

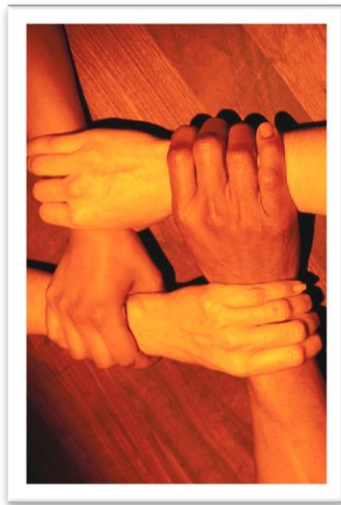


Pediatric Emergency Department Utilization

Connecticut Behavioral Health Partnership

Acknowledgements

This data presentation was possible due to the collaboration of the CT Behavioral Health Partnership.



DSS

VO-CTBHP

DCF

DMHAS



National Context



- Across the country, approximately 25% of all visits to the ED are by individuals under 18 (AHRQ , 2005)
- National studies have documented a trend of increasing Psychiatric ED visits by children and youth (AAP, 2011)
- Children on Medicaid or uninsured account for a disproportionate share of ED visits
- Although young children 0-4 are the most frequent visitors to the ED, children with psychiatric related ED visits were older than those that visit for medical reasons
- Mood disorders were the 6th most common reason for an ED visit that resulted in hospitalization (AHRQ, 2005)

Basic Methodology

**Study Period:
CY 2011 & CY 2012**

Data Used:

- DSS eligibility files
- Medicaid claims
- ValueOptions authorization data
- DCF data



Analyses:

- Descriptive statistics
- Bivariate analyses
- Multiple regression analyses

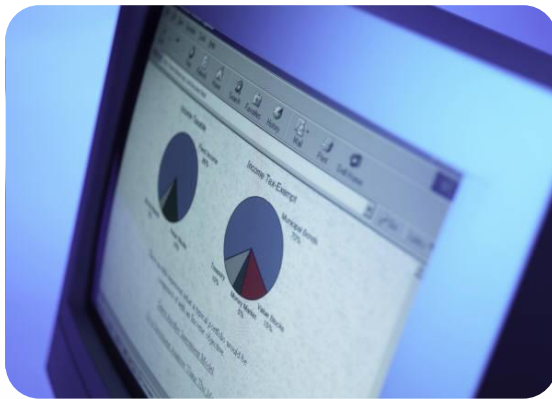
Note: Some data analyses use episode counts and so individuals may be counted more than once, and other analyses use unique member counts because a member can only be in one category.

Cohort Methodology

Youth Population Analyses = All eligible Medicaid youth ages 3-17.

Exclusions:

- Dually eligible at any point
- Had D05 or Title XIX at any point
- Youth ages < 3



BH Cohort Definition:

- Youth who used behavioral health services during the study period.

BH ED Cohort Definition:

- Primary BH diagnosis on ED claim
- Primary medical with secondary BH diagnosis on ED claim.

Basic Questions

1:

What are the characteristics of youth who utilize the ED?

2:

Do factors such as gender, age and race/ethnicity impact BH ED utilization?

3:

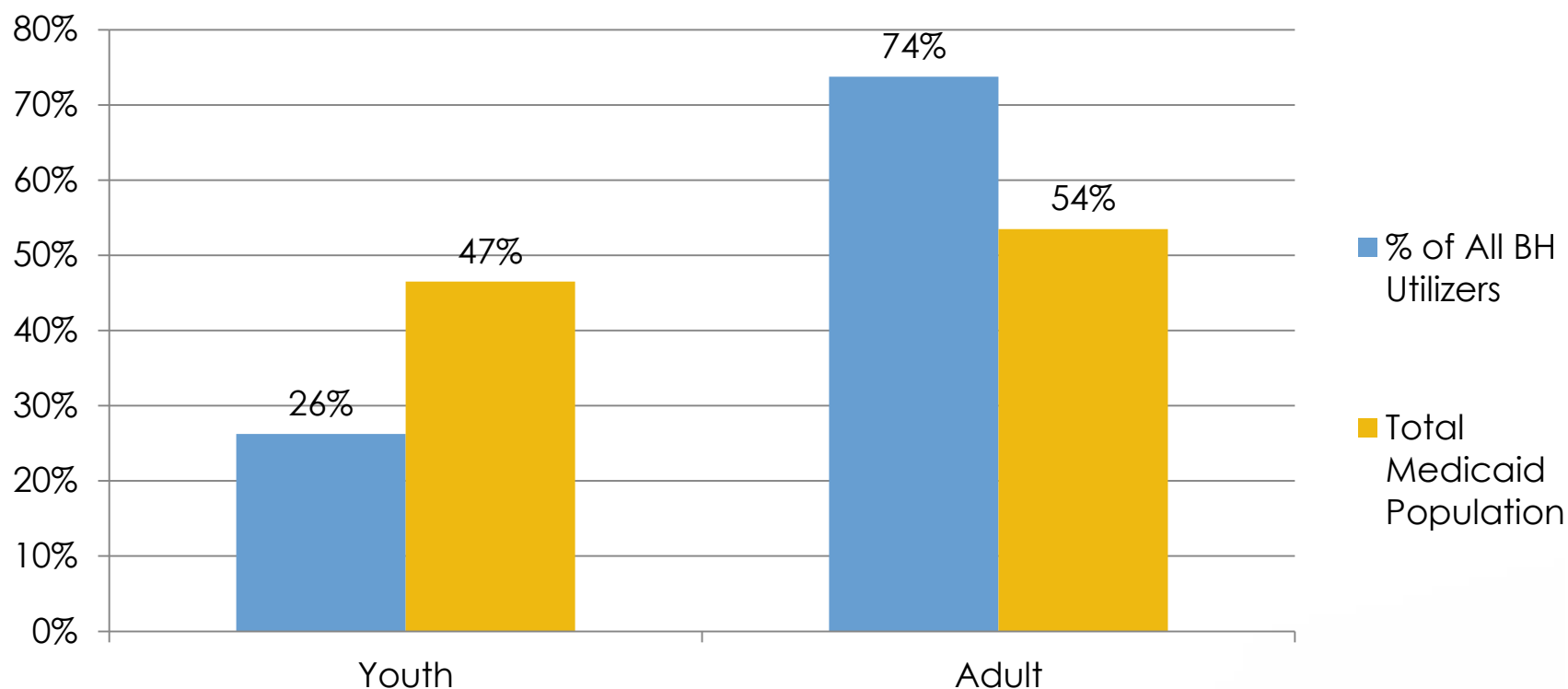
What factors increase risk or provide protection from the frequency of BH ED use?

4.

How can these results inform the system?

