



Smart choices. Powerful tools.

Using State APCD Claims Data to Identify Children with High Mental-Health Needs to Improve Access & Reduce Inpatient Use

Mary Kate Mohlman, PhD, *Blueprint for Health, Department of Vermont Health Access*

Jesse Drummond, PhD; Amy Kinner, MS; Karl Finison, MA, *Onpoint Health Data*

Laurel Omland, *Vermont Department of Mental Health*

Sandi Hoffman, *Department of Vermont Health Access*

Study Background

- Purpose: Evaluate total mental-health expenditures for young people with significant mental-health utilization
 - Identify young people, ages 1–21 years, with high rates of mental-health service utilization that may benefit from a mobile-response-unit initiative
 - Provide baseline data to evaluate whether such an initiative improved outcomes and lowered costs
- Study population
 - Young people, ages 1–21 years, identified with mental-health claims, substance-use disorder claims, or self-inflicted injury claims in VT APCD commercial, Medicaid, and Medicare data for calendar year (CY) 2018

Study Background (cont.)

- High utilizers were defined as young people, ages 1–21 years, with a mental-health and/or substance-use disorder diagnosis in CY2018 and any one of the following criteria:
 - 1 or more hospitalizations with a mental-health diagnosis
 - 1 or more ED visits with a mental-health diagnosis
 - 1 or more mental-health hospital diversion program stays
 - 1 or more residential (private, non-medical institution) stays
 - 4 or more home- and community-based services
 - 4 or more case-management services
- The Non-High utilizer group included all young people that had at least one mental-health diagnosis in 2018 but did not meet the additional criteria above

Reporting Stratifications & Measures

- Stratifications for young people with mental-health diagnoses identified using APCD data
 - High utilizers vs. non-high utilizers of mental-health services
 - Payer types: Commercial, Medicaid, Medicare
 - Age groups (1–5, 6–10, 11–15, 16–17, 18–21 years)
 - Gender
 - Hospital Service Areas (HSAs)
 - 3M™ Clinical Risk Groups (CRGs)
 - SAMHSA mental-health and substance-abuse conditions
- Outcome measures
 - Total expenditures (i.e., allowed amounts) for claims with a mental-health diagnosis
 - Inpatient hospitalizations / ED visits with a mental-health diagnosis

