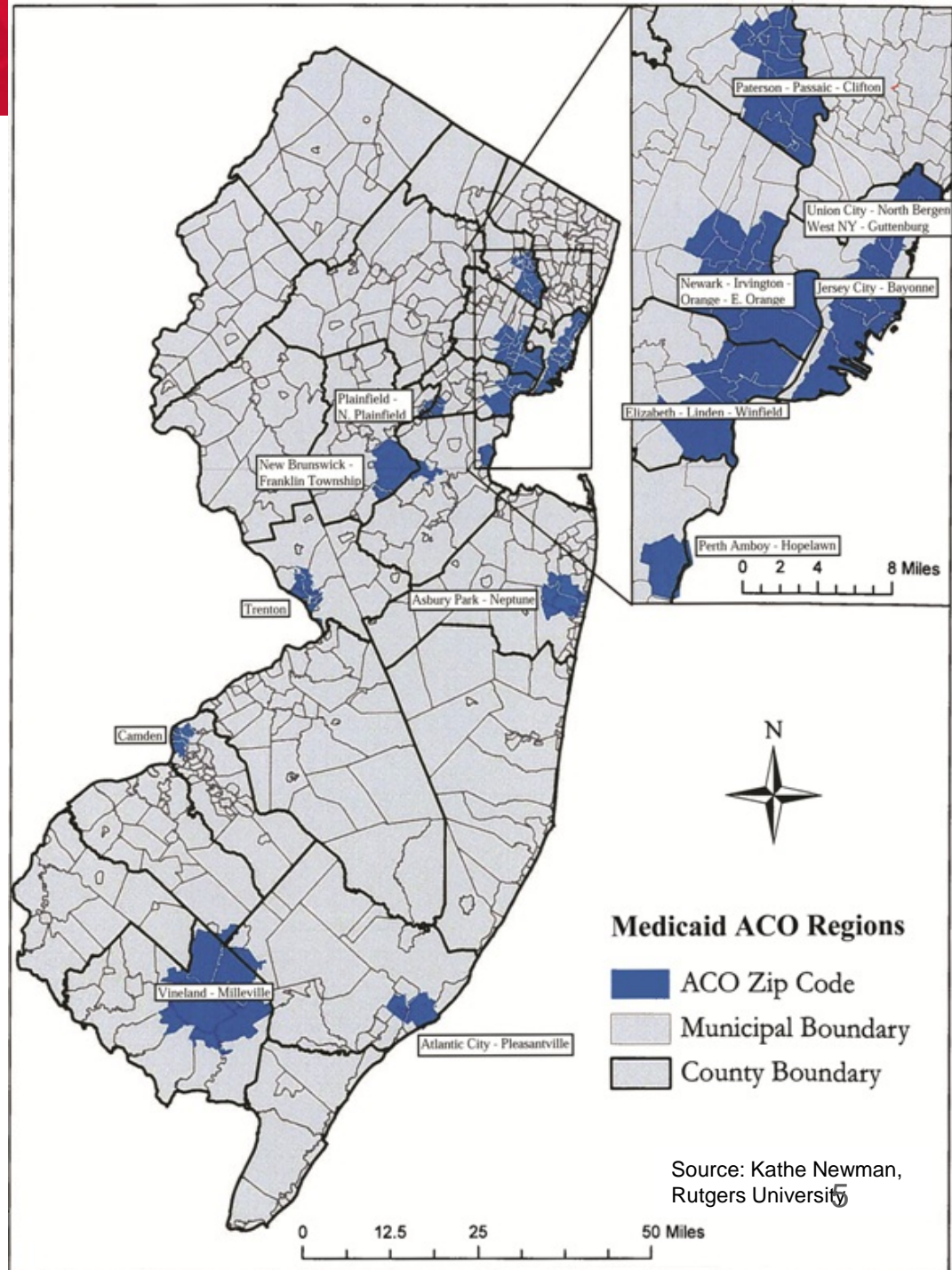
East Orange zip codes (07017,07018)

Irvington zip code (07111)

Orange zip code (07050)