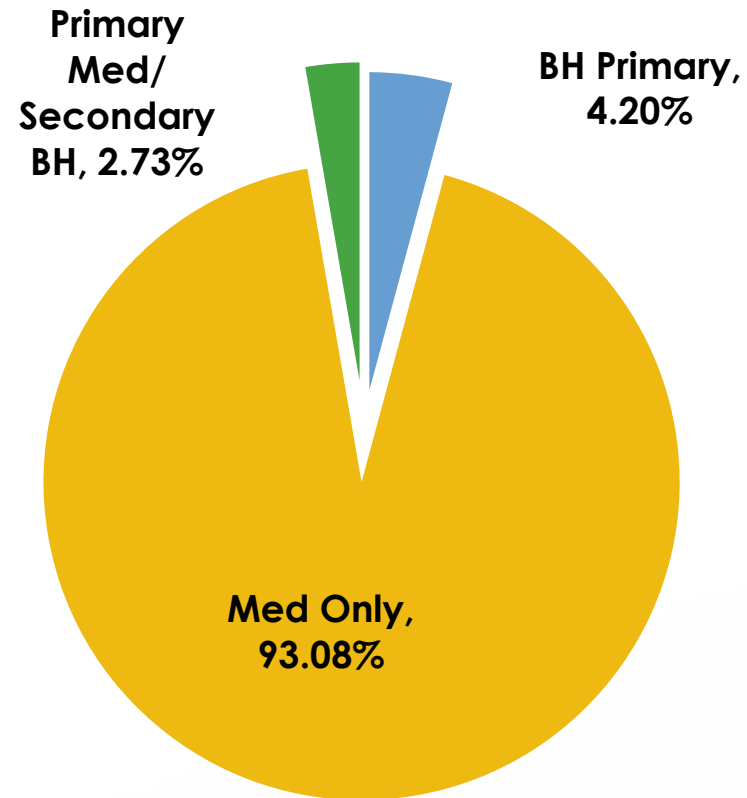


Youth/Adult Medicaid Population



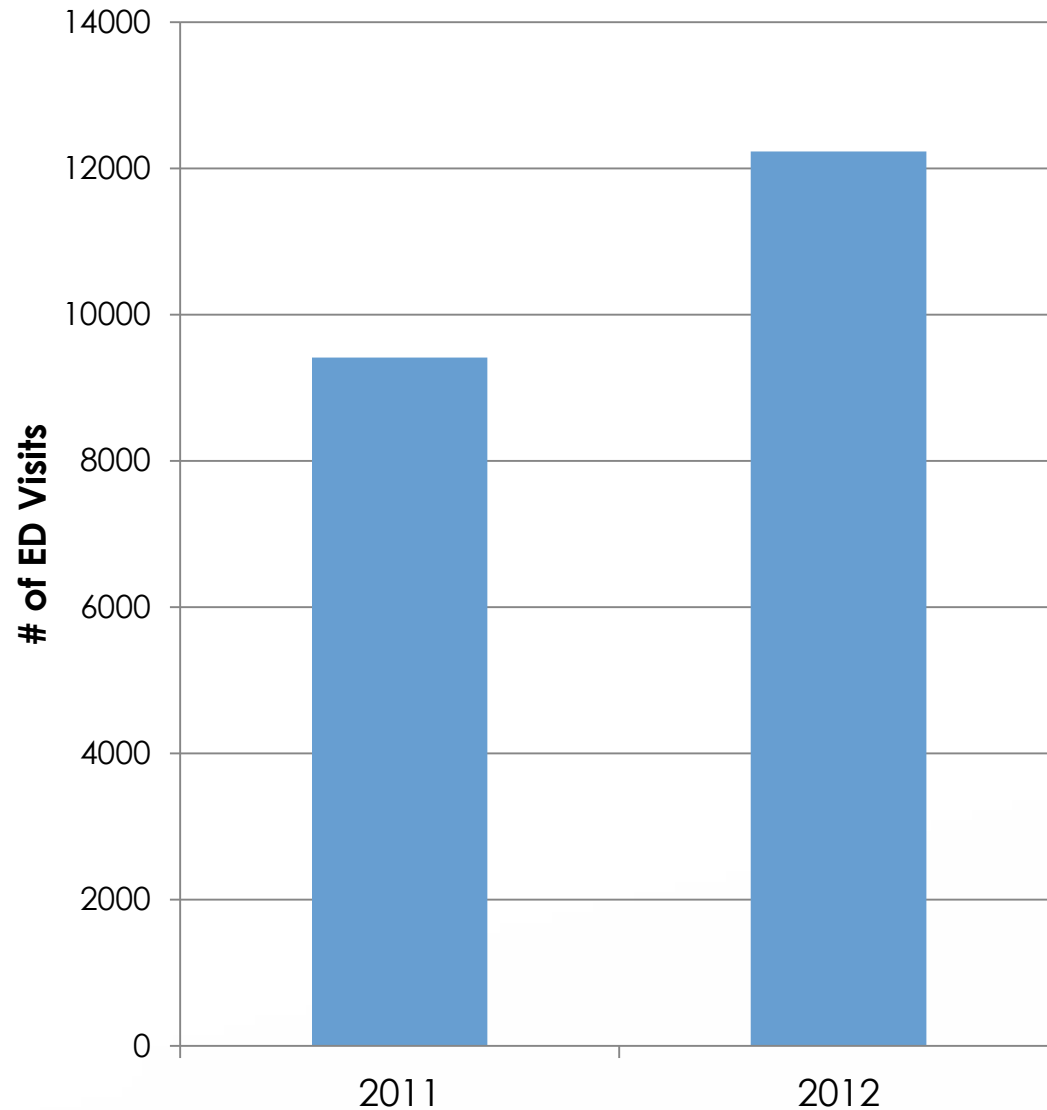
- 539,700 total Medicaid members (adult and youth) were identified in the study.
- Youth represent 47% of the population, but only 26% of all (youth and adult) BH utilizers.
- Adults utilize the majority of all BH services.

Why Did Youth Use the ED?



- 133,288 youth had 304,686 ED claims during the study period.
- The majority of ED claims were for medical reasons (93%).
- Approximately 7% of all ED claims were for behavioral health (primary or secondary diagnosis N = 21,328).

Increase in BH ED Utilization



The volume of youth BH ED visits increased by 30% between 2011 and 2012.



How Many Youth?

