Dissemination of a Weight Management Program among US Veterans

1R01CA124400-01
Funded Sept 2006-2011

Marci Campbell, PhD, MPH, RD
Principal Investigator
Research Phases

- Efficacy
- Pilot effectiveness/dissemination
- Dissemination and implementation
Tailored and interactive health communication strategies

*STRategies to Improve Diet, Exercise, and Screening

NCI R01 CA98-014
Project Team

Marci Kramish Campbell, PhD, RD, Principal Investigator
Robert Sandler, MD, MPH, Co-Principal Investigator
Brenda DeVellis, PhD, Co-Investigator
Andrea Biddle, PhD, Co-Investigator
Boyd Switzer, PhD, Co-Investigator
David Farrell, MPH, President, People Designs, Inc.
Carol Carr, MS, Project Coordinator
Chris Martin, PhD, NCCCS Project Coordinator
Aimee James, PhD, Postdoctoral Fellow
Jill Reedy, Kelly Webber, Renee Kemske, Graduate assistants
Marlyn Allicock Hudson, MPH, Social Research Associate
Seleshi Demissie, Biostatistician

Funded by NCI R01 CA98014
Study Aims

To test the effectiveness and cost-effectiveness of two health communication strategies to promote F&V, PA, CRC screening in a population-based sample drawn from a previous case-control study of CRC risk:

- Tailored print communications (TPC)
- Tailored motivational interviews (TMI)
Demographics

- Average age 66 years
- 48% female
- 40% African American
- Most had high school degree or some college
- 38% colon cancer survivors

James et al., in press
Research design

- TPC only
- TMI only
- TPC + TMI (COMBINED)
- CONTROL

--random assignment, stratified by case status
--12 month intervention
--90% follow-up response rate
TPC intervention

- Four tailored newsletters
- Tailored messages based on:
  - demographics
  - behavioral measures
  - psychosocial variables
  - cancer status
MI Intervention

Four calls using MI protocol:
- Reflective listening
- Open ended questions
- Participant led
- Importance and confidence
- Feedback
- Core values
- Action plans/goals
Results: Fruits and Vegetables

- Both CRC survivors and general population increased F&V, $p = .05$ for combined intervention
- No differential effect by intervention condition for cases
- Significant intervention differences for general population ($p < .01$)

Measure: 35-item F&V FFQ plus biomarker validation
Results: non-CRC affected

Control: + 0.1
TPC: +0.5
TMI: +0.6
Combined: +1.0

\[ \Delta \text{fruit and vegetable servings/day} \]

\[ P < .01 \]
Cost effectiveness

- TPC and Combined interventions were found to be cost effective
- TMI not cost effective (more costly than TPC for same effect)
- Based on findings, awarded NCI Diffusion and Dissemination Supplement (with VA population)
Veterans Health System

- Largest in U.S.
- Over 800 health clinics, 10 million veterans enrolled
- Growing interest in prevention due to high prevalence obesity-related illness
- MOVE! Program pilot (Managing Overweight/Obesity for Veterans Everywhere)
Background....

MOVE! Weight Management Program
- VHA MOVE! Handbook signed March 2006
- Obesity CPG signed Dec 2006
- Programs in place ≥ 90% of VAMCs
- 41,000 patients treated to date

Prior Study Team Research
- Body & Soul
- NC Strides
- Peer Support to Promote Diabetes Self-management
- Healthy Strides / Healthy MOVE!
NCI Dissemination Supplement: Healthy STRIDES/Healthy MOVE!

- Two VA Centers in New York (VISN 2)
- Buffalo (interv) and Syracuse (comp)
- Both implemented VA MOVE! Program
  - Weight management, diet, PA
  - Clinical approach (nurse, MD, psychologist)
  - Targeted printed information
- Buffalo also implemented HSHM!
  - TPCs (4) and MI calls (2-4)
- Primary Focus: Fruits and Vegetables
## Demographics

