



ROLE OF BEHAVIORAL HEALTH CONDITIONS IN AVOIDABLE HOSPITAL USE AND COST

**Sentinel Project Conference on Insurance Coverage Issues for
Mental Health and Addiction Services**

Seton Hall School of Law
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The project team...

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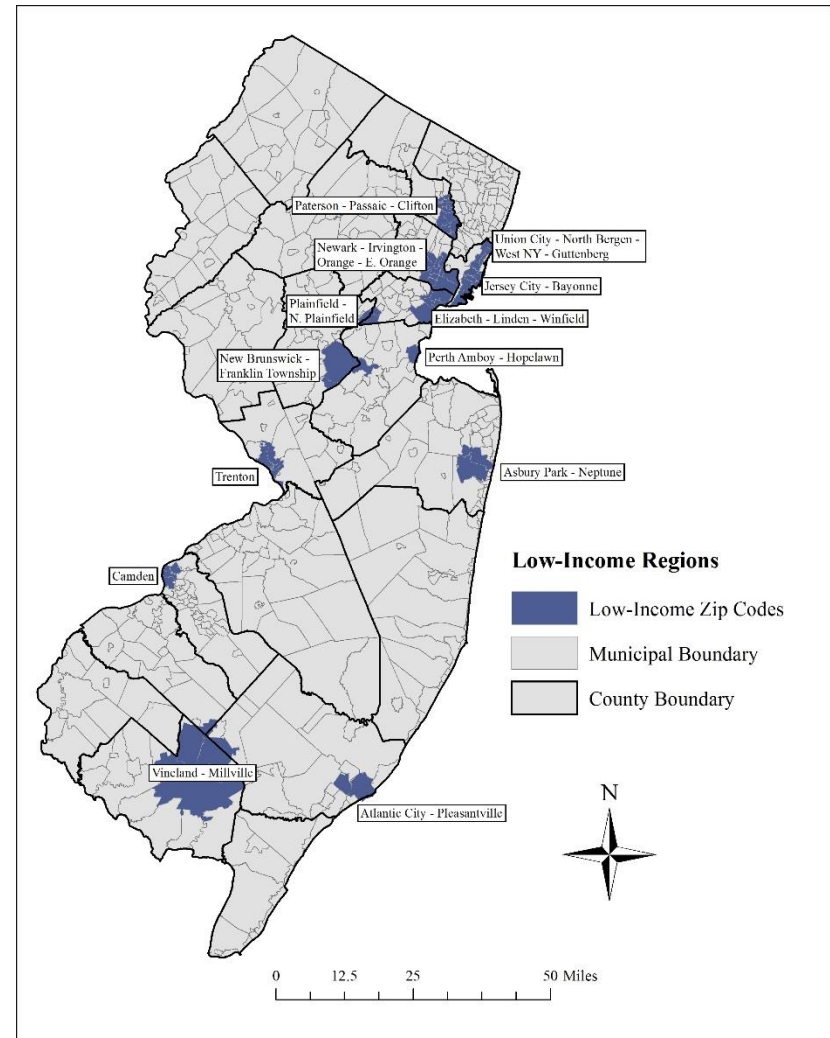
Additional contributions by CSHP colleagues Derek DeLia, Jose Nova, Kristen Lloyd, Oliver Lontok and Dorothy Gaboda.

Background

- The highest cost healthcare consumers account for large share of total costs
 - 5% of users → half of spending
 - 1% of users → about 20% of spending
- High rates of avoidable hospitalizations and emergency department (ED) visits suggest opportunity for savings
 - >1,700 “ambulatory care sensitive”/potentially avoidable inpatient stays per 100,000 NJ population
 - >14,000 potentially avoidable ED visits per 100,000 NJ population
- What role do behavioral health conditions play among hospital high-users and in avoidable use?