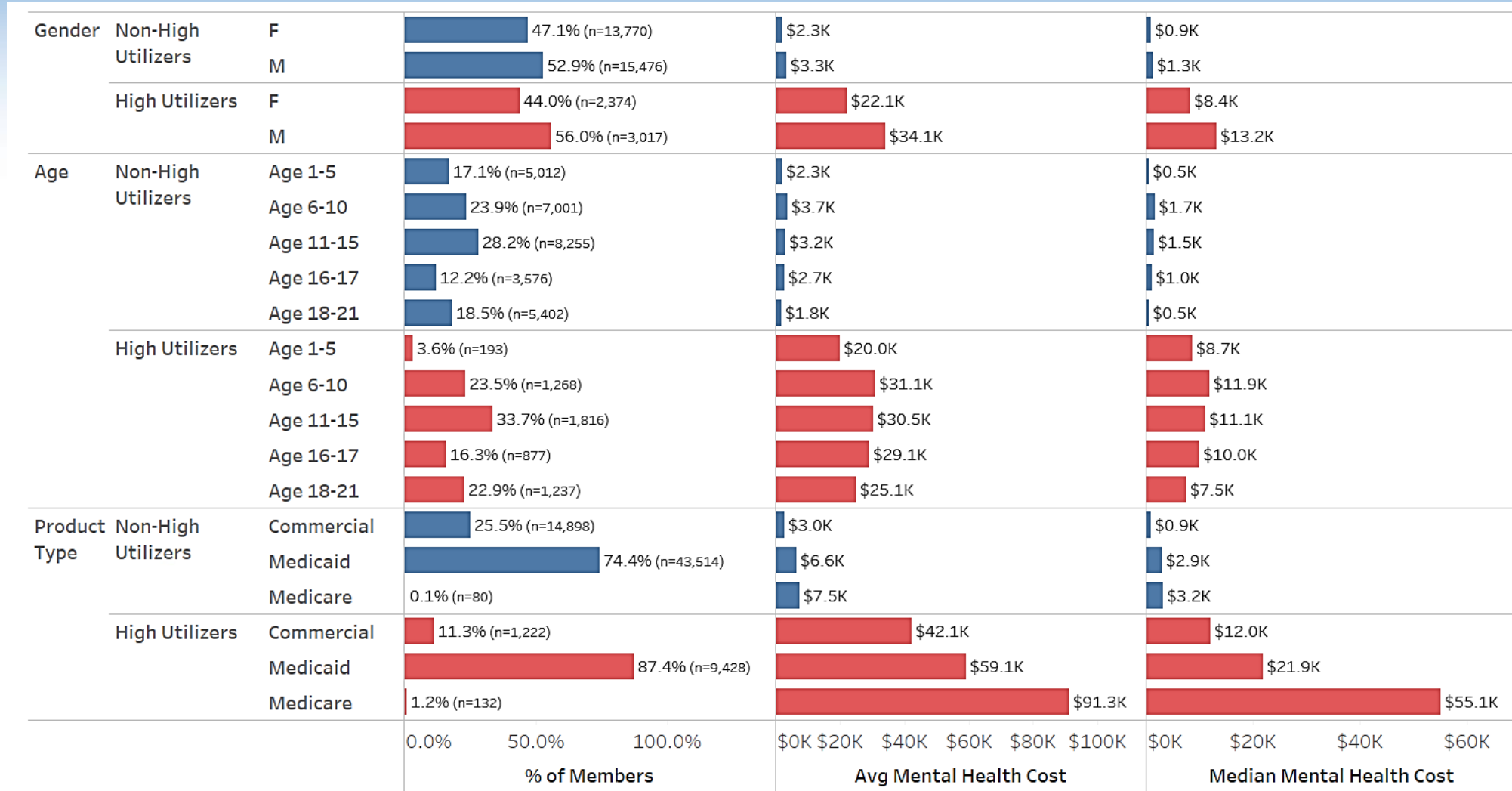
Findings – Mental-Health Utilization & Cost

Metric	Non-High Utilizers	High Utilizers	All Members
Number of members	29,246	5,391	34,637
Number of members with inpatient mental-health discharges	0	960	960
Number of members with mental-health ED visits	0	1,813	1,813
Number of members with ≥4 HCBS days *	0	585	585
Number of members with ≥4 case management services	0	3,438	3,438
Number of members with any residential PNMI treatment †	0	323	323
Number of members with any hospital diversion claim	0	298	298
Total mental-health cost (all members)	\$83,209,302	\$155,219,182	\$238,428,483
Average mental-health cost per member	\$2,845	\$28,792	\$6,884
Median total mental-health cost	\$1,055	\$10,418	\$1,477

