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Texas Child Mental Health Care Consortium

# Preliminary Outcome Data on Impact of TCHATT on Depression Scores

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# Analysis Approach

## Population

- TCHAT Students who have taken PHQ-9A more than once
- Archived services only

## Descriptive Statistics

- Demographics
- School and service characteristics

## Within-Student Change

- Mean score change by level of severity at baseline
- Did students with mild to severe depression at baseline experience  $\geq 5$  improvement in score?
- Did students with baseline scores in the clinical range experience improvement to sub-clinical levels of depressive symptoms?



# Data Sources

## Trayt TCHAT Database

- Assessments (total PHQ-9A severity score, date completed)
- Referrals & Services (age, gender, race, ethnicity, school ID, reason TCHAT service was ended)
- Sessions (completed sessions, session dates)

## Texas Education Agency (TEA)

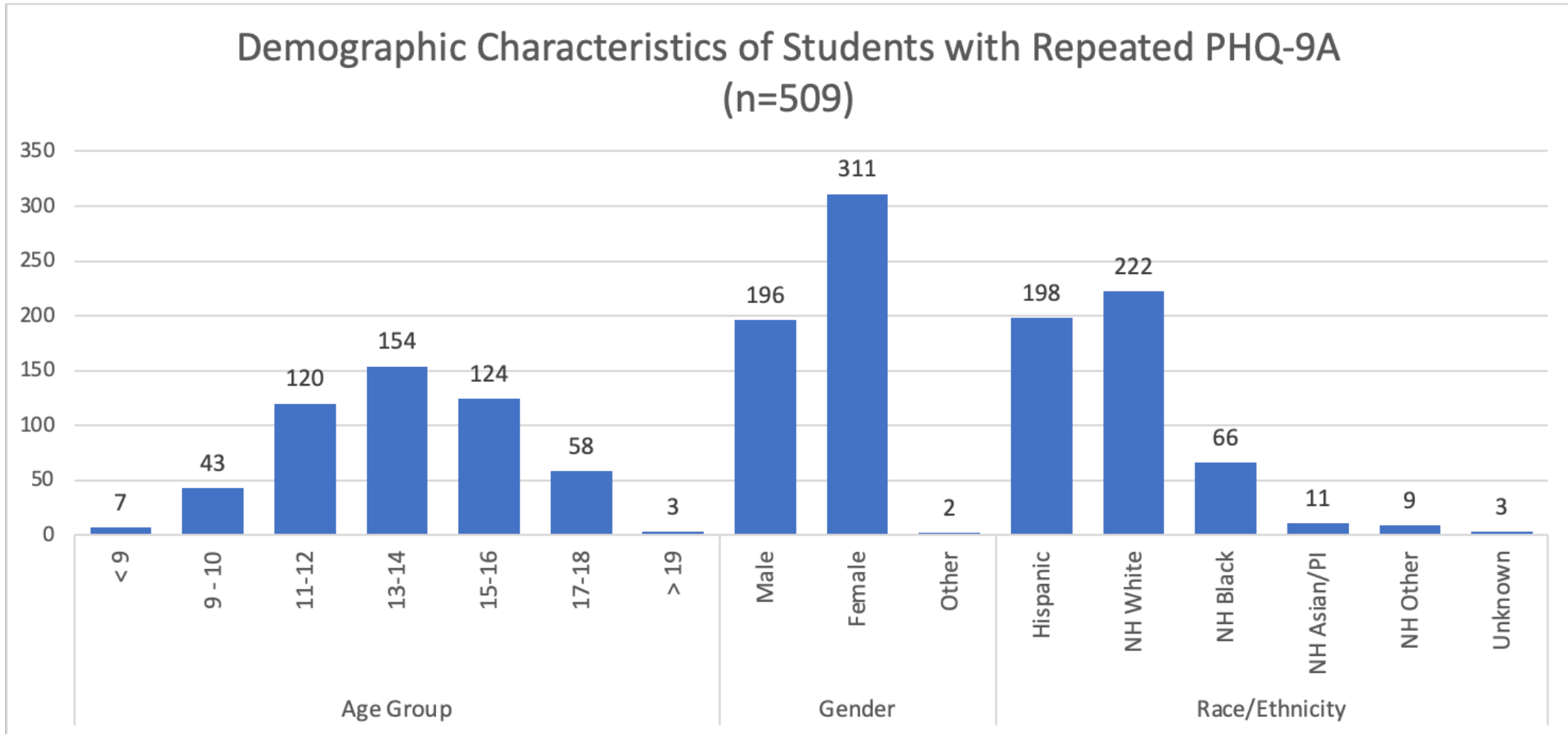
- School locale designations (urban, suburb, small town, rural) from National Center for Education Statistics (NCES)