Data

- Data from NJ Discharge Data Collection System and Charity Care Claims, 2008-2011
 - Individuals linked over time and across NJ hospitals
 - Link to charity care and mortality records
- Focus on 13 low income New Jersey regions

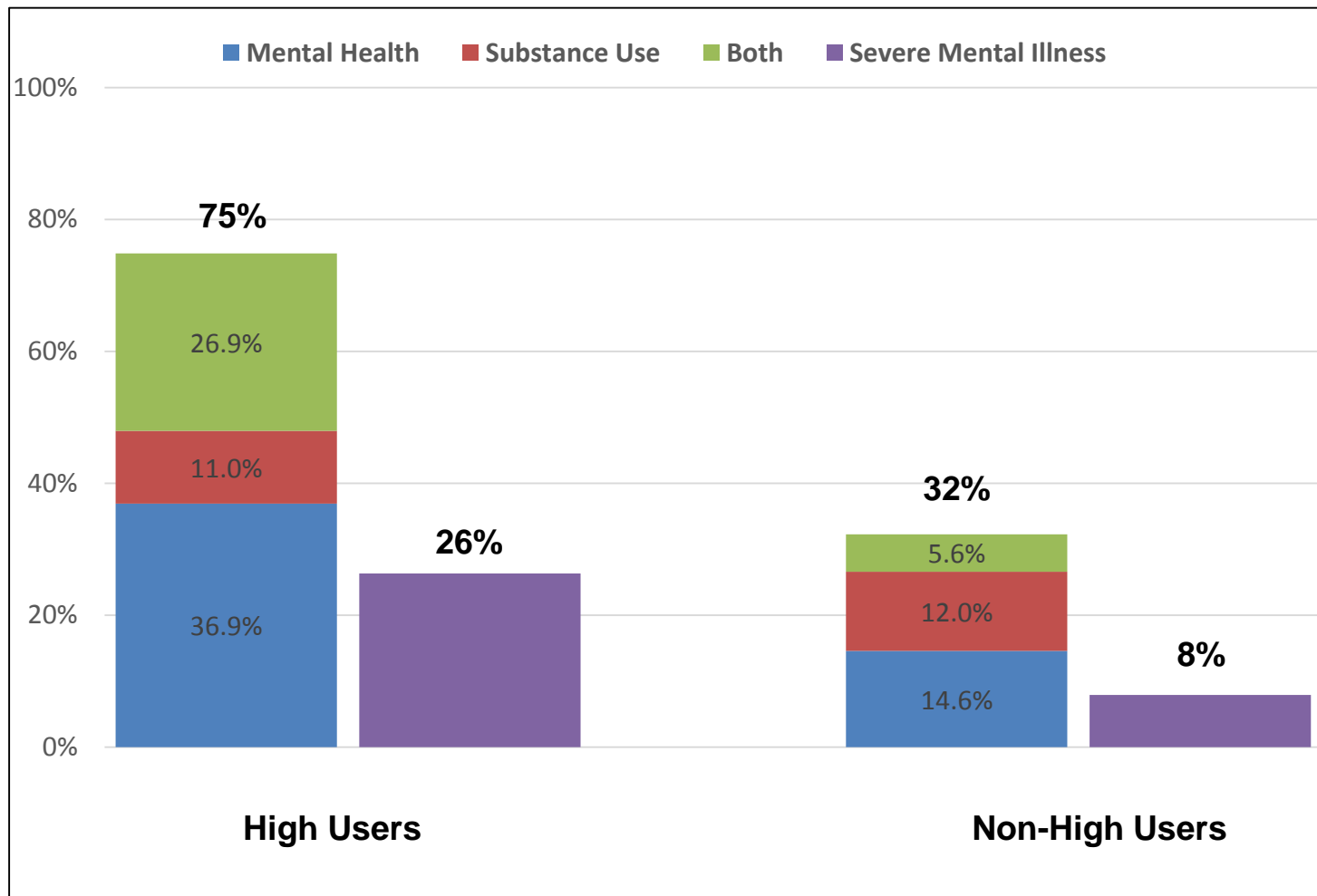


Measures

- Ambulatory care sensitive/avoidable inpatient stays
 - Prevention Quality Indicators, Agency for Healthcare Research and Quality (AHRQ)
- Avoidable treat-and-release ED visits
 - NYU/John Billings algorithm
- High users
 - Roughly top 5% of inpatient stays and ED visits
- Cost
 - Annualized hospital charges adjusted for facility cost-to-charge ratios, 2011 dollars
- Behavioral health co-morbidities identified at any stay/visit
 - AHRQ Clinical Classification Software using ICD-9 diagnosis & procedure codes
 - Substance use disorders
 - Mental health disorders (e.g., mood disorders, schizophrenia, anxiety disorders, delirium, dementia, etc.)
 - Severe Mental Illness (SMI) with functional or social impairment (e.g., psychosis, bipolar disorder, drug dependence, OCD, dysthymia, etc. based on work by Kessler et al. 2005 and Coffey et al. 2011.)