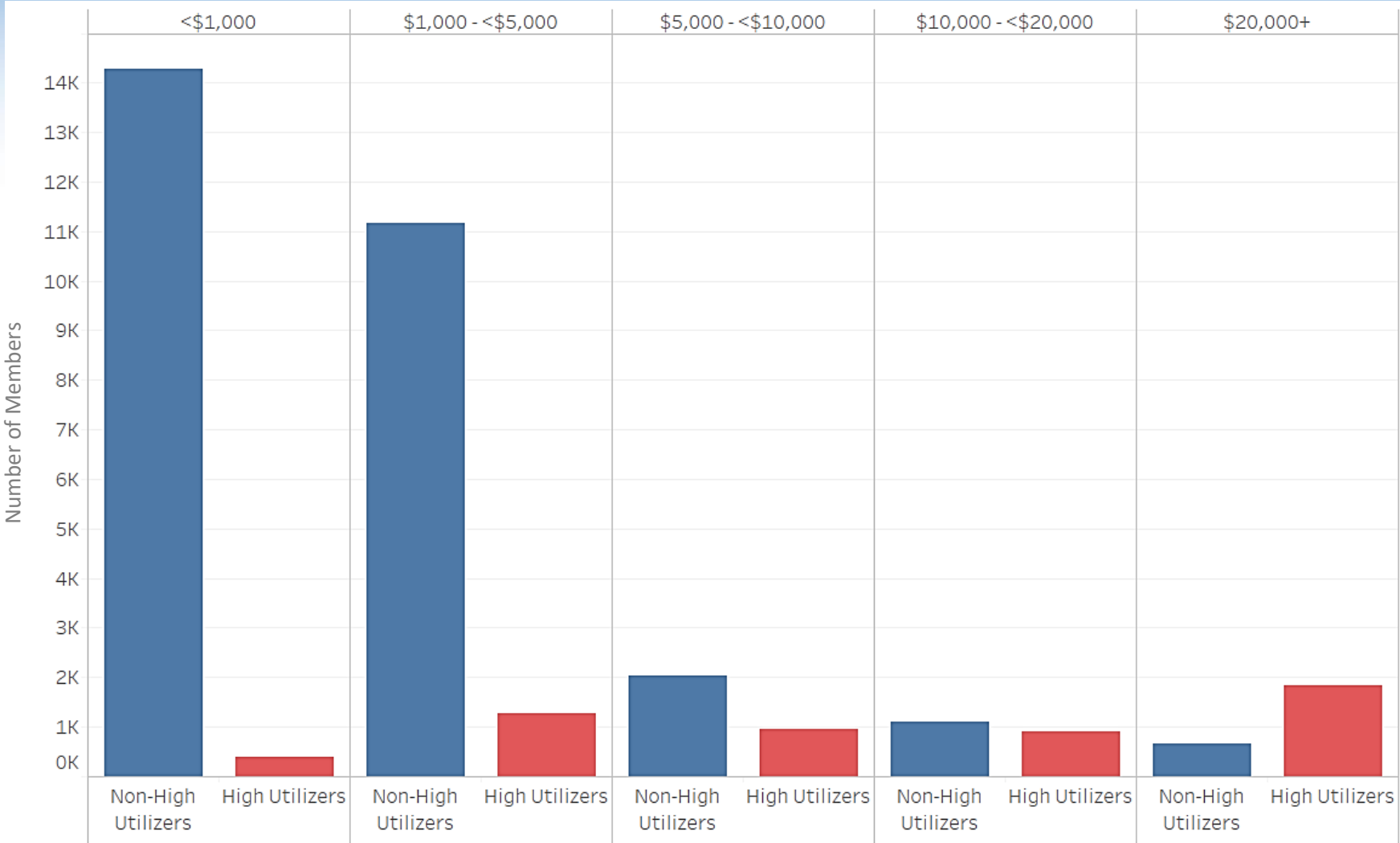
* HCBS = Home and community-based services

