

IICAPS Evaluation Value Options – Connecticut Behavioral Health Partnership

Results Based Accountability (RBA)
Analysis Utilizing Data from
Medicaid Claims, DCF, and Yale

Basic Methodology

- Data – Medicaid Claims, DCF, & IICAPS Service Data
- Sample = All Husky A & B discharged from IICAPS during CY 2011
- Used Descriptive Statistics, Bivariate and Multiple Regression Analyses



Results Based Accountability (RBA)

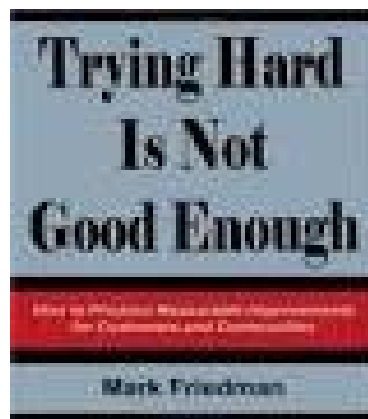


Using Results Based Accountability in United Ways

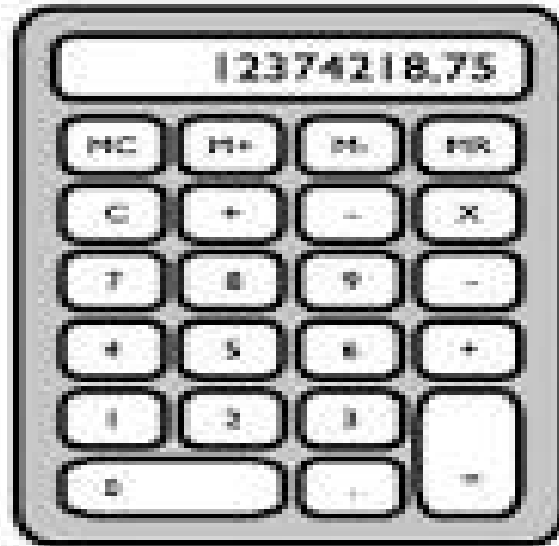
(and other community grant making organizations)

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Results Leadership Group
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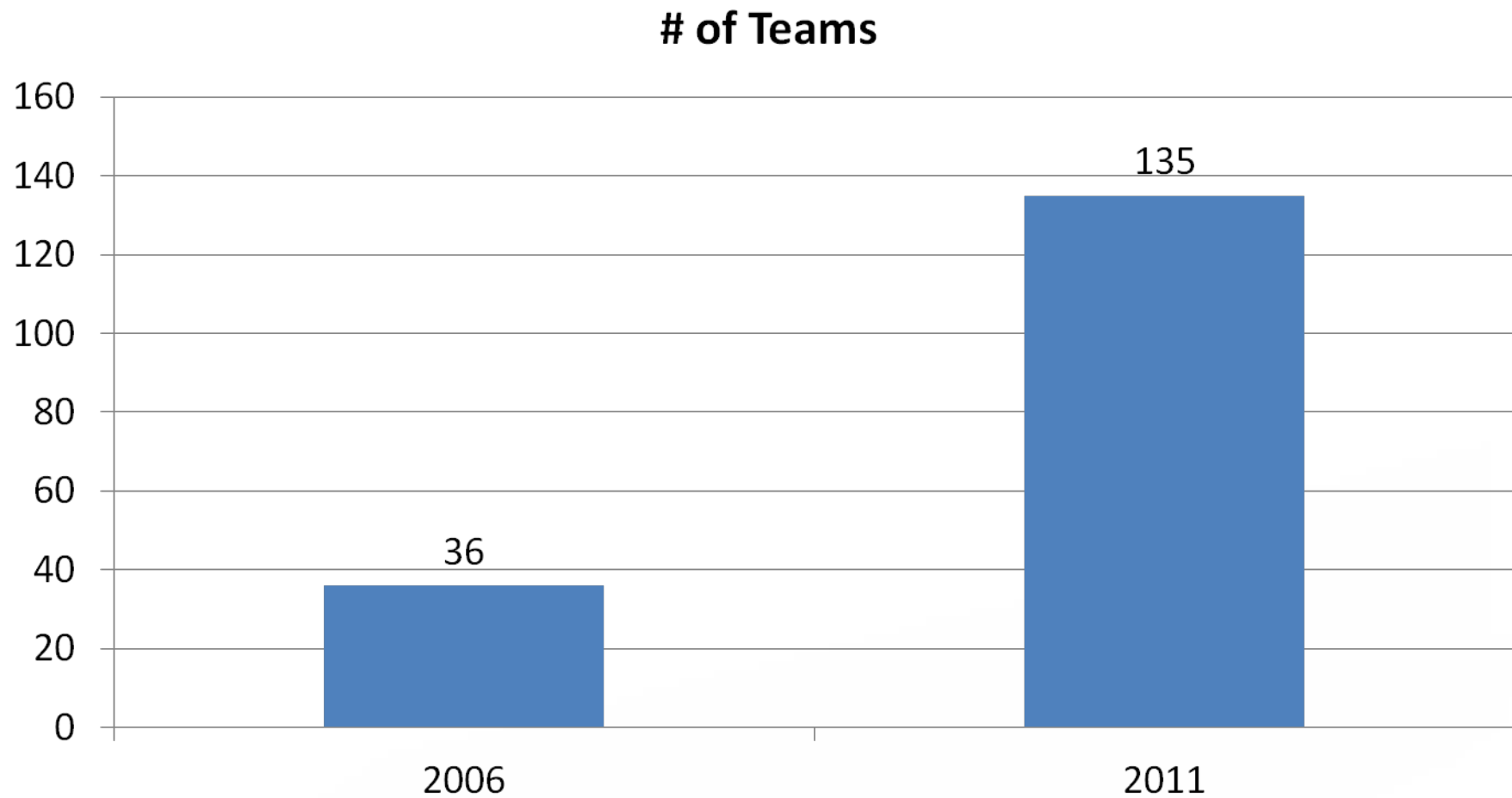


RBA – How Much Did We Do?