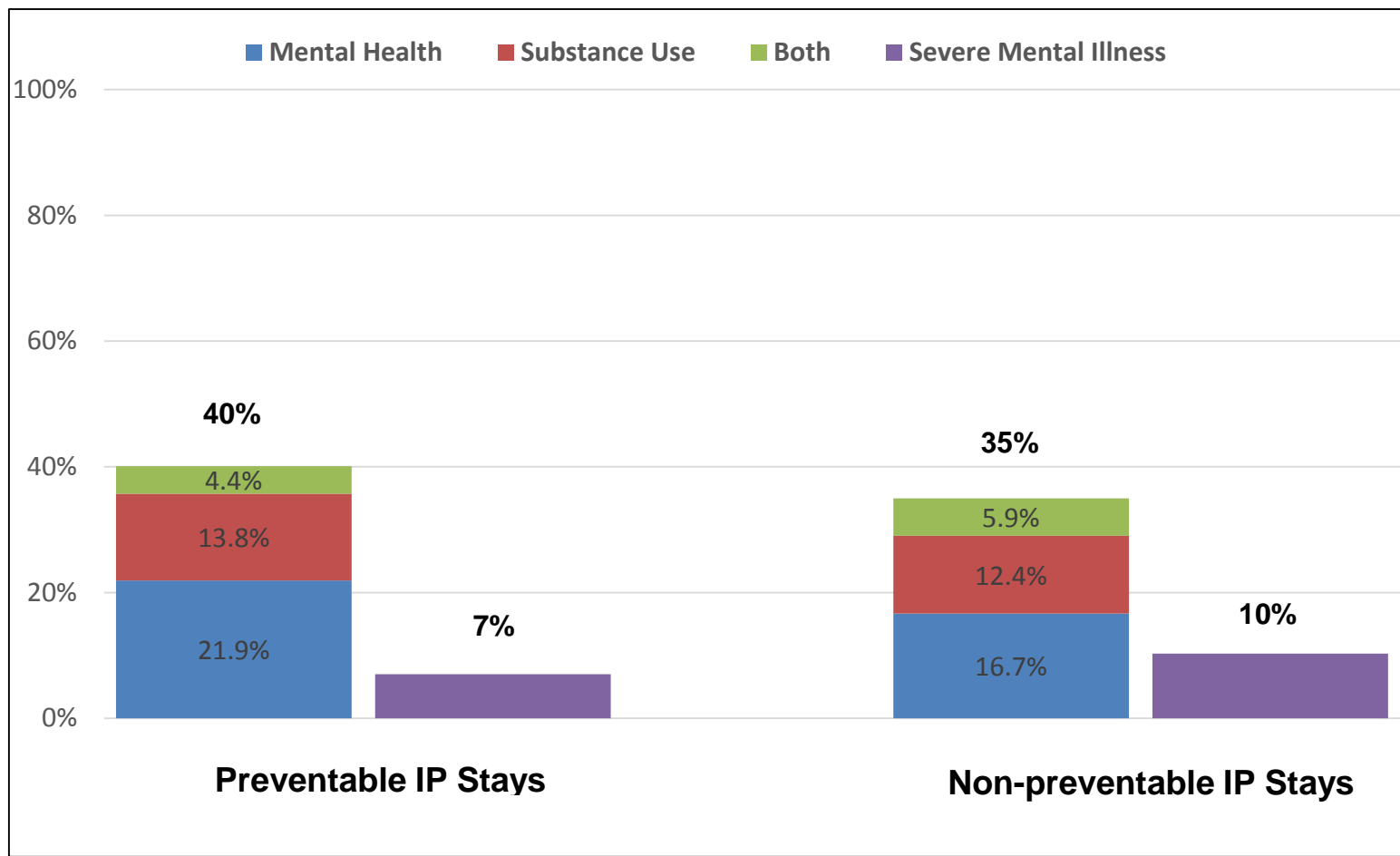
\*\*Trenton zip codes (08608, 08609, 08611, 08618, 08629, & 08638)