47%

Of the Medicaid population were youth = 250,936

25%

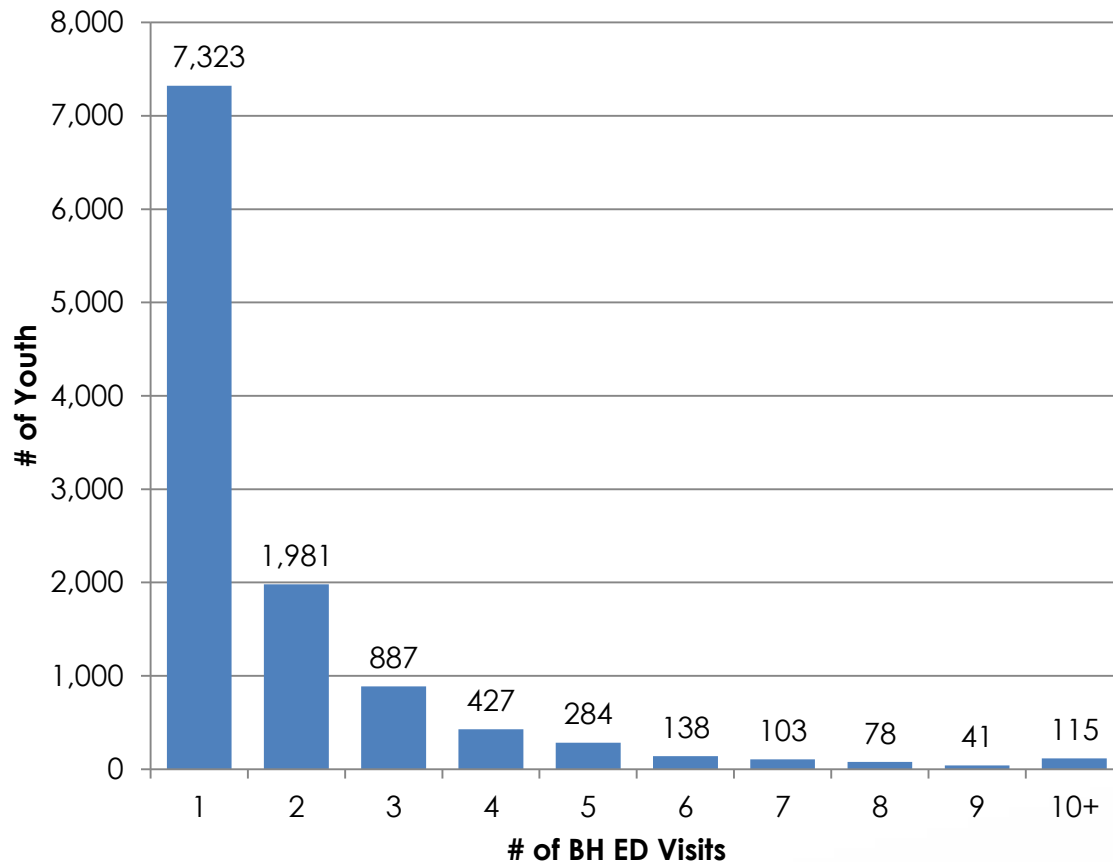
Of the youth used behavioral health services = 63,119

18%

Of the youth in the BH cohort utilized the ED = 11,106



BH ED Frequency Distribution



Of all the youth who had a BH ED visit during the 2-year study period:

- The majority (64%) only had 1 ED visit.
- Over 80% had two or fewer visits.
- The range was from 1-26 total ED visits.
- 115 unique youth had 10+ ED visits.

