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COVID-19 and depression and anxiety screening in primary care

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COVID-19 and depression and anxiety screening in primary care

EK Bernier, EM Mutina, AA Feliccia, LA Wood, KA Herlihy, KA Woodberry

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Introduction

- The COVID-19 pandemic had a severe effect on mental health, heightening the prevalence and severity of anxiety and depression amongst the general population in rural and non-rural areas, particularly youth.^{1,2,3}
- Most reports draw from available data from mental health referrals, hospitalizations, suicides, and other incident data.^{1,4,5}
- There is limited longitudinal information from general population samples using standardized mental health assessments.⁵

Research Question

- Do historical depression and anxiety screens pulled from a MaineHealth pediatric clinic as part of a program evaluation show an increase in scores consistent with published data?

Methods

- Staff pulled data for 538 patients ages 14 to 20 participating in the project between July 1, 2021 to April 30, 2022.
- We collected screens available through Epic for depression (PHQ-9 and PHQ-A) and anxiety (GAD-7).
- Screens were considered pre-COVID if administered prior to April, 2020. The earliest historical screen collected was from September, 2018.
- We used paired sample t-tests to examine within subject changes over time and independent sample t-tests and non-parametric tests to assess differences between rescreened and non-rescreened subgroups.

Discussion

- We did not observe the expected increase in scores in either those tested before or after the start of the pandemic or those with two post-pandemic screens. While some scores increased, others decreased or stayed the same.
- We also did not observe any significant changes related to age or time between initial and rescreens.
- Though depression and anxiety amongst the general public increased during the pandemic,² those with pre-existing depression and anxiety symptoms may have had decreased symptoms during the pandemic.⁶
- For some symptomatic youth, symptom severity decreased during COVID may be attributed to factors such as availability of Telehealth and reduced social stress.^{6,7}
- Increases in depression and anxiety symptoms amongst the general public may have reduced feelings of social isolation and normalized formal and informal accommodations and the prioritization of self care within interpersonal relationships and educational and professional settings.^{6,8}

Results

Sample

- It appears that we did not have Epic access to all of the screens conducted for the general population. See Table 1.
- Out of a total sample of 538, less than half had an accessible depression or anxiety screen.
- Only a minority of patients had accessible screens prior to April 1, 2020.
- 4% (n = 24) and 1% (n = 7) had accessible pre-COVID depression (PHQ) and anxiety (GAD-7) screen scores respectively.

Table 1 Descriptive Statistics

	All Initial Scores		Pre-Post COVID Screen and Rescreen		Post-COVID Screen and Rescreen	
	PHQ* n = 220 (41%)**	GAD-7 n = 130 (24%)**	PHQ* n = 24 (4%)**	GAD-7 n = 7 (1%)**	PHQ* n = 72 (13%)**	GAD-7 n = 30 (6%)**
n (%) Positive Screen (>5)	115 (52)	98 (75)	12(50) - 8 (33)	6 (86) - 5 (71)	37 (51) - 41 (57)	27 (90) - 25 (83)
Age at Initial Screen (m (SD))	15.9 (2.2)	15.3 (1.9)	15.8 (1.9)	15.1 (1.1)	16.5 (2.1)	14.8 (1.5)
Months to Rescreen (m (SD) range)	NA	NA	25.3 (17.6) 8 - 74	32.1 (12.9) 12 - 49	9.2 (8.2) < 1 - 57	6.6 (5.0) < 1 - 15
n (%) Rural	158 (72)	87 (67)	18 (75)	5 (71)	47 (65)	21 (70)