<table>
<thead>
<tr>
<th></th>
<th>Buffalo N=140</th>
<th>Syracuse N=150</th>
<th>P-value</th>
</tr>
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<tbody>
<tr>
<td>Male (%)</td>
<td>87.9</td>
<td>92.7</td>
<td>.17</td>
</tr>
<tr>
<td>Age</td>
<td>57</td>
<td>60</td>
<td>.10</td>
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<tr>
<td>Education:</td>
<td></td>
<td></td>
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<tr>
<td>&lt;=High Sch</td>
<td>28.0</td>
<td>30.9</td>
<td>.78</td>
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<tr>
<td>College+</td>
<td>30.2</td>
<td>24.8</td>
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<tr>
<td>Race/Ethnic:</td>
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<td></td>
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<tr>
<td>White</td>
<td>75.7</td>
<td>85.3</td>
<td>.03</td>
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<tr>
<td>Afr-American</td>
<td>18.6</td>
<td>8.0</td>
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<tr>
<td>BMI:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Men</td>
<td>35.6</td>
<td>33.1</td>
<td>.18</td>
</tr>
<tr>
<td>Women</td>
<td>35.6</td>
<td>36.9</td>
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## Main Outcome

<table>
<thead>
<tr>
<th></th>
<th>Buffalo (HSHM!)</th>
<th>Syracuse (MOVE!)</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>Baseline F&amp;V svgs (mean)</td>
<td>3.99</td>
<td>4.02</td>
<td>.92</td>
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<tr>
<td>Follow-up F&amp;V svgs (mean)</td>
<td>6.09</td>
<td>5.21</td>
<td>.025</td>
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<tr>
<td>Change</td>
<td>+2.10</td>
<td>+1.19</td>
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New Dissemination R01

- Partnership with VA
- Study dissemination and implementation of MOVE! Vs MOVE*VETS!
  MOVE!=VA’s clinic-based obesity treatment program
  - Assessment/counseling and targeted materials
- VETS=veteran education and tailored self-management
  - Adds tailored newsletters and peer counseling by veteran volunteers
Project Personnel-UNC

UNC

- Overall PI: Marci Campbell*, PhD, MPH, RD
- Overall Project Coordinator: Carol Carr*, MS
- Co-Investigators:
  - Bryan Weiner*, PhD
  - Cathy Melvin, PhD
  - Barbara Rimer, DrPH
- Support staff (GRAs, IT developers, etc)

*Denotes VA “Without Compensation” Employee Status
Project Personnel-VA NCP

- VA PI: Linda Kinsinger, MD MPH
- VA Project Coordinator: Leila Kahwati, MD MPH
- Co-investigators:
  - Kenneth Jones, PhD
- Support Staff
Consultants

– Ken Resnicow, PhD (University of Michigan)
– Michele Heisler, MD, MPH (VA Ann Arbor)
– Tammy Anthony, MD (VAMC Syracuse)
– Peg Dundon, PhD (VAMC Buffalo)
Study Roles

**UNC** – overall project coordination and subject matter expertise, formative work, data analysis, product refinement for broad dissemination

**VA NCP** – site identification and recruitment, VA and *MOVE!* logistic expertise, integrate web to print delivery with current *MOVE!* IT, host collected data

**VAMC sites** – recruit subjects and peer counselors, implement intervention, assist with data collection
Abridged Study Aims

1. Identify organizational facilitators and barriers to implementation

2. Develop two new dissemination products: web-to-print tailored message system and DVD-based peer counselor training (MOVE*VETS model)

3. RCT at 12 VAMC sites to evaluate the relative effect of the MOVE*VETS! model compared to usual MOVE!
Project Phases

- Site recruitment and assessment
- Formative work
- RCT
- Refinement and broad dissemination of materials
Site Recruitment and Assessment

- 12 VAMCs
  - Some research capacity
  - *MOVE!* implemented
  - Local PI identified
  - Local R&D and IRB approval obtained

- Organizational Survey at Each Site
  - Based on Assessment of Chronic Illness Care Tool
  - By site visit or V-Tel
  - Key informant interviews
Formative work

Tailored newsletter
– Refining and pretesting current version
– Developing web-to-print delivery
– Integrating delivery system with current MOVE! IT system

Peer Counselor Training Program
– Adapt Body & Soul training DVD based on focus group findings and usability testing
– Recruit and train peer counselors locally
Group RCT

MOVE*VETS vs. Standard MOVE!
- 12 VAMCs

Outcomes at 6 and 18 months
- Primary Outcomes
  - Participation
  - Weight loss
- Secondary Outcomes:
  - Participant behavior change and psychosocial measures
  - Organizational change measures
Challenges (this week...)

- VA policies and security concerns

- 29% budget cut

- How to adapt our EBI’s to fit within above
Joys

- Great team to work with
- Very deserving population
- VA system model and electronic medical records
- High potential for dissemination and sustainability