# Early Childhood Mental Health Outcome Evaluation

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# 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?

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# 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

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# Main Findings
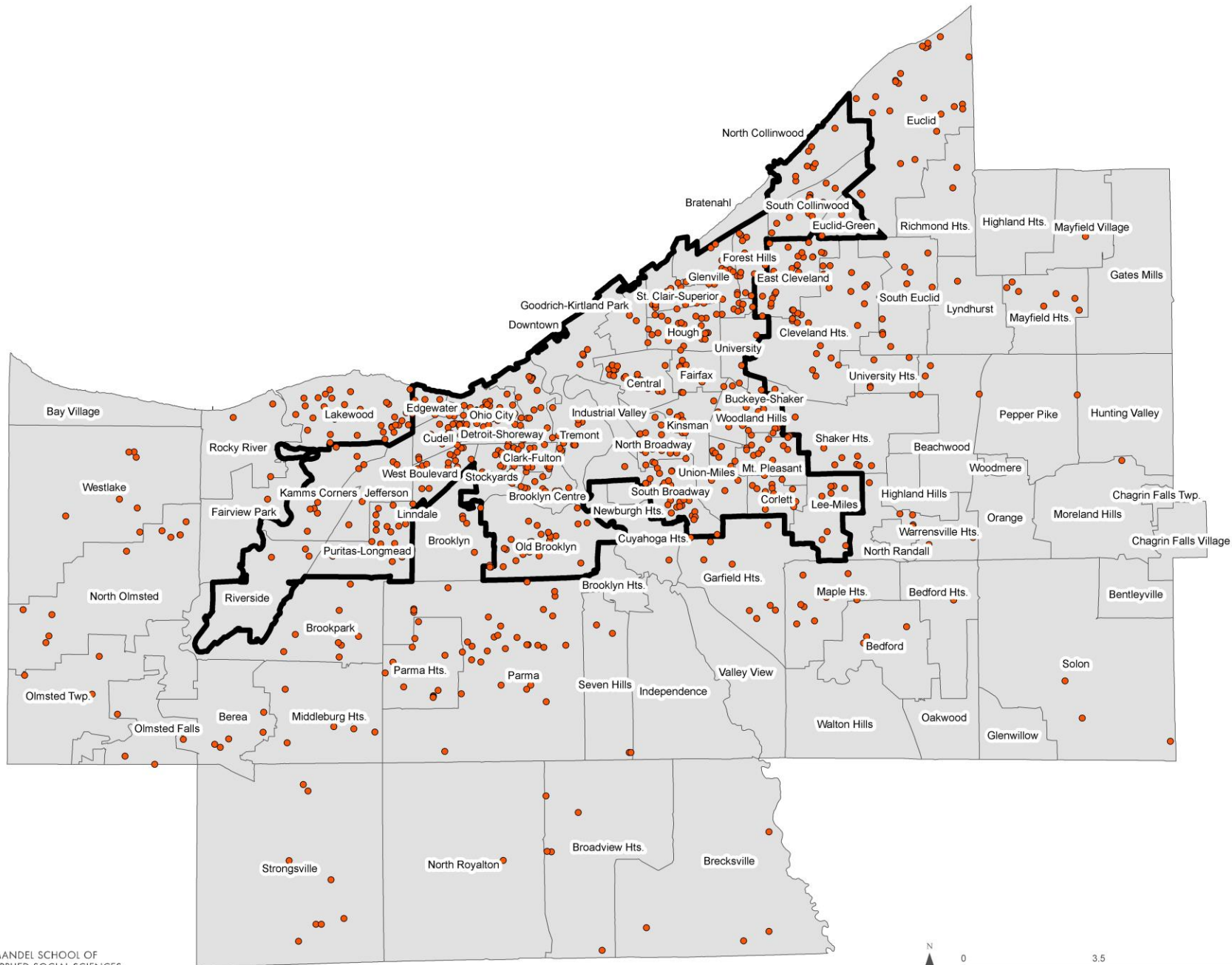
1. ECMH efforts are bringing about behavioral improvements and relationship benefits

2. Better outcomes associated with treatment completion

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# 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

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North Collinwood

Euclid

Bratenahl

South Collinwood

Euclid-Green

Richmond Hts.

Highland Hts.

Mayfield Village

Forest Hills

Gates Mills

Glenville

East Cleveland

Goodrich-Kirtland Park

St. Clair-Superior

South Euclid

Lyndhurst

Mayfield Hts.