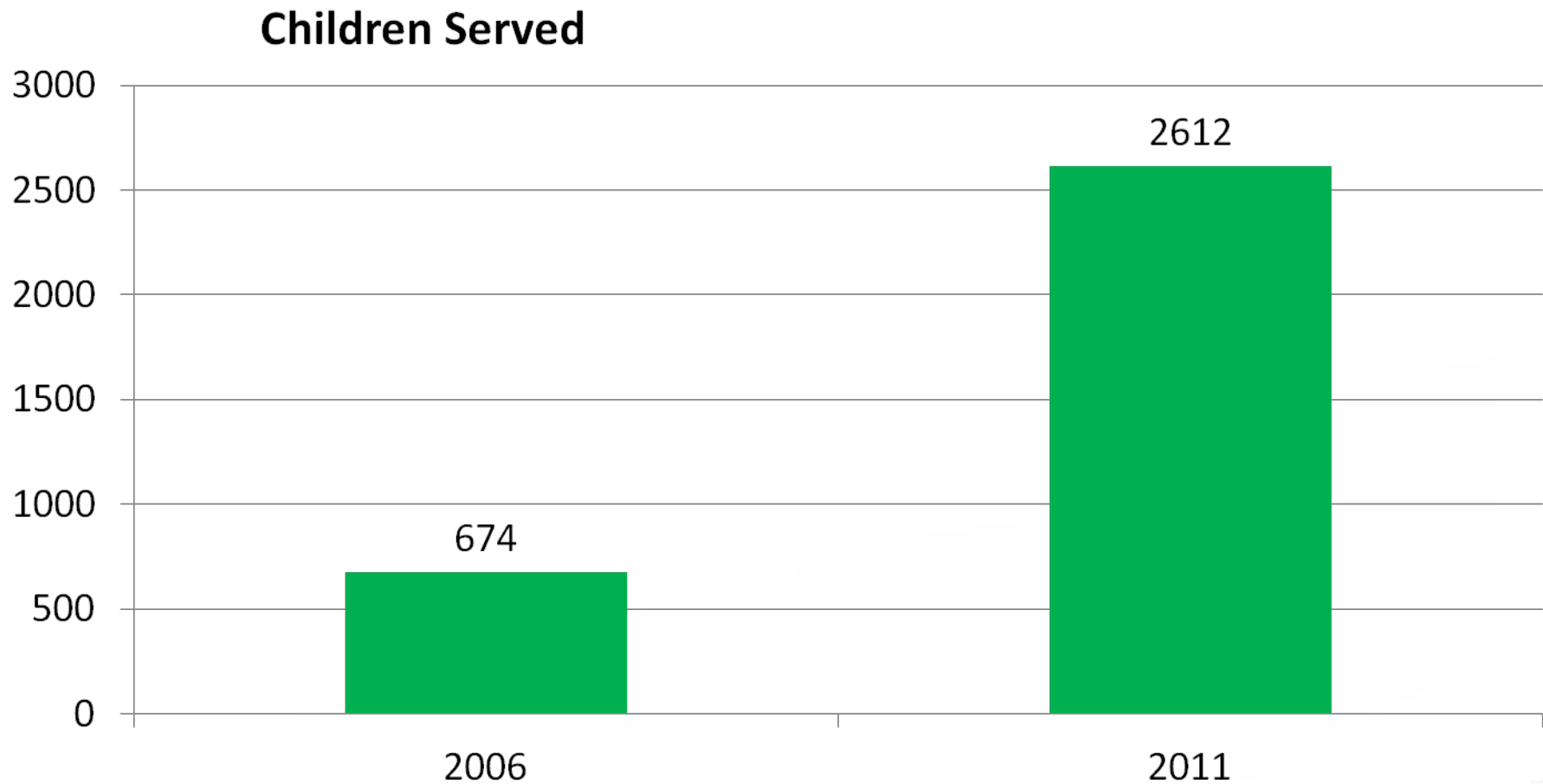


- Growth in utilization
- Characteristics of IICAPS users

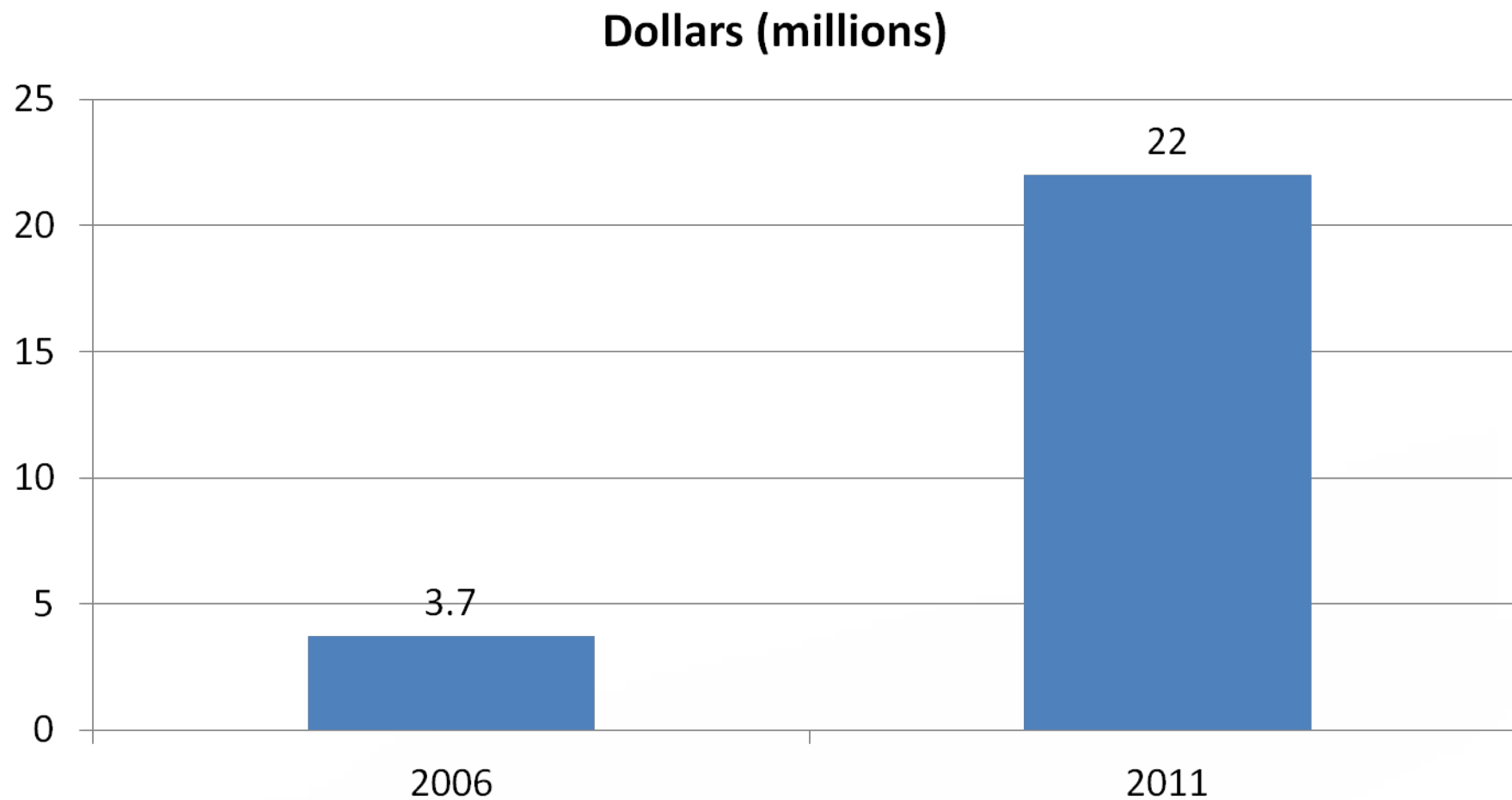
IICAPS Growth - Teams



IICAPS Growth - Children/Families Served

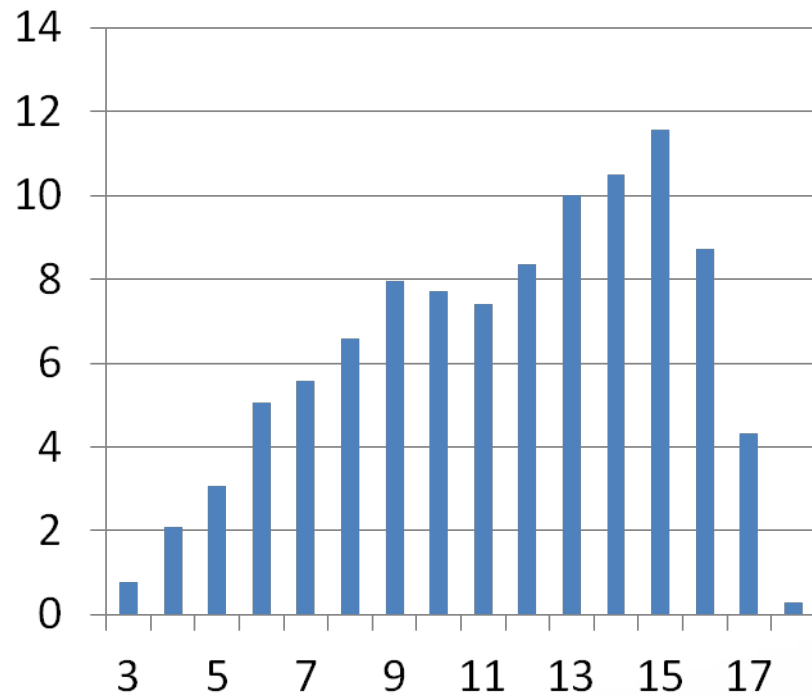


IICAPS Growth - Expenditures