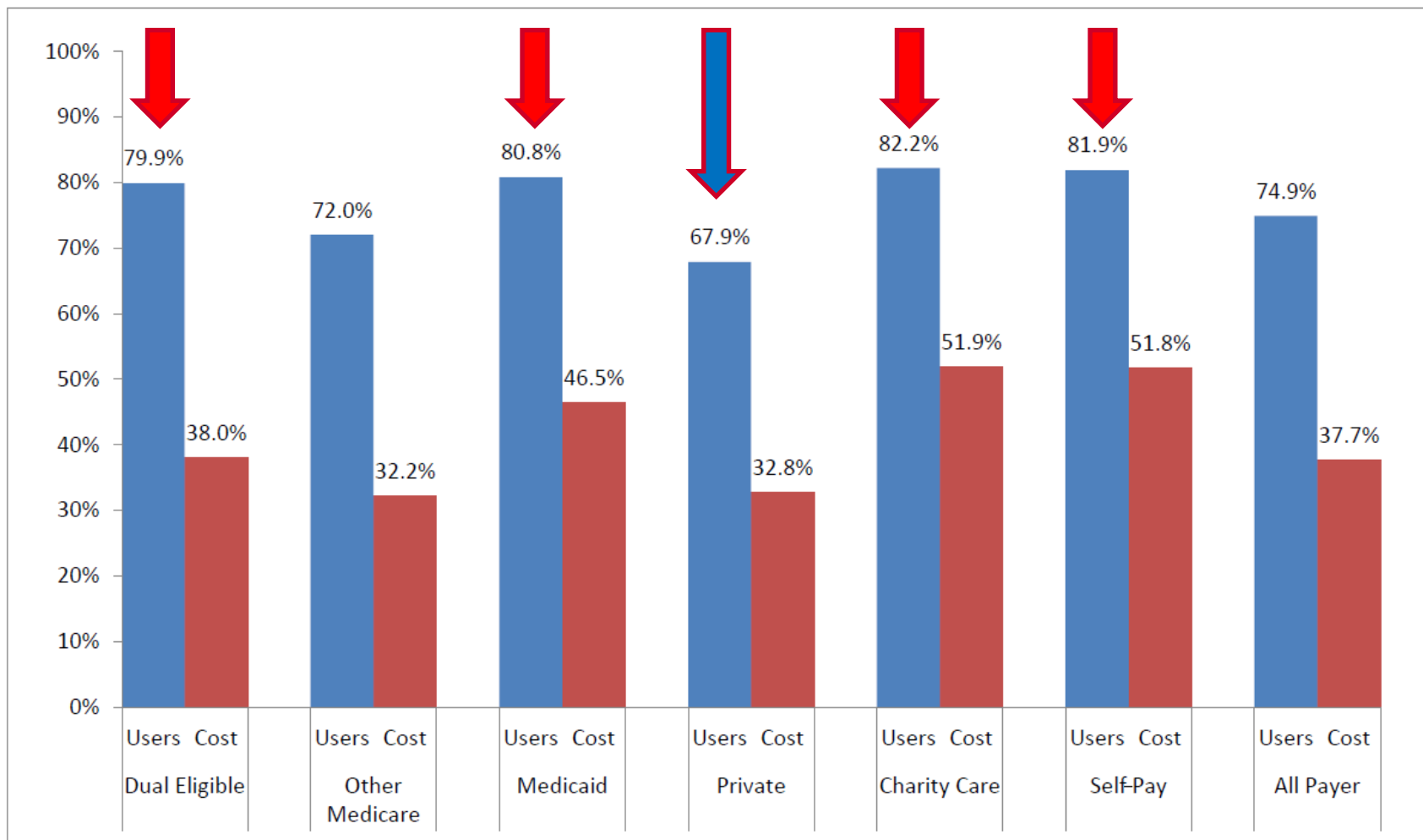
Behavioral Health Problems by Inpatient High User Status