*PHQ = PHQ-9 or PHQ-A
**Indicates percentage out of the total sample

Total Score Changes at Rescreen

Figure 1 Changes in Depression Screen Scores

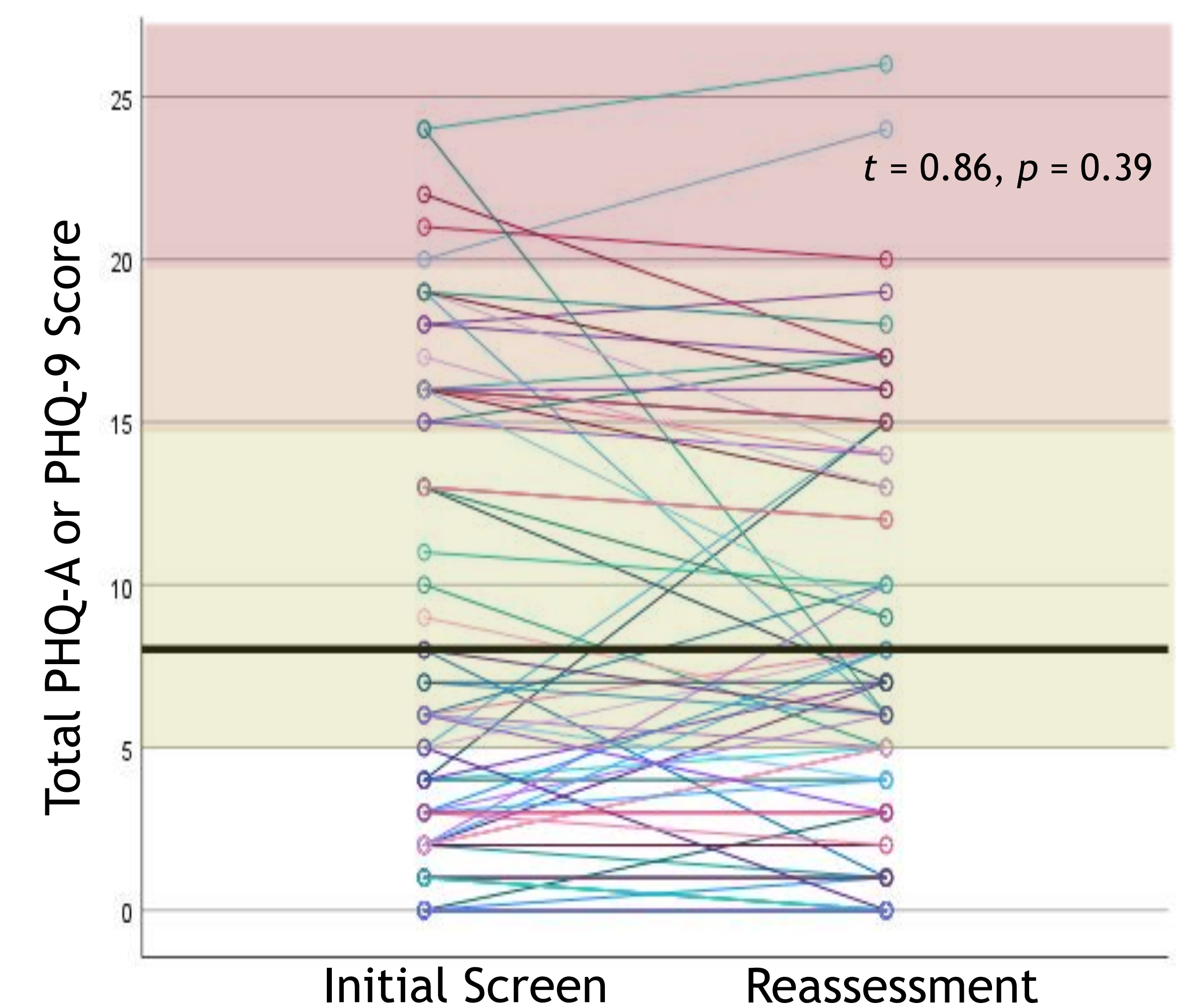
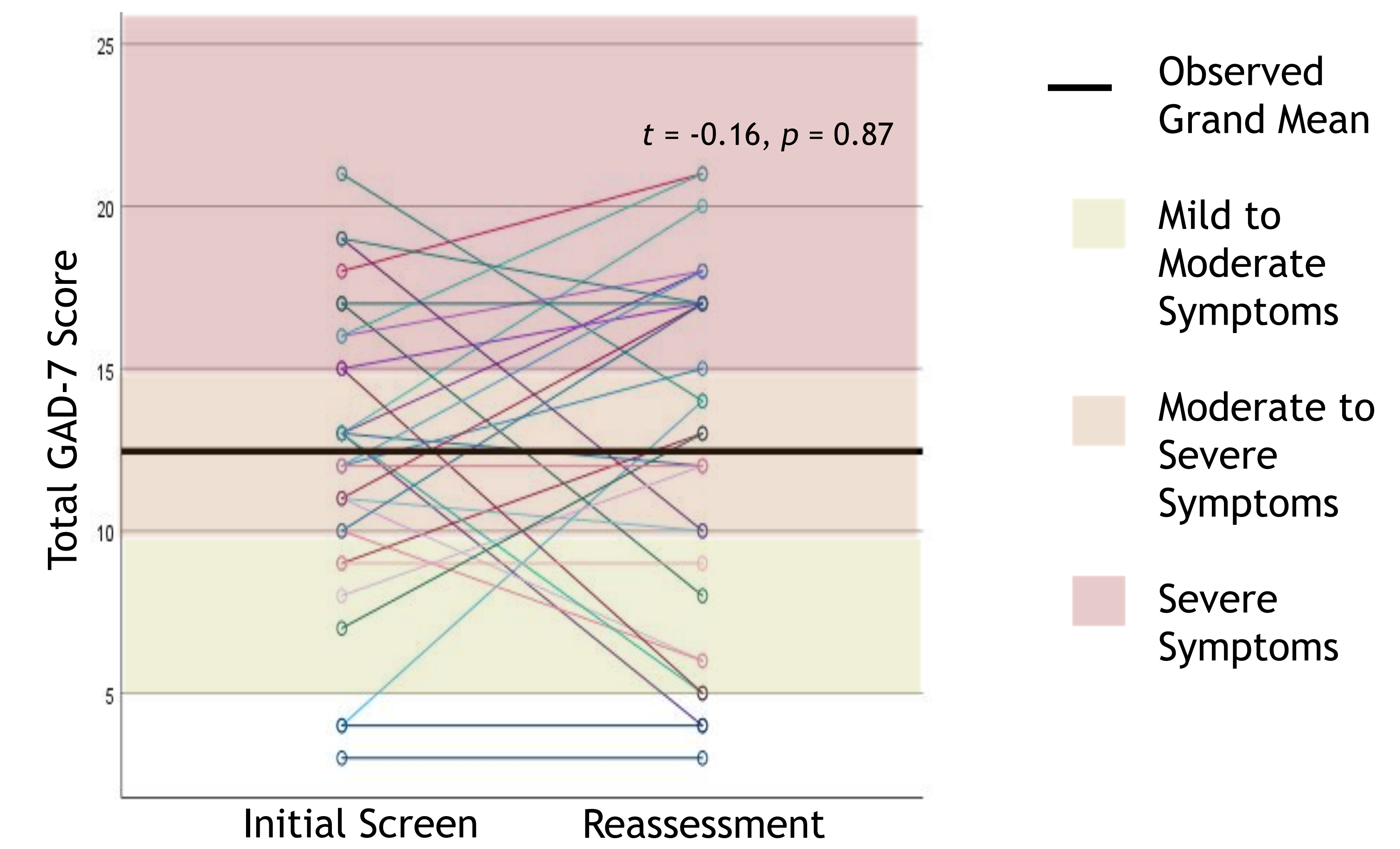