Center for State Health Policy



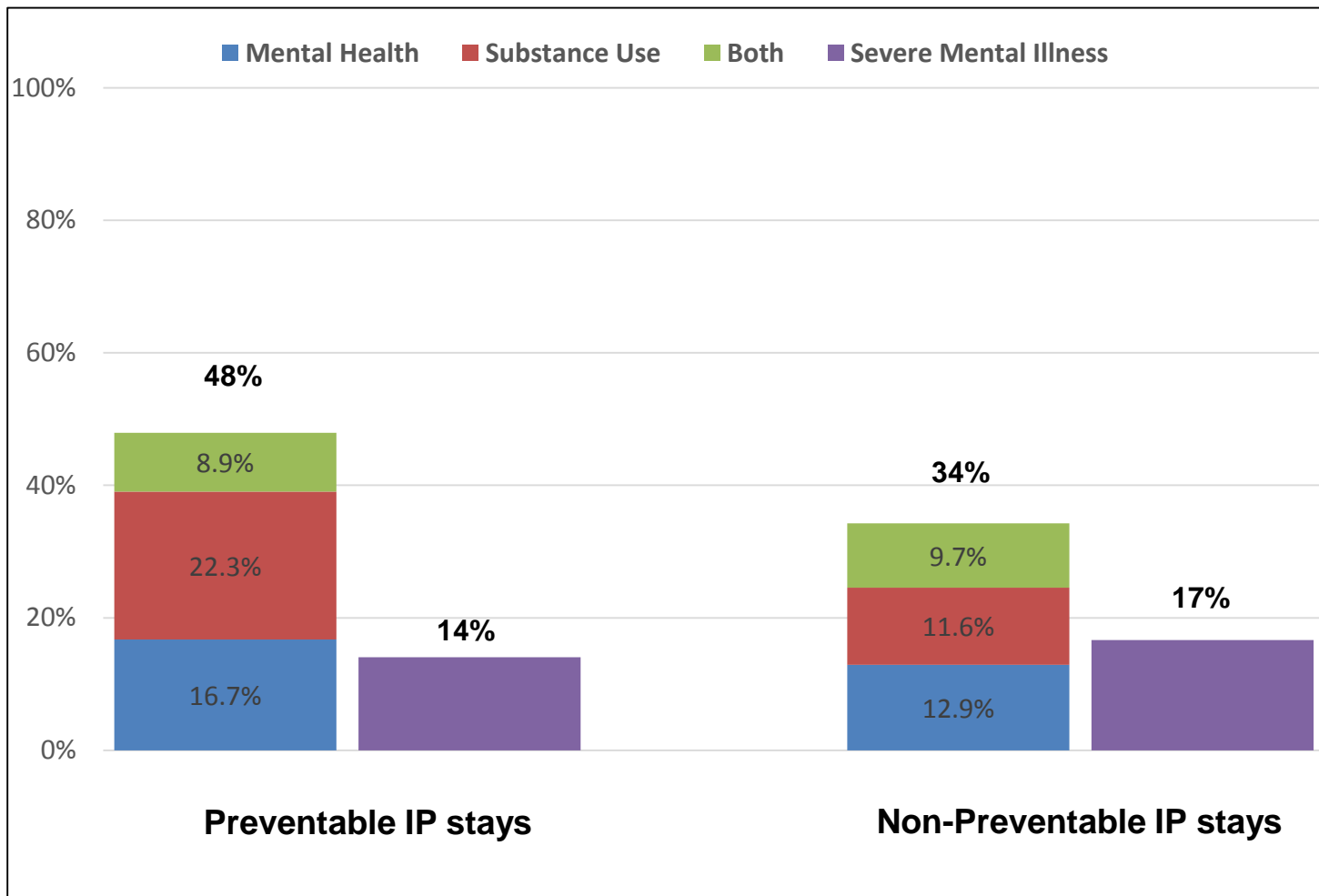
# Behavioral Health Problems by Preventable Inpatient (IP) Hospitalizations

