

# 2027.0 - Participant engagement and outcomes in a SMS-text based workplace health behavior change intervention: The working for you study



**Session:** Environmental/Occupational Health Poster Session (SA)

**Program:** APHA Student Assembly

## Abstract

### Objective

We developed an SMS text based interactive Obesity Treatment Approach (iOTA) to promote healthy eating and physical activity among low-income health care workers. We evaluated predictors of intervention engagement and success rates of behavior goals.

### Methods

Obese workers ( $\text{BMI} \geq 30 \text{ kg/m}^2$ ) selected up to three behavior change goals during coaching sessions, then received weekly interactive texts to report their weight and progress toward behavioral goals. Engagement was defined as the percentage of weeks participants responded to goal or weight messages. Multivariable linear regressions examined factors associated with engagement. Behavior goal success was self-reported through weekly text responses.

### Results

12 month follow-up of 193 subjects showed 41 weeks mean duration of iOTA participation. Mean engagement was 60% (one or more responses) and 41% (all goal prompts). Age, female sex, and higher income predicted higher engagement. Degree of engagement was positively associated with achievement of at least 1 goal ( $r=0.23$ ,  $p=0.002$ ) and all goals ( $r = 0.19$ ,  $p = 0.007$ ). Goals with high success included limiting free (87%) and purchased (75%) food at work. Goals with low success included self-monitoring of diet (38.7%) and limiting total calories (36.1%). We are analyzing changes in weight and other health behaviors associated with engagement.

## Conclusion

Participants maintained a high level of engagement with iOTA over the 12-month period. Higher engagement was associated with behavioral goal attainment. Success varied considerably across goals. Interactive SMS text systems are a potentially useful tool for scalable and sustainable interventions to change health and safety behaviors in workplaces.

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## Learning Areas

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## Keyword(s)

Obesity, Telehealth

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