



Outcome Evaluation Data from Evidence-Based Practice Implementations Supported by CiMH



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Overview of Workshop

- Describe CiMH's approach to 'program performance and outcome evaluation' for evidence-based practice implementations
- Present recent data from program performance and outcome evaluation 'dashboard' reports
 - Highlight outcomes
- Discuss future directions



CiMH's Current Evaluation Protocols

- EBP implementations vary with regard to evaluation requirements
 - Some practices have required outcome evaluation that is built in to the clinical service delivery
 - Some practices have required web-based data entry for their clinical service delivery
 - Some practices have required data collection as part of the funding for implementation
 - Some practices have no requirements



CiMH's Current Evaluation Protocols

- Evaluation protocols are developed separately for each practice
 - In collaboration with the developers/clinical experts and with the implementation leads
- CiMH develops data collection materials, conducts training, and provides ongoing technical assistance
- Implementation sites are responsible for data entry
- Sites submit data, upon request, to CiMH for analysis and reporting



CiMH's “Dashboard” Reports

- Program Performance and Outcome Evaluation Reports
 - Data tables, to conserve space
 - Sites can easily make pie charts or bar graphs for presentations to various stakeholders
 - Three primary domains
 - Characteristics of clients served
 - Description of services provided
 - Outcomes achieved



CiMH's "Dashboard" Reports

– Aggregate Report

- Pools together all data submitted

– Site-Specific Reports

- Each agency submitting data receives a site-specific report
- "Site" could be a county agency or an organizational provider
- Agencies and providers can receive more than one site report if they choose (i.e., reflecting implementation at different physical locations or for different funding streams)



CiMH's "Dashboard" Reports

– Limitations

- Quality of the data included in the reports is only as good as the quality of data entered
- CiMH does not have the ability to go to the primary source(s)
 - Cannot verify accuracy
- Current data submission intervals do not allow for "real-time" reporting
 - Goal is to turn reports around within two months of the data submission



CiMH's “Dashboard” Reports

– Benefits

- The first level of program performance reflected in the dashboard reports is the extent to which data are being collected and entered accurately and completely
 - Does the report accurately reflect the implementation of the EBP
 - Are some (or many) data elements missing
 - Technical assistance is available to assist sites in investigating inconsistencies or questions



CiMH's "Dashboard" Reports

– Benefits

- Agencies are encouraged to compare their site-specific report with the aggregate report, examining the extent to which a particular program is performing “on par” with the average
- Questions one might ask about their site report:
 - Is the entry rate low?
 - Is the dropout rate high?
 - Is the distribution of demographic characteristics reflective of clients in need of services and/or for whom the EBP is intended?
 - Are outcome measures being collected pre-treatment?
 - Does the service delivery information reflect what is intended from this EBP?
 - Is this program achieving the expected outcomes?



CiMH's “Dashboard” Reports

– Benefits

- Routine data collection and reporting on program performance and outcome evaluation demonstrates the extent to which an EBP implementation is...
 - Serving the population for whom the practice/program is intended
 - Providing a level of service delivery similar to what has been reported in the literature for this practice/program
 - Achieving outcomes similar to those that have been achieved in the literature and in other implementations



CiMH's “Dashboard” Reports

– Benefits

- **It's not just for EBPs!**
- Routine data collection and reporting on program performance and outcome evaluation demonstrates the extent to which any program, practice, or service is...
 - Serving the population for whom program, practice, or service is intended
 - Providing a level of service delivery similar to what one would expect
 - Achieving outcomes as intended



Recent CiMH Dashboard Reports

Evidence-Based Practice*	# of Sites that Submitted Data	Overall N
Aggression Replacement Training (ART)	10	2,108
Functional Family Therapy (FFT)	39	11,760
Trauma Focused Cognitive Behavioral Therapy (TF-CBT)	91	19,069
Positive Parenting Program (Triple P)	46	5,909

*Not an exhaustive list of EBPs supported by CiMH



Clients Served

- Common data elements on clients served included in CiMH dashboard reports
 - Age
 - Gender
 - Ethnicity
- Some EBPs also collect and track
 - Primary language
 - Primary Axis I diagnosis
 - Referral source



Clients Served

EBP	Average Age	Gender		Ethnicity				
		Female	Male	African American	Asian/ PI	Caucasian	Hispanic/ Latino	Other
ART	16.0	12%	88%	19%	1%	19%	57%	4%
FFT	15.2	37%	61%	21%	1%	19%	49%	7%
TF-CBT	11.3	56%	44%	15%	1%	9%	72%	4%
Triple P	8.6	34%	66%	9%	1%	10%	76%	4%



Services Provided

- Common data elements on service delivery information included in CiMH dashboard reports
 - Duration of Treatment
 - Usually in Weeks, sometimes in Days
 - Range, Average, Standard Deviation
 - Number of Sessions or Groups
 - Range, Average, Standard Deviation
- Some EBPs also collect and track
 - Service delivery information by Phase or Component



Services Provided

EBP	Average Length of EBP	Average Number of Sessions or Groups
ART	10 weeks	24.7
FFT	37 weeks	14.3
TF-CBT	32 weeks	25.3
Triple P	21 weeks	14.4



Outcomes Achieved

- The majority of EBPs use standardized questionnaires, or measures of functioning, to assess outcomes
 - These vary by program/practice
 - Sometimes required as part of the routine clinical service delivery for an EBP
 - Sometimes optional, recommended by the EBP developers/clinical experts and/or CiMH
 - Some outcome measures are general, broad
 - Some outcome measures are focused on a specific treatment target



Outcomes Achieved

- Outcome Indicator: Percent Improvement
 - The percent change from the average pre- score to the average post- score is reported for each outcome measure
 - Change is always reported in terms of improvement
 - Interpreting percent change can be difficult
 - It is influenced by the range of scores – a measure with a smaller range of scores is likely to show a greater percent change than a measure with a larger range of scores
 - It does not translate to clinically meaningful change
 - It is an overall reflection of treatment success
 - Do our clients get better after participation in this treatment?