Downtown

Hough

Cleveland Hts.

University

Bay Village

Fairfax

University Hts.

Pepper Pike

Hunting Valley

Central

Buckeye-Shaker

Lakewood

Edgewater

Ohio City

Industrial Valley

Woodland Hills

Detroit-Shoreway

Kinsman

Shaker Hts.

Beachwood

Woodmere

Rocky River

Cudell

Tremont

North Broadway

Mt. Pleasant

Clark-Fulton

Union-Miles

Highland Hills

Westlake

West Boulevard

Stockyards

Corlett

Lee-Miles

Kamms Corners

Jefferson

Brooklyn Centre

Chagrin Falls Twp.

Fairview Park

Linndale

Newburgh Hts.

Warrensville Hts.

Orange

Moreland Hills

Chagrin Falls Village

Puritas-Longmead

Brooklyn

South Broadway

Cuyahoga Hts.

North Randall

North Olmsted

Riverside

Old Brooklyn

Brooklyn Hts.

Garfield Hts.

Maple Hts.

Bedford Hts.

Bentleyville

Brookpark

Bedford

Solon

Olmsted Twp.

Parma Hts.

Parma

Seven Hills

Independence

Valley View

Walton Hills

Oakwood

Glenwillow

Olmsted Falls

Berea

Middleburg Hts.

Broadview Hts.

Strongsville

North Royalton

Brecksville

N

0        3.5        7
Miles

# Child Welfare Involvement Cont.

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

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# 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%

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# 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

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# 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

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# Finding #1

- Parents reported statistically significant reductions in child **<u>internalizing</u>** and **<u>externalizing</u>** problems following treatment.

  - 6.5% reduction in internalizing behaviors
  - 8.5% reduction in externalizing behaviors
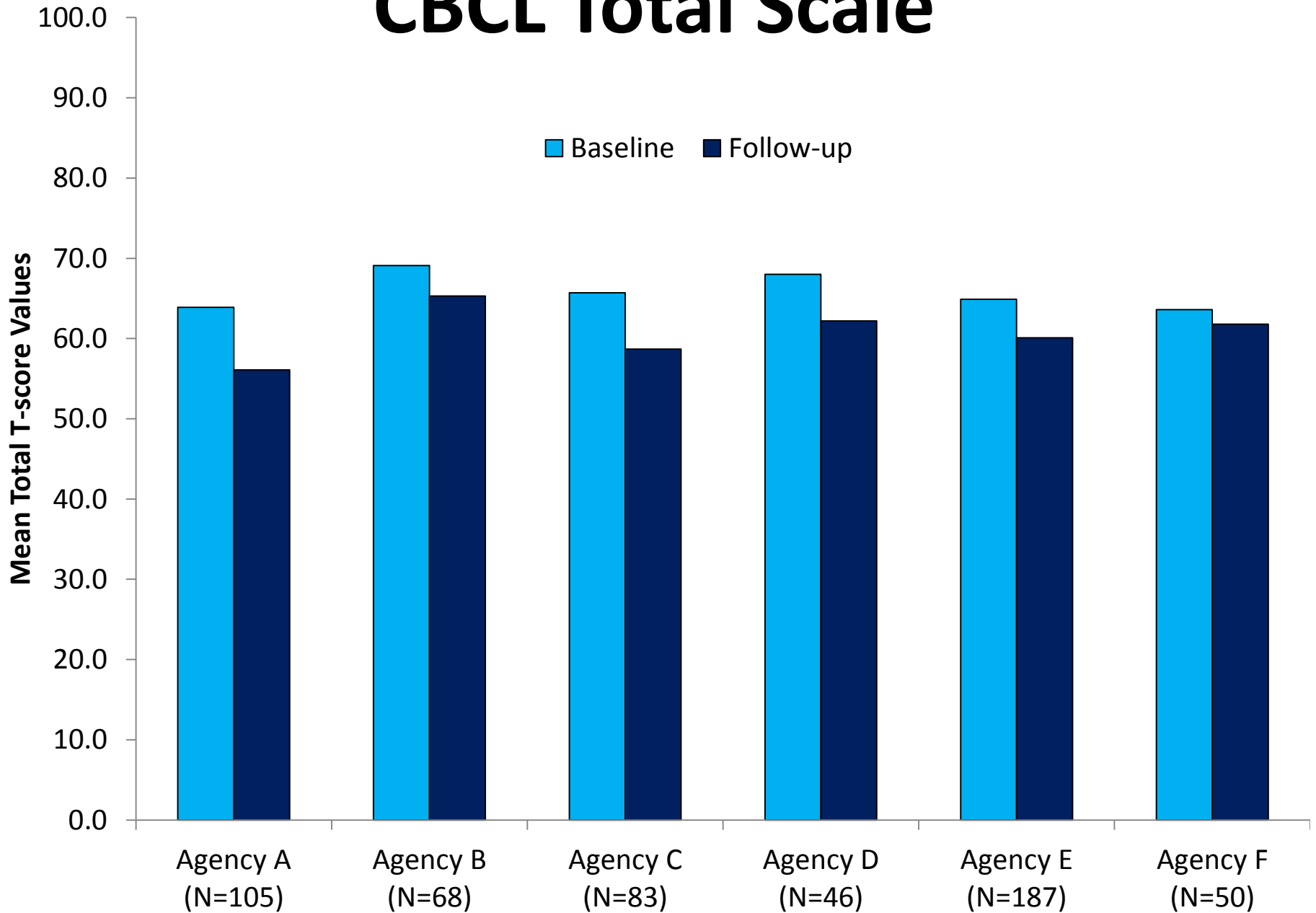  - 8.3% reduction in total behavior problems