## 13 Low-Income NJ Areas, 2008-2011



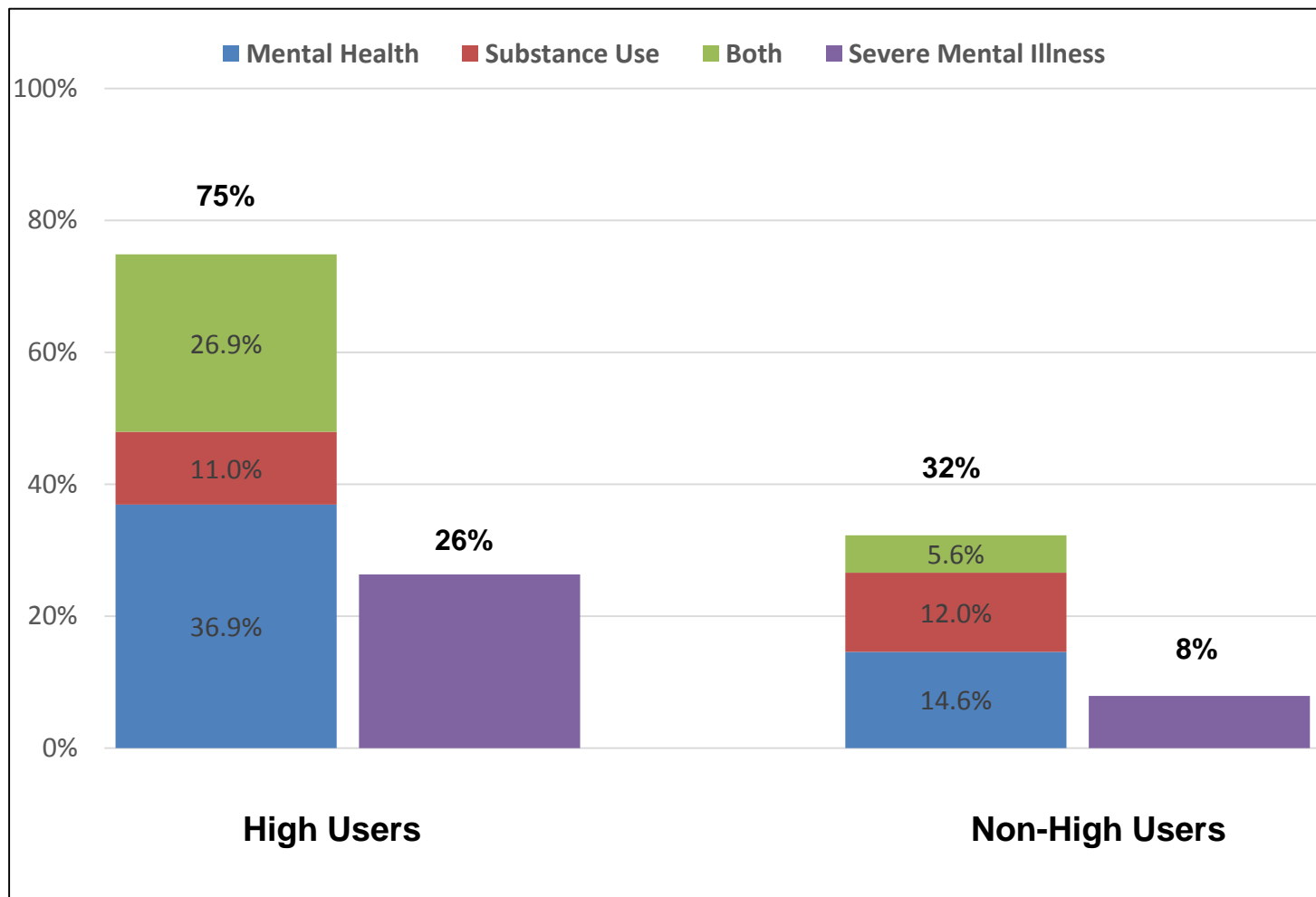
# Medicaid Beneficiary Behavioral Health Problems by Preventable IP Hospitalization Status