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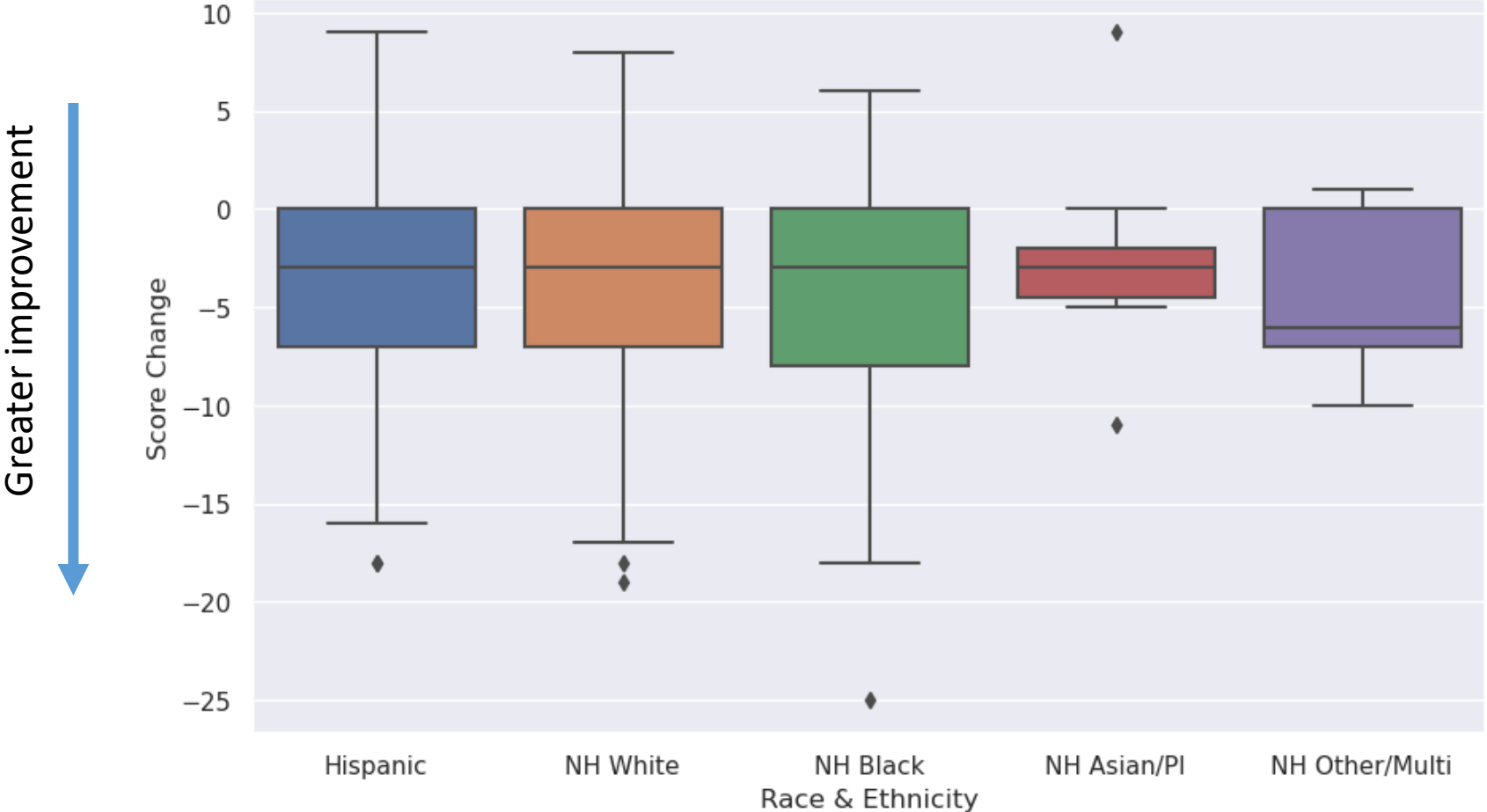
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# Descriptive Statistics