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# CBCL Internalizing Subscale

# CBCL Externalizing Subscale

# CBCL Total Scale

**Mean Total T-score Values**

| | Baseline | Follow-up |
|---|---|---|

- Agency A (N=105)
- Agency B (N=68)
- Agency C (N=83)
- Agency D (N=46)
- Agency E (N=187)
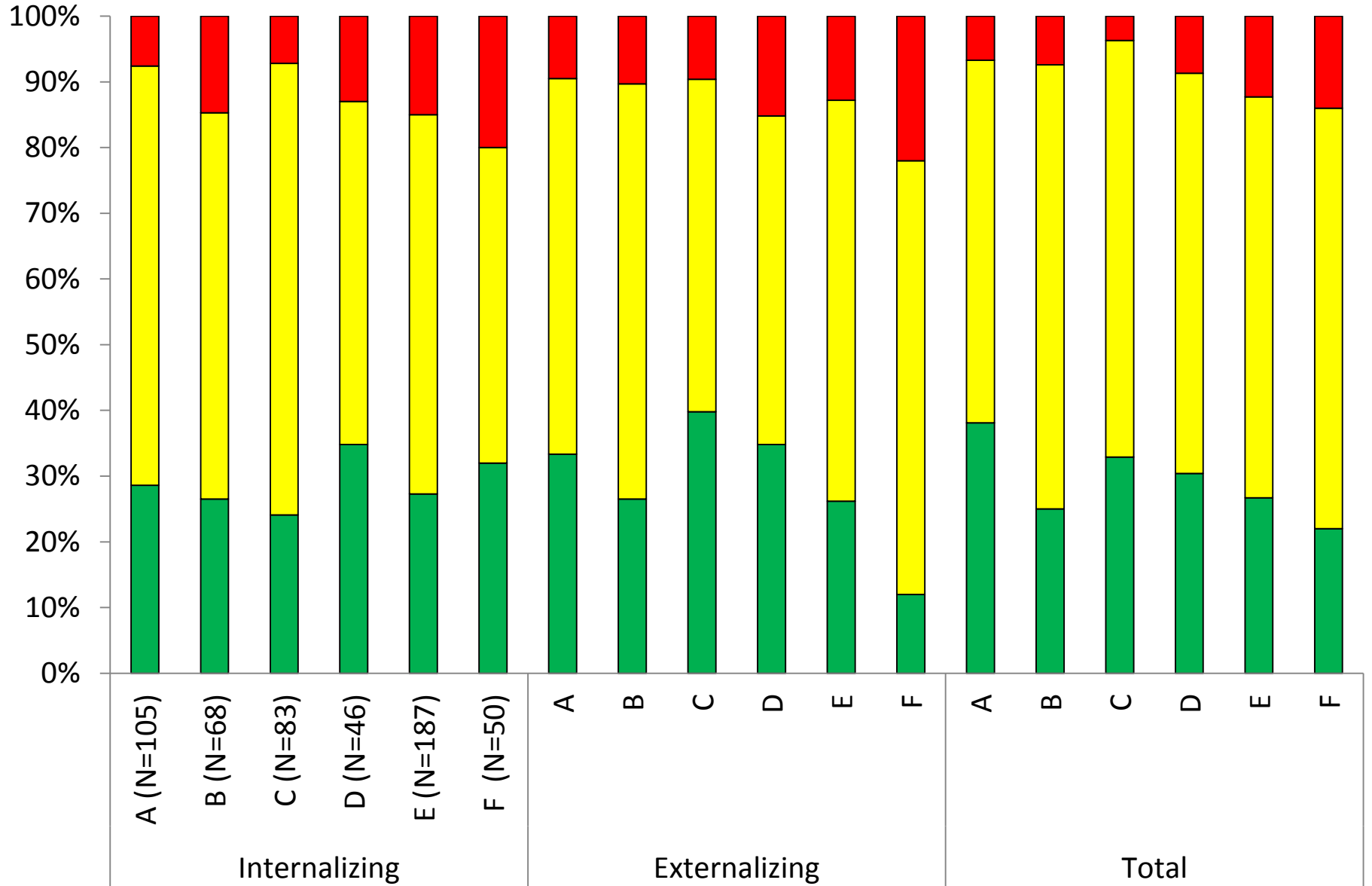- Agency F (N=50)
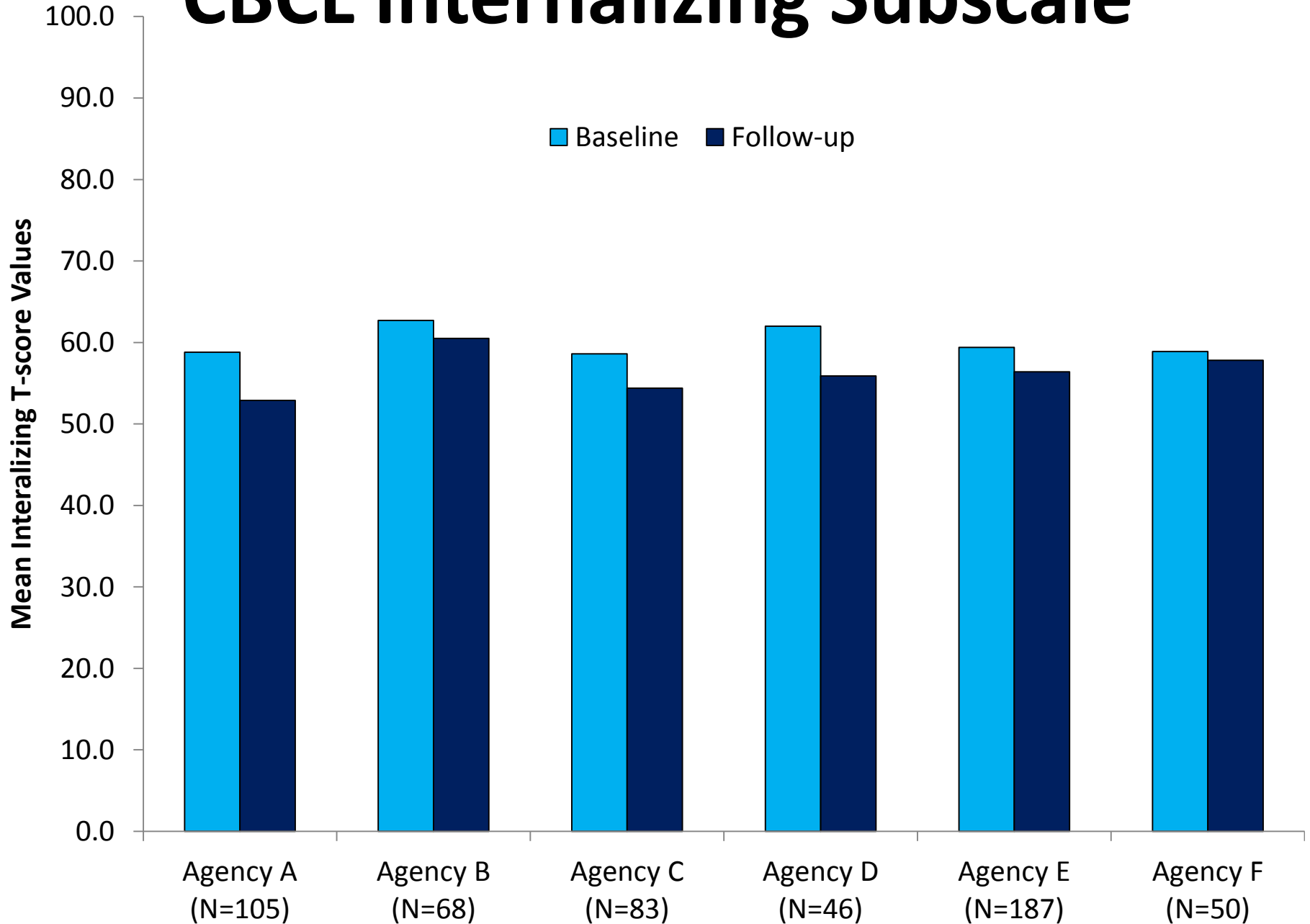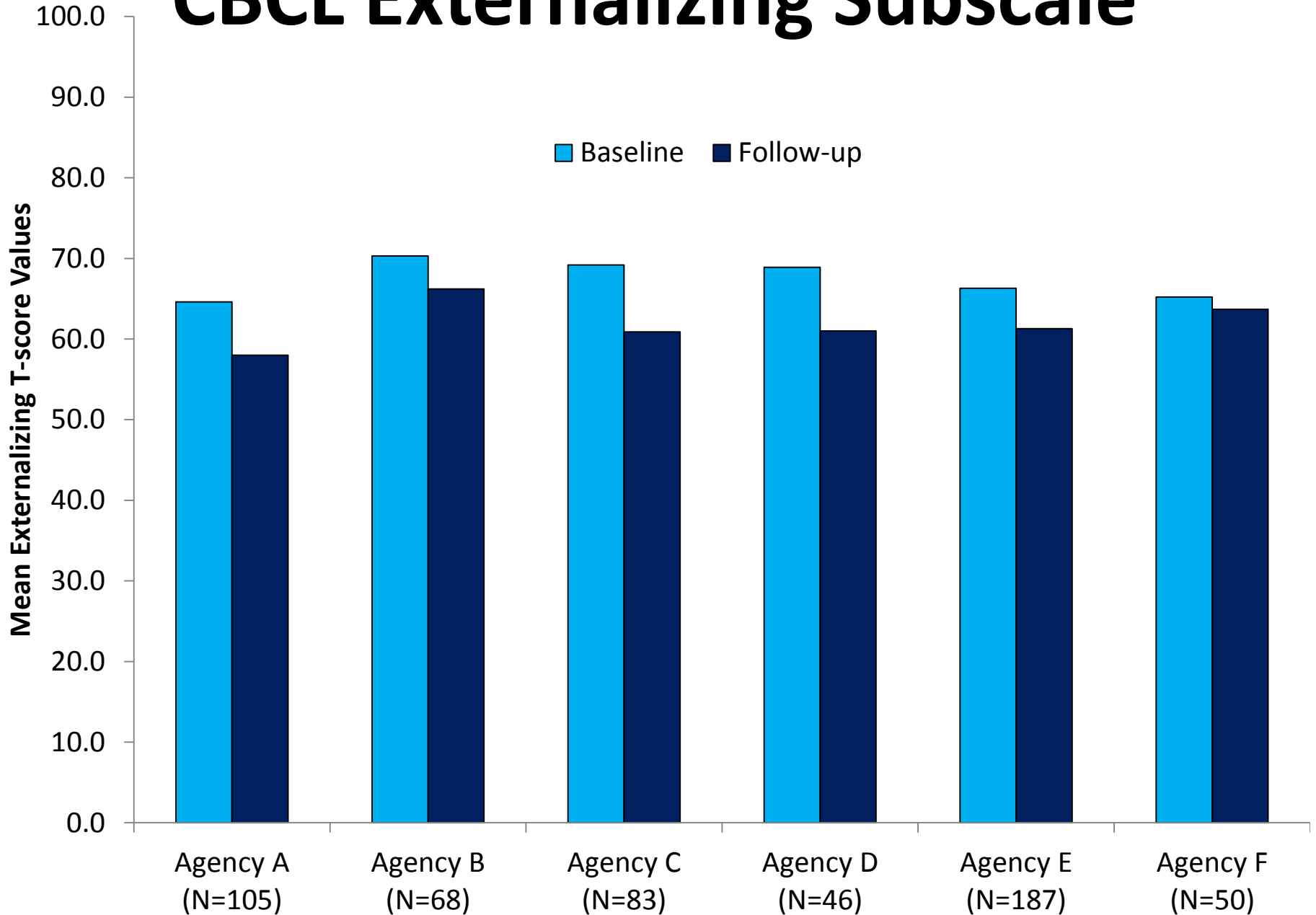
# Categorical Change Across Agencies