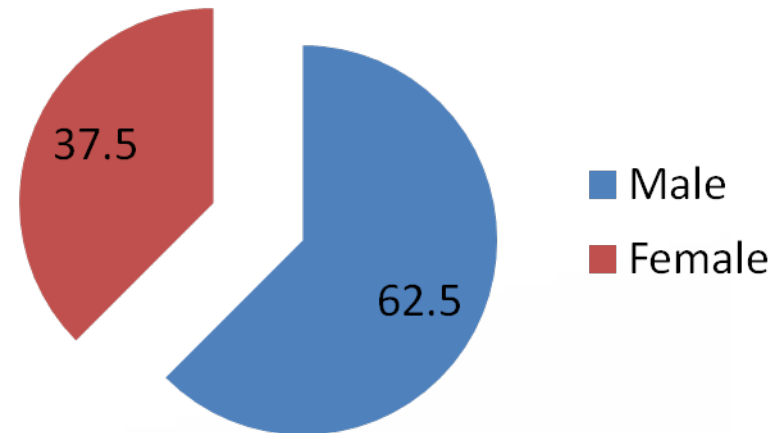


Characteristics of IICAPS Users

Percentage by Age

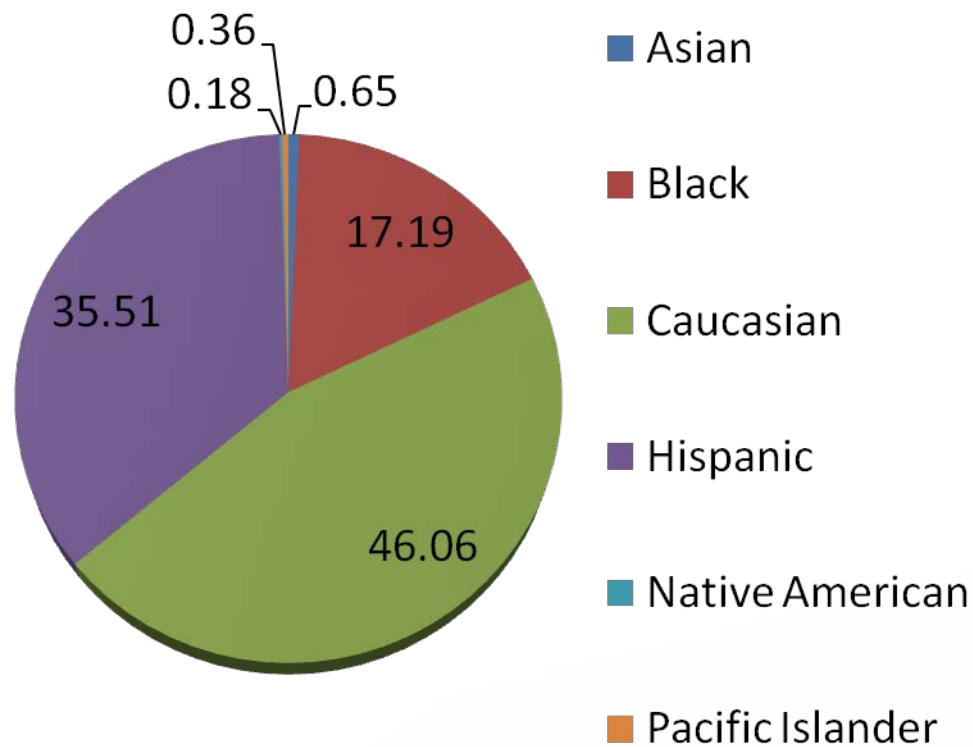


Percentage by Gender



Characteristics of IICAPS Users

Race & Ethnicity



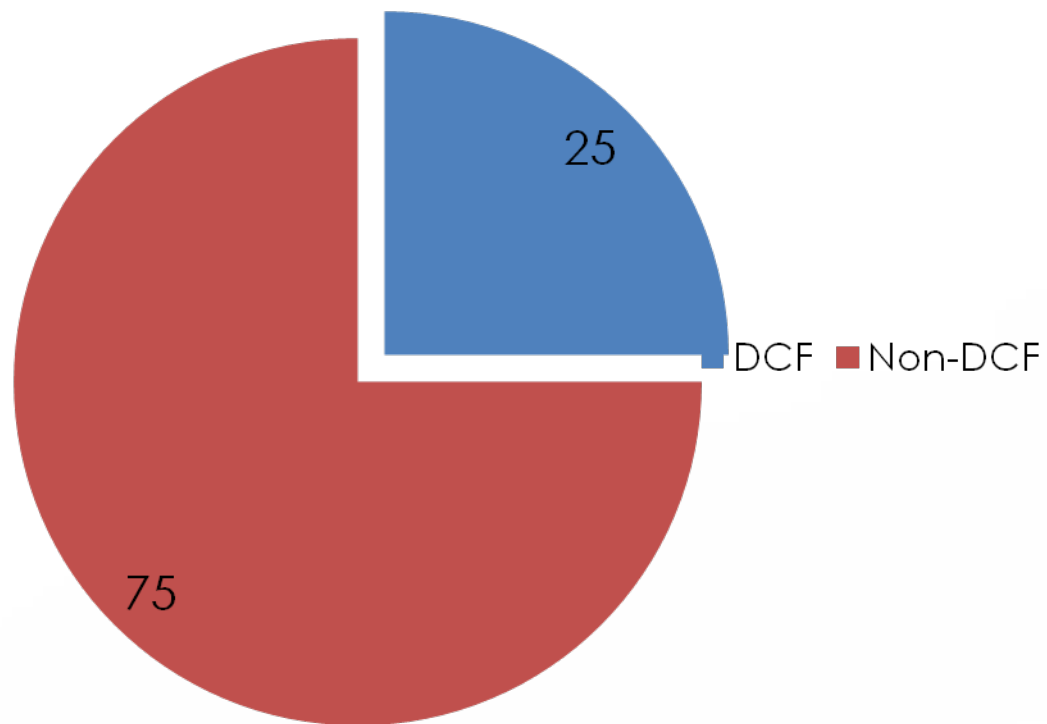
Comparisons to Medicaid Population

- Caucasians are over-represented in IICAPS
- Blacks and Asians are under-represented in IICAPS
- Hispanics participate in IICAPS at the same rate as their participation in Medicaid

Characteristics of IICAPS Users

DCF Involvement

Percentage Involvement



RBA – How Well Did We Do It?



