

# Early Childhood Mental Health Outcome Evaluation

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JACK, JOSEPH AND MORTON MANDEL  
SCHOOL OF APPLIED SOCIAL SCIENCES

CASE WESTERN RESERVE  
UNIVERSITY

Invest in Children  
Cuyahoga County

Zero to Three  
National Training Institute  
December 11, 2014

# Evaluation Questions

1. What are the characteristics of the children and families served?
2. Do children show improved functioning following treatment?
3. For whom are ECMH services most effective?



# Sample

- Administrative records from 6 local agencies
  - Agencies varied in size and number of children served
- Cases opened b/t Jan 2007 -Dec 2012
  - 2 agencies stopped offering ECMH services as part of this initiative on June 30, 2011
- N=930



# Main Findings

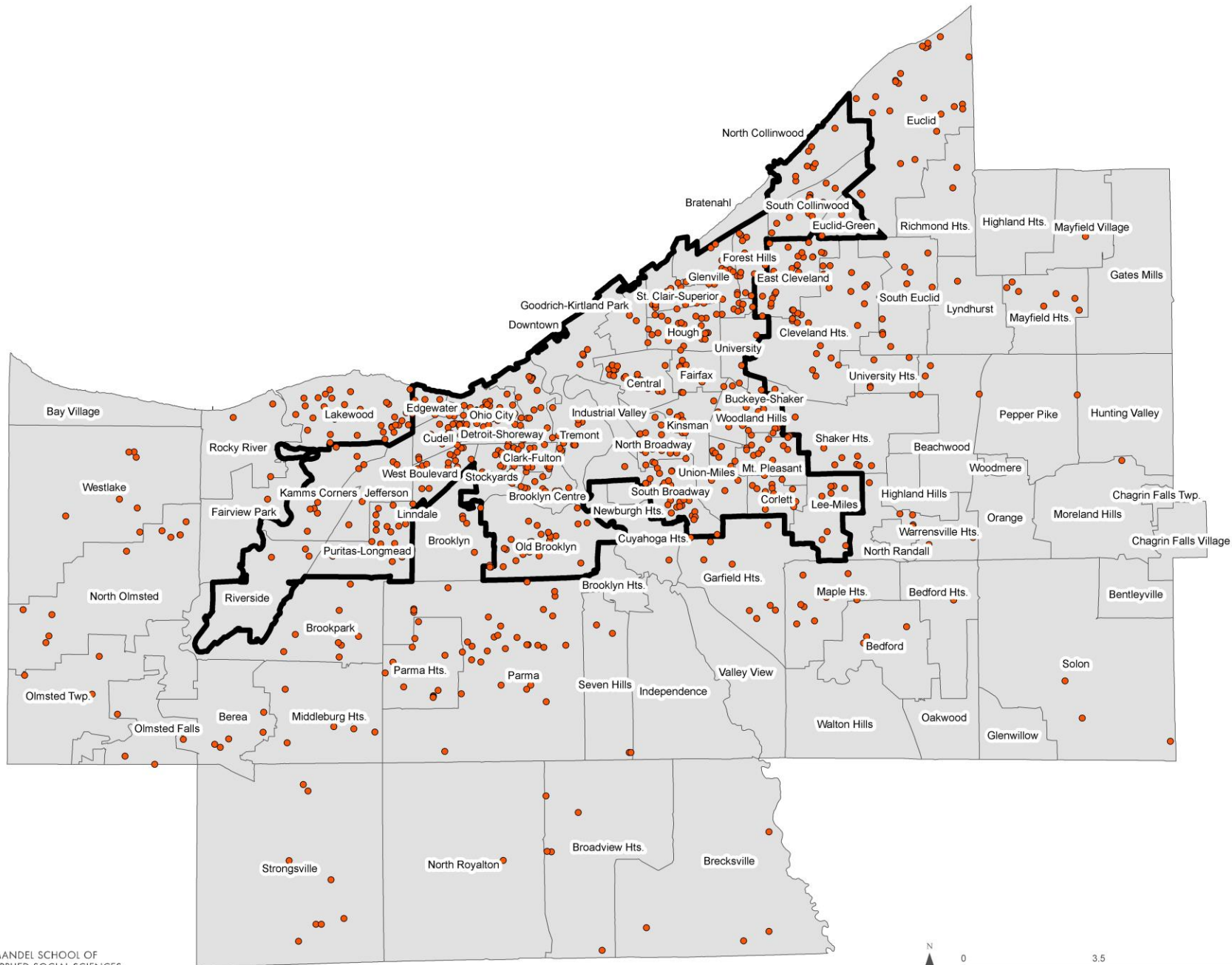
1. ECMH efforts are bringing about behavioral improvements and relationship benefits
2. Better outcomes associated with treatment completion



