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

- DSS
- VO-CTBHP
- DCF
- DMHAS
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

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 demographic factors 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?
- 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).
The volume of youth BH ED visits increased by 30% between 2011 and 2012.
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.
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.
- 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.
- 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.
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.
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 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.
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.

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.
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.
Questions?
EMPS Crisis Intervention Service

Jack Lu, Manu Singh-Looney, & Jeffrey Vanderploeg
28th Annual Research & Policy Conference
March 23, 2015
What is EMPS?

- A team of trained mental health professionals who can respond immediately on-site, or by phone, when a child is experiencing a mental health need or is in crisis
- Funded by state grants (DCF) combined with third party reimbursement (Medicaid, commercial insurers)

Who can receive EMPS?

- Anyone can call on behalf of a youth who is in crisis or has a mental health need
- A “crisis” is defined by the family
- Any child 18 or younger in Connecticut (can serve children over 18 if they are currently enrolled in school)
- Regardless of insurance status or ability to pay
- Exclusions: Youth in Residential Treatment Centers, Sub-Acute Units, Inpatient Hospitals
EMPS Components

- Coverage of every town and city in CT--(14) Sites
- Single Statewide Call Center (211-United Way)
- Mobile Response Hours
  - 8am to 10pm (M-F)
  - 1pm to 10pm (Sat/Sun/Holidays)
EMPS PIC Components

- Performance Standards
- Performance Improvement Center
- Statewide Training
- Data Reporting
- Quality Improvement
EMPS and Hospital Emergency Departments (EDs)

- EMPS diverts youth from the EDs by taking referrals directly from families, schools, police, & other referrers

- EMPS provides services to youth in ED

<table>
<thead>
<tr>
<th>Inpatient diversion</th>
<th>Provided when community-based care is a safe and effective alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up services</td>
<td>- Provided in the community at time of discharge</td>
</tr>
<tr>
<td></td>
<td>- Up to 45 days of follow-up care</td>
</tr>
<tr>
<td></td>
<td>- Linkages to ongoing care as needed (e.g., Outpatient treatment, evidence-based in-home services)</td>
</tr>
</tbody>
</table>
EMPS Data Overview
FY2011 – FY2014

- EMPS Key indicators:
  - Call and Episode Volume
  - Mobility Rates
  - Response Time
  - ED Utilization

- For full EMPS reports see CHDI.org or EMPSCT.org
Statewide Call and Episode Volume
EMPS FY2011 – FY2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Calls</th>
<th>211 Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2011</td>
<td>9,457</td>
<td>2,808</td>
</tr>
<tr>
<td>FY 2012</td>
<td>10,459</td>
<td>3,330</td>
</tr>
<tr>
<td>FY 2013</td>
<td>11,105</td>
<td>4,469</td>
</tr>
<tr>
<td>FY 2014</td>
<td>12,376</td>
<td>5,626</td>
</tr>
</tbody>
</table>

EMPS Episodes

211 Only

20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Statewide Mobility Rates
EMPS Episodes FY2011 – FY2014

Goal = 90%

<table>
<thead>
<tr>
<th>Year</th>
<th>Mobility Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2011</td>
<td>90.3%</td>
</tr>
<tr>
<td>FY 2012</td>
<td>92.5%</td>
</tr>
<tr>
<td>FY 2013</td>
<td>91.9%</td>
</tr>
<tr>
<td>FY 2014</td>
<td>91.7%</td>
</tr>
</tbody>
</table>

Goal = 90%
Statewide Response Times Under 45 Minutes (EMPS Episodes FY2011 – FY2014)

Goal = 80%

<table>
<thead>
<tr>
<th></th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>80%</td>
<td>86%</td>
<td>85%</td>
<td>88%</td>
</tr>
<tr>
<td>FY 2011</td>
<td>86%</td>
<td>85%</td>
<td>88%</td>
<td>87%</td>
</tr>
</tbody>
</table>
EMPS & ED Utilization (Statewide EMPS Episodes FY2011 – FY2014)

- FY2011: 26% (N = 1,892)
- FY2012: 25% (N = 458)
- FY2013: 23% (N = 726)
- FY2014: 23% (N = 2,102)

Blue bars: ED Eval 1(+) in 6 Months Prior
Red bars: ED Eval 1(+) During Episode

N: Number of episodes.
Clients Evaluated in ED One or More Times in the Six Months Prior to and During an EMPS Episode