13 Low-Income NJ Areas, 2008-2011



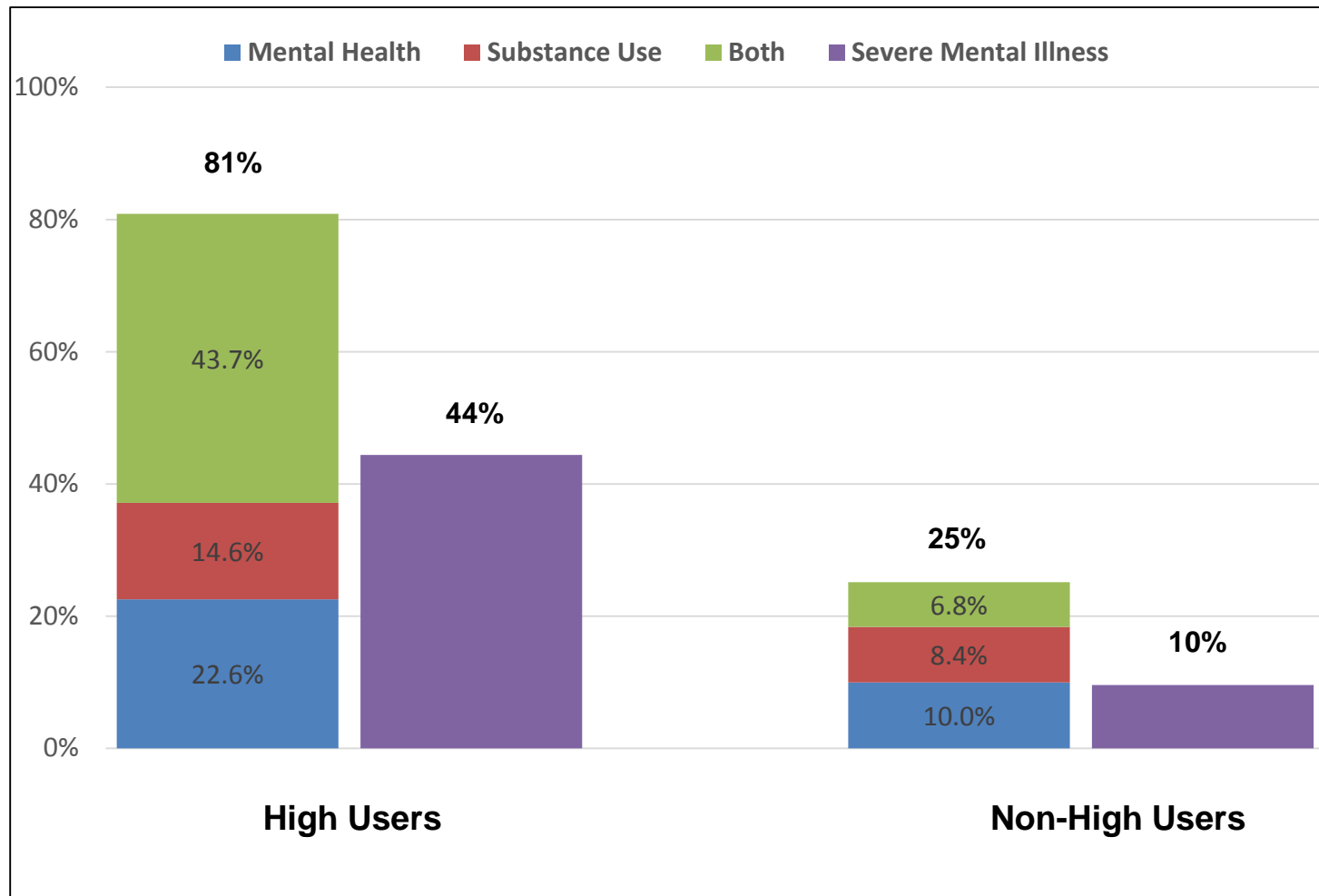
# Behavioral Health Problems by Inpatient High User Status