Figure 2 Changes in Anxiety Screen Scores



Total Score Changes During the Pandemic

Figure 3 Changes in Depression Screen Scores Pre and Post COVID

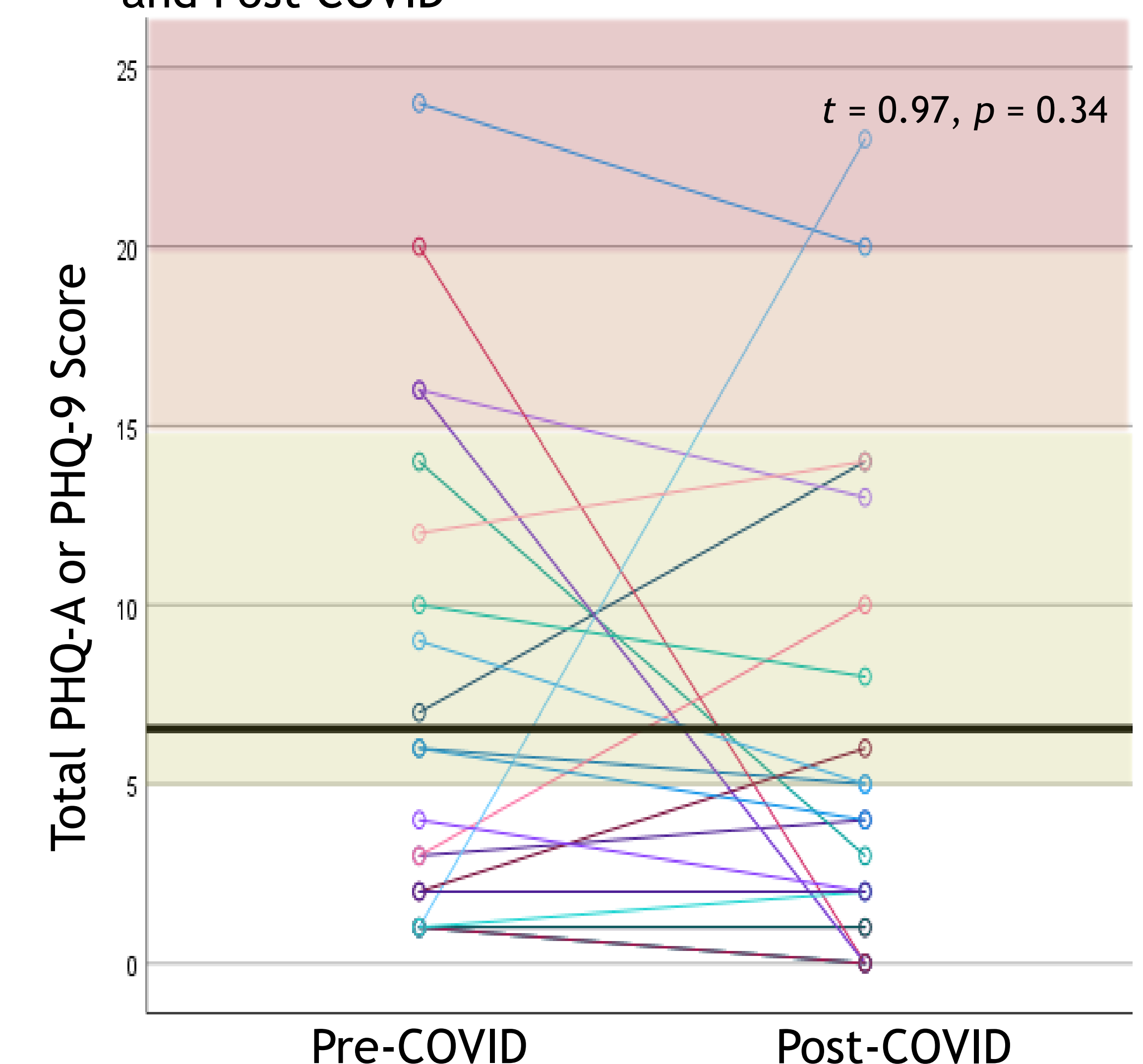
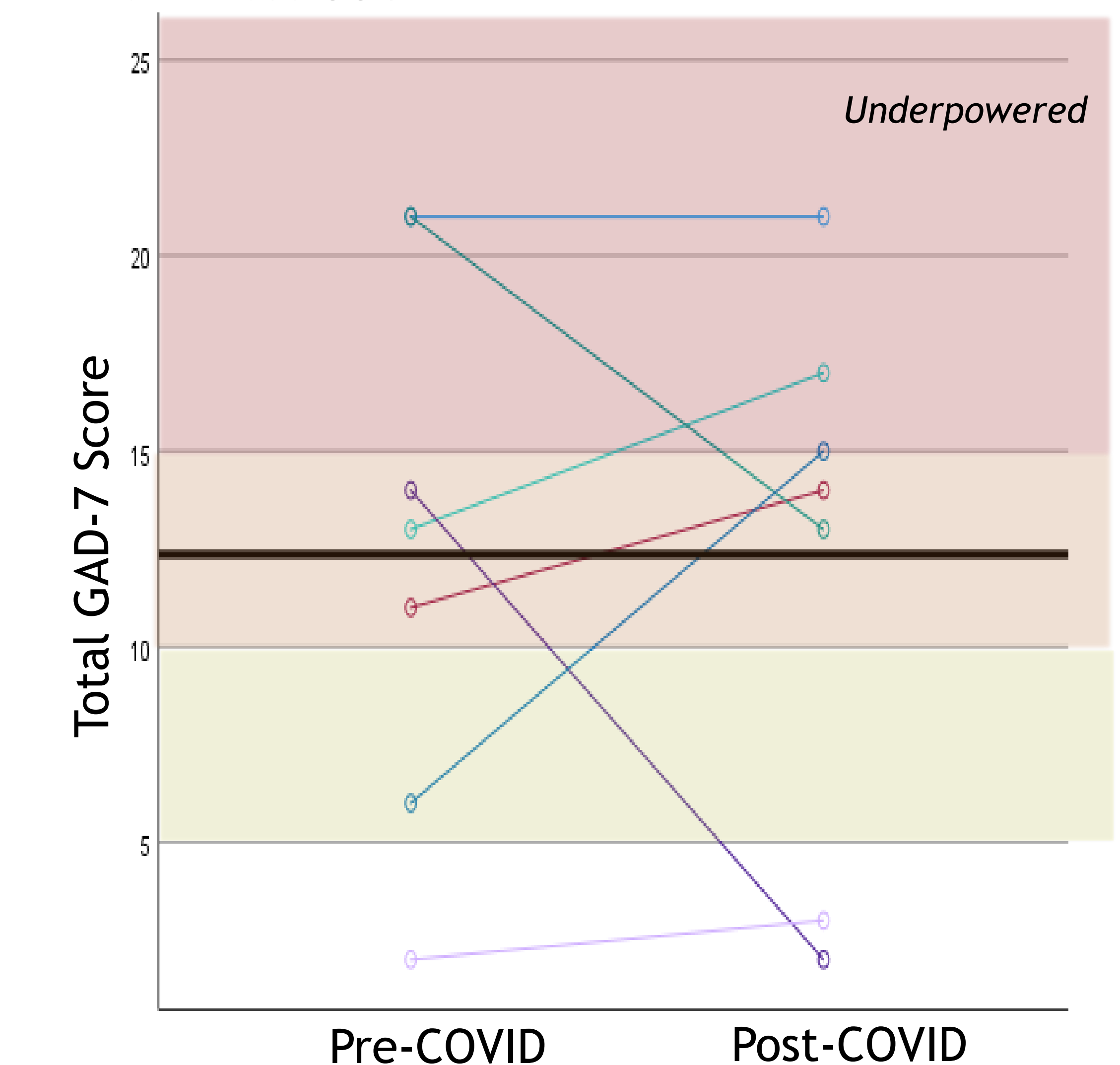


Figure 4 Changes in Anxiety Screen Scores Pre and Post COVID



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Additional Talking Points

- Though people may live through the same event, they may not all experience it the same way. Certain factors may impact one's vulnerability to and perception of a given stressor.
- COVID-19 was a stressful time for most people but that heightened stress may have made us more aware of the needs of ourselves and others. We should carry those lessons to maintain some of the unexpected progress we saw during COVID-19 by retaining and improving:
 - Access to services such as by continuing to offer Telehealth mental health services
 - Awareness of and compassion for those experiencing mental illness
 - Consideration of our mental health needs and the needs of others
- For many, COVID was a serious stressor or traumatic event. We should keep in mind that though the pandemic seems to have come to an end, many still feel the effects of the pandemic and may continue to for a long time.

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