- Central: 30% (ED Eval 1(+)) in 6 Months Prior, 21% (ED Eval 1(+)) During Episode
- Eastern: 28% (ED Eval 1(+)) in 6 Months Prior, 11% (ED Eval 1(+)) During Episode
- Hartford: 24% (ED Eval 1(+)) in 6 Months Prior, 17% (ED Eval 1(+)) During Episode
- New Haven: 21% (ED Eval 1(+)) in 6 Months Prior, 15% (ED Eval 1(+)) During Episode
- Southwestern: 15% (ED Eval 1(+)) in 6 Months Prior, 15% (ED Eval 1(+)) During Episode
- Western: 22% (ED Eval 1(+)) in 6 Months Prior, 23% (ED Eval 1(+)) During Episode
- Statewide: 33% (ED Eval 1(+)) in 6 Months Prior, 20% (ED Eval 1(+)) During Episode

ED Eval 1(+) in 6 Months Prior
ED Eval 1(+) During Episode
EMPS & ED Utilization (Statewide EMPS Episodes FY2011 – FY2014)

- **FY2011**: 24% (N = 1,513) for ED Eval 1(+) in 6 Months Prior, 15% (N = 414) for ED Eval 1(+) During Episode.
- **FY2012**: 24% (N = 1,809) for ED Eval 1(+) in 6 Months Prior, 13% (N = 491) for ED Eval 1(+) During Episode.
- **FY2013**: 23% (N = 1,513) for ED Eval 1(+) in 6 Months Prior, 16% (N = 414) for ED Eval 1(+) During Episode.
- **FY2014**: 23% (N = 491) for ED Eval 1(+) During Episode.
Comparisons between Non-Medicaid and Medicaid-only EMPS Cases:
- Race & Ethnicity
- Gender

Comparisons between Non-Medicaid and Medicaid-only EMPS Episodes:
- Insurance Status at Intake for EMPS Episodes
- Referral Sources
- Age
## Statewide EMPS Cases - FY2014

### EMPS FY2014 (n = 6,369)

<table>
<thead>
<tr>
<th>Race</th>
<th>Non-Medicaid</th>
<th>Medicaid Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>% of Total</td>
</tr>
<tr>
<td>Asian</td>
<td>56</td>
<td>2.3%</td>
</tr>
<tr>
<td>African Descent</td>
<td>253</td>
<td>10.1%</td>
</tr>
<tr>
<td>White</td>
<td>1,848</td>
<td>74.1%</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>3</td>
<td>0.1%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>3</td>
<td>0.1%</td>
</tr>
<tr>
<td>Mixed Race</td>
<td>70</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other</td>
<td>262</td>
<td>10.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,495</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
### EMPS FY2014 (n = 6,559)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Non-Medicaid</th>
<th>Medicaid Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>% of Total</td>
</tr>
<tr>
<td>No, Not of Hispanic, Latino, or Spanish Origin</td>
<td>2,085</td>
<td>83.3%</td>
</tr>
<tr>
<td>Yes, Mexican, Mexican American, Chicano</td>
<td>24</td>
<td>1.0%</td>
</tr>
<tr>
<td>Yes, Puerto Rican</td>
<td>80</td>
<td>3.2%</td>
</tr>
<tr>
<td>Yes, Cuban</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Yes, South or Central American</td>
<td>47</td>
<td>1.9%</td>
</tr>
<tr>
<td>Yes, of Hispanic/Latino Origin</td>
<td>266</td>
<td>10.6%</td>
</tr>
<tr>
<td>Total</td>
<td>2,502</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Statewide EMPS Cases - FY2014
Gender of Children Served

47% 52%
48% 53%

Male Female

Non-Medicaid
Medicaid
Statewide EMPS – FY2014

Total Youth Served = 9,377
Total Episodes = 12,376
Statewide EMPS Episodes - FY2014

- Husky A: 60.1%
- Private: 31.5%
- No Health Insurance: 3.6%
- Husky B: 2.2%
- Other: 1.8%
- Medicaid (non-HUSKY): 0.3%
- Military Health Care: 0.6%
- Medicare: 0.0%

N = 9,130
Completion Rate = 73.8%
Statewide EMPS Episodes - FY2014
Referral Sources of Children

- **Police**: 1% Medicaid, 1% Non-Medicaid
- **Foster Parent**: 0% Medicaid, 1% Non-Medicaid
- **Probation/Court**: 1% Medicaid, 1% Non-Medicaid
- **Dept. Children & Families**: 2% Medicaid, 0% Non-Medicaid
- **Other**: 4% Medicaid, 3% Non-Medicaid
- **Other community provider**: 4% Medicaid, 3% Non-Medicaid
- **ED**: 12% Medicaid, 11% Non-Medicaid
- **School**: 40% Medicaid, 39% Non-Medicaid
- **Self/Family**: 36% Medicaid, 42% Non-Medicaid
Statewide EMPS Episodes - FY2014

