# Integrating Virtual Collaborative Care Behavioral Health in Breast Cancer Care: Improving Outcomes in Mental Health, Adherence, and Racial Equity

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## INTRODUCTION

- ~40% of patients with breast cancer experience depression/anxiety
- Mental health issues worsen treatment adherence and survival outcomes
- Cerula Care is a virtual collaborative care program integrating behavioral health into oncology
- Objctive: To evaluate Cerula Care's impact on depression, anxiety, and quality of life in patients with breast cancer

## METHODOLOGY

**Design**: Retrospective analysis

**Population**: (N = 207)

- 99% female, mean age 55.7
- 58% White, 32.4% Black/African American
- 83% non Medicaid (n = 152)

**Assessments (monthly)**:

- PHQ-9 (depression), GAD-7 (anxiety), FACT-G7 (QOL), one-time satisfaction survey

**Analysis:** Descriptives, paired-sample t-tests, correlations

**Figure 1. Cerula Care Team**

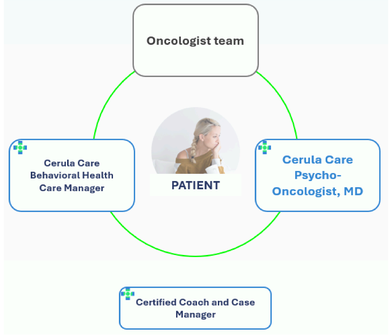
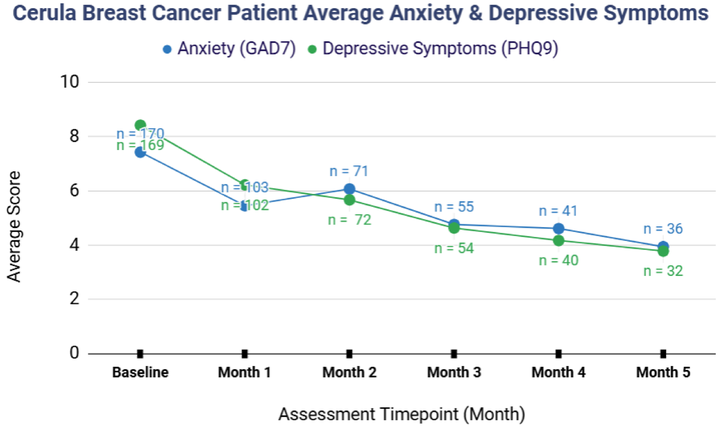



**Figure 2. Anxiety and Depressive Symptom Changes**




## RESULTS

**Table 1. Mean Change in Mental Health Outcomes During Cerula Care**

| Outcome Measure | n | Mean Change | Significance | Effect Size (Cohen's d) |
|---|---|---|---|---|
| Depression (PHQ-9) | 32 | ↓ 6.63 points over 5 months | p < .001 | 3.77 |
| Anxiety (GAD-7) | 31 | ↓ 4.83 points over 5 months | p < .001 | 4.37 |
| Quality of Life (FACT-G7)* | 62 | ↑ 1.58 points over 2 months | Not significant | — |

*Note: p < .05 = statistically significant*
**Identifying as Black was positively correlated with improvement in quality of life (r = 0.49, p = .01)*
*† Medicaid patients had higher baseline anxiety (GAD-7 = 10.67 vs. 6.62, p = .005), higher depression (PHQ-9 = 10.62 vs. 7.63, p = .004), and lower functional quality of life (FACT-G7 = 11.67 vs. 17.30, p = .073).*

## RESULTS

**Patient Feedback** (n = 23)

- ✅ 70% reported Cerula helped them attend oncology visits
- ✅ 65% reported Cerula helped them improve their medication adherence

## CONCLUSION

- Embedding a virtual collaborative mental healht care model led to meaningful reductions in depression and anxiety symptoms and improved medication adherence and oncology visit attendance
- Findings highlight the impact of integrating virtual behavioral health into oncology practice
- Results highlight the potential to address health disparities, with Black patients showing greater improvements in quality of life
- Future studies should evaluate long-term outcomes, scalability, and cost-effectiveness of virtual collaborative care in oncology

## REFERENCES

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