Demographics Outline

GENDER

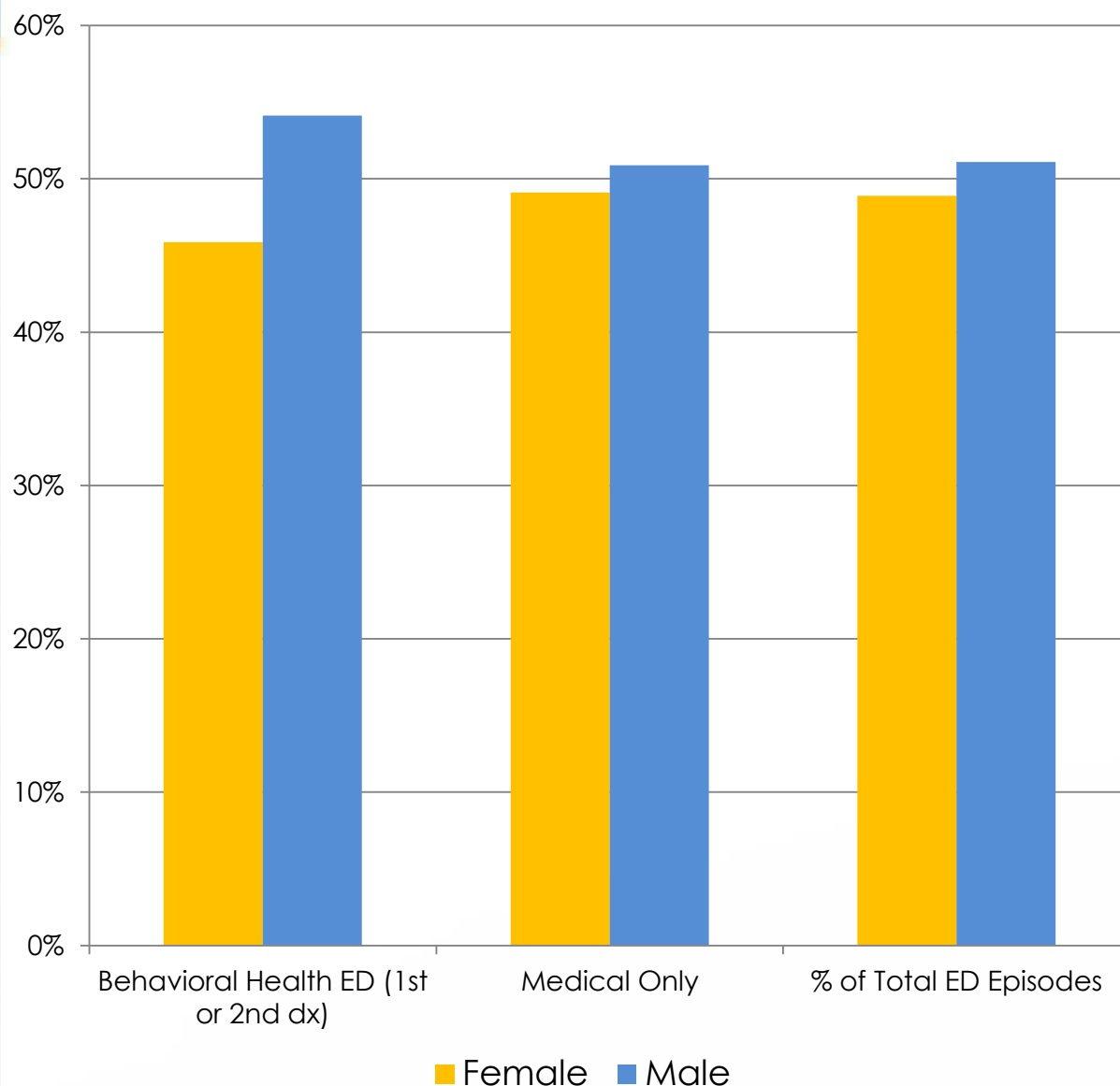
AGE

**RACE &
ETHNICITY**

**DCF
INVOLVEMENT**



Gender and ED Use by Diagnosis Indicator



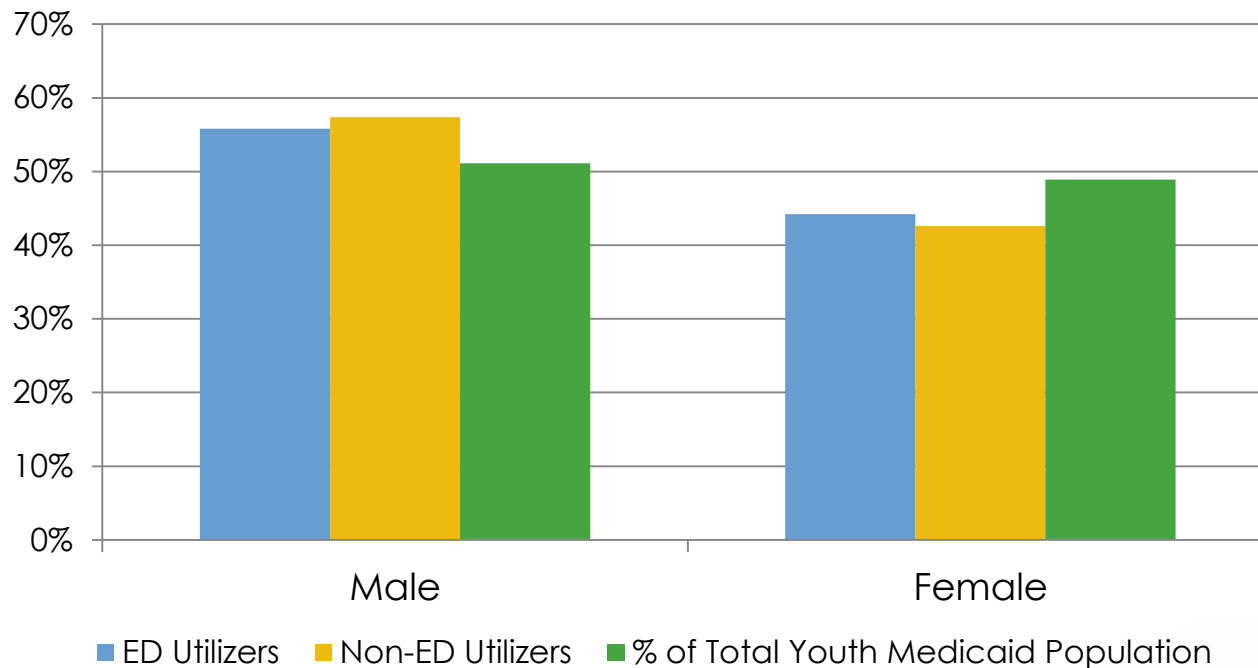
- Males are over-represented in BH ED utilization.
- Males and females utilized medical ED services at rates similar to their population rate.



Note: This data is not unique members, as members may have episodes of more than one type of ED visit.

Gender Differences in ED and Non-ED Utilization of BH Services

ED Utilizers vs. Non-ED Utilizers Compared to % of Total Medicaid Population



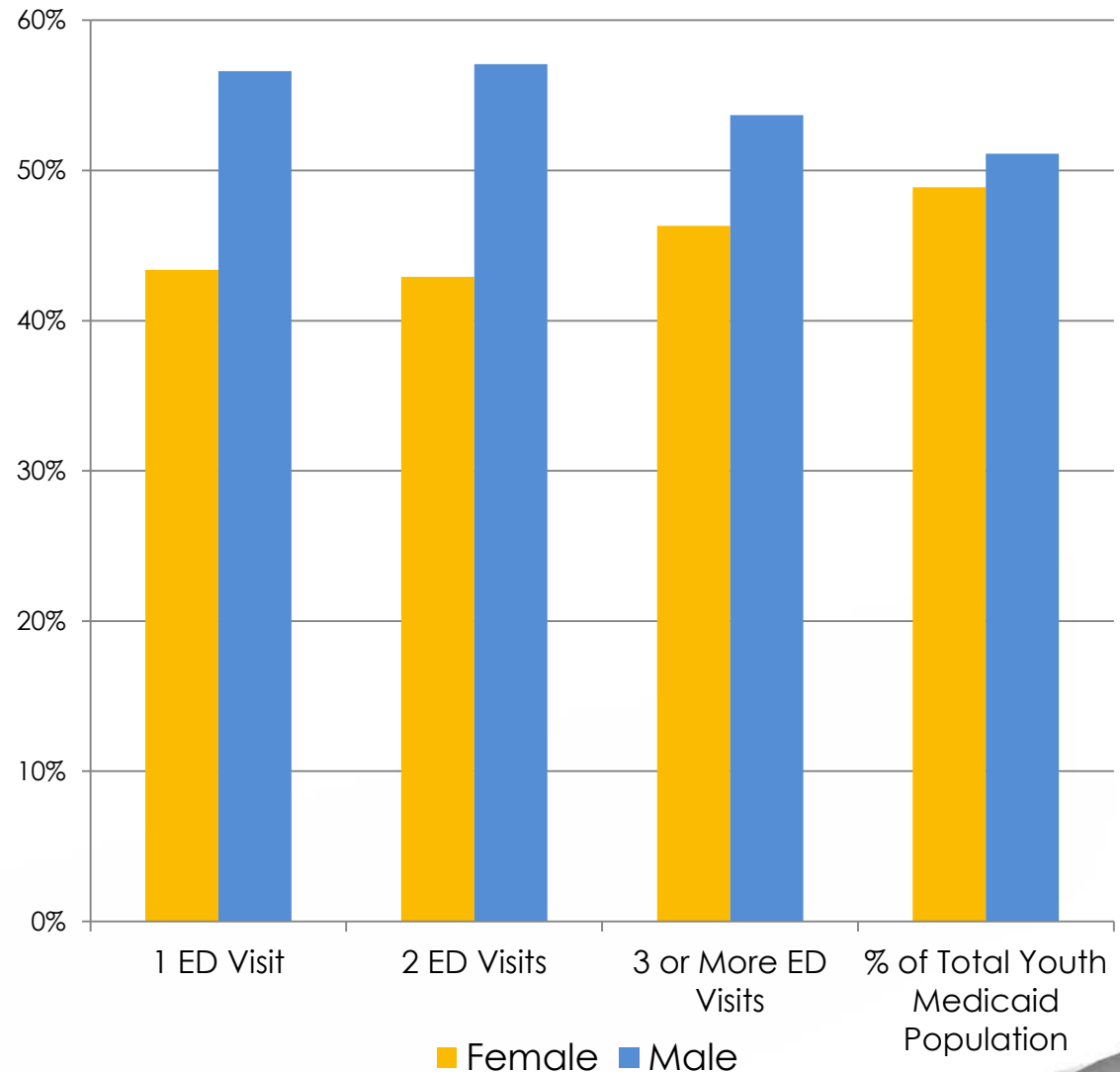
- Males utilize BH services, in general, at rates greater than their population rate.
- Females who use BH services are under-represented in both ED and non-ED utilization.

Note: This data shows unique members. A youth can only be counted in one category.

Gender and Frequency of BH ED visits



- Compared with their population rate, males are over-represented in their use of the ED for BH needs.
- As the frequency of BH ED visits increases, the discrepancy between males and females decreases



Note: This data shows unique members. A youth can only be counted in one category.

How Does Gender Impact ED Utilization?

