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## A School Nurse-Delivered Intervention for Overweight and Obese Adolescents: Lessons Learned


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Pbert L, Osganian SK, Schneider KL, Druker S, Magner RP, Reed GW, Gellar LA, Gapinski M, Sheetz A. (2012). A School Nurse-Delivered Intervention for Overweight and Obese Adolescents: Lessons Learned. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from [https://escholarship.umassmed.edu/cts\\_retreat/2012/presentations/6](https://escholarship.umassmed.edu/cts_retreat/2012/presentations/6)

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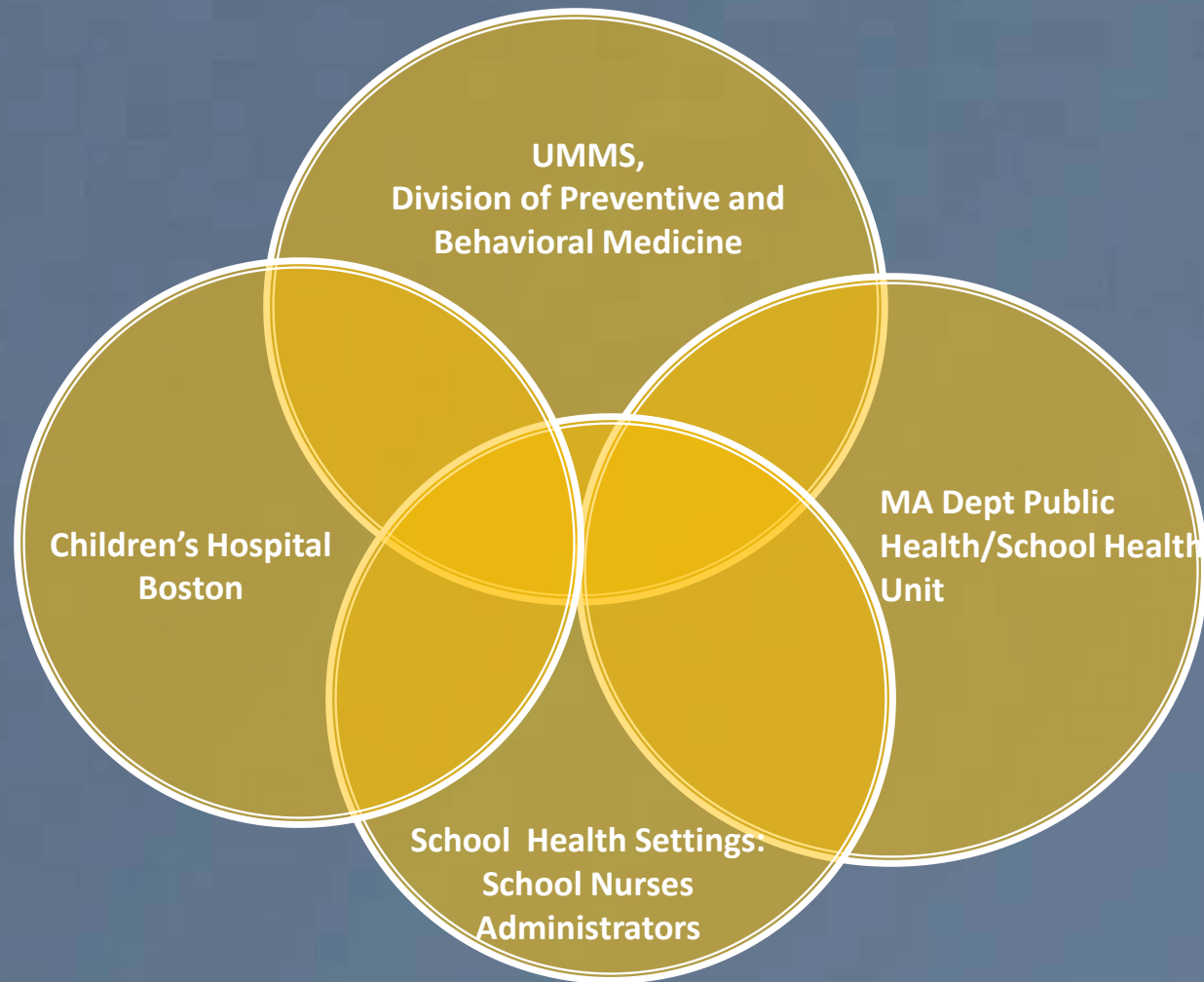
# School Nurse-Delivered Intervention for Overweight and Obese Adolescents: Lessons Learned