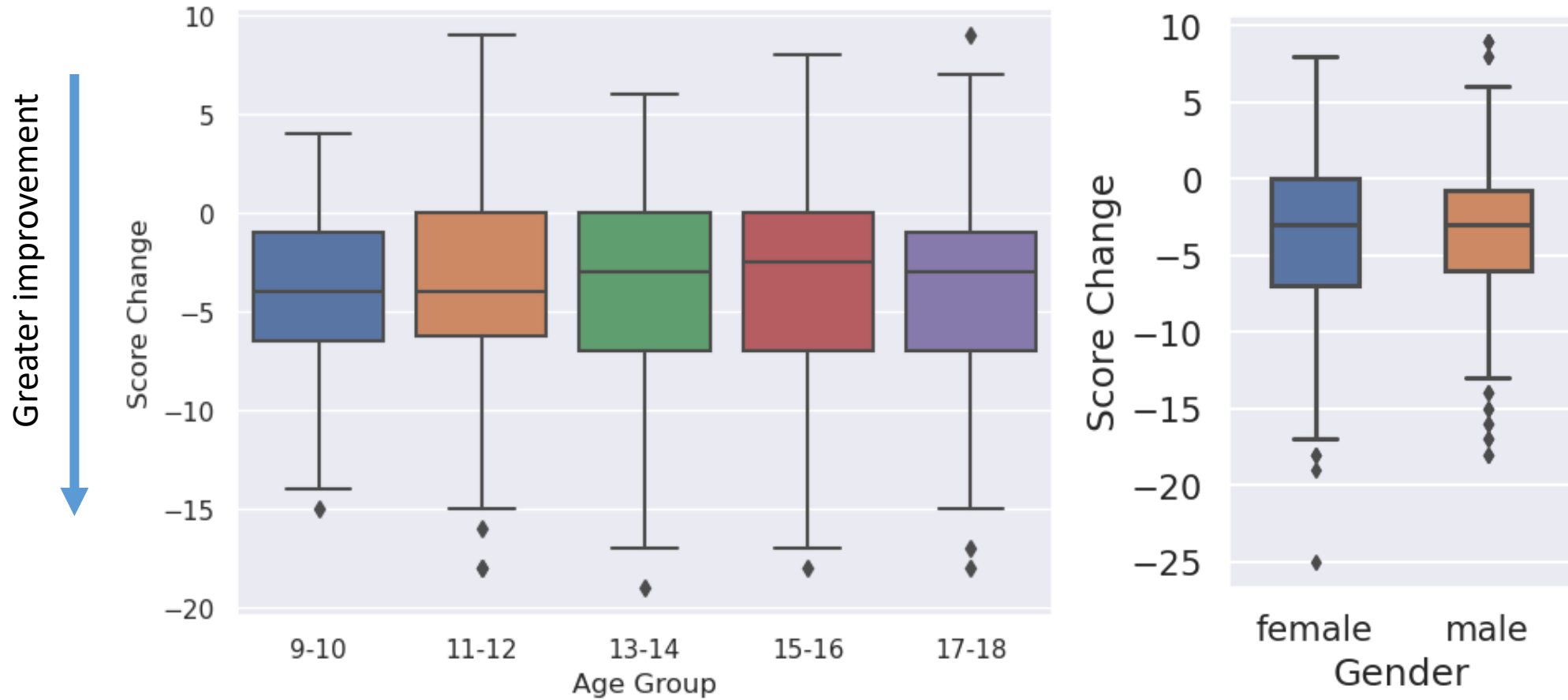
# Mean Score Change

All race and ethnic groups improved equally well



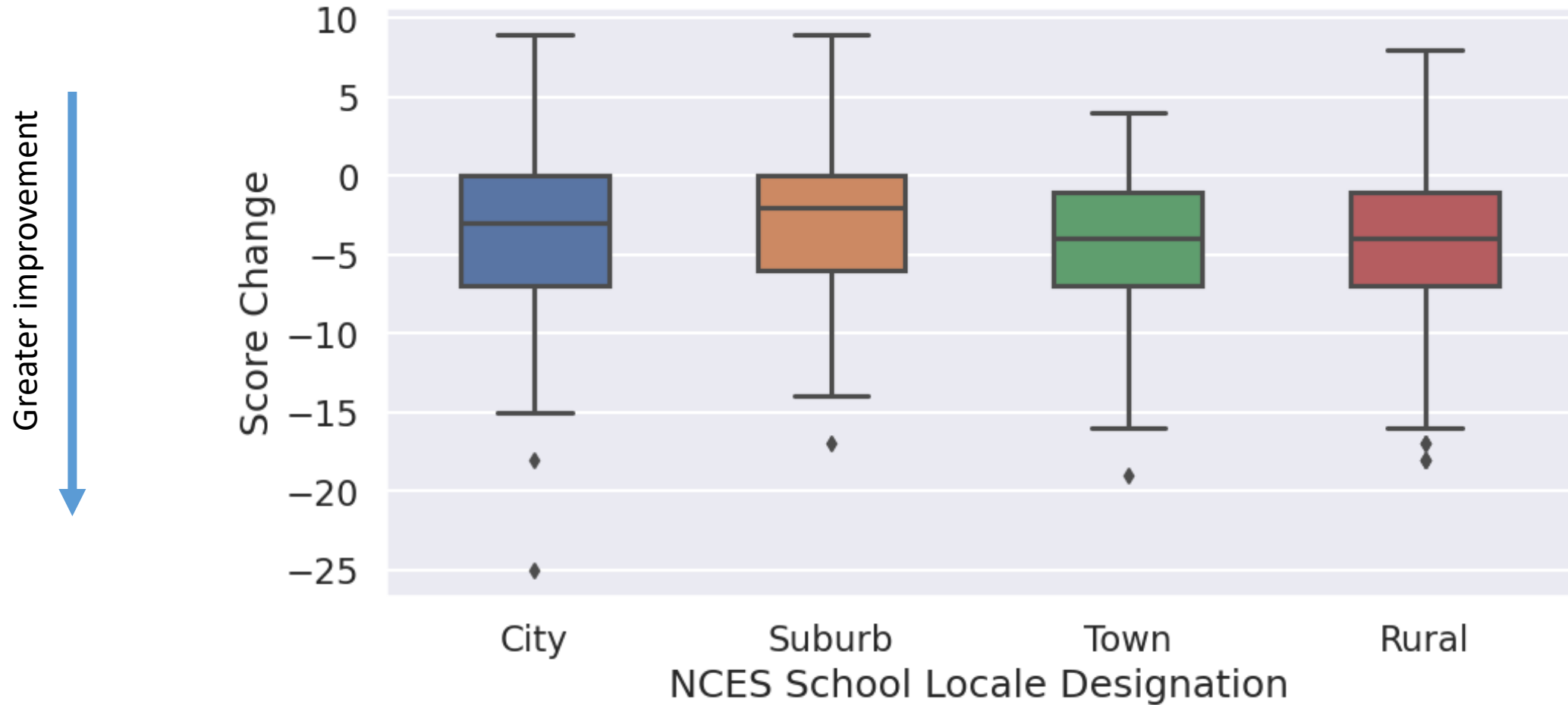
# Mean Score Change

All age and gender groups improved equally well



# Mean Score Change

Students in all school locales improved equally well