13 Low-Income NJ Areas, 2008-2011



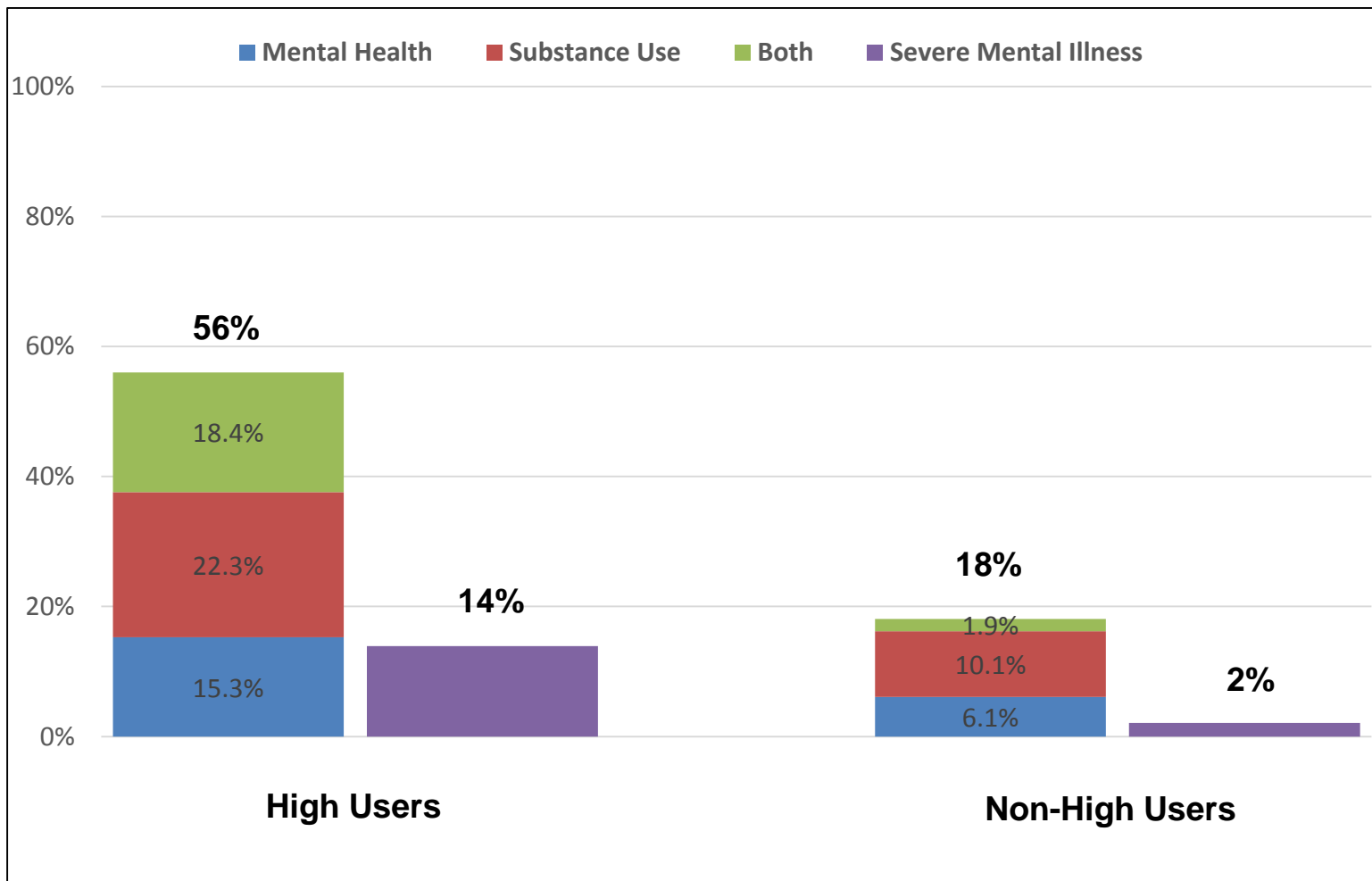
Behavioral Health Problems Among Inpatient High Users by Payer

