

# StayWell at Home: A Text Messaging Intervention to Counteract Depression and Anxiety during COVID-19 Social Distancing

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## Background

- Social distancing and stay-at-home orders were necessary interventions to slow down COVID-19 transmission.
- Societal changes contained the pandemic while also leading to unplanned consequences like anxiety and depression.
- We developed StayWell, a daily skills-based SMS text messaging program meant to mitigate COVID-19 related depression and anxiety symptoms for English and Spanish speaking individuals in the US.

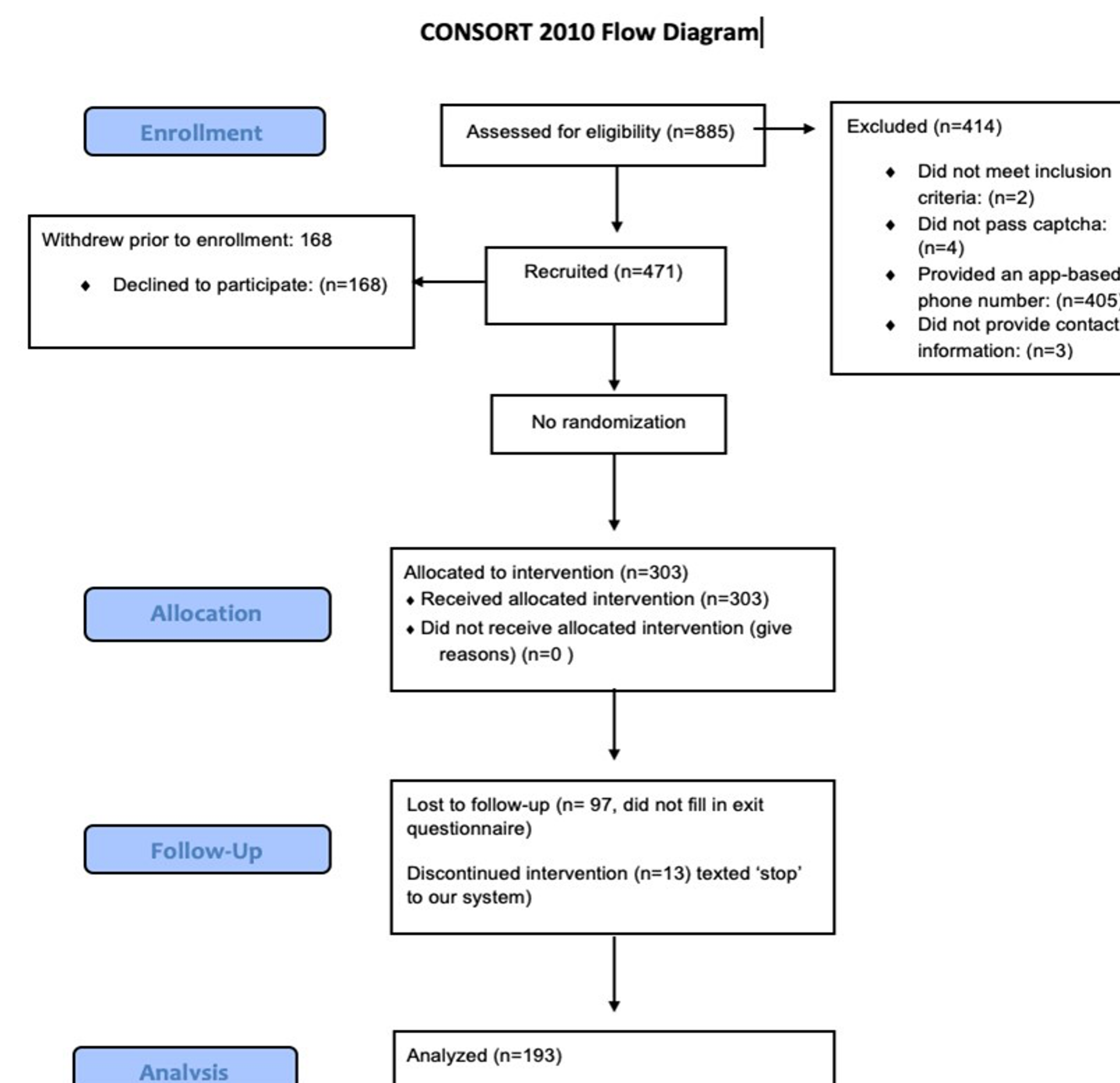
## Methods

- Qualtrics baseline and 60-day exit questionnaires assessed participants' demographic and clinical characteristics
- 2-item Generalized Anxiety Disorder (GAD-2)
- 8-item Patient Health Questionnaire-8 (PHQ-8)
- Paired t-tests detected the change in PHQ-8 and GAD-2 scores from baseline to follow-up measured 60 days later.
- The analytic sample (N = 193) includes participants who completed both the baseline and exit questionnaires.

**Table 1. Changes in PHQ-8 and GAD-2 scores for individuals who completed both the baseline and 60-day assessment (N=193).**

Measure	Scores				
	Baseline score, mean (SD)	60-day score, mean (SD)	Change from baseline, %	Mean difference (95% CI)	P value
PHQ-8 <sup>a</sup>	9.30 (5.70)	7.58 (5.27)	18.50%	-1.72 (-2.35, -1.09)	<0.001
GAD-2 <sup>b</sup>	2.80 (1.89)	2.32 (1.83)	17.20%	-0.48 (-0.71, -0.25)	<0.001

<sup>a</sup> PHQ-8: Patient Health Questionnaire-8, <sup>b</sup> GAD-2: Generalized Anxiety Disorder-2



**Figure 1. Flowchart of data collection process**

## Results

- At the 60-day time point, there were statistically significant reductions in both PHQ-8 and GAD-2 scores
- We found a decrease of 0.48 (95% CI: -0.71, -0.25) in GAD-2 scores and 1.72 (-2.35, -1.09) in PHQ-8 scores.
- Improvements in anxiety and depression symptoms translate to an 18.5% and 17.2% reduction in mean PHQ-8 scores and GAD-2, respectively.
- High levels of engagement during the 60-day intervention period

## Conclusions

- StayWell is a low-intensity, cost-effective, and accessible population-level mental health intervention.
- Participation in StayWell was related to improved depression and anxiety symptoms.
- Text messaging interventions could serve as an important public health tool for disseminating strategies to manage mental health.