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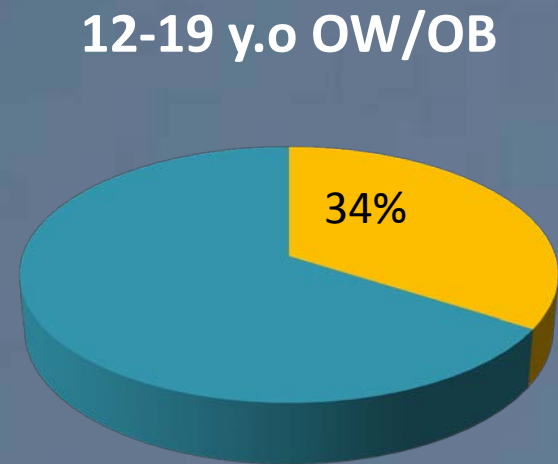


# Academic and Community Partnership



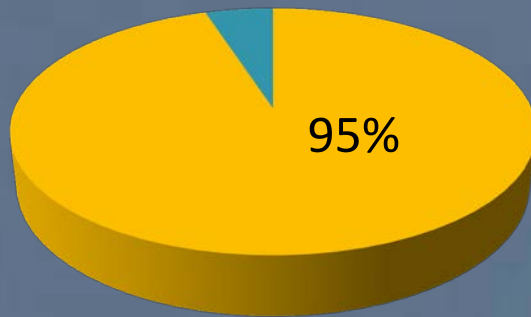
# Feasible, accessible weight loss treatment approaches for OW/OB adolescents are needed

- Systematic review for USPSTF (Whitlock et al, 2010) found moderate/high intensity interventions can ↓ weight, BUT GAPS:
  - targeted younger children
  - conducted in specialty health care settings with limited reach (accessibility, cost) and public health impact

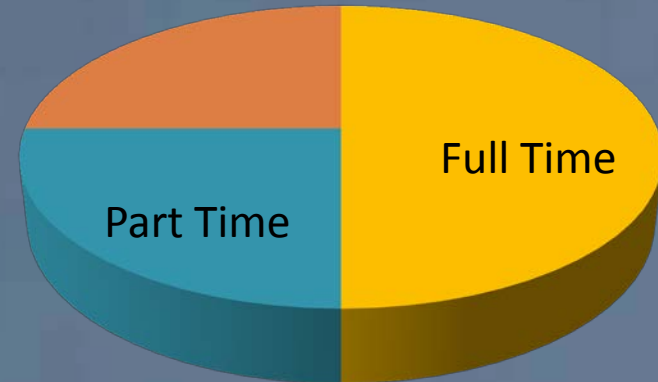


# School nurses in the school health setting have tremendous potential for public health impact on adolescent obesity

Adolescents Attending School



School Nurses in HS



- Primary health professional in school setting
- Accessible and continuous care
- Professional organization (NASN) cites role of school nurse is to assist regarding diet, physical activity and weight and provide obesity treatment