<table>
<thead>
<tr>
<th></th>
<th>Medicaid (Ave age 12.4)</th>
<th>Non-Medicaid (Ave age 13.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 5 &amp; under</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Age 6-8</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Age 9-12</td>
<td>27%</td>
<td>22%</td>
</tr>
<tr>
<td>Age 13-15</td>
<td>37%</td>
<td>42%</td>
</tr>
<tr>
<td>Age 16-19</td>
<td>19%</td>
<td>29%</td>
</tr>
<tr>
<td>Age 19 &amp; Up</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
In Summary

- EMPS is a best practice model of mobile crisis care for children and families.
- Overall EMPS utilization has increased--key performance indicators have been maintained.
- EMPS provides a valuable service to communities and hospital EDs across the state.
- Degree of utilization and quality of working relationships with EDs varies.
When compared to Non-Medicaid EMPS cases, children with Medicaid insurance tend to be:

- **Male** (+5.2% higher)
- **Non-White** (Difference of more than +25%)

When compared to Non-Medicaid EMPS episodes, children with Medicaid insurance tend to be:

- **Younger** (*Average* difference of almost 14 ½ months and more pre-teens by category)
- Referred by **self/families** (-5.9%) less
- Referred by **EDs** (+0.9%) and **schools** (+0.6%) more
Recommendations and Future Directions

- **Ensure sufficient EMPS staffing** to meet increasing demand and provide adequate follow-up care
- EMPS and long-term service utilization—Does EMPS help reduce rates of ED and inpatient hospitalization and increase utilization of community-based care?
  - Possibly begin with Medicaid-enrolled youth
- Examine **differences in utilization** between Medicaid and privately insured
  - Do utilization patterns or outcomes differ?
- Recommend changes to **data collection** systems in how Race & Ethnicity are collected
  - Match PSDCRS to current U.S. Census Bureau guidelines
Frequent Visitors to the Emergency Department

March, 2015
Increasing ED Utilization is an International concern (Lewis, 2010)
1996 – 2006, US saw a 36% increase in ED utilization (LaCalle and Rabin, 2010)
• In CT, pediatric ED visits increased 38% between 2001 and 2005 (Mulkem, Raab, & Potter, 2007)
• BH ED visits increased 30% for 2011-12 (VO, 2013)
Young Children (0-4) are the most frequent visitors to the ED for medical reasons

Adolescents are more likely to visit for a BH crisis and makeup most of the BH ED visits.
Youth Frequent Visitors for BH Reasons are more likely to be:

- Female
- Older
- Receive Gov. Aide
- Mood Disorder
- Psychotic Disorder

Newton, et al, 2013
Despite concern with ED utilization, fewer than 20% of EDs at Academic Medical Centers had a method of identifying frequent Visitors (Boudreaux, et al, 2011)
METHODS

- Medicaid Claims Data of Youth 3-17
- Calendar Year 2013
- Frequent Visitors Identified during July to December 2013
- BH ED visits defined as those that had a primary or secondary BH diagnosis on the ED claim
- 18% of all youth Medicaid members that used at least one BH service during 2013, visited an ED for BH reasons
- Frequent Visitors defined as top 2%, or those with 4 or more visits in a 6 month period
- Range of BH ED Frequent visits = 4-17
72% of BH ED Frequent Visitors were 13-17 YO

- Average age of FVs = 13.6 years-old.

13-17 YO Percentages

- % of Frequent Visitors 13-17: 72%
- % of BH Users 13-17: 39%
- % of Medicaid Population 13-17: 31%
140 total Youth Frequent Visitors

- 57 males (41%)
- 83 females (59%)

Female Disproportionate Representation:

- Female % of FVs
- Female % of BH Users
- Female % of Medicaid Population
Patterns of ED Visiting by Cohort & Hospital
Some youth persist in their pattern of frequent visits to the ED but most seem to be EPISODIC frequent visitors.