Consistency of Practice

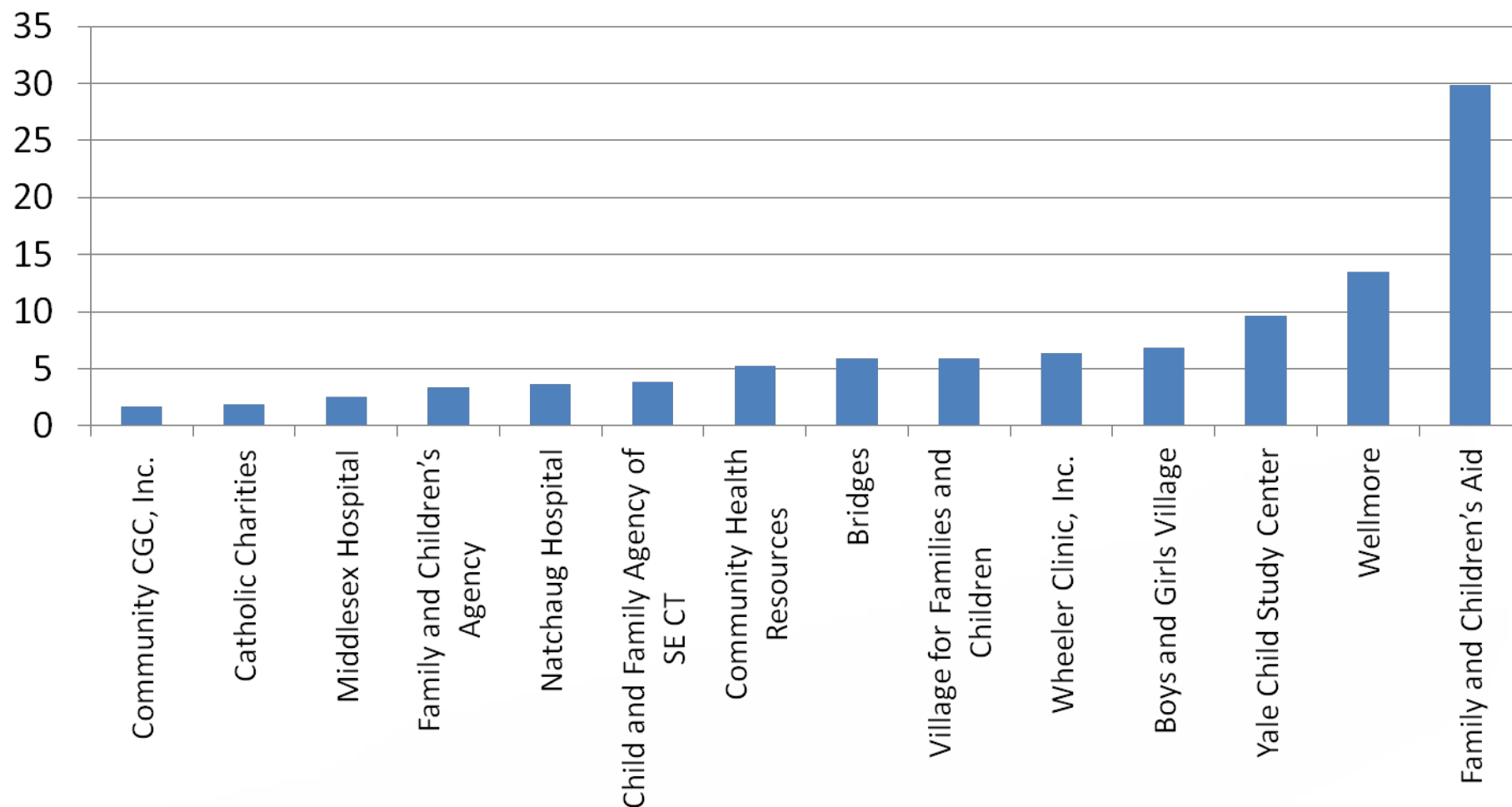
What was Evaluated

- Diagnosis
- Duration of Care
- Services Billed/Paid
- Service Patterns
- Gaps in Care