## 13 Low-Income NJ Areas, 2008-2011

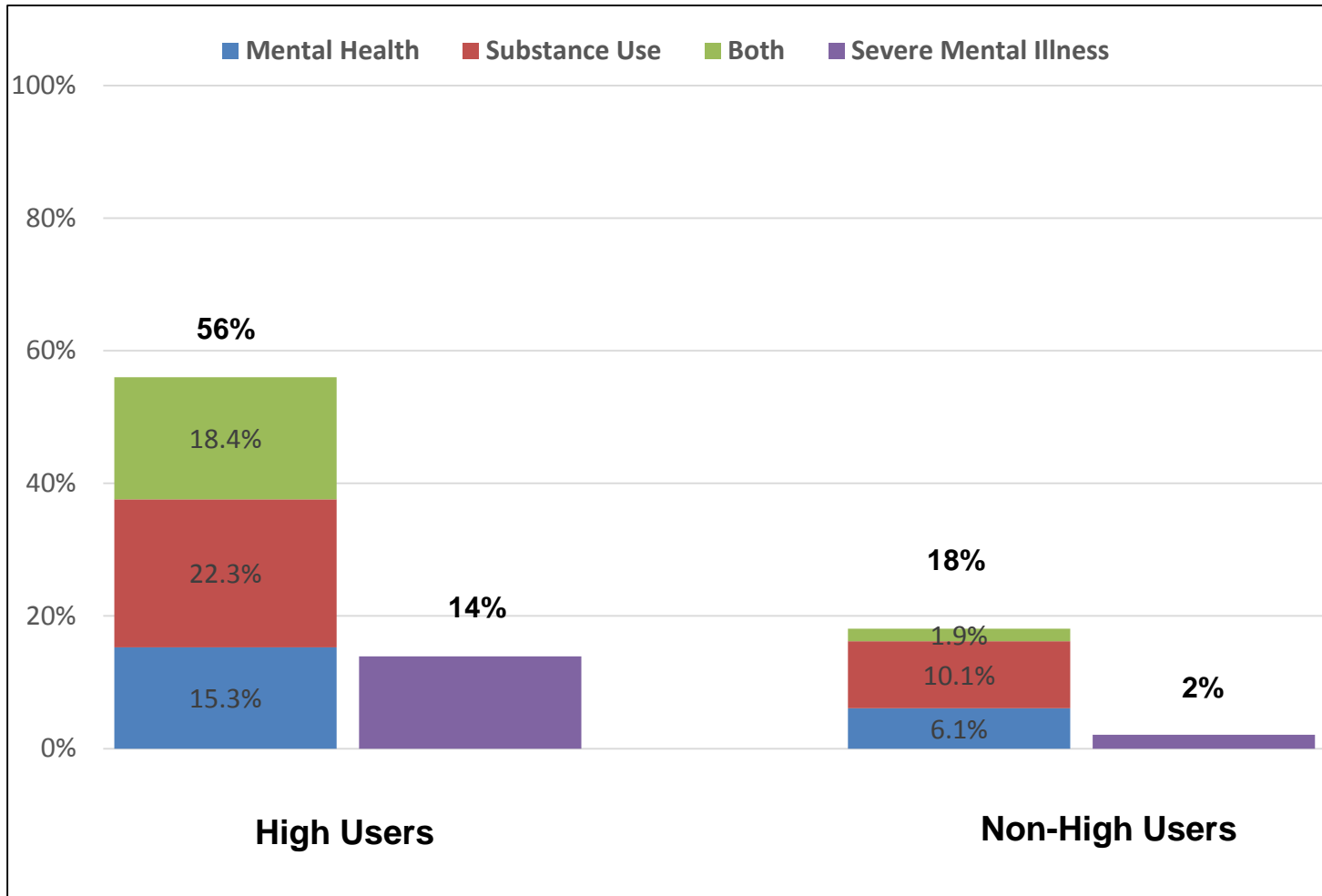




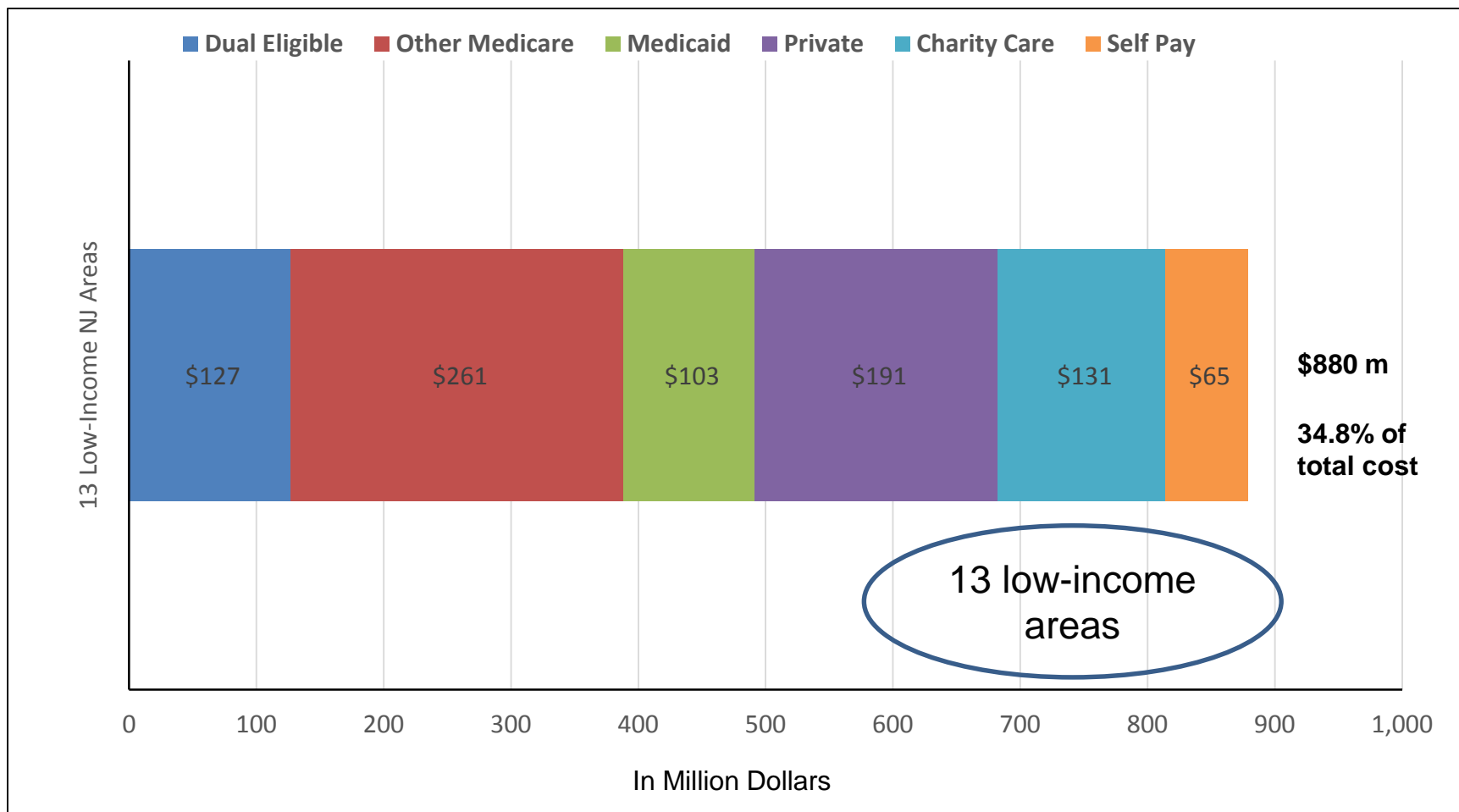
# Medicaid Beneficiary Behavioral Health Problems by Inpatient High User Status 13 Low-Income NJ Areas, 2008-2011