# Sample Characteristics

- Across agencies:
  - Children served ~60% male
  - Children b/t 24-35 months old
  - Vast majority living w/ biological parent
  - ~ 50% parented by 2 caregivers
  - 1.3% (Agency B) - 28.6% (Agency C) of parents already referred/involved in mental health services







# Child Welfare Involvement Cont.

- Report of child maltreatment
  - Before (N=923) ECMH = 39%
  - During (n=756) ECMH = 13%
  - After (n=215) ECMH = 13%
- Substantiated/Indicated report
  - Before ECMH = 12%
  - During ECMH = 2%
  - After ECMH = 2%



# Axis I Diagnoses

- Regulatory = 10.0 - 51.7%
- Affect = 5.0 - 40.1%
- Adjustment = 6.7 - 19.7%
- Traumatic Stress = 2.7 - 6.7%
- Sleep = 0.0 - 3.3%
- Relating & Communicating = 1.0 - 11.7%





# Axis II Diagnoses

- Relationship = 0.0 – 57.7%
- Axis I & II = 0.0 – 53.3%



# Service Dosage

- Variability in average # of months in ECMH
  - Overall sample  $M = 8.0$  ( $SD=6.3$ )
    - $M= 4.3$  ( $SD=2.9$ ) to  $M=10.7$  ( $SD=8.1$ )
- Across all agencies
  - 42.9% of children received < 6 months ECMH
  - 35.5% of children received between 6-11 months



# Service Dosage Continued

- Variability in average # of hours in ECMH
  - Overall sample  $M = 33.9$  ( $SD=44.8$ )
    - $M= 20.4$  ( $SD=16.4$ ) to  $M=119.7$  ( $SD=103.9$ )
- Across all agencies
  - 37.4% of children received < 15 hours ECMH
  - 26.6% of children received between 15-29 hours



# Reason for Case Closure (%)

- Across agencies
  - Between 14.5-66.7% of cases ‘completed treatment’ (M=30.0%)
- % of Families who withdrew from ECMH
  - 11.7-53.6%, M=28.7%
- Other reasons for non-completion
  - Child transitioned to other program
  - Unable to locate family
  - Family declined service