13 Low-Income NJ Areas, 2008-2011

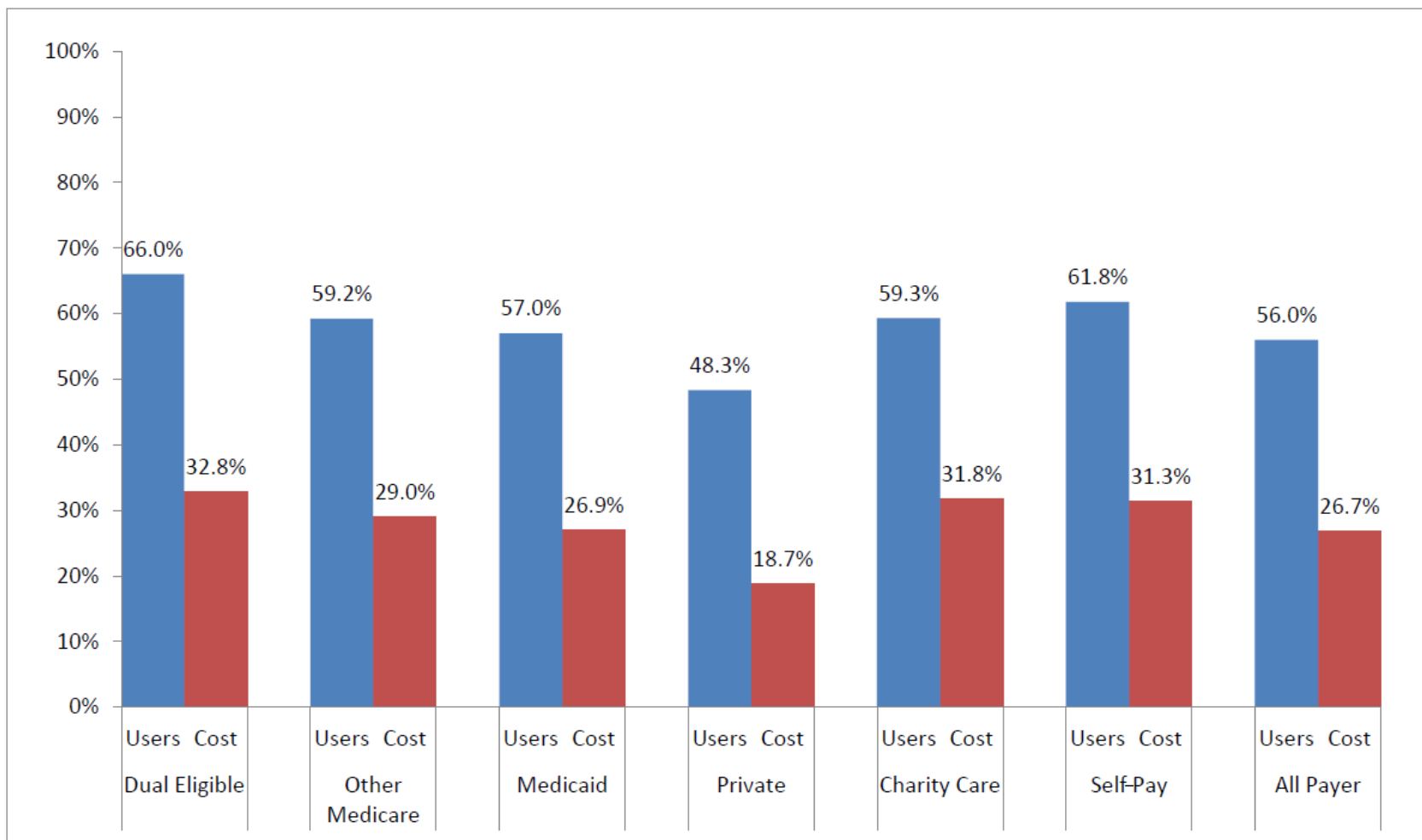


Behavioral Health Problems by ED High User Status