<table>
<thead>
<tr>
<th>Number of Youth BH ED Frequent Visitors that Maintained Frequent Visitor Status</th>
<th>Youth BH ED Frequent Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior 6-months (January 1-June 30, 2013)</td>
<td>#</td>
</tr>
<tr>
<td>Index 6-months: (July 1 – December 31, 2013)</td>
<td>140</td>
</tr>
<tr>
<td>Following 6-months (January 1-June 30, 2014)</td>
<td>23</td>
</tr>
</tbody>
</table>
Visits to Multiple EDs

- Across time-periods 50% of ED frequent visitors visited 1 ED.
New Hospital Measures

- Percentage of ED BH Visits accounted for by Frequent Visitors
- Percentage of ED 30-Day Readmissions
- ED 7 Day Connection to Care Rates
Across the state 2% of ED users account for 12.6% of BH ED Visits

The range is from a high of 20.3% to a low of 0% at 31 CT Hospitals
The range of ED 30-Day hospital readmission rates are from a low of 0% to a high of 22.3%

The statewide average is 16.4%.
The statewide average for BH ED 7-Day CTC was 28.6%.

The range of CTC rates was from a high of 47.8% of 14.9%.

Of the two large children’s specialty hospitals, one was above the statewide average at 32.6% and the other was below the average at 27.2%.
Next Steps

- Further Study of Episodic and Persistent Frequent Visitors
- Use Intensive Care Management with frequent visitors
- Establish Community Care Teams at larger volume hospitals
- Develop Predictive Algorithm
- Use new measures in a performance improvement program
- Consider establishment of urgent care centers
EMPS Crisis Intervention Service: Frequent Recipients

Jack Lu, Manu Singh-Looney, & Jeffrey Vanderploeg
28th Annual Research & Policy Conference
March 23, 2015
Between 2006-2011, hospitalizations for *mental health conditions* increased by 50% (no change in overall hospitalizations across all conditions)
- ED visits for mental health conditions increased by 21%
- $11.6 billion spent on hospital visits for mental health (Torio et al., 2015)

Increase in ED use for behavioral health needs has furthered the development of “crisis services” (Allen, Forster, Silver, & Currier, 2002)

Mobile crisis services effectively:
- diverts people in crisis from psychiatric hospitalization
- links suicidal individuals discharged from the ED to services
- links people in crisis to outpatient services better than services that provide psychiatric hospitalization (Dyches, Biegel, Johnsen, Guo, & Min, 2002; Guo, Biegel, Johnsen, & Dyches, 2001; Hugo, Smout, & Bannister, 2002; Scott, 2000).
Purpose

- Examine the characteristics of Emergency Mobile Psychiatric Services (EMPS) recipients
- Identify patterns and predictors of frequent recipients of EMPS services
Methodology

Study period includes data from:
- FY2013 (Jul 1, 2012 – Jun 30, 2013)

Data:
- EMPS Providers

Analyses:
- Descriptive statistics
- Multiple Regression analyses
Key Terms

**Index Period**: The period of 6 months from 7/1/13 – 12/31/13

**EMPS Frequent Recipient**: The top 2% of children who received EMPS services during Index Period (4 or more episodes)

**Other Time Periods (Top 2%)**:
- A. 6 months prior to index period (4 or more episodes): 1/1/13 – 6/30/13
- B. 6 months after index period (3 or more episodes): 1/1/14 – 6/30/14

**Episodic Frequent Recipient**: Frequent recipient during Index Period and A or B

**Persistent Frequent Recipient**: Frequent recipient during Index Period and A and B
## EMPS Frequent Recipients
### Utilization Prior and Following Index Period

#### Prior 6 Months

<table>
<thead>
<tr>
<th># EMPS visits</th>
<th># (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>31 (53%)</td>
</tr>
<tr>
<td>1</td>
<td>10 (17%)</td>
</tr>
<tr>
<td>2</td>
<td>10 (17%)</td>
</tr>
<tr>
<td>3</td>
<td>4 (7%)</td>
</tr>
<tr>
<td>4</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>5</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>6</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>7+</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Total</td>
<td>59 (100%)</td>
</tr>
</tbody>
</table>

#### Index Period
(Jul. 1 – Dec. 31, 2013)

<table>
<thead>
<tr>
<th>#EMPS visits</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>4</td>
<td>38 (64%)</td>
</tr>
<tr>
<td>5</td>
<td>16 (27%)</td>
</tr>
<tr>
<td>6</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>7+</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>Total</td>
<td>59 (100%)</td>
</tr>
</tbody>
</table>