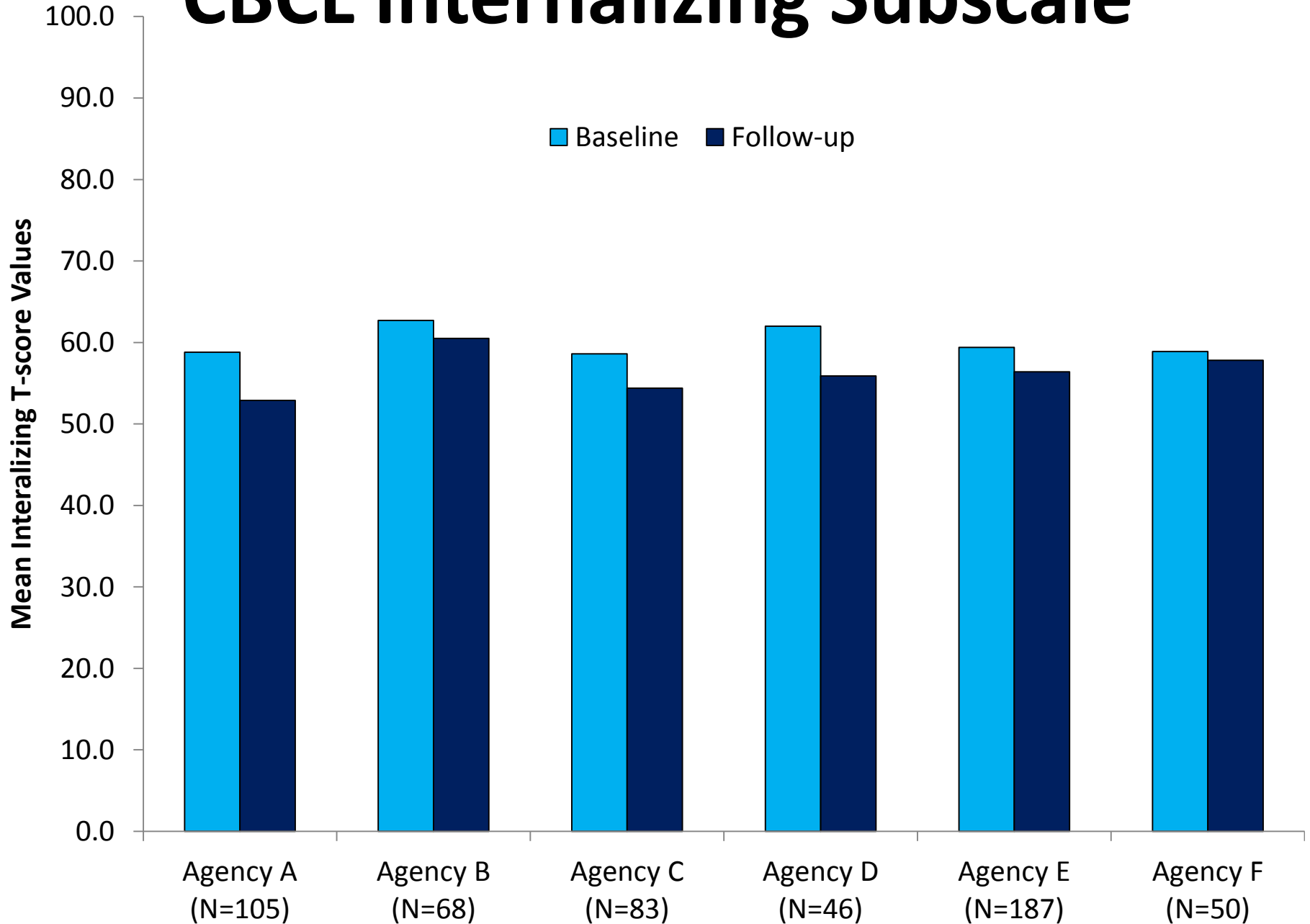


# Finding #1

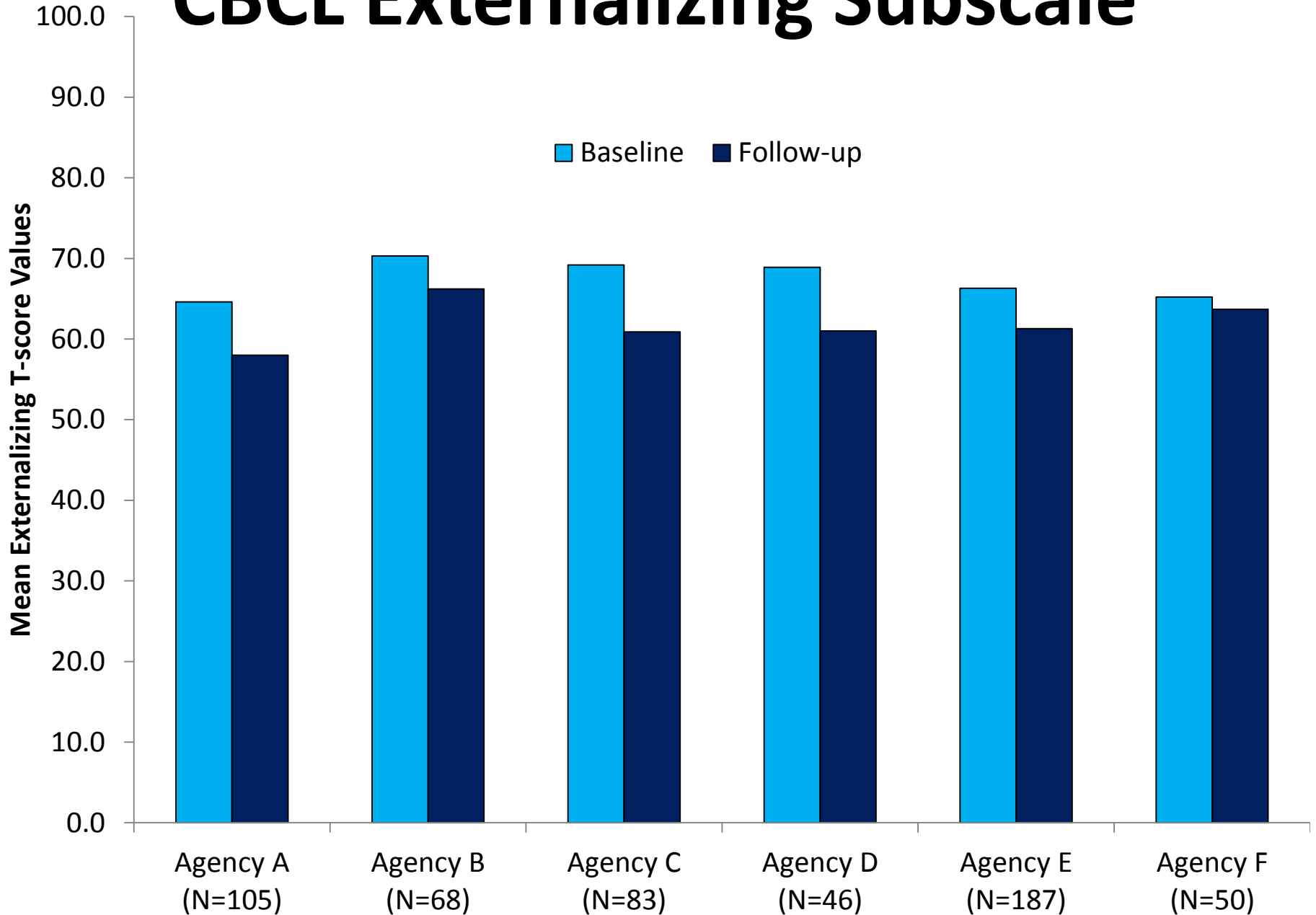
- Parents reported statistically significant reductions in child internalizing and externalizing problems following treatment.
  - 6.5% reduction in internalizing behaviors
  - 8.5% reduction in externalizing behaviors
  - 8.3% reduction in total behavior problems