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# Mean Score Change

## PHQ-9A score change by baseline score category

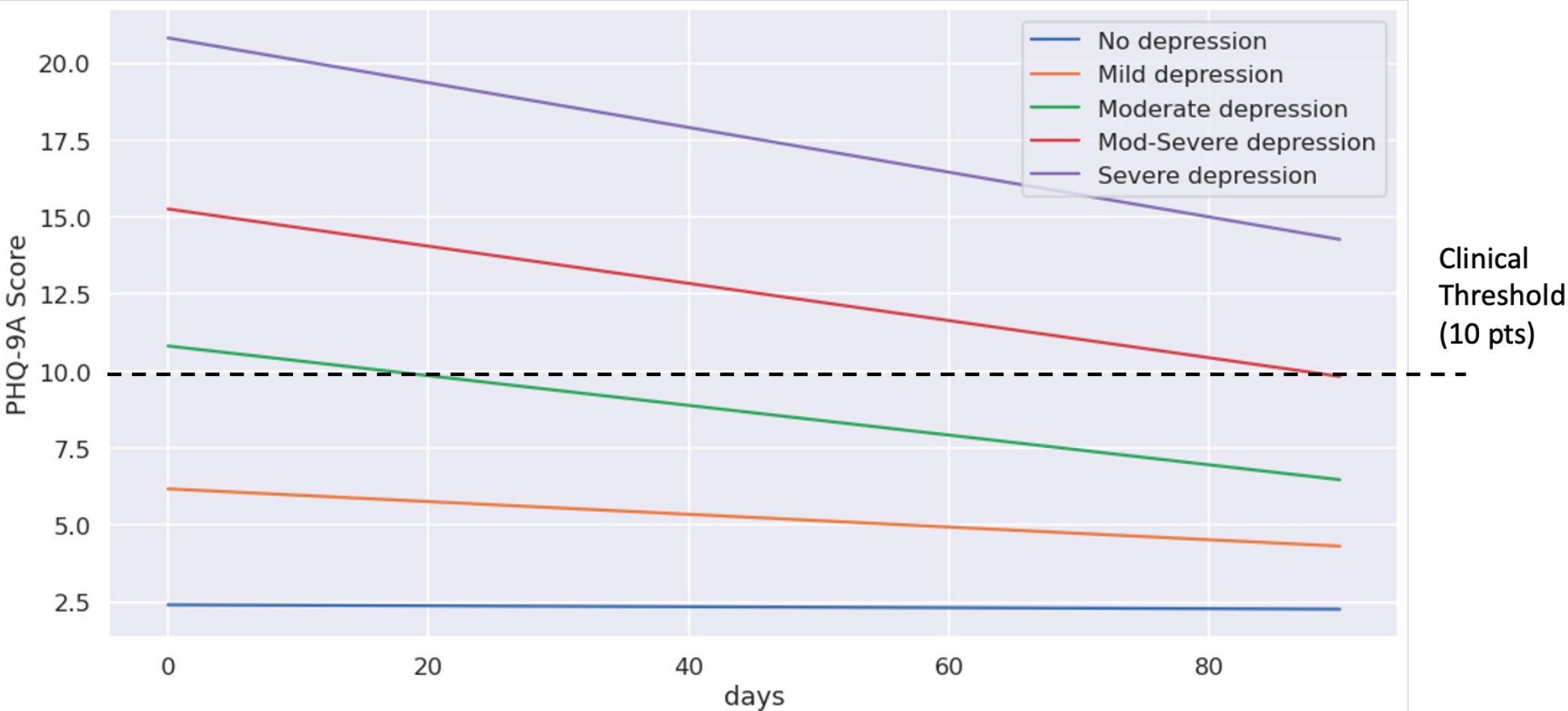
Baseline Score Group	n	Baseline Score mean (SD)	Score Change Baseline to Last Assessment mean (SD)	Days Baseline to Last Assessment mean (SD)
0-4: No depression	88	2.3 (1.4)	-0.1 (2.7)	46.3 (29.9)
5-9: Mild	117	6.8 (1.4)	-2.3 (3.4)	59.9 (46.4)
10-14: Moderate	137	11.9 (1.4)	-4.3 (4.9)	57.5 (39.5)
15-19: Mod / Severe	117	16.9 (1.4)	-6.6 (6.0)	65.8 (48.6)
20-29: Severe	50	22.2 (1.7)	-6.0 (6.6)	60.0 (37.9)
<b>All Students</b>	<b>509</b>	<b>11.2 (6.3)</b>	<b>-3.8 (5.3)</b>	<b>58.2 (42.2)</b>