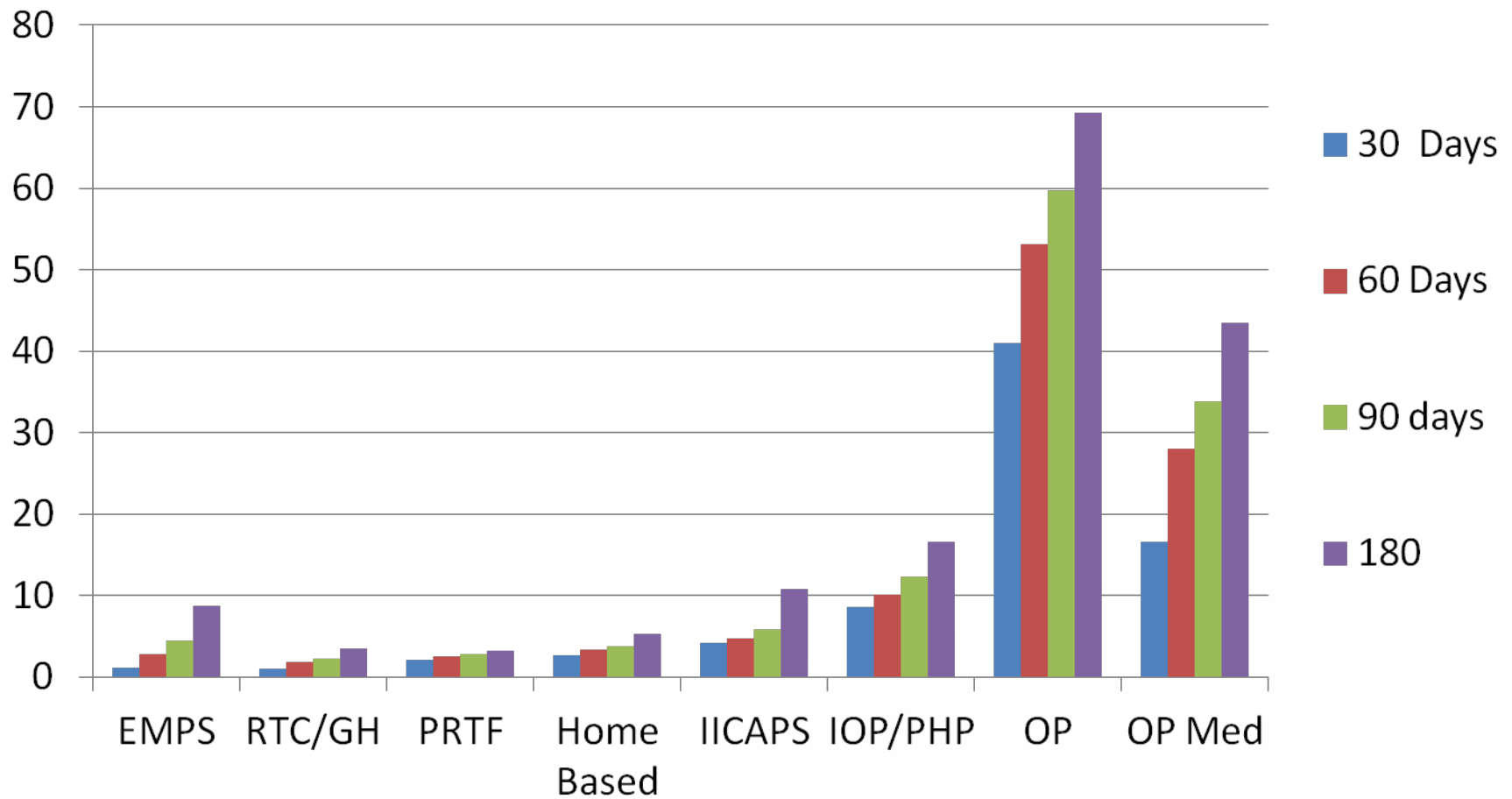
What is reported here

- IICAPS Network
- Post IICAPS Service Utilization
- Frequency of Service

Percentage of IICAPS Users by Provider

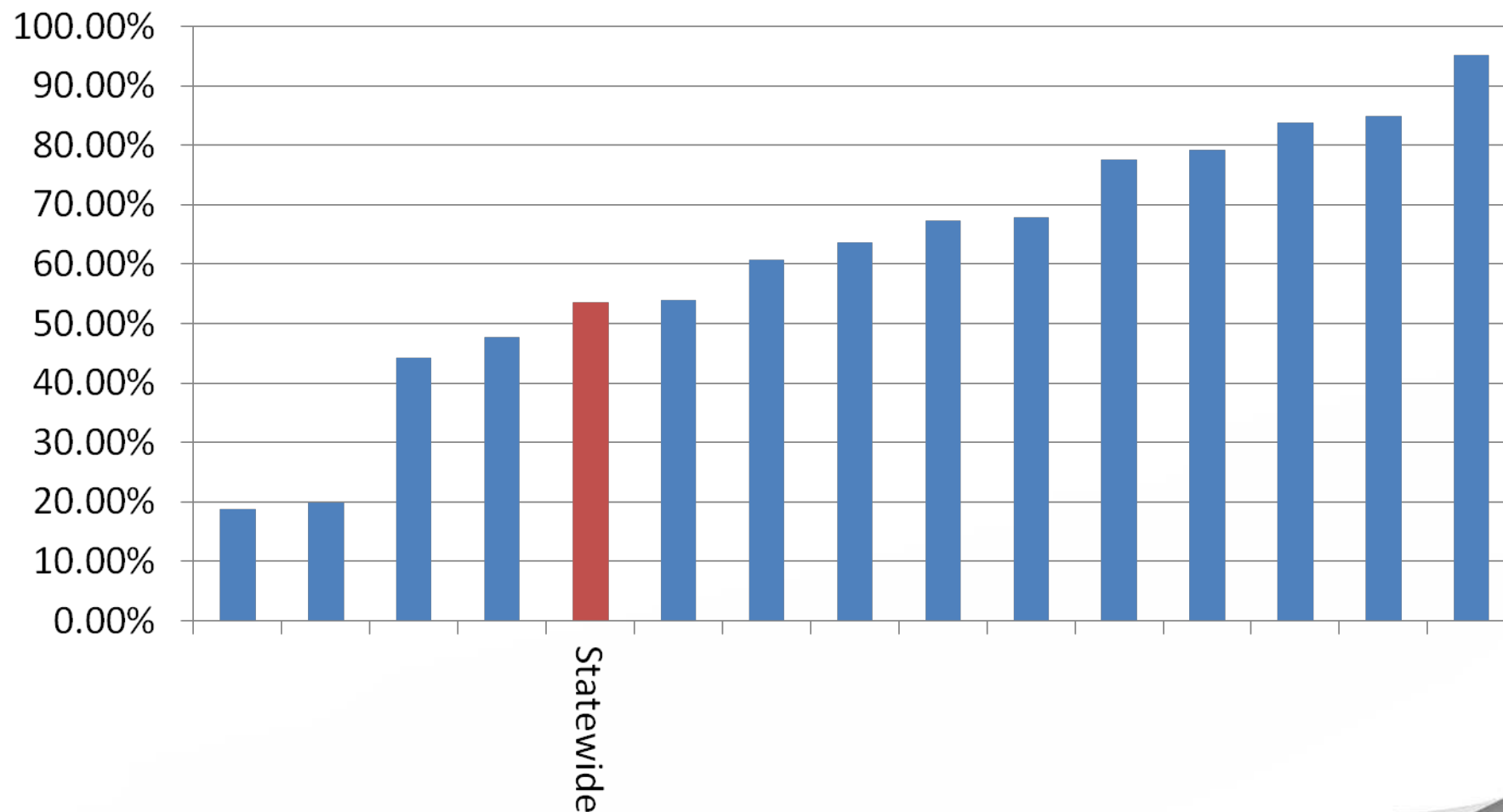


Service Utilization Post IICAPS



Frequency of Service by Provider

% Cases W/1-3 Avg. Days Btw. Services



Differences Between Providers in Average Days Between Services (FREQUENCY)

Average # days between services								
Mean	Std Dev	a	b	c	d	e	f	g
2.51 g	0.55							
2.92 fg	0.62							
3.07 ef	0.76							
3.077 ef	0.51							
3.20 def	1.12							
3.38 cdef	1.19							
3.39 cdef	1.27							
3.44 cde	1.02							
3.67 bcd	1.20							
3.69 bc	1.77							
3.78 bc	0.94							
3.83 bc	2.32							
4.08 b	1.07							
4.97 a	2.01							

RBA - Are IICAPS Users Better Off?