# CBCCL Internalizing Subscale

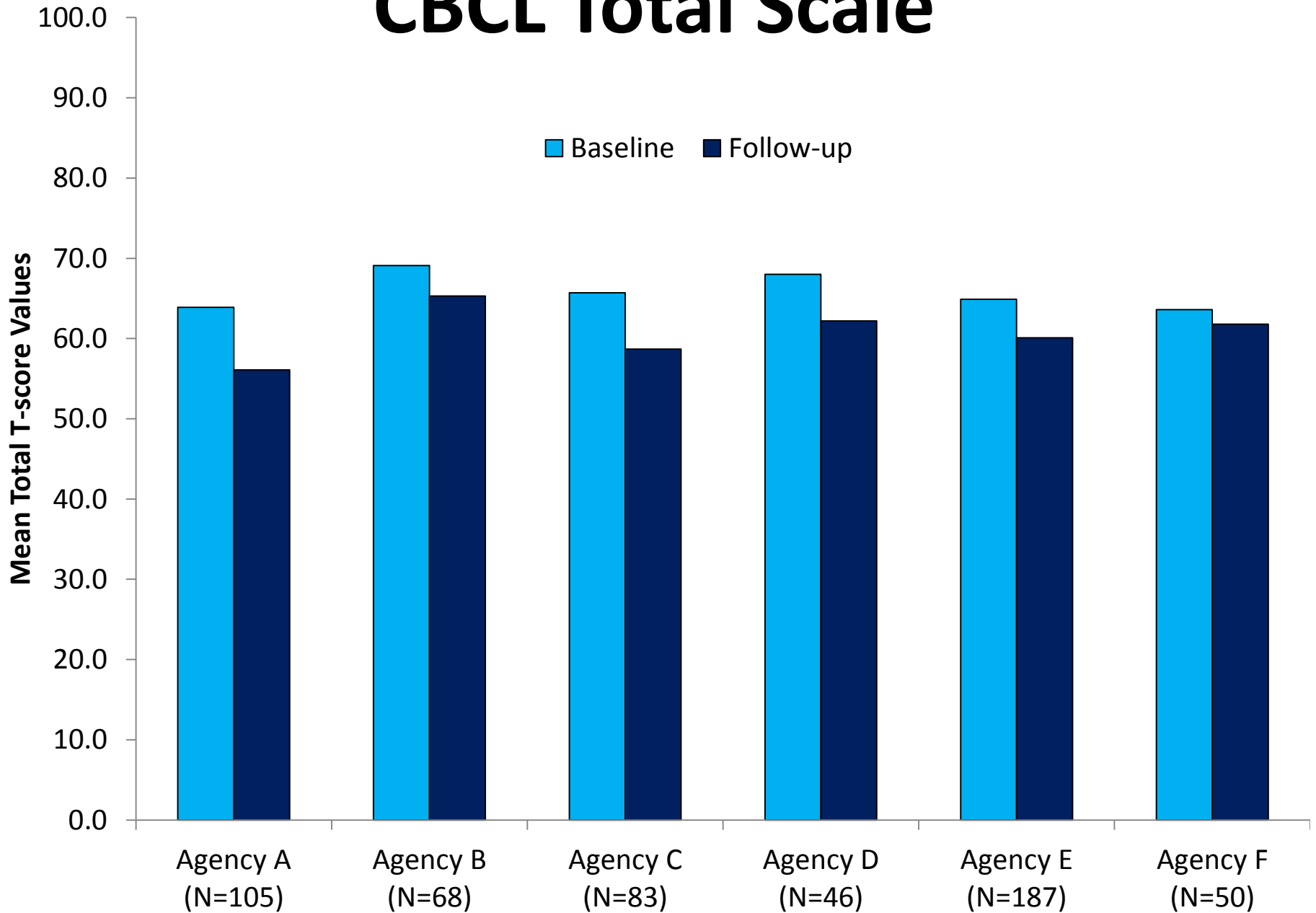


# CBCCL Externalizing Subscale



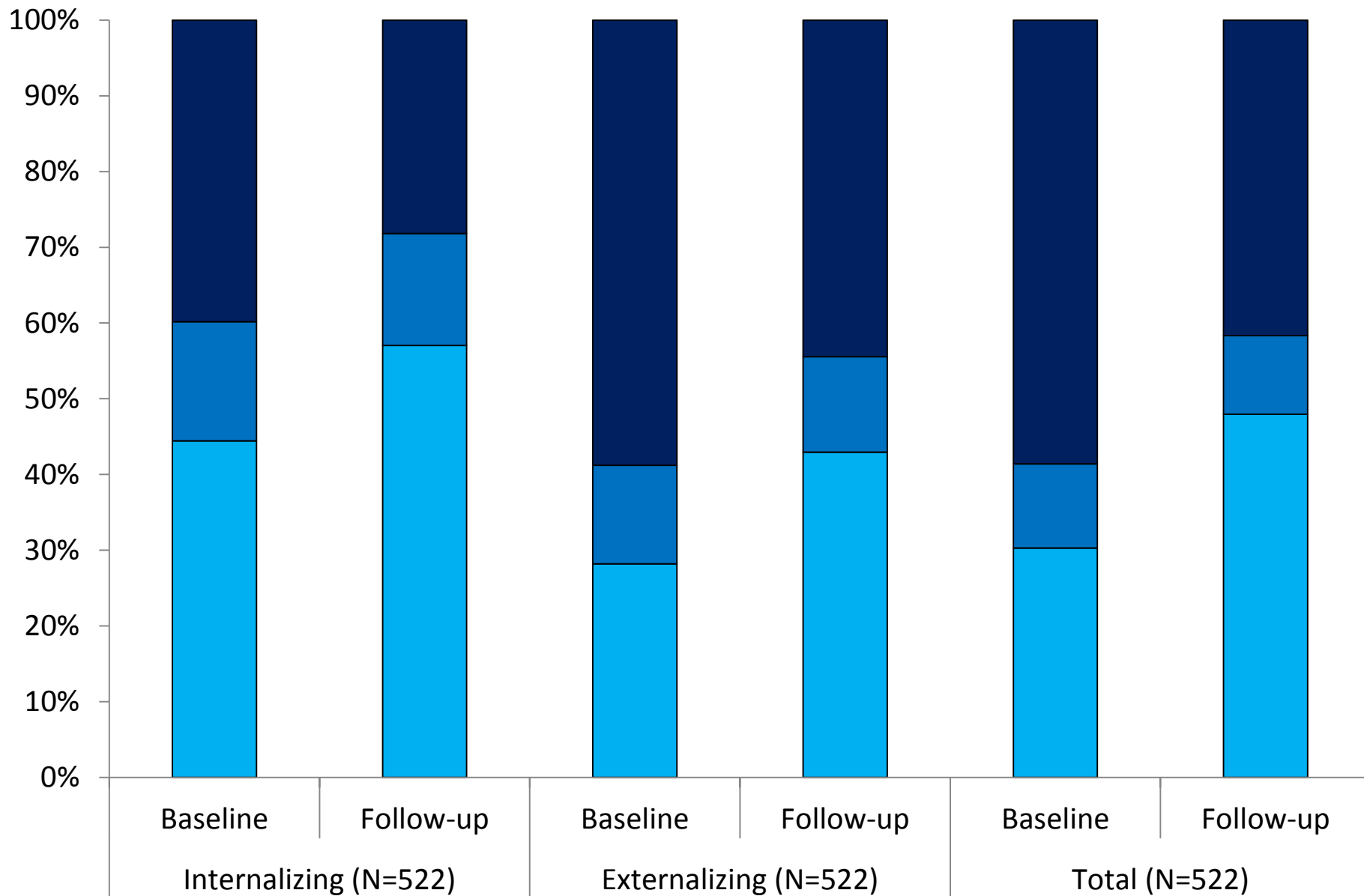


# CBCCL Total Scale