Outcomes Achieved

- Outcome Indicator: Reliable Change
 - We can look at two scores and see that they are different; but, how do we know that the difference we're observing isn't simply due to measurement error? How much difference do we need to observe to know that it is a reliable amount of change?
 - A fairly complex formula is used that takes into account the variability of the pre-treatment group and measurement error, resulting in our ability to categorize pre/post change for each measure into three groups:
 - Reliable Positive Change, Reliable Negative Change, and No Reliable Change



Outcomes Achieved – ART

- Three components to the ART group intervention; three different target-specific measures
 - Skill Streaming Checklists (skill streaming)
 - Staff Report and Youth Self-Report
 - Range 1 – 5
 - Not standardized, no clinical cutpoint
 - Aggression Questionnaire [AQ] (anger control)
 - Youth Self-Report
 - Range 34 – 170
 - Clinical cutpoint 110 and higher
 - How I Think Questionnaire [HIT] (moral reasoning)
 - Youth Self-Report
 - Range 1 – 6
 - Clinical cutpoint 2.77 and higher



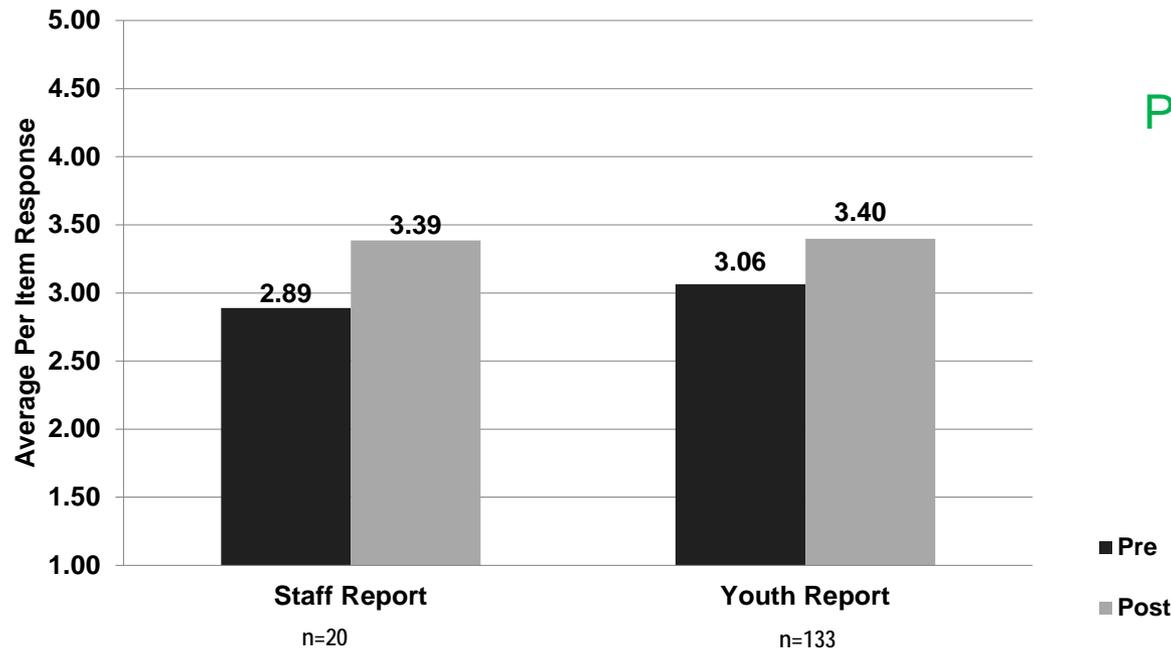
Outcomes Achieved – ART Skill Streaming Component