#### Following 6 Months

<table>
<thead>
<tr>
<th># EMPS visits</th>
<th># (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>26 (44%)</td>
</tr>
<tr>
<td>1</td>
<td>17 (29%)</td>
</tr>
<tr>
<td>2</td>
<td>6 (10%)</td>
</tr>
<tr>
<td>3</td>
<td>6 (10%)</td>
</tr>
<tr>
<td>4</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>5</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>6</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>7+</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Total</td>
<td>59 (100%)</td>
</tr>
<tr>
<td>Time Frame</td>
<td>Youth EMPS Frequent Recipients</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>#</td>
</tr>
<tr>
<td>Prior 6-months (January 1 – June 30, 2013)</td>
<td>4</td>
</tr>
<tr>
<td>Index 6-months (July 1 – December 31, 2013)</td>
<td>59</td>
</tr>
<tr>
<td>Following 6-months (January 1 – June 30, 2014)</td>
<td>10</td>
</tr>
</tbody>
</table>
FY2014

Index Period
(July 1, 2013 – December 31, 2013)
Total Youth Served = 4,463
Total Episodes = 5,400
Demographics

DCF Status

- 16% 1 Visit Only
- 23% 2-3 Visits
- 38% Frequent Recipient Youth (4+)

DCF
Child Health and Development Institute of Connecticut, Inc.
2-11 Connecticut
Get Connected. Get Answers.
Demographics

Sex

Male

Female

Age 5 and Under

Age 6-8

Age 9-12

Age 13-15

Age 16-19

Age 19+

1 Visit Only

2-3 Visits

Frequent Recipient Youth (4+)

DCF Connecticut

Child Health and Development Institute of Connecticut, Inc.

2-11 Get Connected. Get Answers.
What Predicts Frequent EMPS Utilization?

Potential Predictors

- DCF Status
- Alcohol or Drug Use
- Referral Source
- Trauma History
- DSM Axis 1 Diagnosis
- Race
- Ethnicity
- SED Status
- Time Living in US
- Age
- TANF Eligible
- Medical Insurance
- Sex

Outcome

Frequency of EMPS Use
What Predicts Frequent EMPS Utilization?

**Outcome**

- Frequency of EMPS Use
  - $R^2=15.2\%$
  - $P < 0.000$

**Significant Predictors**

- **YES** DCF Status
- **YES** Self/Family Referral
- **YES** Trauma History (Witness to Violence)
- **NO** Trauma History (Hx of Trauma, Sexual Victimization, DA/MP)
- **YES** Alcohol or Drug Use
- **NO** Axis 1 Diagnosis (Adjustment Disorder)
- **YES** Axis 1 Diagnosis (Mood disorders, ADHD)
- **YES** SED Status
- **YES** TANF Eligible
- **YES** Medicaid
- **NO** Private Insurance
- **YES** Time Living in US
- **YES** Age
- **YES** Sex
- **YES** Race
- **YES** Ethnicity
- **YES** Sex
- **YES** Time Living in US
- **YES** Age
- **YES** Sex
- **YES** Race
- **YES** Ethnicity

**DCF Status**

**Self/Family Referral**

**Trauma History (Witness to Violence)**

**Trauma History (Hx of Trauma, Sexual Victimization, DA/MP)**

**Alcohol or Drug Use**

**Axis 1 Diagnosis (Adjustment Disorder)**

**Axis 1 Diagnosis (Mood disorders, ADHD)**

**SED Status**

**TANF Eligible**

**Medicaid**

**Private Insurance**

**Time Living in US**

**Age**

**Sex**

**Race**

**Ethnicity**

**Medicaid**

**Private Insurance**

**Time Living in US**

**Age**

**Sex**

**Race**

**Ethnicity**
What Does this Model Tell Us?

• The model that was developed accounts for 15.2% of the variance in frequency of EMPS use.
• The need for EMPS is not discriminant to Race, Sex, Hispanic Ethnic Origin, Alcohol and/or drug use, or Age.
• The children that utilize EMPS more frequently:
  • have Medicaid insurance
  • experience poverty with under/no employment for caregivers
  • have an Axis 1 diagnosis of Depression, Mood D/O NOS, PTSD, ADHD, ODD, PDD
  • meet the Severe Emotional Disturbance (SED) criteria
  • are involved with DCF
  • are self or family referred
Conclusions

• Those who receive EMPS more frequently have unique characteristics.
• Economic indicators of poverty are *stronger predictors* of frequent EMPS use than severity in behavioral/emotional challenges and other social identity dimensions.
• Future research may examine how EMPS addresses a gap in the service array for frequent visitors to emergency departments.
• Deepening our holistic understanding of EMPS frequent recipients to inform the development of additional services in the crisis continuum.
References


For questions about EMPS services and contract management:
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For questions about EMPS data:
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