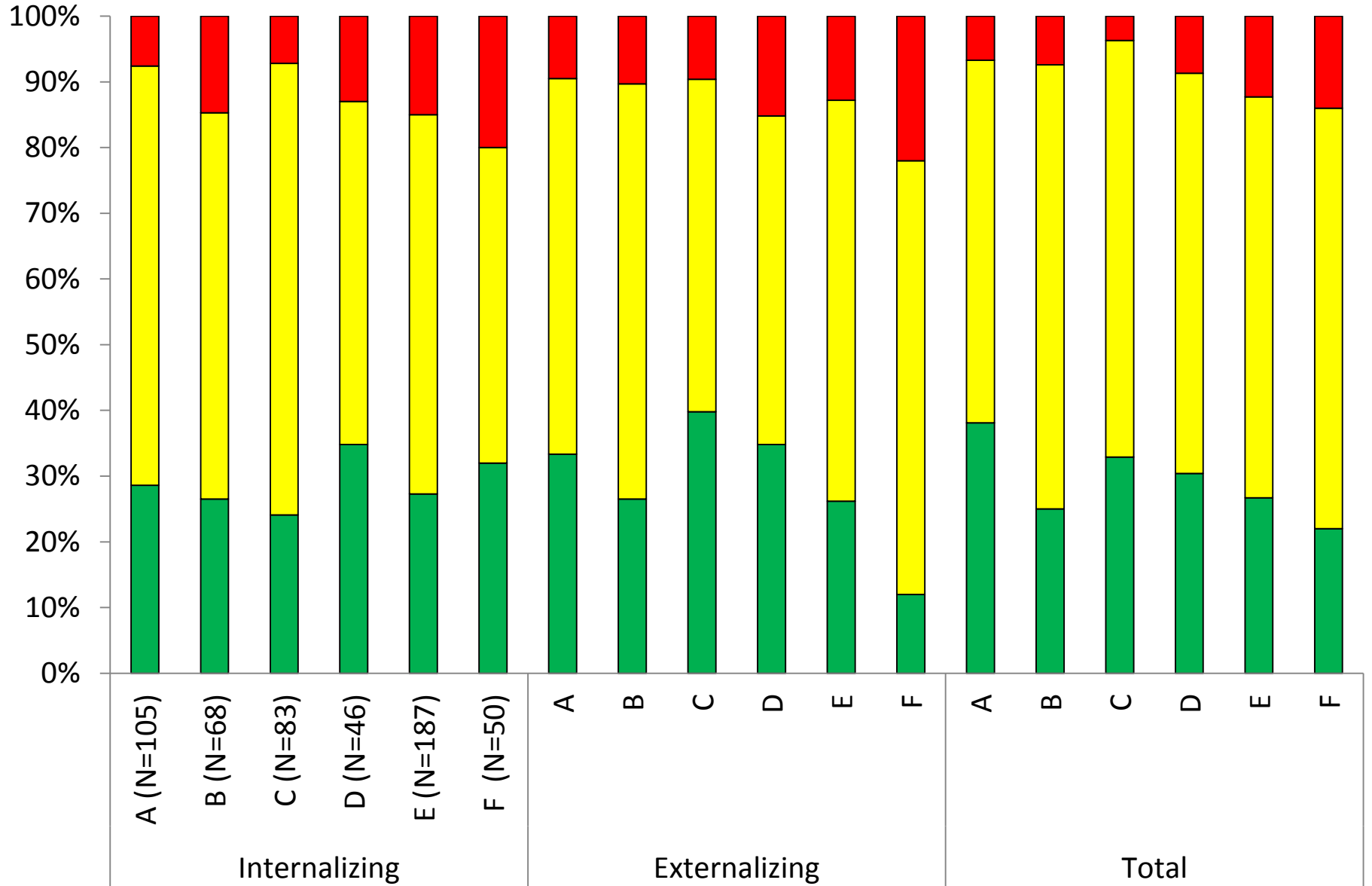
# Categorical Change Across Agencies

■ Subclinical ■ Borderline clinical ■ Clinical



# Within Child Change

Improved Stayed the same Worsened