Skill Streaming Checklists

Targeted Assessment Data
ART Skill Streaming Outcomes

Staff Report
17%*
improvement
in youth
Pro Social Skills

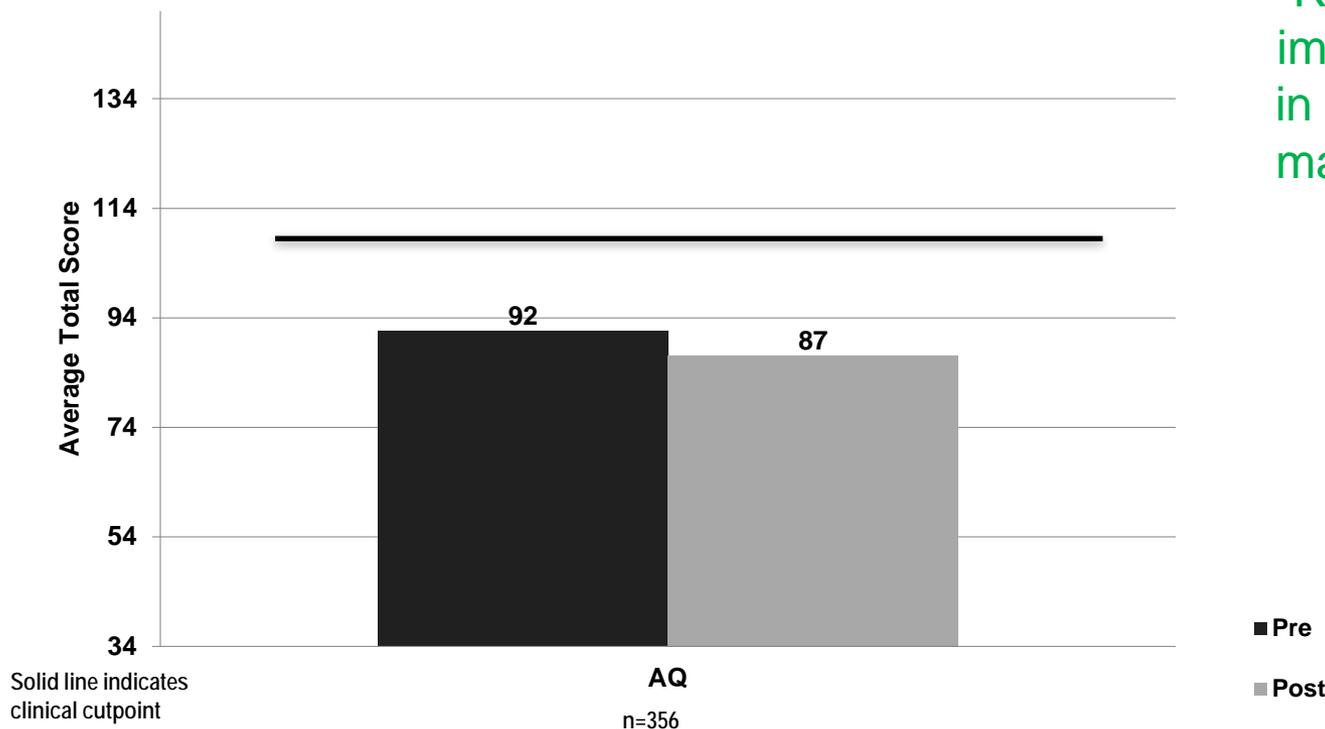
Youth Self-
Report **11%***
improvement
in their
Pro Social Skills



Outcomes Achieved – ART Anger Control Component

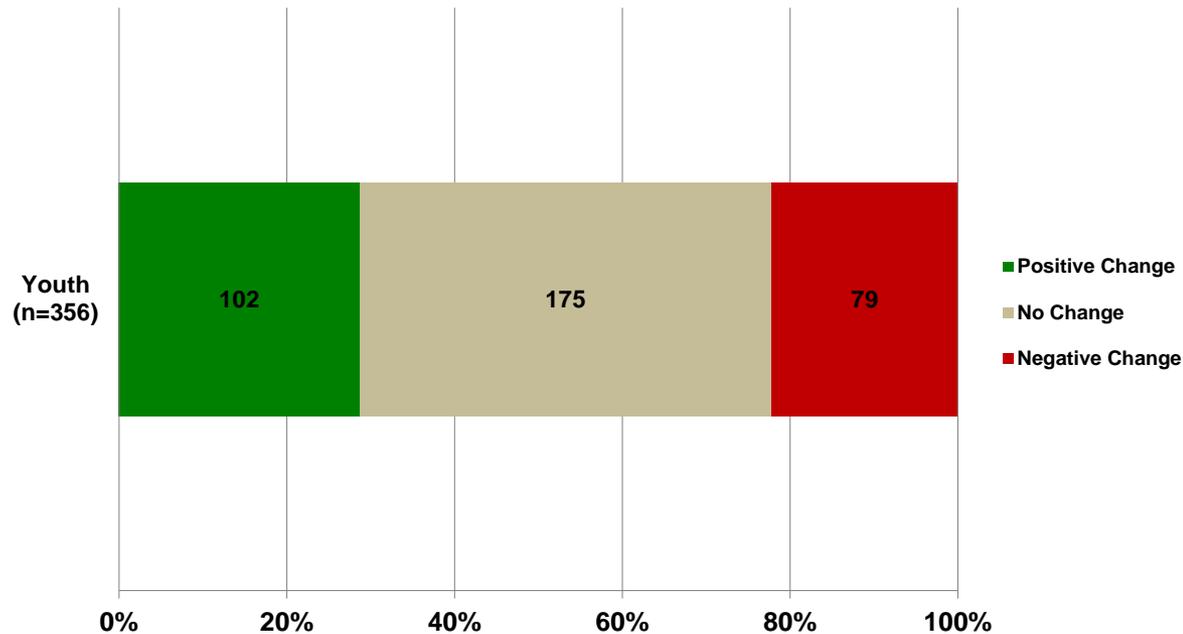
Aggression Questionnaire ART Anger Control Outcomes