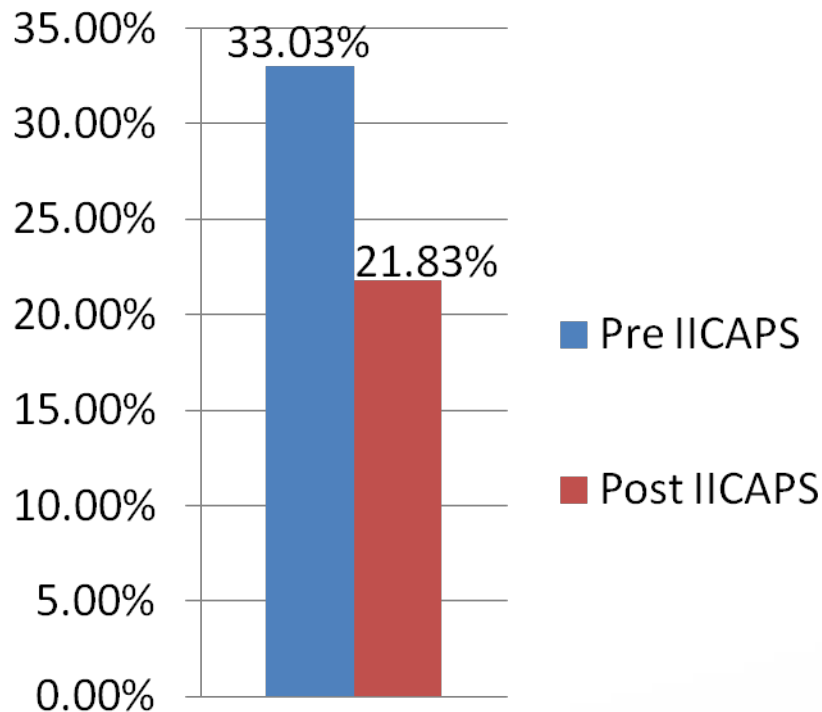


Bennett Chattanooga Times Free Press

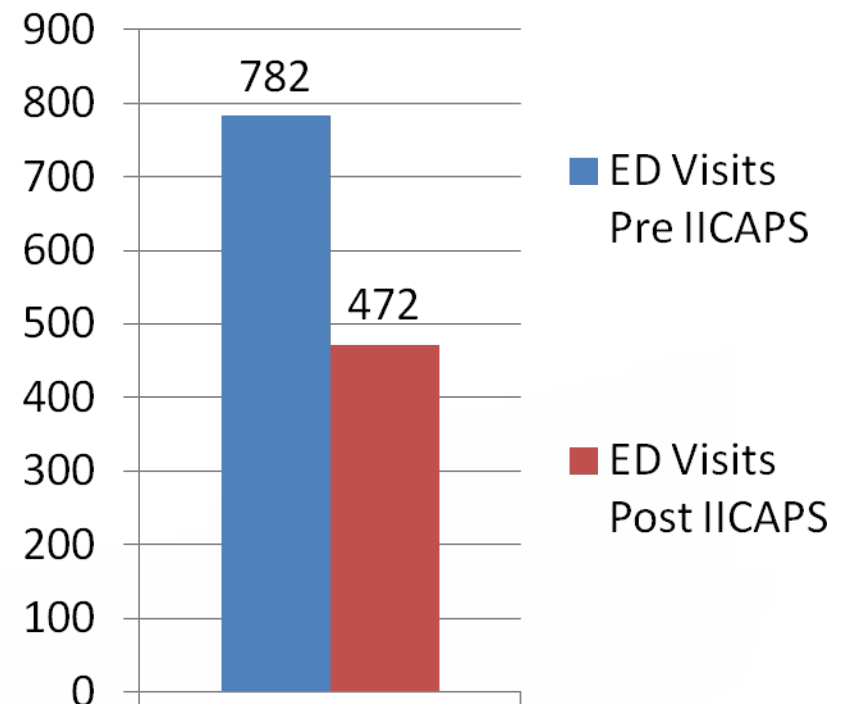
- ED utilization
- Inpatient admissions and days
- Spending