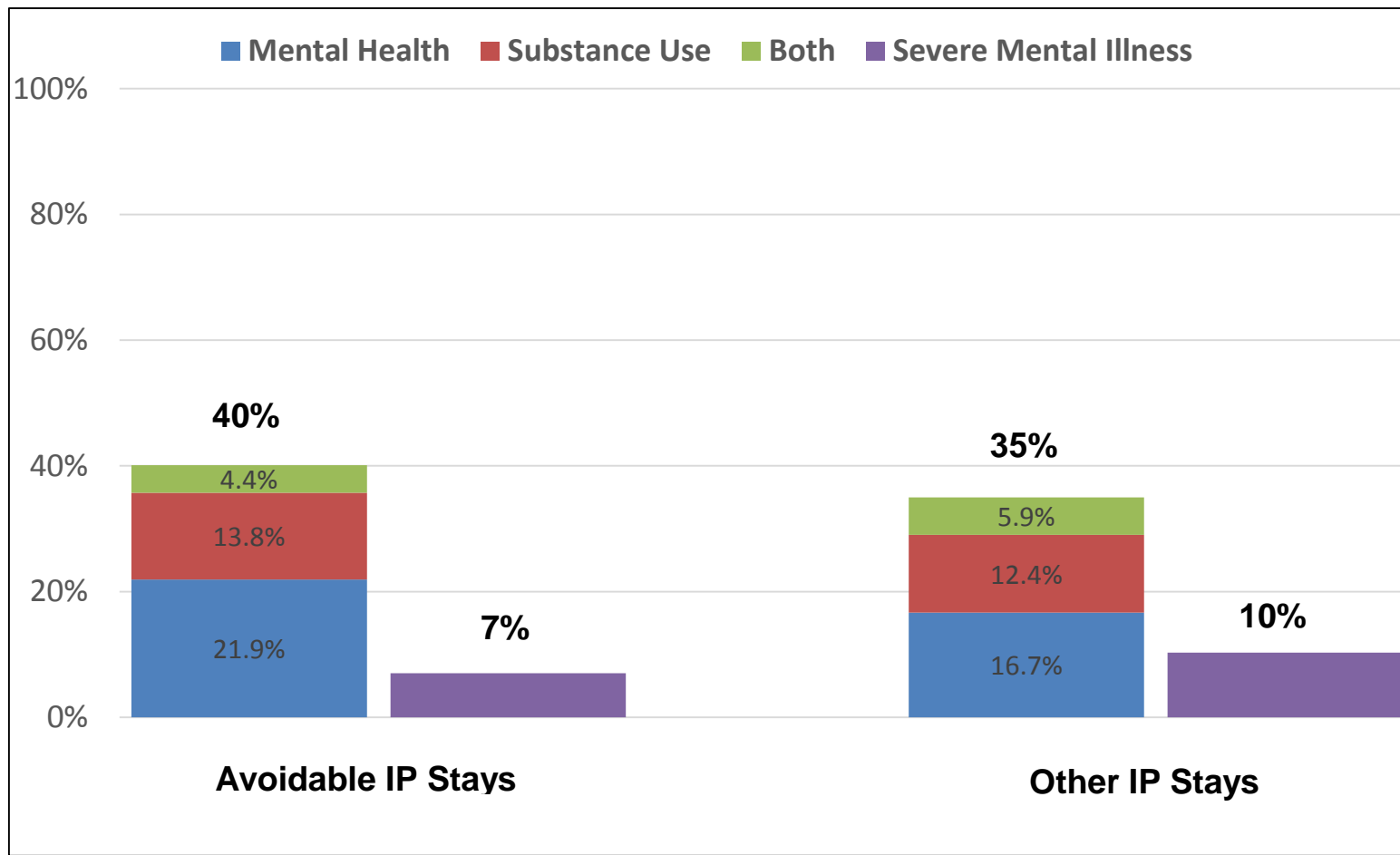
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