Youth Self-
Report **5%***
improvement
in their anger
management



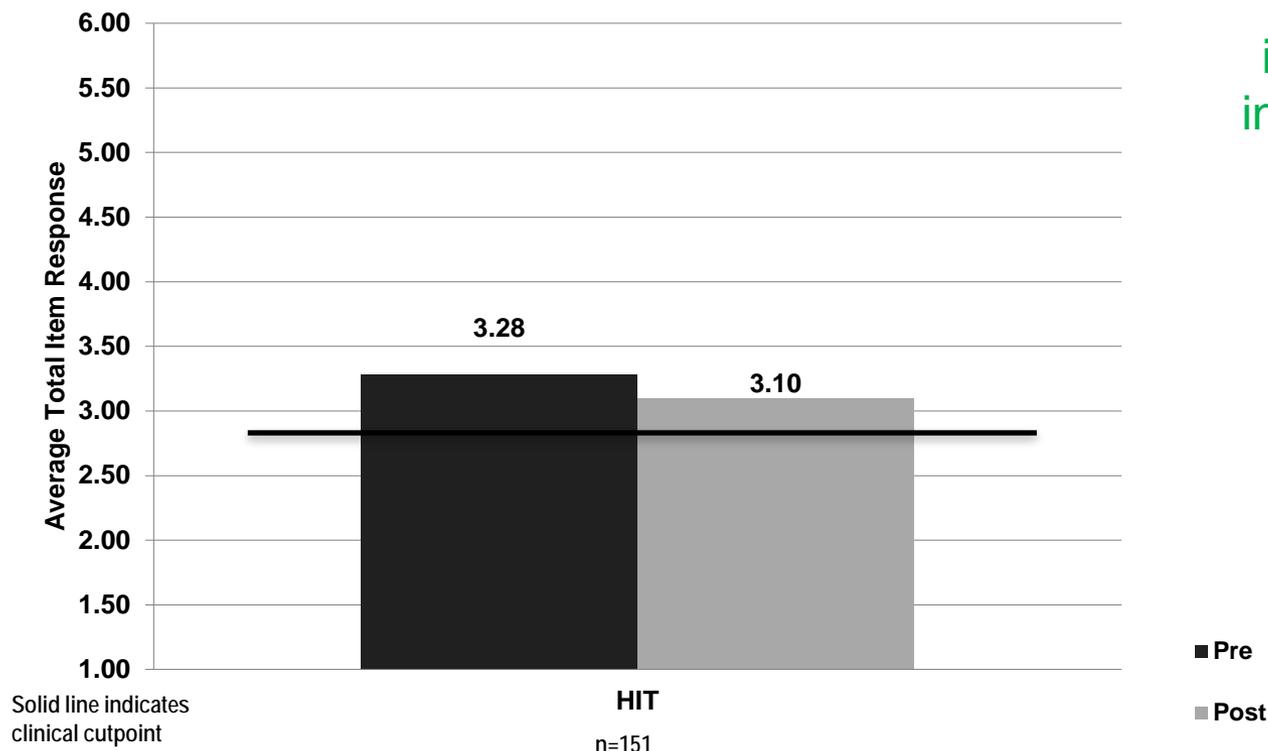
Outcomes Achieved – ART Anger Control Component