■ Subclinical  ■ Borderline clinical  ■ Clinical
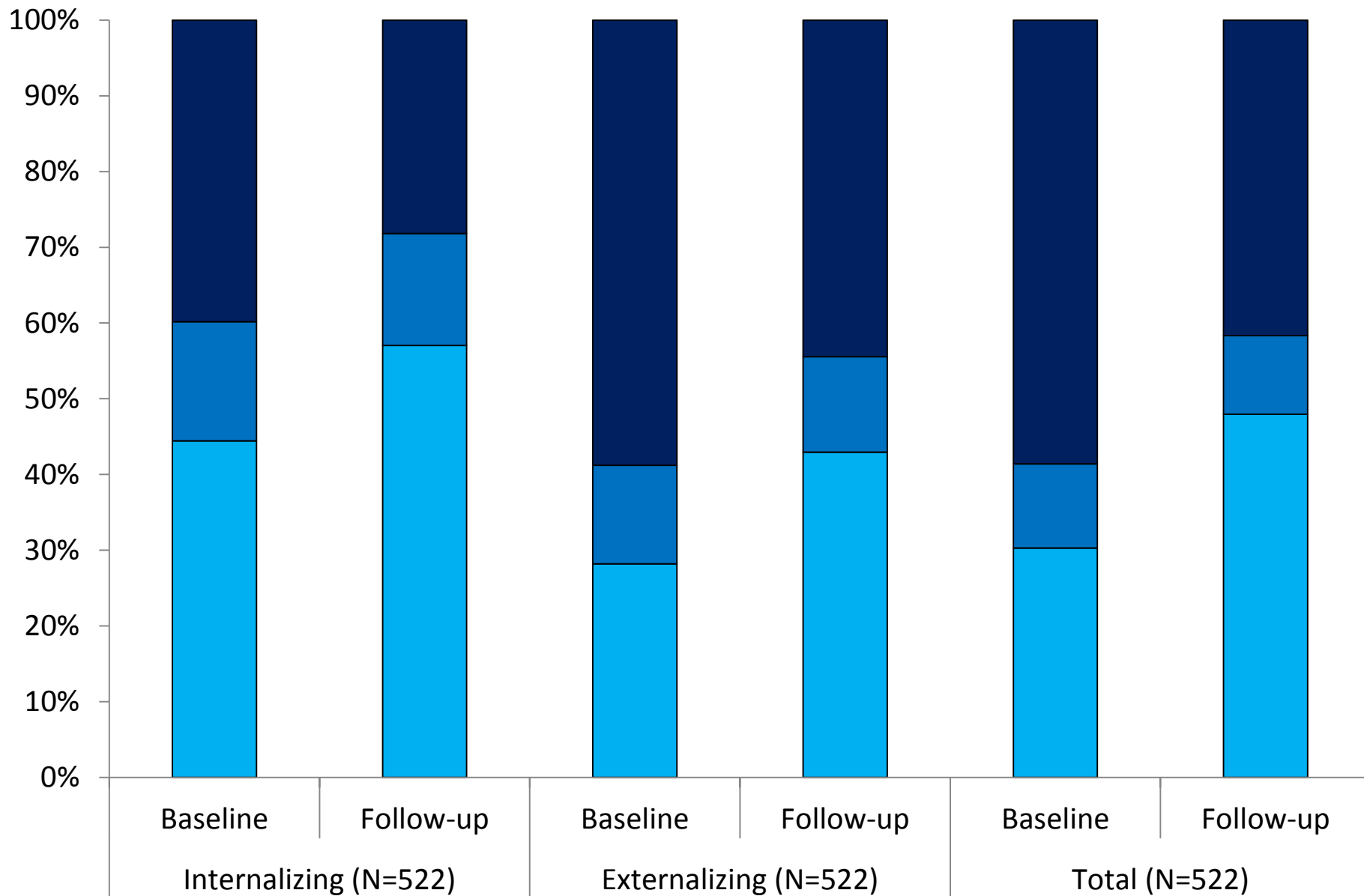