1:

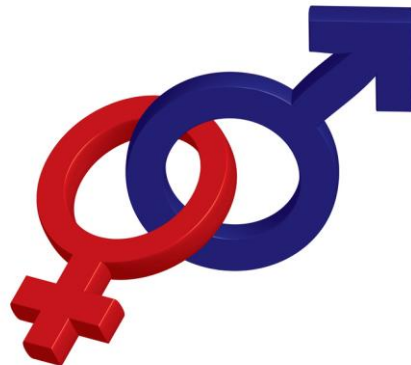
Males and females visit the ED for medical reasons at rates similar to their Medicaid population rate.

2:

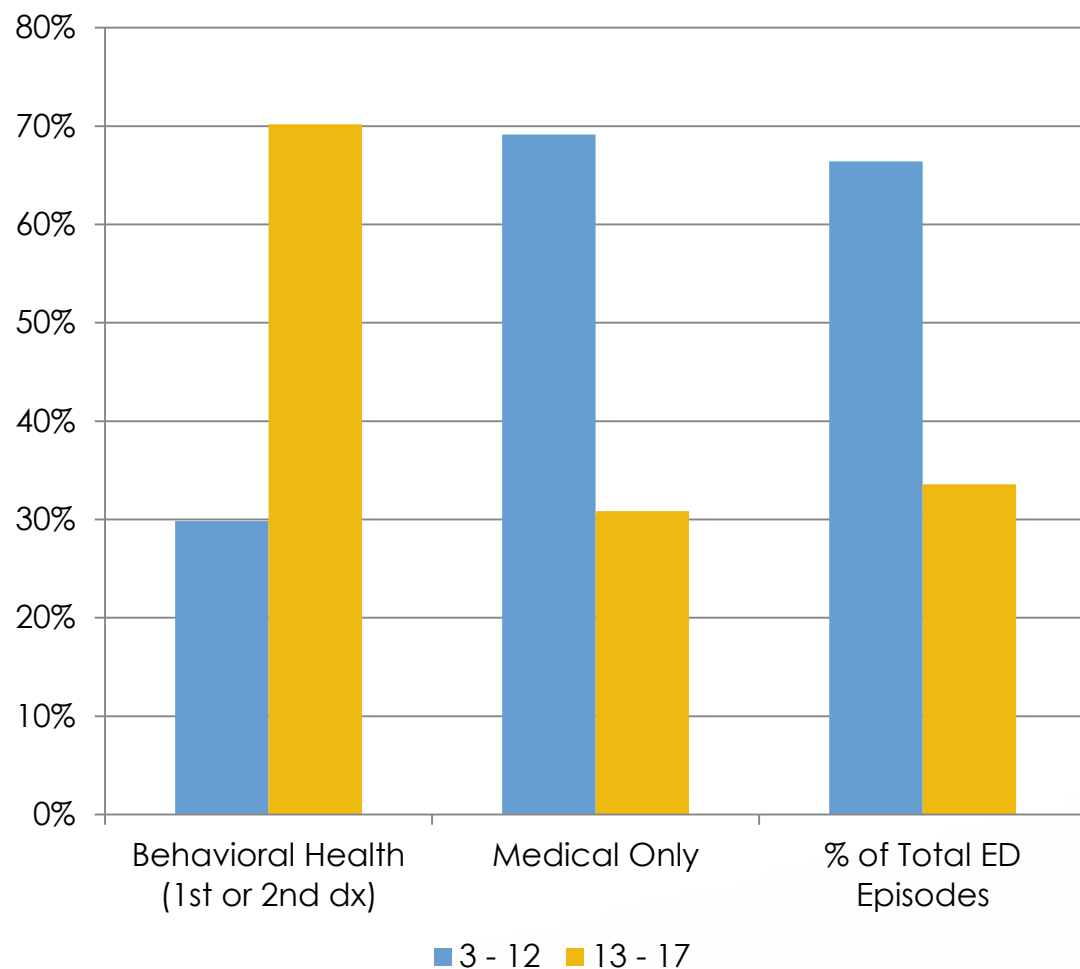
Males utilize the ED for behavioral health needs at a rate greater than their population rate.

3:

Females are under-represented in BH ED visits but less so as the number of visits increases.



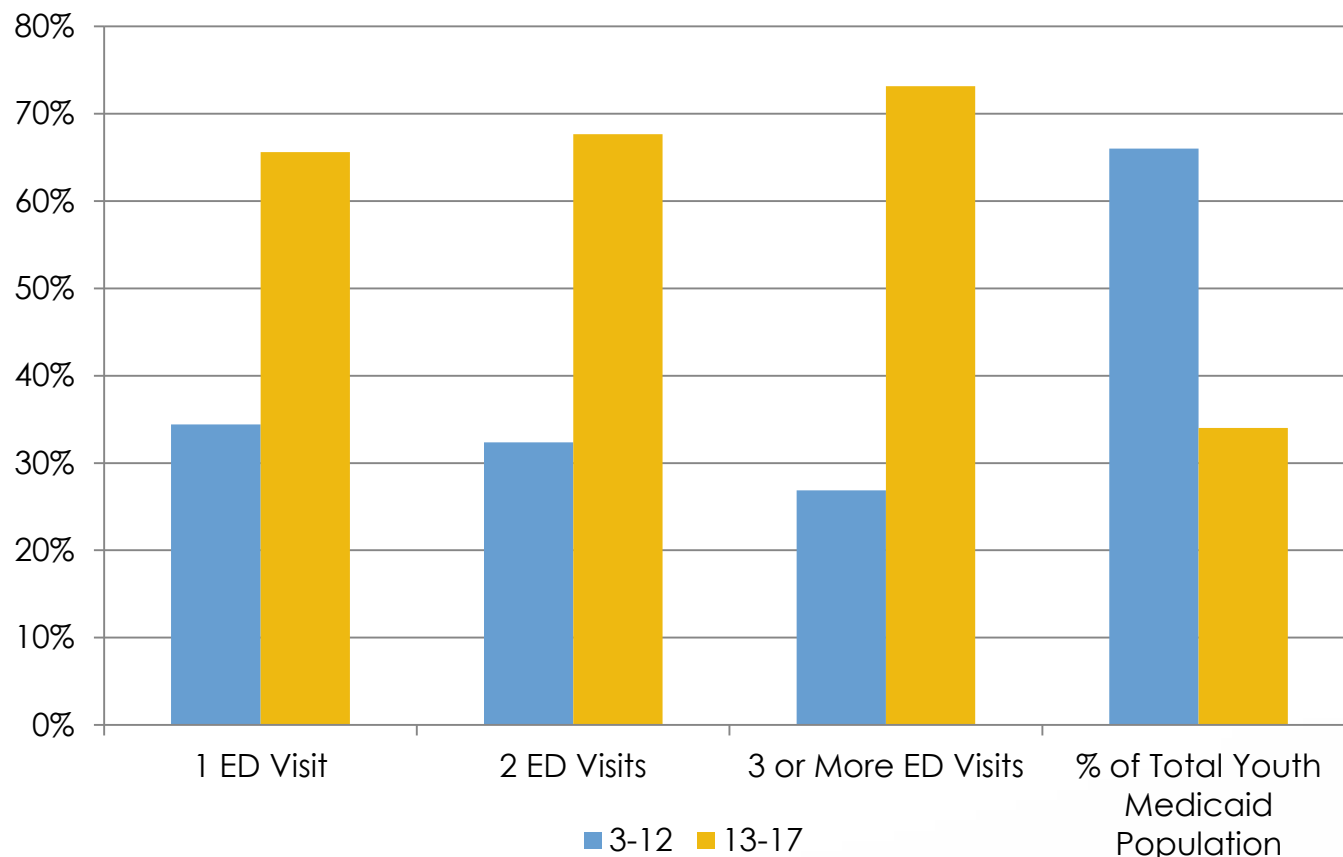
Age by ED Diagnosis Indicator



- Children ages 3-12 make up the majority of all ED visits.
- Younger children are most often going to the ED for medical reasons.
- Adolescents, on the other hand, are utilizing the ED for BH needs at significantly higher rates.