Reliable Change on AQ Total Score
ART Anger Control Outcomes



Outcomes Achieved – ART Moral Reasoning Outcomes

How I Think Questionnaire
ART Moral Reasoning Outcomes

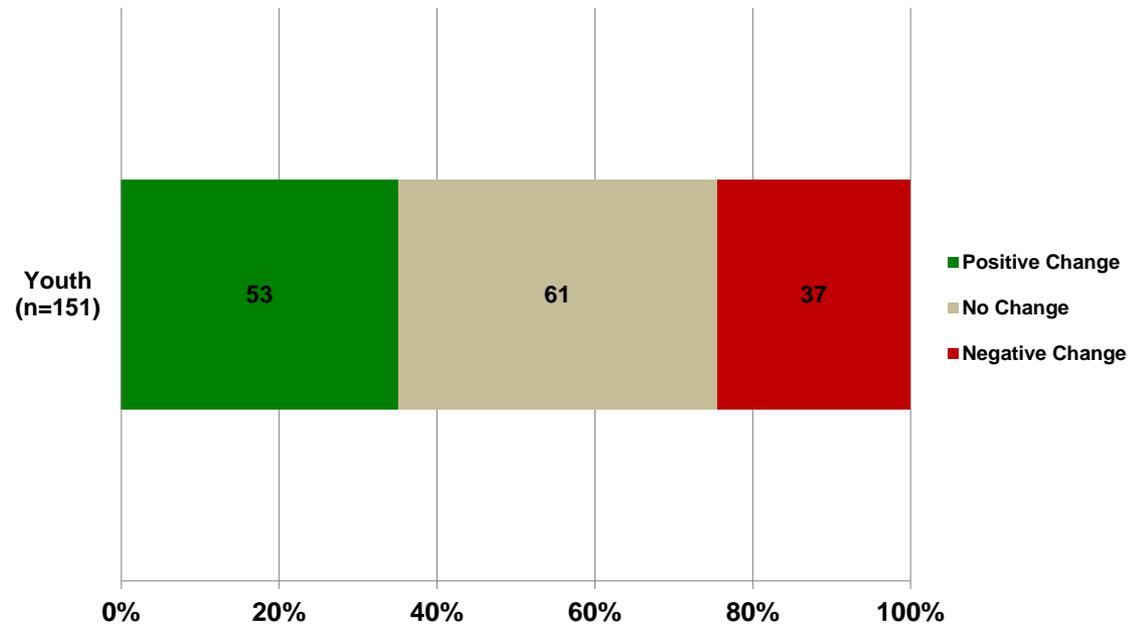


Youth Self-Report 6%* improvement in their thought processes



Outcomes Achieved – ART Moral Reasoning Outcomes

Reliable Change on HIT Total Score ART Moral Reasoning Outcomes



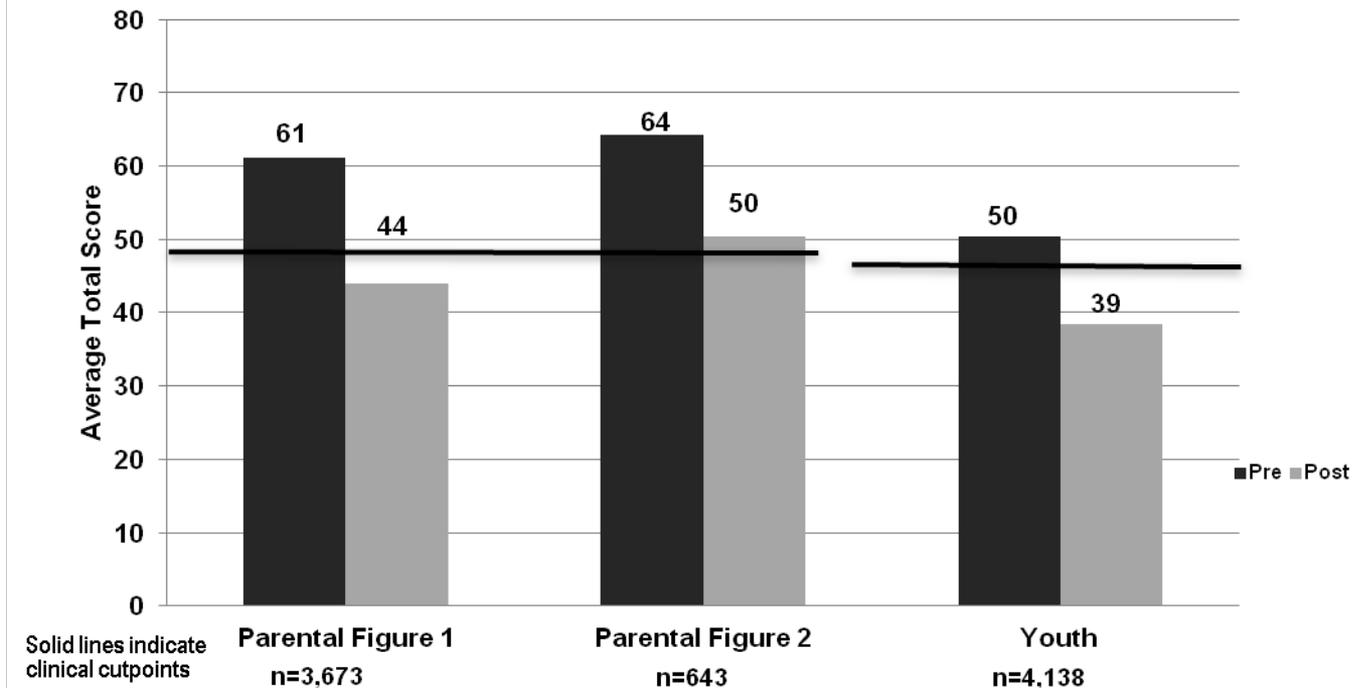
Outcomes Achieved – FFT

- General Measure of Youth Mental Health Functioning
 - Youth Outcome Questionnaires (YOQ and YOQ-SR)
 - Parent/Caregiver Report and Youth Self-Report
 - FFT collects data from two Parental Figures
 - Range -16 – 240
 - Clinical Cutpoint 47/46 and higher



Outcomes Achieved – FFT

Youth Outcome Questionnaires
Total Score
FFT Aggregate Data



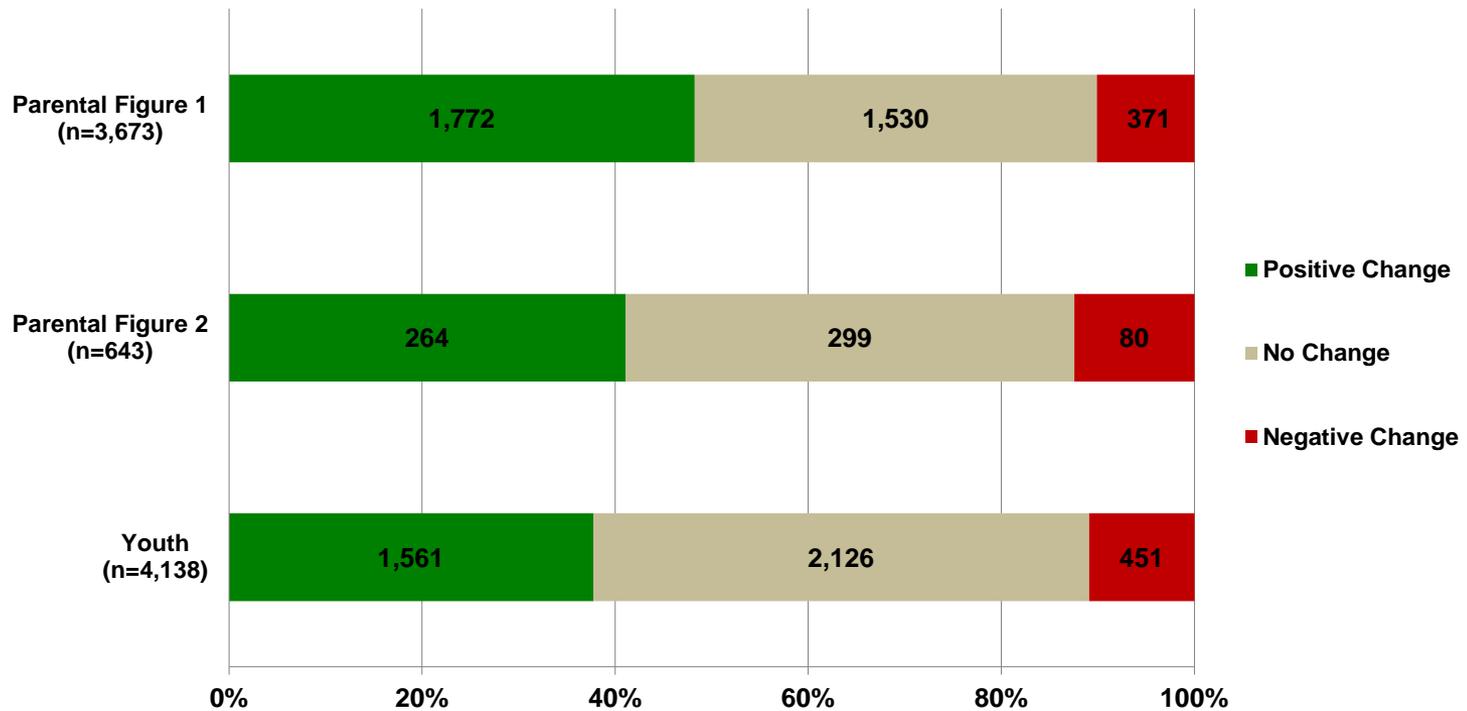
Parents Report
an average of
28%*
improvement
in youth mental
health and
overall
functioning