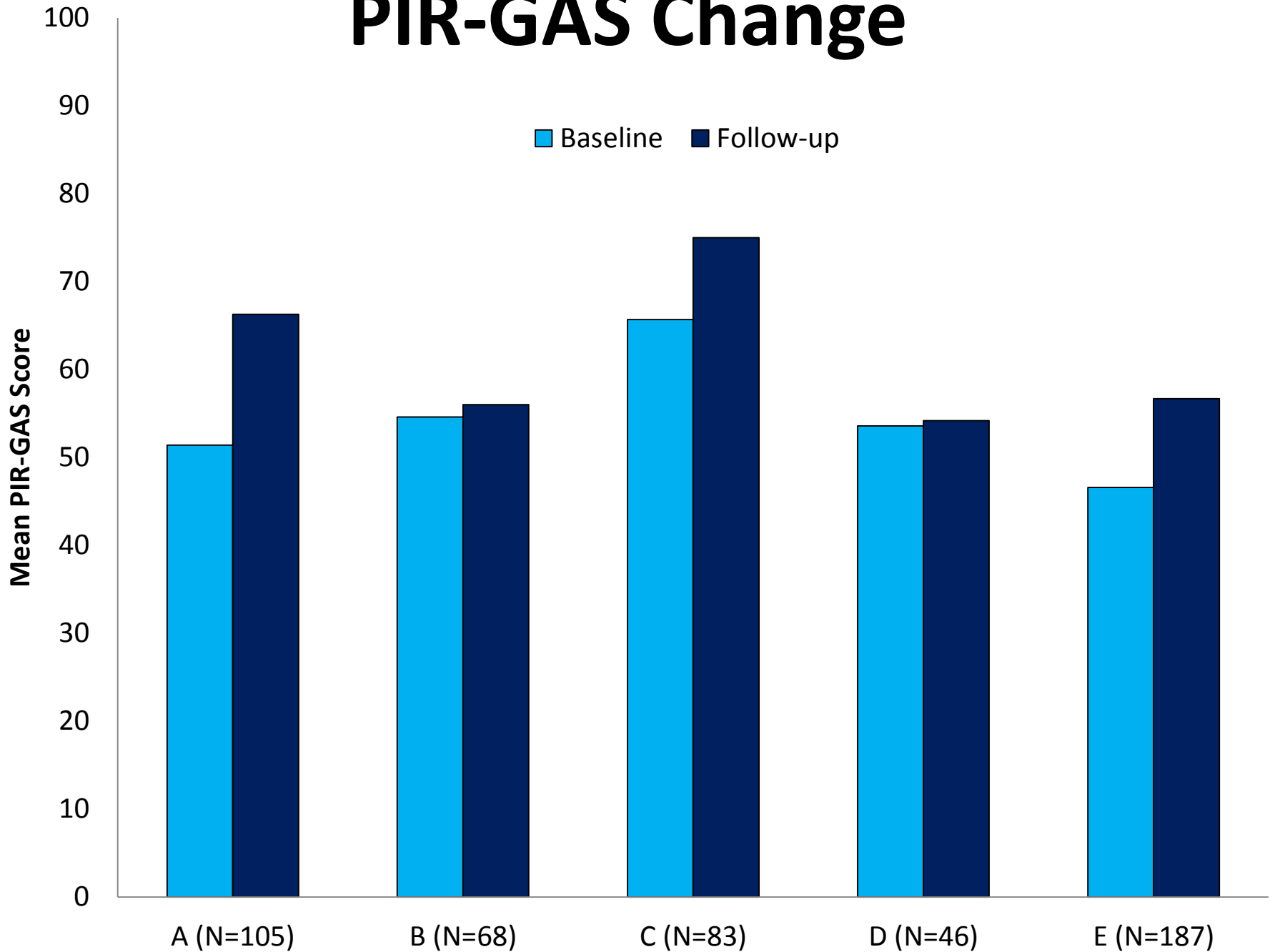
# Within Child Change

