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:
- Higher obesity rates
- 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:
- Few located in rural areas
- Frequency of travel and distance

Research focus
How to reduce obesity-related health disparities among rural populations?
### Digital Weight Control Approaches Attractive

<table>
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<th>Access</th>
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<tr>
<td>▪ Most rural areas have internet access</td>
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<td>▪ Rural residents successful at losing weight in online lifestyle programs</td>
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<td>▪ Digital programs eliminate travel to treatment center</td>
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<table>
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<th>Efficacy</th>
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<td>▪ But digital interventions may not produce comparable weight losses to in-person</td>
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<td>▪ “High touch” personnel-intensive treatment components often not included in digital programs</td>
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<td>▪ Having a real person delivering treatment components may increase weight losses</td>
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But Which High Touch Component?

iREACH Examines 3 “High Touch” Components

- **Zoom**
  - Weekly Zoom
  - No Zoom group

- **Coach**
  - 3 Individual sessions
  - No coaching

- **Weekly Feedback on Self Monitoring**
  - Custom crafted
  - Pre-scripted

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
  o 7-10% weight loss
  o Calorie targets
  o Graded physical activity goals

• Daily self monitoring
  • Body weight via e-scale
  • Dietary intake on Fitbit app
  • Physical activity with tracker

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

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Tailoring to Reach Rural Populations: National Recruitment

- Digital recruiting channels
  - ResearchMatch
  - Boosted Facebook posts
  - Contact via direct email thru listservs
    - Rural Hospital Association
    - State Health Departments
    - 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
  - “Smart Scale” for weight outcomes

https://www.ireachstudy.org/
Tailoring to Reach Rural Populations:

Intervention Adjustments

• Dietary habit change
  o Dining out
  o Grocery store availability
  o Gardens

• Physical activity promotion
  o Limited access to parks/green spaces, walkable destinations and exercise facilities
  o Safety of physical activity in rural areas

• Social support
  o Limited in rural areas
  o Seek to build within group
iREACH Rural is Currently Ongoing

• We hope to return to this group for the big reveal of study findings
• Suggestions for recruitment channels welcomed
  o Anyone with creative ideas encouraged to share
  o 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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