† PNMI = Private non-medical institution

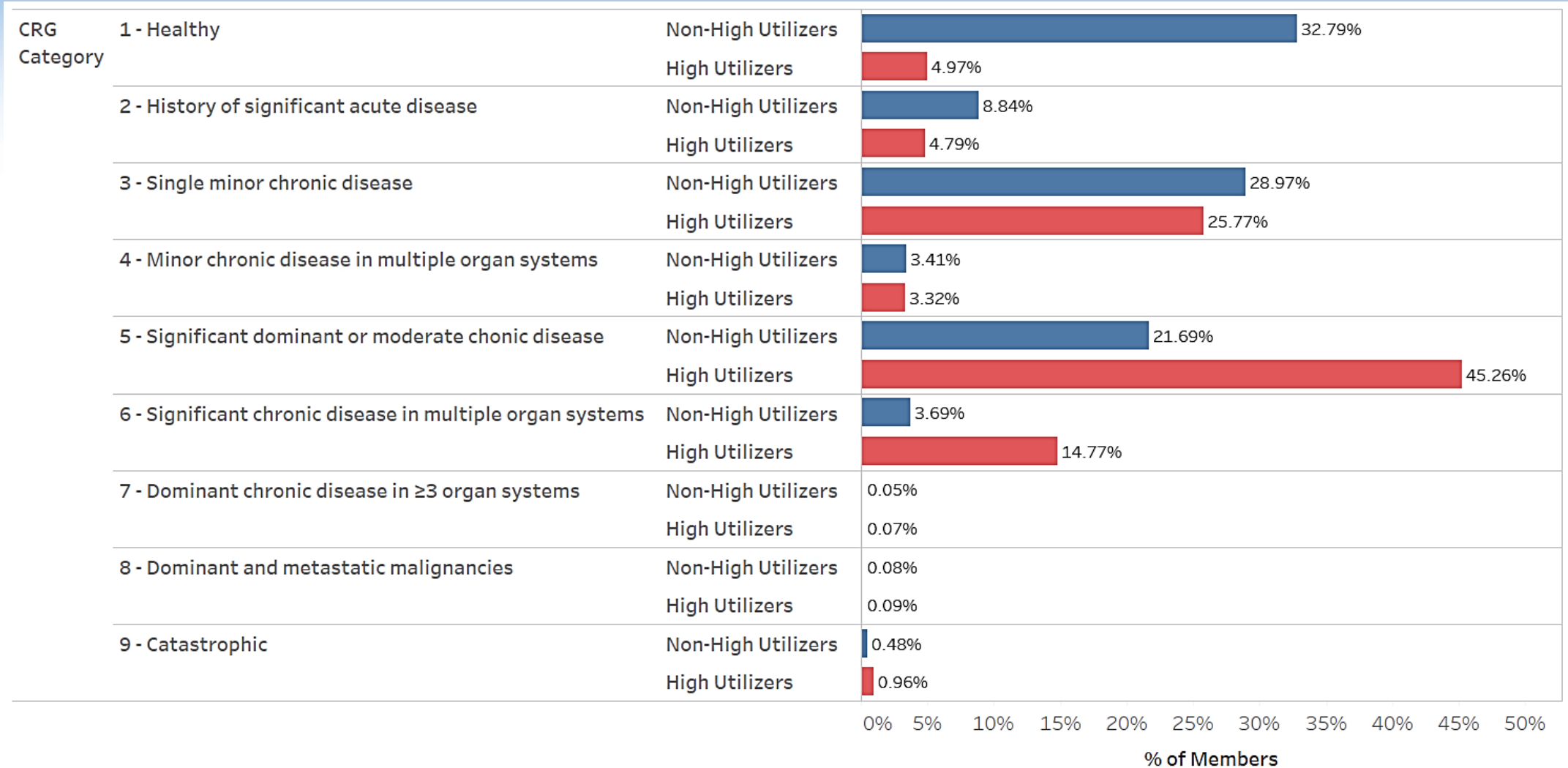
Findings – Demographics



Findings – Total Mental-Health Cost Distribution

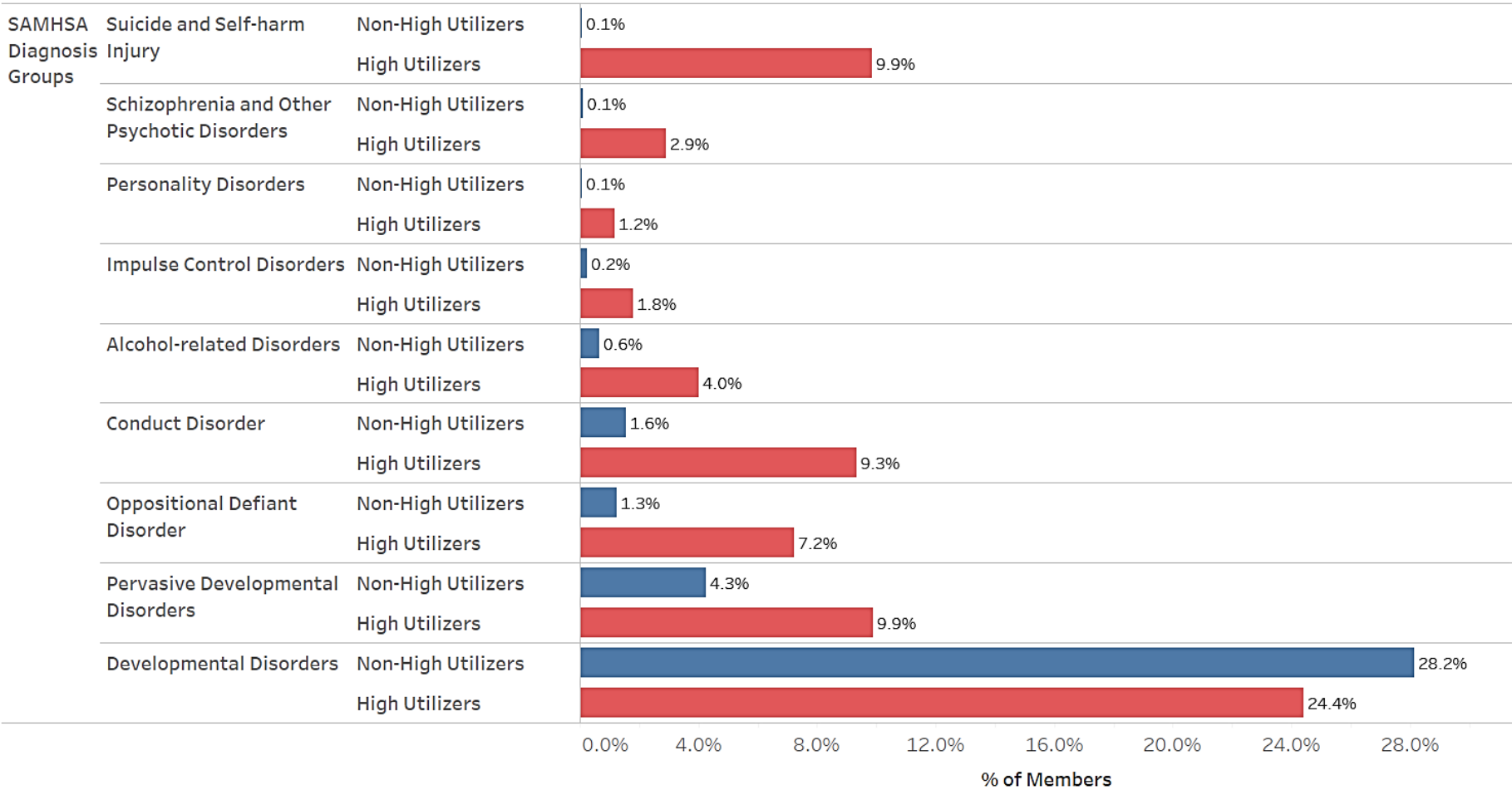


Findings – Health Status Measured by 3M™ CRGs



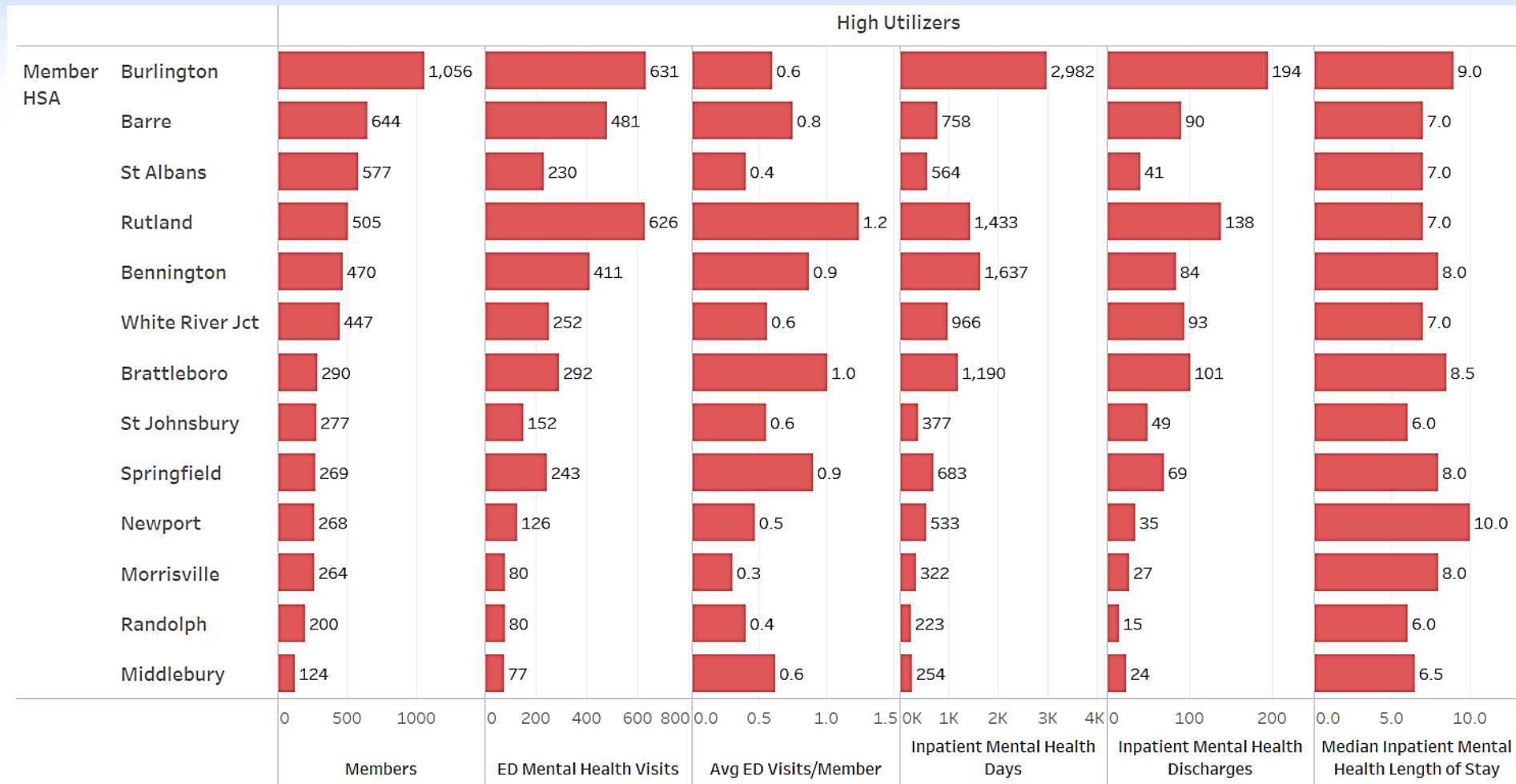
Findings – SAMHSA Diagnosis Categories

Percent of Group Population with Diagnosis



Findings – High Utilizers

Emergency Department & Inpatient Utilization by HSA



Conclusions

- Compared to the non-high utilizer group, pediatric patients categorized as high utilizers had...
 - Higher proportions of patients that were male, patients that were 11 years or older, and patients enrolled in Medicaid
 - Average total mental-health service expenditures approximately 10 times greater
 - Substantially higher proportions in all SAMHSA diagnostic categories except developmental disorders
- Regional counts of individuals categorized as high utilizers did not necessarily indicate where the highest acute care or interventions were needed
- APCDs are valuable for assessing pediatric populations with high mental-health service utilization and identifying populations with highest acute needs who may benefit from alternative interventions



Reliable data. Informed decisions. Strategic advantage.

75 Washington Avenue
Suite 1E
Portland, ME 04101

207 623-2555

www.OnpointHealthData.org