■ Improved   □ Stayed the same   ■ Worsened

# Finding #2

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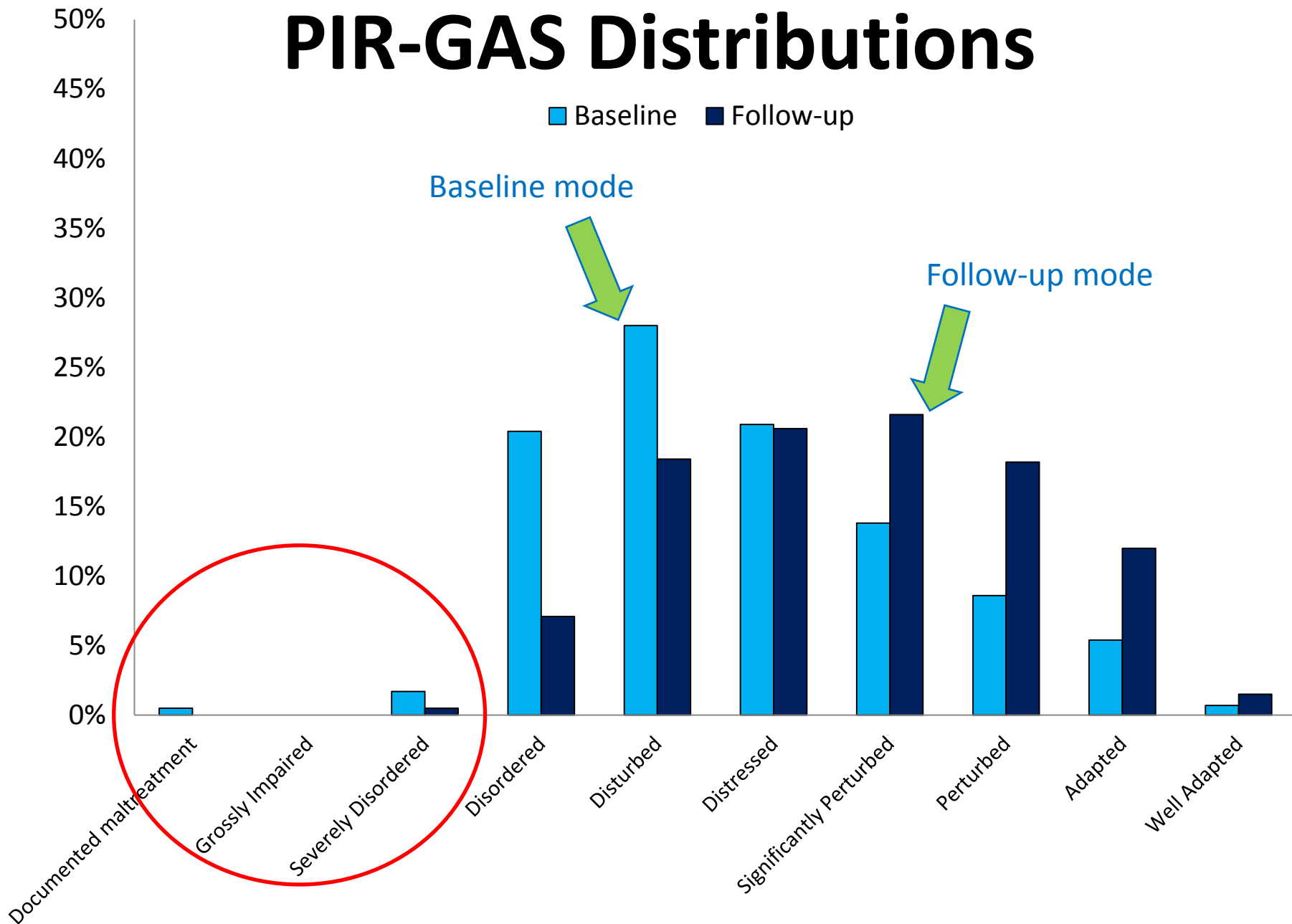
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# PIR-GAS Change

# PIR-GAS Distributions

■ Baseline   ■ Follow-up

Baseline mode

Follow-up mode

50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%

Documented maltreatment
Grossly Impaired
Severely Disordered
Disordered
Disturbed
Distressed
Significantly Perturbed
Perturbed
Adapted
Well Adapted

# 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 <u>internalizing</u> problems,
  - **11.5** point decline in <u>externalizing</u> problems,
  - and a **10.8** point improvement in parent-child <u>relationship functioning</u>

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# Finding #4

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

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# 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

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# 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

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# 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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