ED Utilization Pre-Post IICAPS

Pre – Post Percentage of Youth with ED Visits



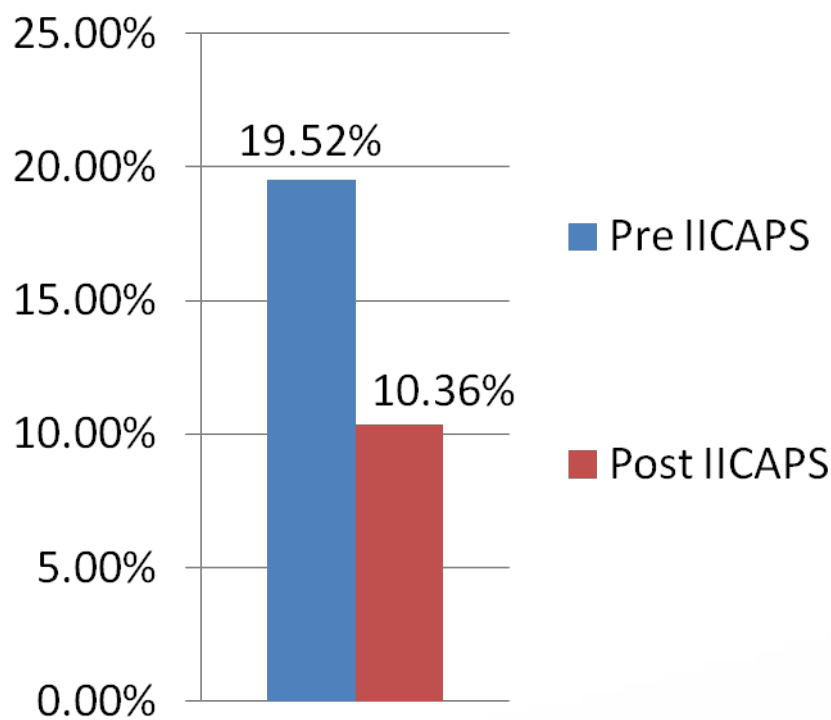
Pre-Post Number of ED Visits



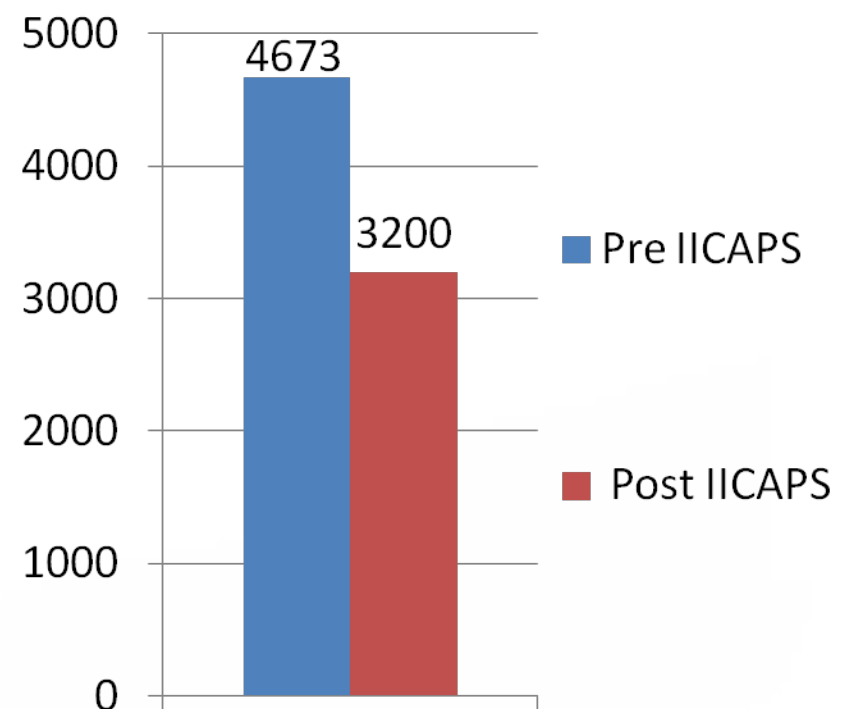
37 % decrease from Pre to Post IICAPS in utilization of ED

Inpatient Utilization Pre-Post IICAPS

Pre – Post Percentage of Youth with Inpatient Stays



Pre-Post Number of Inpatient Days



47.7% decrease in members admitted inpatient and 31% decrease in inpatient days

Return On Investment (ROI) – Does IICAPS Reduce Future Expenditures?

Considerations

- Full Analysis of ROI should look at all potential costs and savings including incarceration, child welfare intervention, educational attainment, as well as healthcare costs
- Consider the methodology of Steve Aos and colleagues
- IICAPS impact on Medicaid expenditures remains a valid question

Findings

Variable	N	Mean
Pre IICAPS BH \$	1429	\$7552.42
During IICAPS BH \$	1429	\$3901.31
Post IICAPS BH \$	1429	\$7411.24

- Average of \$141.18 in savings
- Small “return” considering cost of service
- Difficult to monetize the subjective impact on avoidance of hospitalization and ED visits

What Factors Predict More Money Spent Post IICAPS?

Did not Predict

- Provider
- Low DRG
- Gender
- Age
- Ethnicity
- DCF involvement
- Sibling status
- Length of episode
- Clinical and case management units billed during IICAPS
- Total money spent on IICAPS
- Average number of days between IICAPS services
- Most of the mental and physical health diagnoses
- Flexible fund units

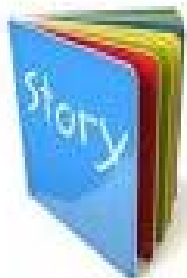
Bivariate Predictions

- **Autism Spectrum Diagnosis**
($\text{Chi}^2 = .0034$)
- **Disruptive Behavior Disorder**
($\text{Chi}^2 = .047$)

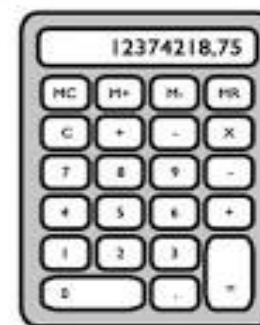
Multiple Regression Predictions from DX.

- Autism Spectrum Disorder
- Disruptive Behavior Disorder
- ADHD

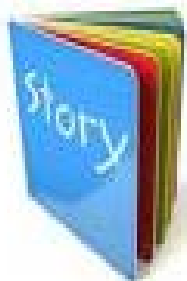
RBA Summary – The Story Behind the Numbers



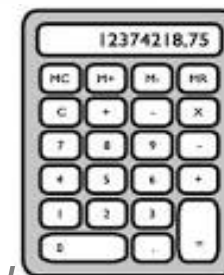
- The most frequently utilized service post IICAPS is outpatient therapy and medication management
- There appears to be room for improvement in how quickly members are connected to care



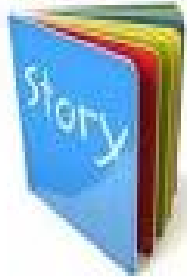
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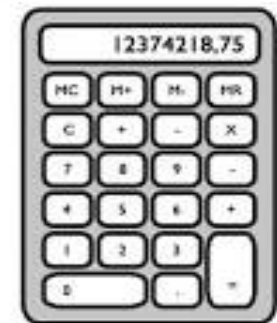
- An inpatient stay following IICAPS is predicted by a diagnosis of Autism Spectrum Disorder
- Autism was also predictive of more vs. less healthcare expenditure after IICAPS
- This requires further study, perhaps using other data collected by Yale (OHIO Scales, Main Problem Ratings, Tx. Completion, etc.)
- There should also be consideration of either developing an in-home alternative service for autism, and/or identifying other treatment interventions



RBA Summary – The Story Behind the Numbers



- IICAPS appears to be effective at reducing subsequent utilization of the ED and hospital inpatient admissions and days post IICAPS treatment
- **This is further evidence of the effectiveness of the model regarding the primary goal of keeping kids in the community and out of higher levels of care**



Questions