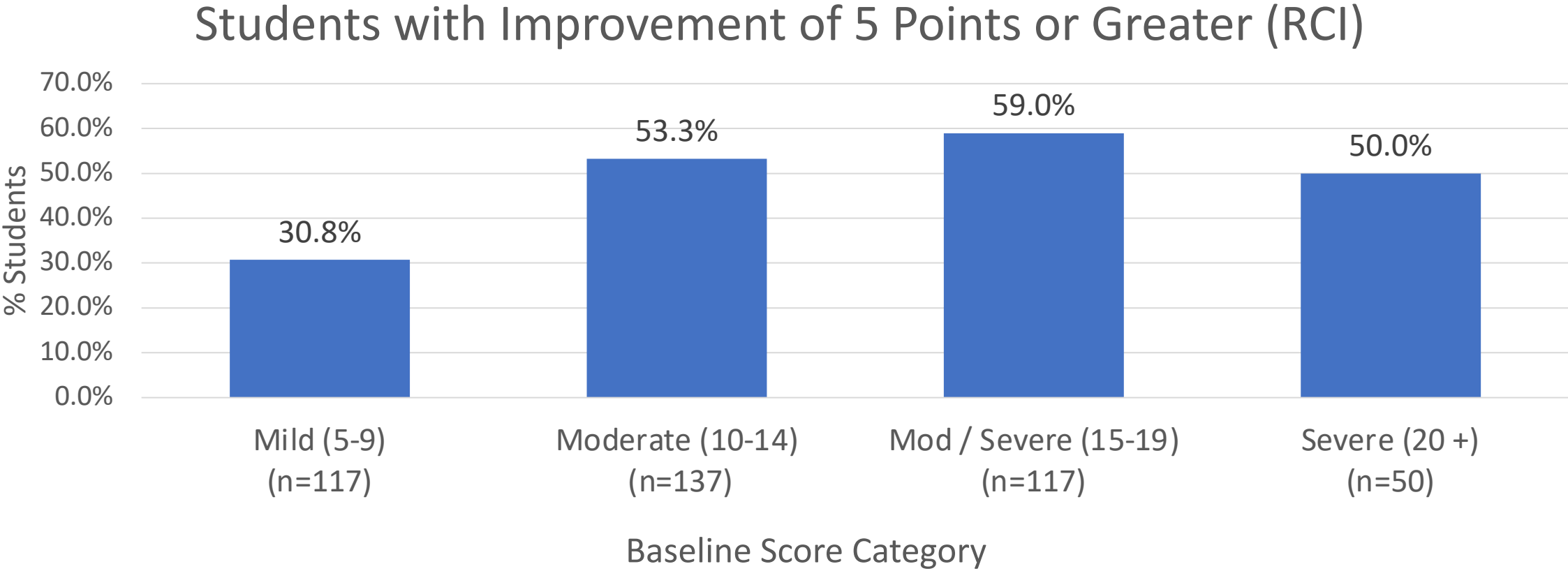


# Mean Score Change

## PHQ-9A score change by baseline score category

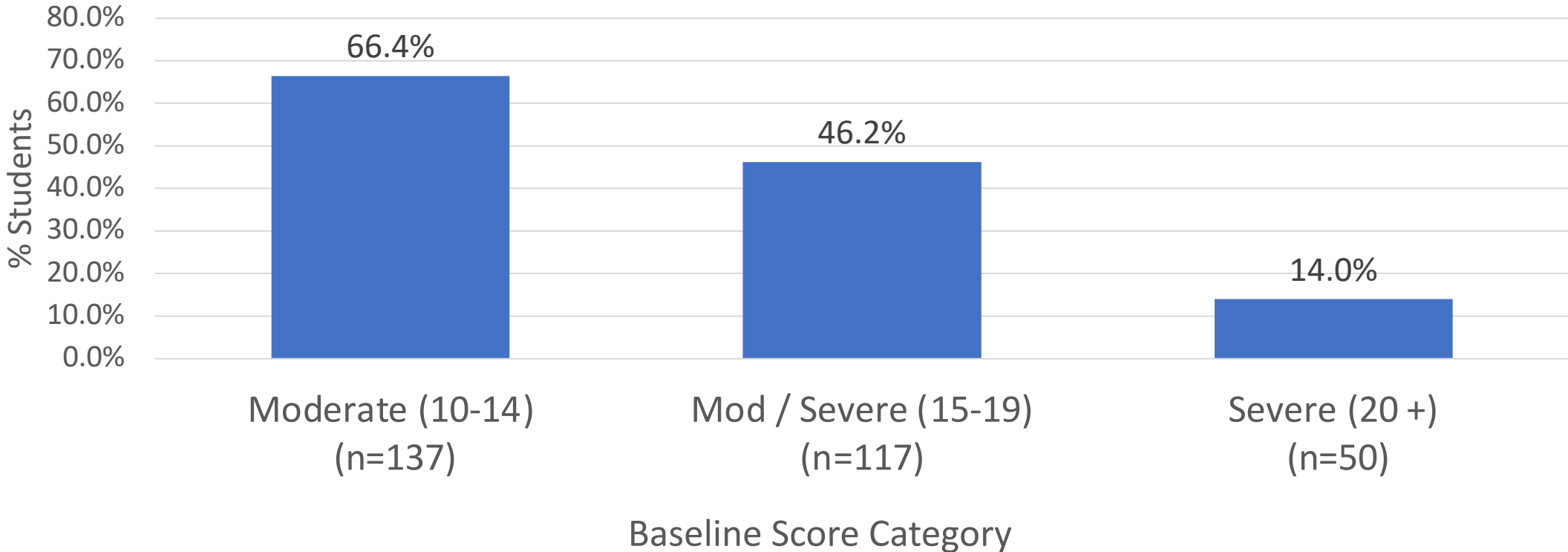


# Did Students Achieve Reliable Change?



# Did Students Achieve Clinically Meaningful Change?

Students with Mild or No Depression at Final Assessment



# Conclusions

- Participation in TCHATT resulted in a clinically significant reduction in depressive symptoms, particularly for those with more severe symptoms on entry to the program
- Treatment was equally effective for students of
  - All major racial and ethnic groups
  - Males and females
  - All age groups
  - Rural, Suburban and Urban areas
- Further analyses planned to look at anxiety, suicidal behavior and other major symptom groups



# Conclusions

- These results are from a sub-sample of the over 13,000 students that have been treated in TCHATT
- Looks at the effect of the first 60 days of treatment
- Need to standardize assessment across TCHATT and look at a wider range of symptoms



# Executive Summary

- 509 students with multiple PHQ-9A assessments of depressive symptoms through 10/31/2022
  - Demographics representative of state school population
- On average, PHQ-9A depression scores improved from baseline to the final assessment
- Outcomes improved equally across all subgroups of race, ethnicity, age, and gender
- More severe scores at baseline were associated with greater improvements over time