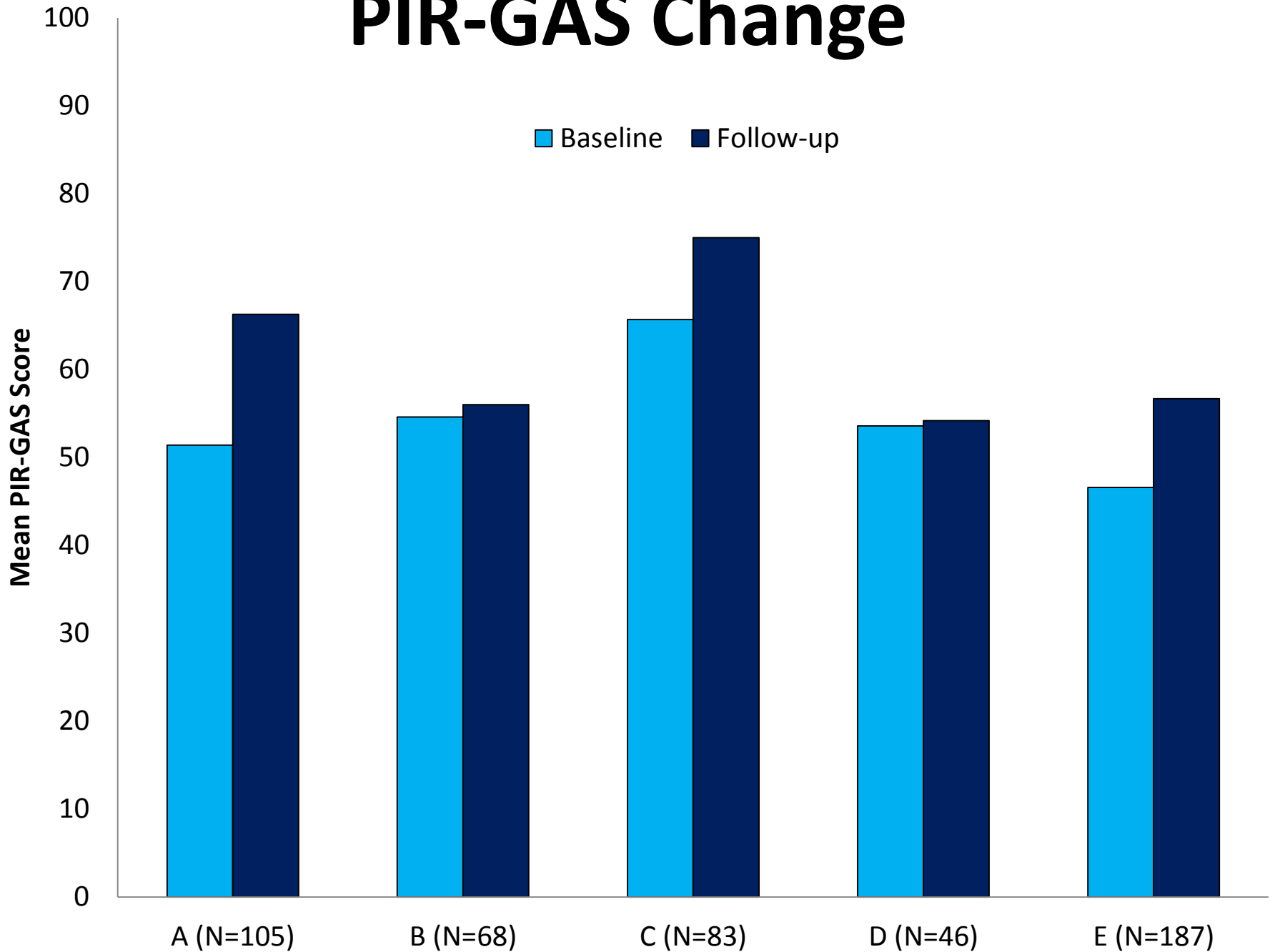
# Finding #2

- Parent-child relationship functioning, as reported by ECMH therapists, improved significantly following treatment.