## Behavioral Health Problems by ED High User Status 13 Low-Income NJ Areas, 2008-2011

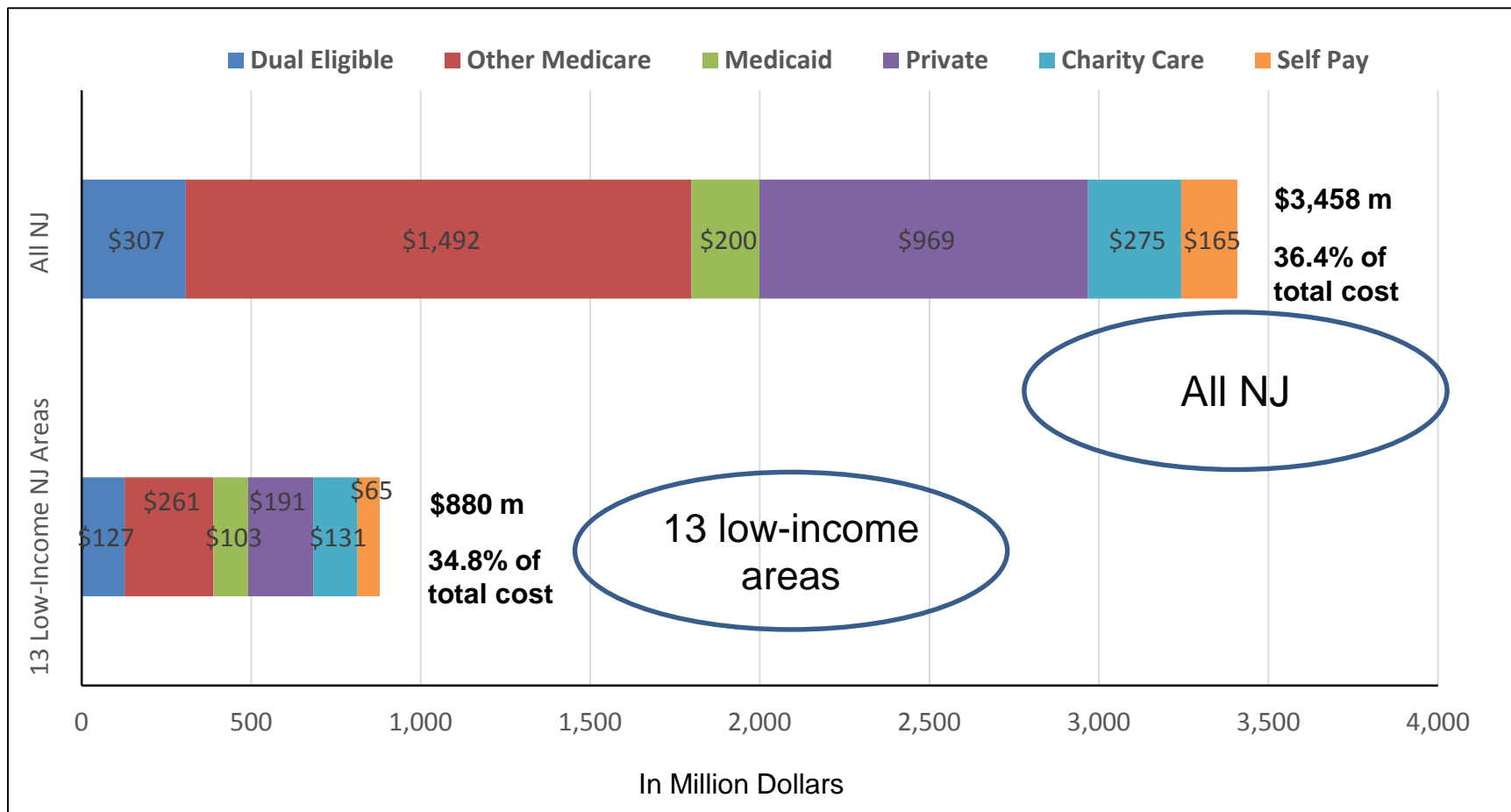


# Annual Inpatient Cost Associated with Behavioral Health Problems



# Annual Inpatient Cost Related to Behavioral Health Problems

## 13 Low-Income NJ Areas and All NJ



Percentages reflect BH-related costs as a percent of total IP costs

## Conclusions: Behavioral Health and Avoidable Use and Cost

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- Higher prevalence of BH conditions among avoidable hospitalizations
  - Differences are higher for Medicaid beneficiaries for both preventable hospitalizations, and also hospitalizations by high users
- Substantially higher prevalence of BH conditions among high users
  - Overall three out of four inpatient high users are diagnosed with BH conditions
  - 44% of Medicaid inpatient high users have a serious mental illness
- BH-related costs comprise a substantial proportion of total IP costs across regions and payers
  - In the 13 low-come regions, annual BH-related costs amount to \$880 m, 34.8% of overall IP costs
  - Statewide, BH-related costs amount to \$3.5 b, 36.4% of overall IP costs
- Findings underscore the importance of current NJ policy initiatives including the Medicaid ACOs, Medicaid Managed Behavioral Health Organization, Behavioral Health Homes.
- Special focus may be needed for the Medicaid expansion population which is also likely to have significant behavioral health involvement along with housing and other social challenges.

# DISCUSSION

## Methods Appendix

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- **New Jersey All-Payer Uniform Billing Hospital Discharge data**
  - Public use discharge-level data and patient-level linked data prepared by the NJ Dept. of Health
  - Patient demographics, clinical information, patient residence, hospital charge amounts and hospital information
- **Avoidable Hospitalizations and Emergency Department (ED) Visits**
  - Population-based rates of ambulatory-care sensitive/preventable inpatient and ED visits
- **High Users of Hospital Resources**
  - ‘High user’ of inpatient care equal to 4 or more inpatient stays (96<sup>th</sup> percentile of statewide distribution) 2008-2011
  - ‘High user’ of ED care equal to 6 or more visits over 2008-2010 (94<sup>th</sup> percentile of statewide distribution) 2008-2011
- **Cost estimates based on discharge-based charges**
  - Charge data deflated by cost-to-charge ratios, annualized for 2008-11, and adjusted to 2011 dollars using the Consumer Price Index for medical care