Youth Self-
Report **24%***
improvement
in their mental
health and
overall
functioning



Outcomes Achieved – FFT

Reliable Change on YOQ Total Score
Pre-FFT to Post-FFT:
Aggregate Data



Outcomes Achieved – TF-CBT

- Target-Specific Measure Focused on Symptoms of Trauma Exposure
 - UCLA Post Traumatic Stress Disorder Reaction Index (PTSD-RI)
 - Parent Report and Child Self-Report
 - Range 0 – 68
 - Clinical cutpoint 38 and higher
- General Measures of Youth Mental Health Functioning, YOQ and YOQ-SR are also collected
 - Not reported in this presentation



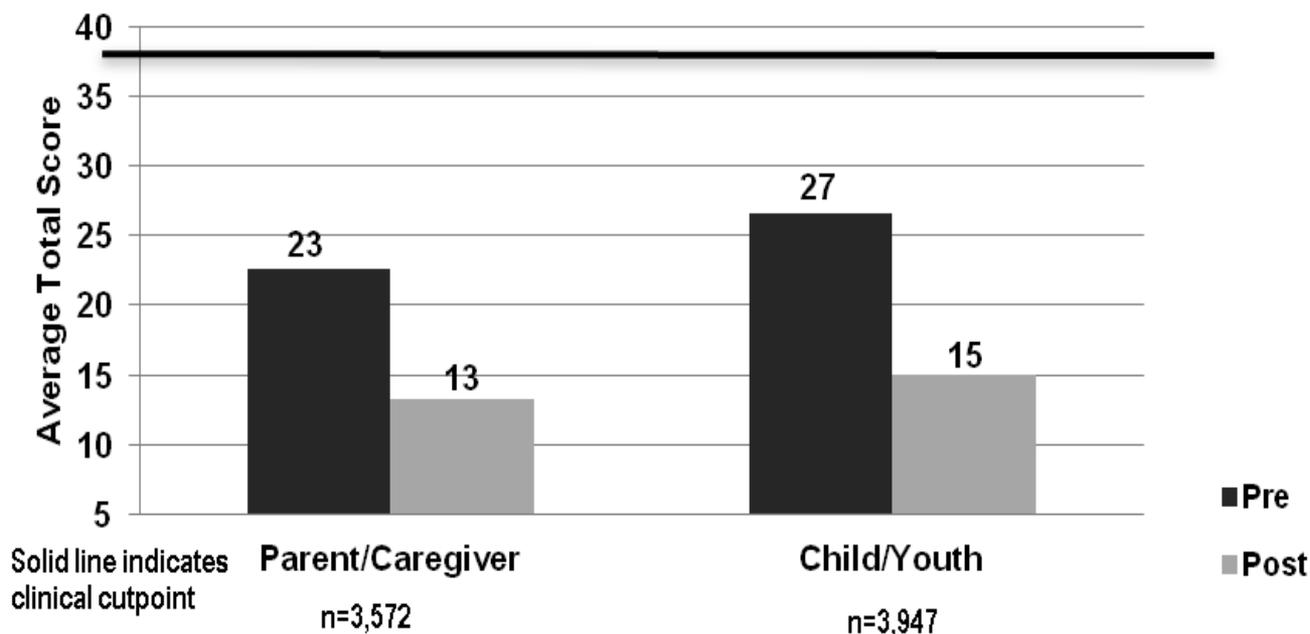
Outcomes Achieved – TF-CBT

Post-Traumatic Stress Disorder

Reaction Index

Total PTSD Severity Score

TF-CBT: Aggregate Data