Note: This data is not unique members, as members may have episodes of more than one type of ED visit.

Age by Frequency of BH ED Visits



- Adolescents are the majority of the BH ED utilizers and this pattern holds true across all ED frequency categories.
- Adolescents' use of the ED is disproportionate to their Medicaid population rate.
- Young children are less likely to be frequent utilizers of the ED.

Note: This data shows unique members. A youth can only be counted in one category.

How Does Age Impact ED Utilization?

1:

Children ages 3-12 are more likely to use the ED for medical reasons than behavioral health.

2:

Adolescents use the ED for behavioral health needs disproportionately to their Medicaid population rate.

3:

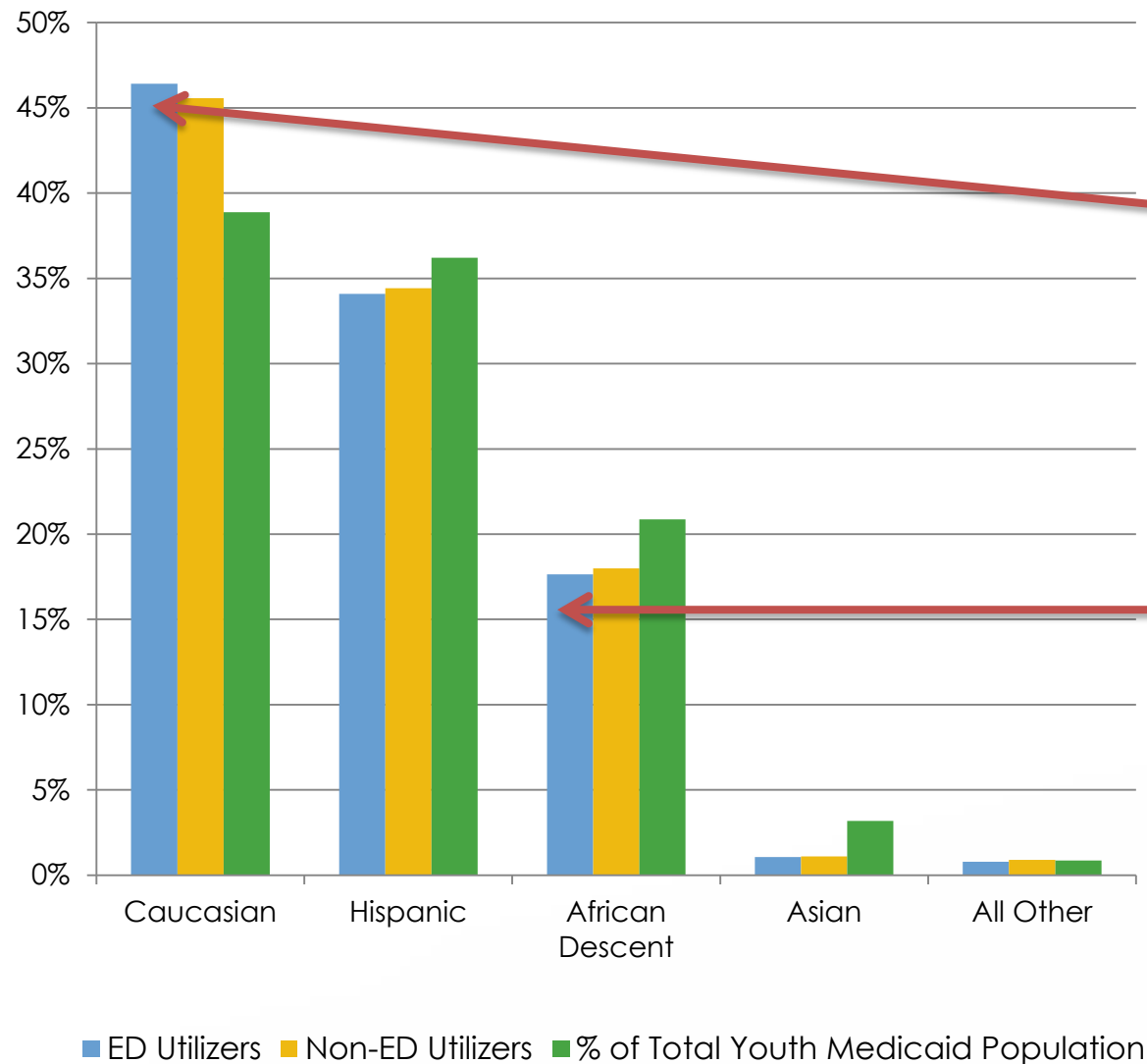
Even within the behavioral health cohort, adolescents continue to utilize the ED at higher rates than the younger children.

4.

The vast majority of youth who return to the ED are adolescents.



Race/Ethnicity by ED and Non-ED Utilizers of BH Services



- Caucasians were over-represented in the BH cohort overall, but most so in the ED utilizer group.
- All other race/ethnic categories are under-represented in ED utilization, with the African Descent group being the most under-represented.

Note: This data shows unique members. A youth can only be counted in one category.

How Does Race/Ethnicity Impact ED Utilization?

1:

Caucasians are over-represented in their use of behavioral health services, particularly the ED visits for BH reasons

2:

Those members of Hispanic, African Descent, and Asian race/ethnicity are under-represented in the ED and BH services in general.