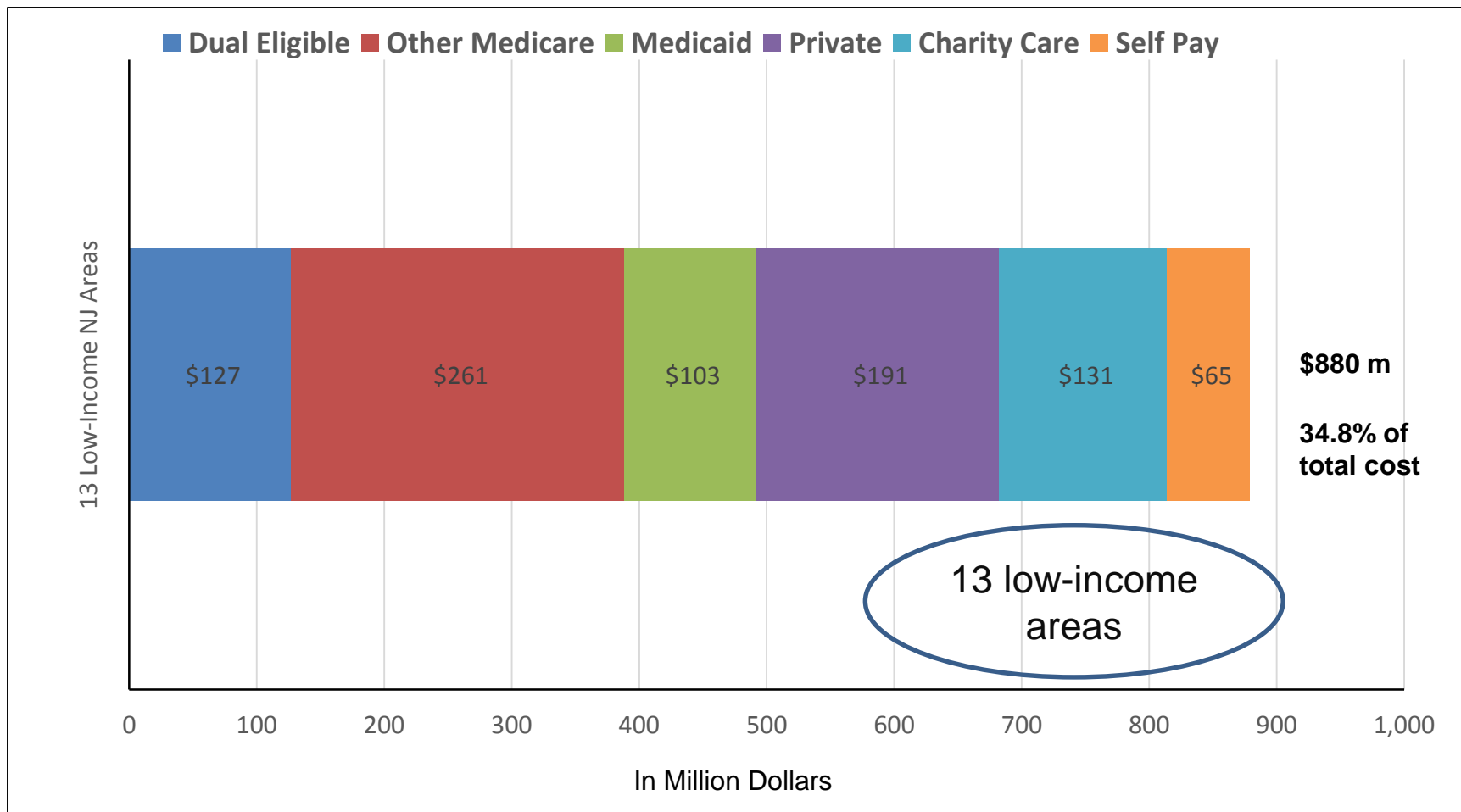
Behavioral Health Problems Among ED High Users by Payer 13 Low-Income NJ Areas, 2008-2011