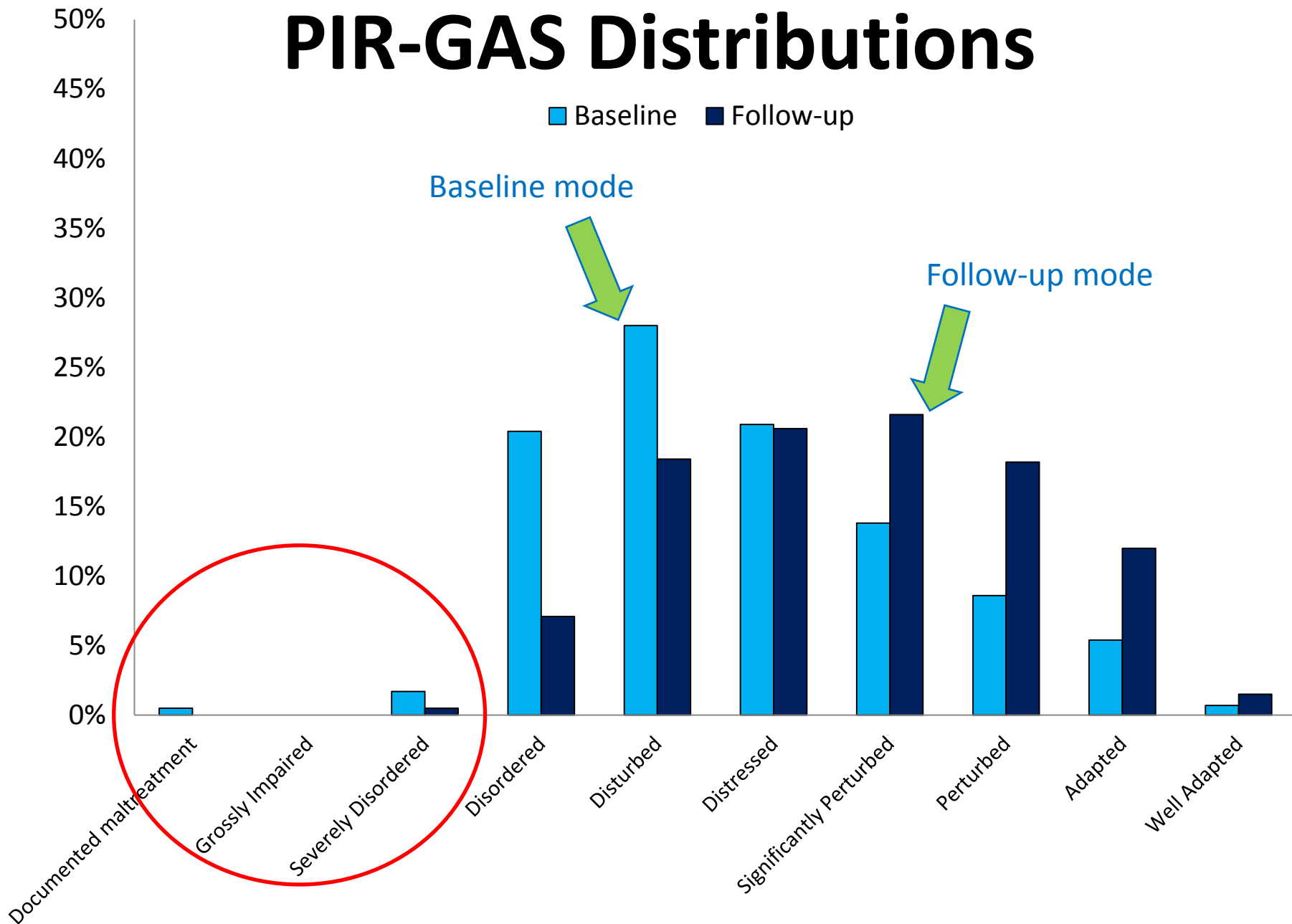


# PIR-GAS Change

■ Baseline ■ Follow-up



# PIR-GAS Distributions



# Finding #3

- Outcomes for cases that completed treatment were significantly better
  - On average, families who completed treatment saw an *additional 7.7* point decline in internalizing problems,
  - **11.5** point decline in externalizing problems,
  - and a **10.8** point improvement in parent-child relationship functioning





# Finding #4

- “Significant improvement” related to:
  - Number of service units (in hours) received
  - Treatment completion
  - Child gender
  - # of caregivers



# For whom is ECMH most effective?

- Created baseline – follow-up change scores for each outcome
- Explored characteristics of children who made gains in excess of 1.5 *SD* of the change score mean on each outcome
  - CBCL internalizing subscale = 32 children
  - CBCL externalizing subscale = 41 children
  - CBCL total scale = 35 children
  - PIR-GAS = 35 children



# Total Sample vs. Children who Made Significant Gains

- On average
  - Received more hours of ECMH
  - More likely to complete treatment
  - More likely to be female
  - More likely to come from 2 caregiver households
- For PIR-GAS only
  - Younger than total sample



# General Conclusions

- Variability across agencies at each agency
- ECMH efforts associated w/ behavioral improvements, relationship benefits
- Better outcomes associated w/ treatment completion
- Significant proportion of children within subclinical CBCL threshold at baseline



# Implications for the System

- Consensus across agencies
  - What does “completed treatment” mean?
  - Diagnoses
- Improve data collection methods
  - Are we capturing the ‘right’ data?
- Are we reaching the children most in need?
- Should agencies specialize in treatment modalities or particular diagnoses?
- Referral sources



# Thank you!

Questions?

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