Parents Report **41%*** improvement in children's post traumatic stress symptoms

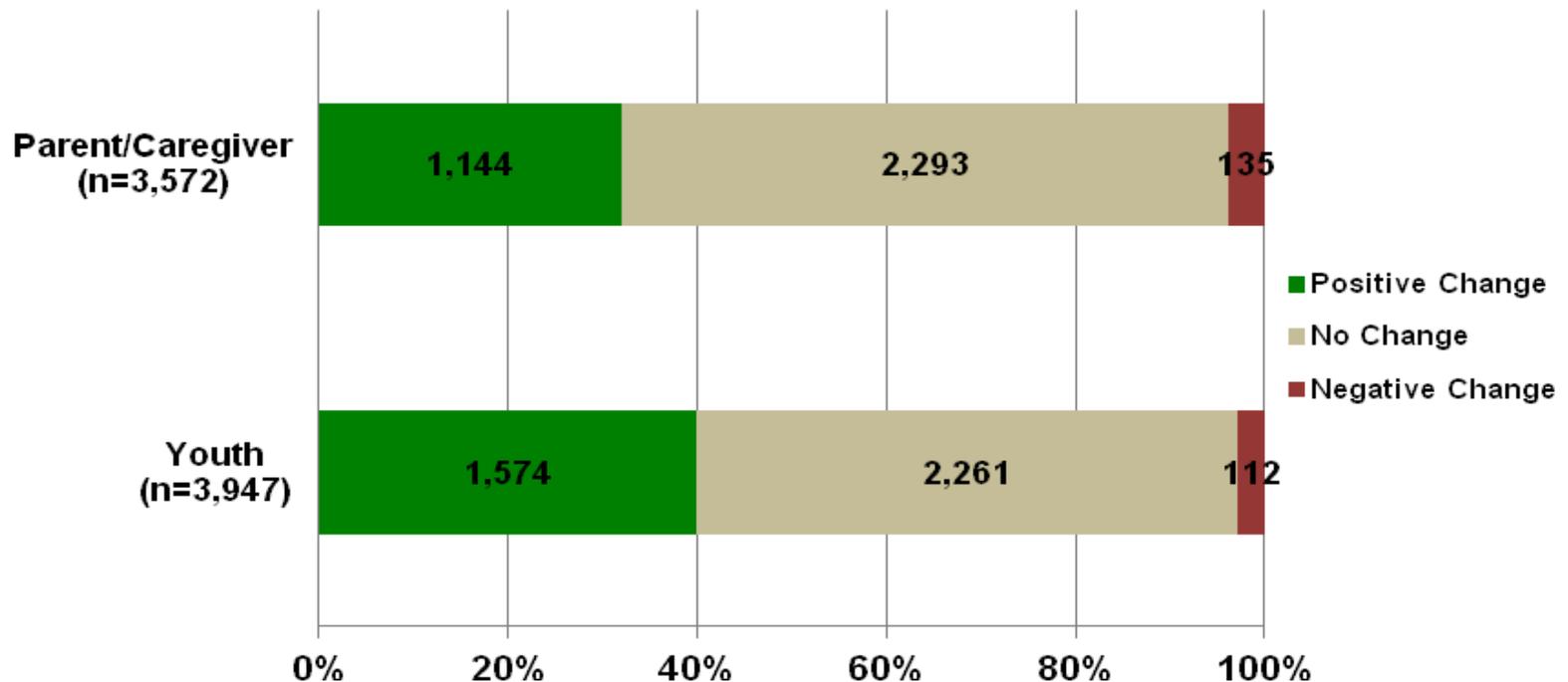
Children Self-Report **43%*** improvement in their post traumatic stress symptoms



Outcomes Achieved – TF-CBT

Reliable Change on PTSD-RI Total Score

Pre-TF-CBT to Post-TF-CBT: Aggregate Data



Outcomes Achieved – Triple P

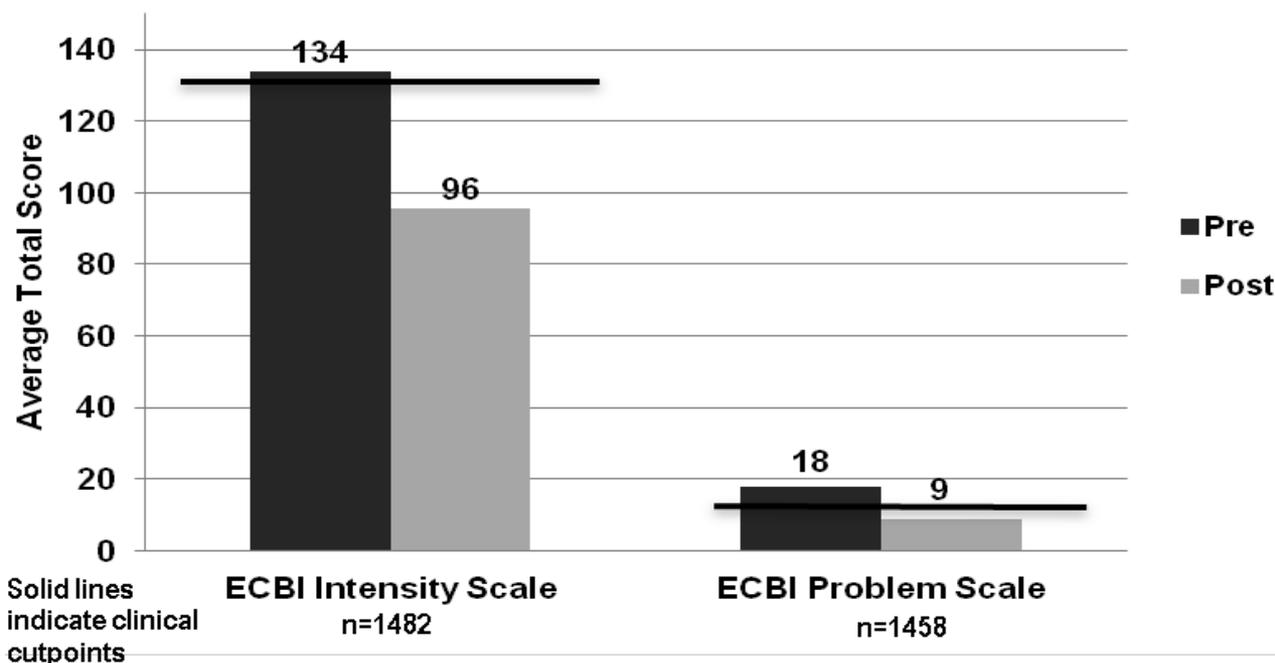
- Target-Specific Measure Focused on Disruptive Behaviors
 - Eyberg Child Behavior Inventory (ECBI)
 - Parent/Caregiver Report
 - Intensity Score Range 36 – 252
 - Clinical cutpoint 131 and higher
 - Problem Score Range 0 – 36
 - Clinical cutpoint 15 and higher
- A variety of other measures of child behavior and family functioning are used by Triple P sites across the state
 - Not reported in this presentation