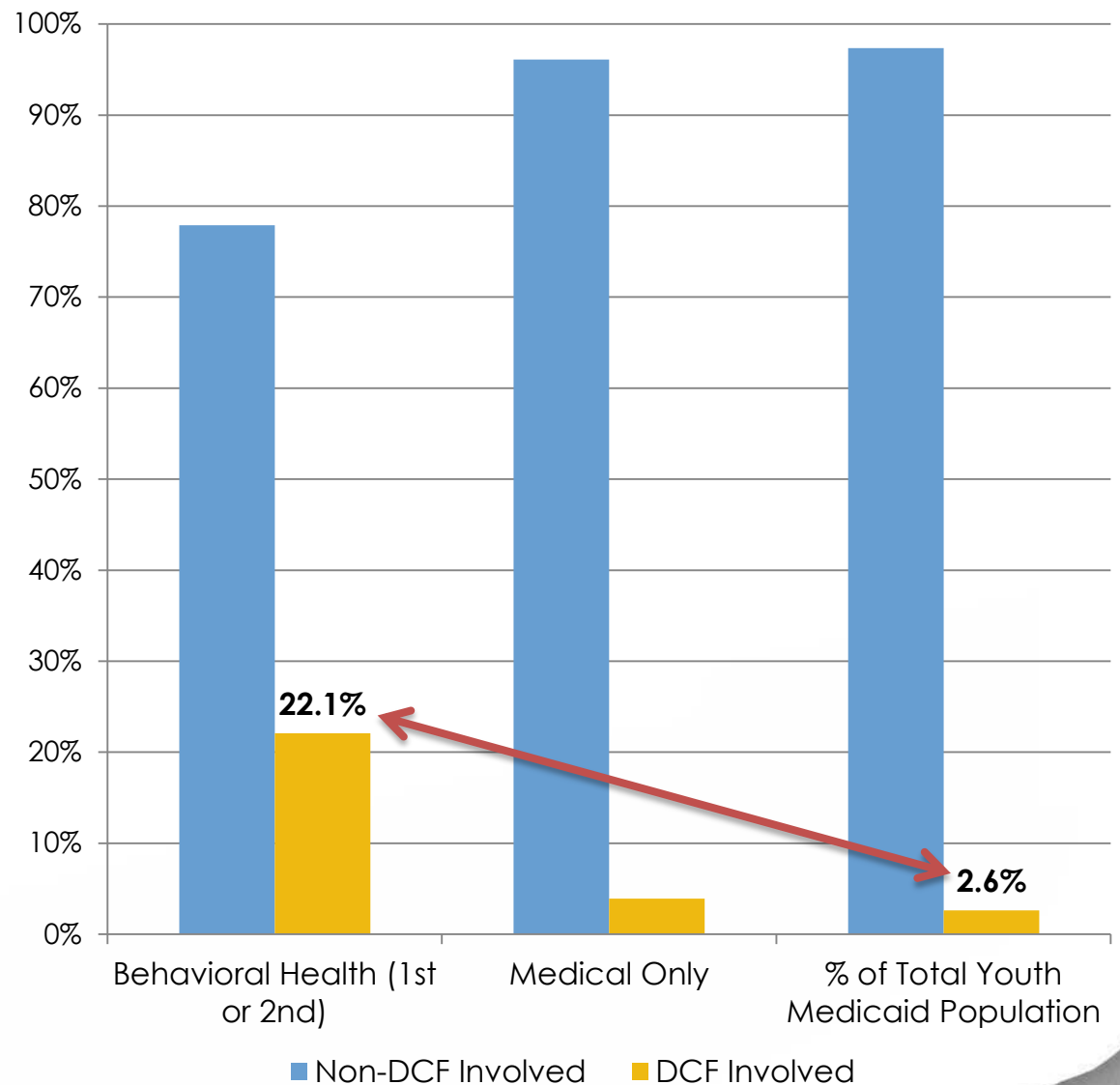
3:

Members with African descent have the largest disparity between their rate in the Medicaid population and their use of the ED and BH services.

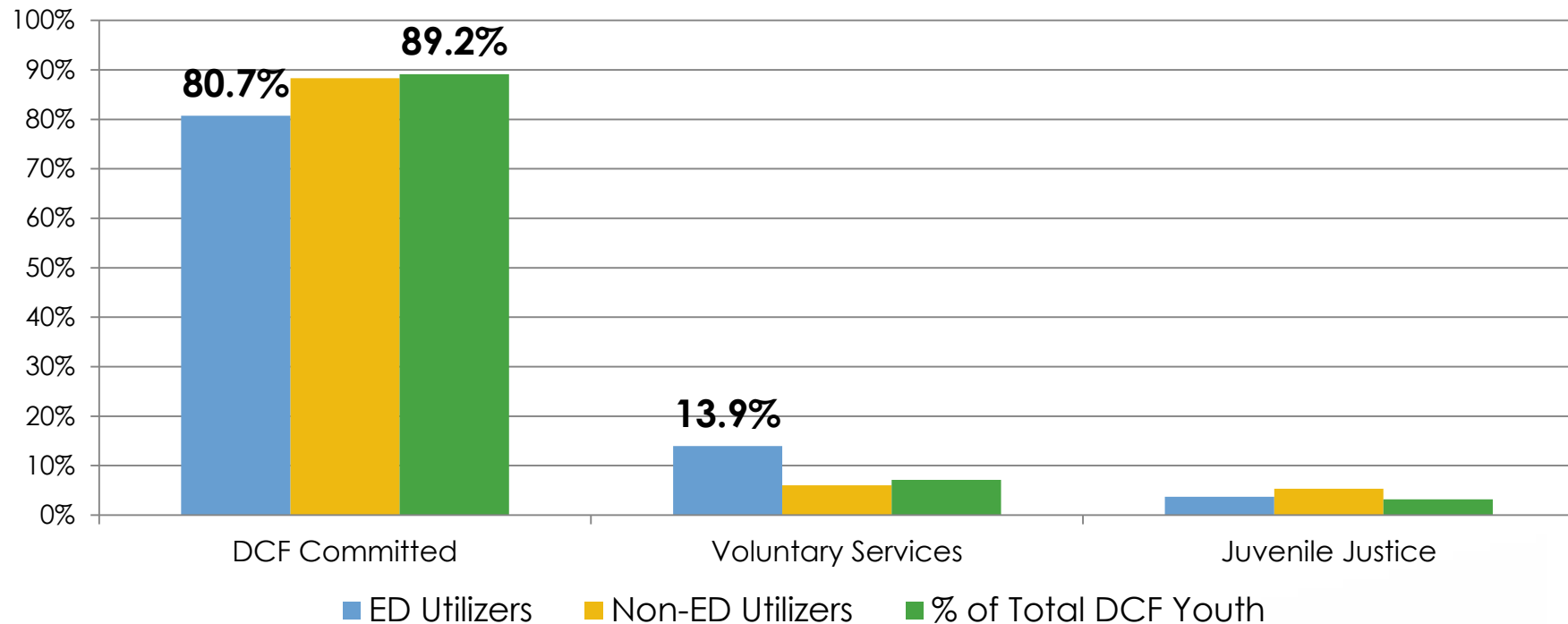


DCF Involvement by Diagnosis Indicator

- DCF involved youth make up less than 3% of the total population.
- DCF Youth neither under or over use the ED for medical reasons
- DCF involved youth are significantly over-represented in BH ED utilization.