Behavioral Health Problems by Avoidable Inpatient (IP) Stays 13 Low-Income NJ Areas, 2008-2011

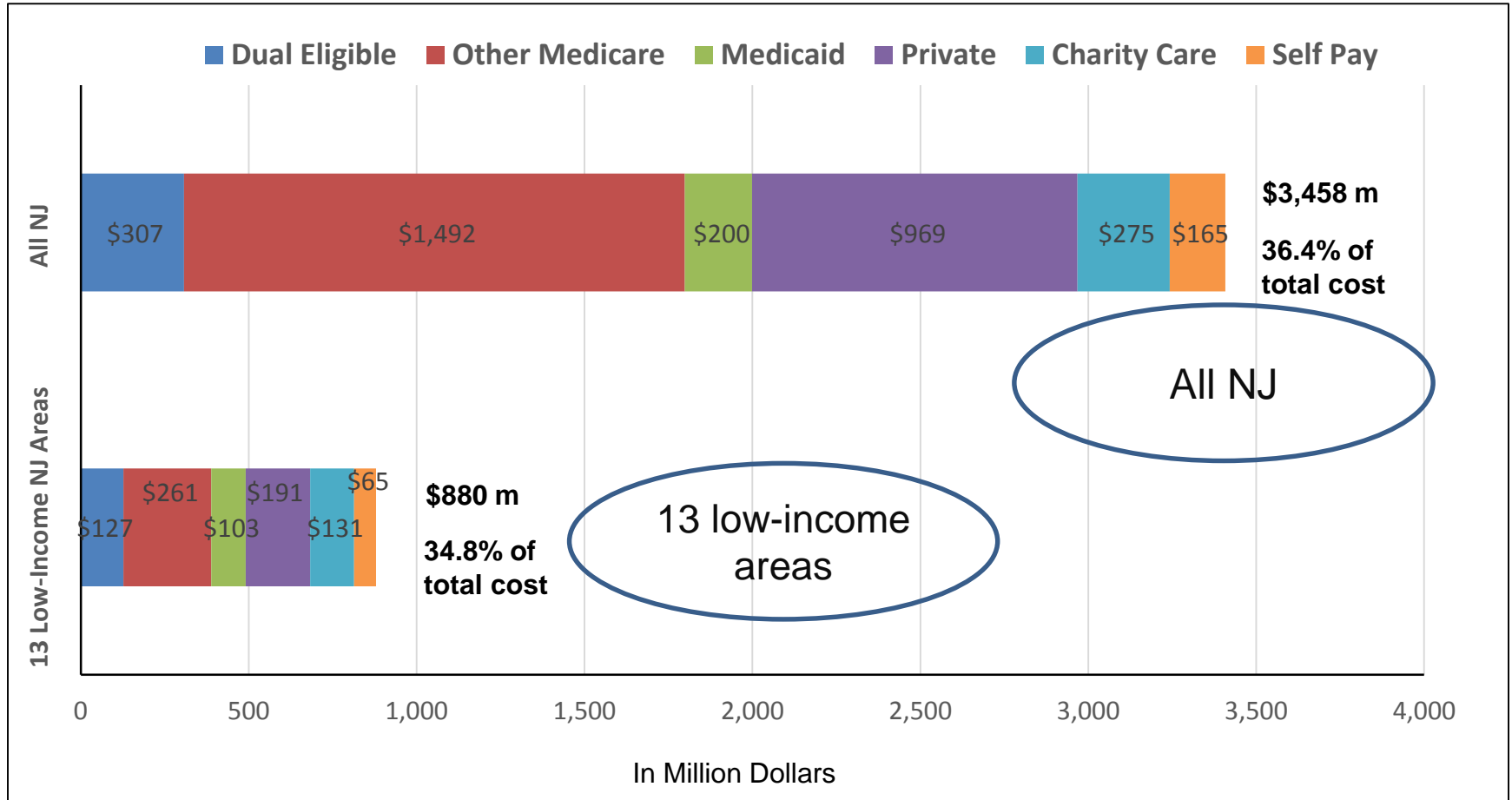


Annual Inpatient Cost Associated with Behavioral Health Problems



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

- Very high prevalence of BH conditions among high users across all payers
 - Three of four inpatient high users diagnosed with BH conditions
 - One in four diagnosed with a serious mental illness
- High prevalence of BH conditions among avoidable hospitalizations
- BH conditions associated with substantial share of hospital costs across all payers
 - IP costs... 38% overall, 47% Medicaid, & 33% privately insured
- Findings underscore importance of NJ Medicaid policy initiatives including ACOs, Managed Behavioral Health Organization, & Behavioral Health Homes
- Among all payers... very substantial potential to reduce cost among high users and patients with avoidable use by assuring access to quality BH services and integrating BH with physical health care

Thank You

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