Outcomes Achieved – Triple P

ECBI Intensity and ECBI Problem Raw Scale Scores

Triple P Level 4/5 Aggregate Data

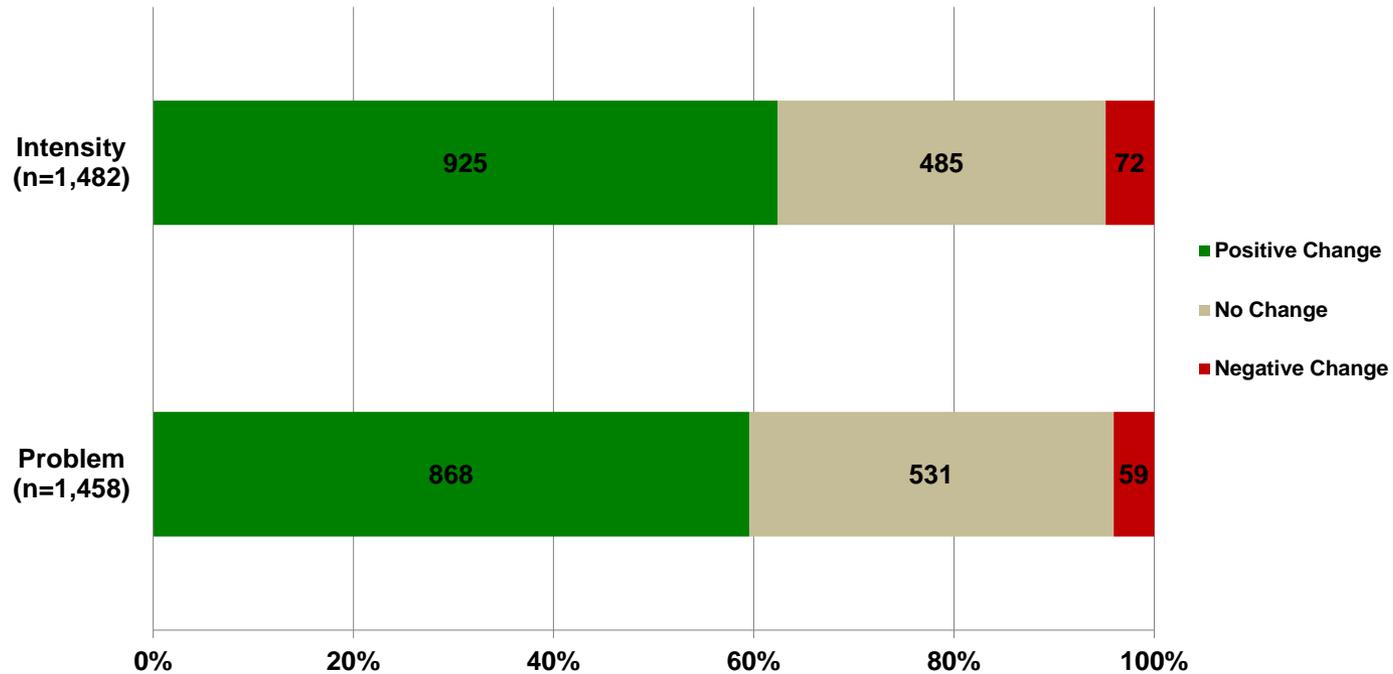


Parents Report **28%*** improvement in the intensity of children's disruptive behavior; and, **50%*** improvement in how problematic those behaviors are to them



Outcomes Achieved – Triple P

Reliable Change on ECBI Raw Score Triple P Parenting Level 4/5 Aggregate Data



Summary

- CiMH receives varying amounts of data for program performance and outcome evaluation reporting across EBP implementations
 - Dependent on the number of implementing agencies/ sites; and, the extent to which data collection for outcome evaluation purposes is required



Summary

- Outcome data consistently reflect positive gains after participation in EBPs
 - Improvements are reported in children's general mental health functioning as well as in target-specific areas, such as skills acquisition, anger management, depression, disruptive behavior, and trauma symptoms



Future Directions

- ***Exciting News!!***

- As of next fiscal year, CiMH will officially merge with the Alcohol and Drug Policy Institute (ADPI)

Creating the:

CENTER FOR BEHAVIORAL HEALTH SOLUTIONS



Future Directions

- CiMH/Center for Behavioral Health Solutions is transitioning to a web-based solution that will simplify and reduce errors in data submissions, and automate analysis and reporting
 - “**eBHSolutions**”
- The goal is to provide **real-time feedback** of data to drive decision-making at multiple levels
 - Client
 - Program
 - Agency/Organization
 - County
 - State





Questions





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