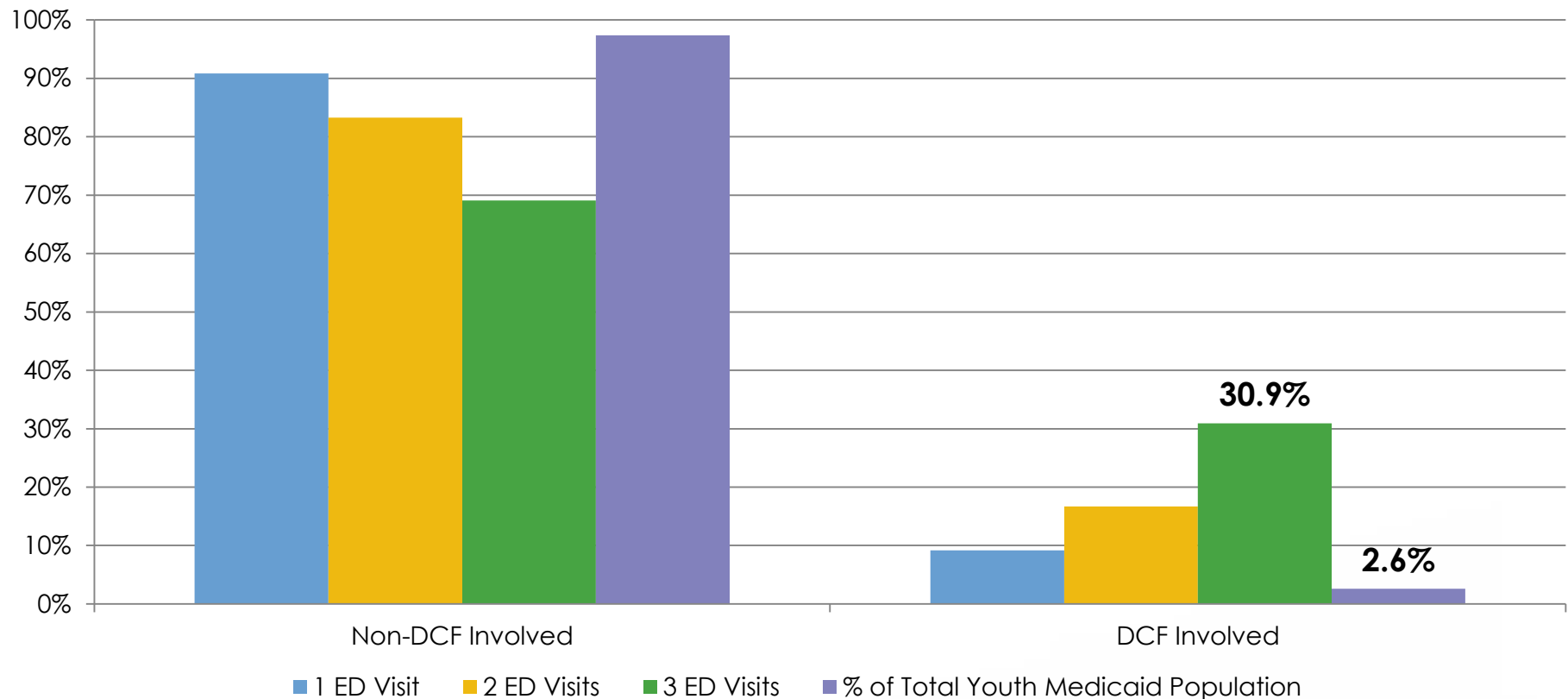
DCF Status by ED and Non-ED Utilizers of BH Services



- DCF Committed youth make up 89% of all youth identified as DCF involved, but of the DCF youth who used the ED, Committed youth make up only 80%.
- Youth involved with Voluntary DCF services are over-represented in ED Utilization compared to their portion of the DCF youth in the BH cohort.

Note: FWSN and Dually Committed youth are not graphed as their percentages were too small to show. DCF involvement was calculated based on status on the last day of the study period.

DCF Involvement by Frequency of BH ED visits



- DCF involved youth are increasingly more likely to frequently visit the ED for BH needs.
- DCF involved youth make up 31% of the youth who readmit to the ED 3+ times, which is significantly higher than their population rate (2.62%).

How Does DCF Involvement Impact ED Utilization?

1:

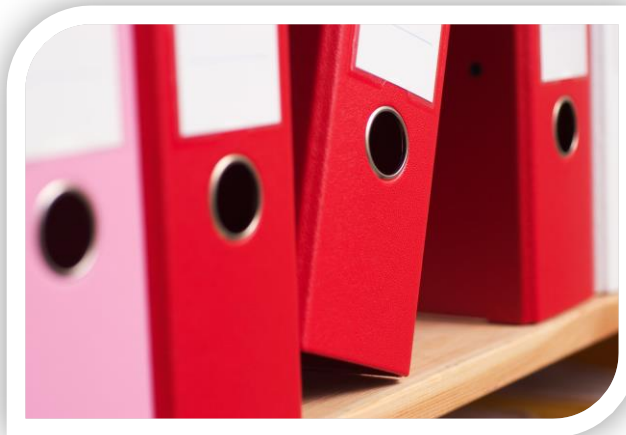
DCF involved youth make up a small portion of the total population (2.6%), but a much larger portion of the BH ED visits (22%).

2:

DCF Voluntary youth are over-represented in ED utilization.

3.

DCF involved youth are more likely to be frequent utilizers of the ED for BH needs.



Who is at Risk for ED Utilization?

Multiple Regression Analyses

Strong Risk Factors for 1+ ED visits

- 1 or more inpatient medical stays
- Alcohol related disorders
- Personality Disorders
- Attending a PRTF
- Nicotine related disorders
- Autism Spectrum Disorders

Strong Risk Factors for 3+ ED visits

- Intellectual Disabilities
- Nicotine related disorders
- Personality Disorders
- Psychoses
- Attending a PRTF

Strong Protective Factors for 1+ ED visits

- One or more Outpatient Treatment Visits
- Attending a Residential Treatment Facility



Next Steps & System Recommendations

Utilization of the pediatric ED continues to rise despite comparable increases in the use of alternatives such as EMPS.

- *A further clinical study of the two populations (EMPS & ED) may help to increase rates of diversion from the ED.*

The vast majority of youth that visit the ED for BH reasons do not require hospitalization or medical clearance.

- *Continue to promote alternatives such as EMPS and the integration of crisis services in community based programs.*

Next Steps & System Recommendations

Approximately 2000 youth utilized the ED 3 or more times and youth within DCF voluntary services are at very high risk for multiple visits.

- Consider establishing an intensive service such as High Fidelity Wrap-around to serve this group.

Racial and Ethnic disparities, particularly for African American Youth, exist in ED utilization.

- Consider linking with other projects/efforts to address health disparities.

Next Steps & System Recommendations

Intellectual disability and Autism were predictors of multiple visits to the ED.

- Consider establishing stronger partnerships between DDS and mental health providers and developing/expanding specialty community based services.

Receiving outpatient services was protective against ED utilization.

- Promote access and enhance the quality of outpatient care to bolster this protective effect.

Utilization of Pediatric ED services follows a predictable seasonal trend. A system “crisis” is frequently experienced in the spring.

- Consider establishing an ongoing workgroup to address ED issues proactively, as well as when crises occur.

Questions?

