Delivering Digital Behavioral Weight Management Interventions in **Rural Populations**



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Obesity is a Significant **Public Health Challenge** for individuals Living in **Rural Areas**



- Rural communities experience substantial burden from obesity
 - $_{\odot}~$ Higher obesity rates
 - $_{\odot}\,$ Greater prevalence of obesity-related chronic disease
- Effective evidence-based lifestyle interventions which target eating habits and physical activity patterns include weekly contact over 4-6 months
- Access can be a barrier
 - $\circ~$ Few located in rural areas
 - $\circ~$ Frequency of travel and distance

Research focus

How to reduce obesity-related health disparities among rural populations?



Digital Weight Control Approaches Attractive



Most rural areas have internet access

Access

- Rural residents successful at losing weight in online lifestyle programs
- Digital programs eliminate travel to treatment center

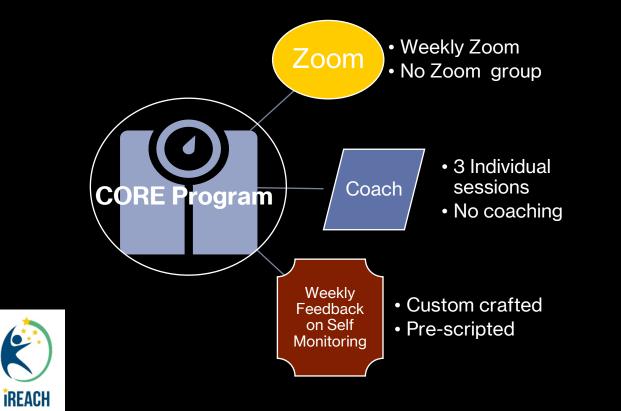
 But digital interventions may not produce comparable weight losses to in-person

Efficacy • "High touch" personnel-intensive treatment components often not included in digital programs

 Having a real person delivering treatment components may increase weight losses

But Which High Touch Component?

iREACH Examines 3 "High Touch" Components



Using a Factorial Design

- Refine the iREACH digital weight loss intervention to optimize weight loss outcomes for individuals living in rural areas
- Identify the component (or combination of components) that increase weight loss

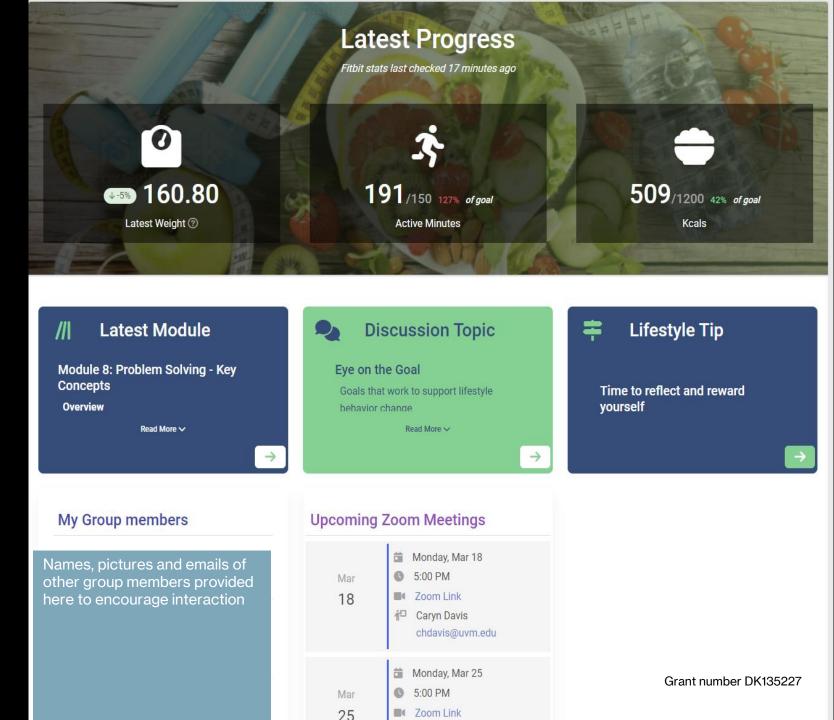


iREACH Rural Core Program

- Theory-guided 24-session program
 - o Weekly interactive online video modules
 - o Skills development activities
- Goal-directed
 - \circ 7-10% weight loss
 - Calorie targets
 - o Graded physical activity goals
- Daily self monitoring
 - Body weight via e-scale
 - Dietary intake on Fitbit app
 - Physical activity with tracker

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- Group-based
 - \circ Closed group of ~20 members
 - \circ Private discussion board
 - o Group facilitator



Tailoring to Reach Rural Populations: National Recruitment

- Digital recruiting channels
 - o ResearchMatch
 - Boosted Facebook posts
 - Contact via direct email thru listservs
 - Rural Hospital Association
 - State Health Departments
 - $\circ~$ Rural small and large media
- All enrollment procedures remote
 - Online portal to introduce study
 - Zoom screening to review eligibility and answer questions
 - REDCap online, secure consent form & questionnaires
 - $\circ~$ "Smart Scale" for weight outcomes



https://www.ireachstudy.org/

Tailoring to Reach Rural Populations: Intervention Adjustments

- Dietary habit change
 - \circ Dining out
 - Grocery store availability
 - \circ Gardens
- Physical activity promotion
 - Limited access to parks/green spaces, walkable destinations and exercise facilities
 - $\circ~$ Safety of physical activity in rural areas
- Social support
 - $\circ~$ Limited in rural areas
 - $\circ~$ Seek to build within group

Grocery Guru

Making healthy choices starts with a plan and smart shopping. Let's learn how to become a Grocery Guru!





Grocery Guru KEY CONCEPTS

Select a key concept to learn more.



iREACH Rural is Currently Ongoing

- We hope to return to this group for the big reveal of study findings
- Suggestions for recruitment channels welcomed
 - $\,\circ\,$ Anyone with creative ideas encouraged to share
 - $\circ~$ Investigative team seeks rural contacts to engage
- Students interested in rural lifestyle interventions and/or digital delivery of weight control programs are invited to reach out to the investigative team to explore opportunities

Thank you!



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