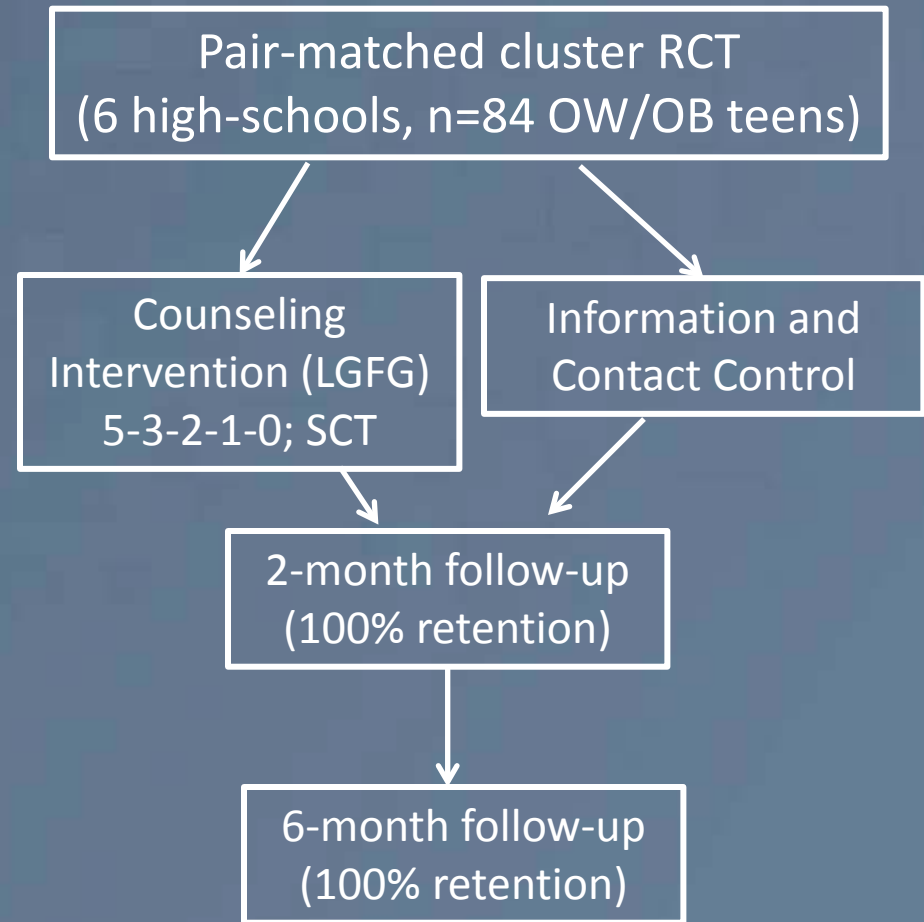


# Methods to test feasibility of 6-session school nurse-delivered intervention

Achieving a healthy weight: what every teen should know

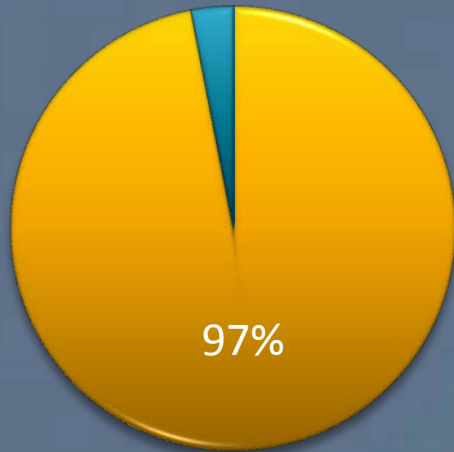


**Lookin' good**  
**Feelin' go♥d**

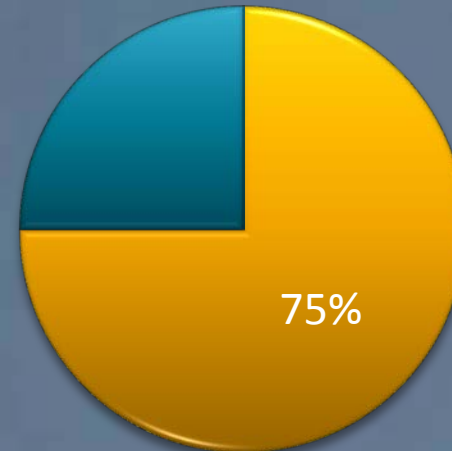


# The intervention was feasible for nurses to deliver

Protocol content covered



Not at all difficult to incorporate into daily work



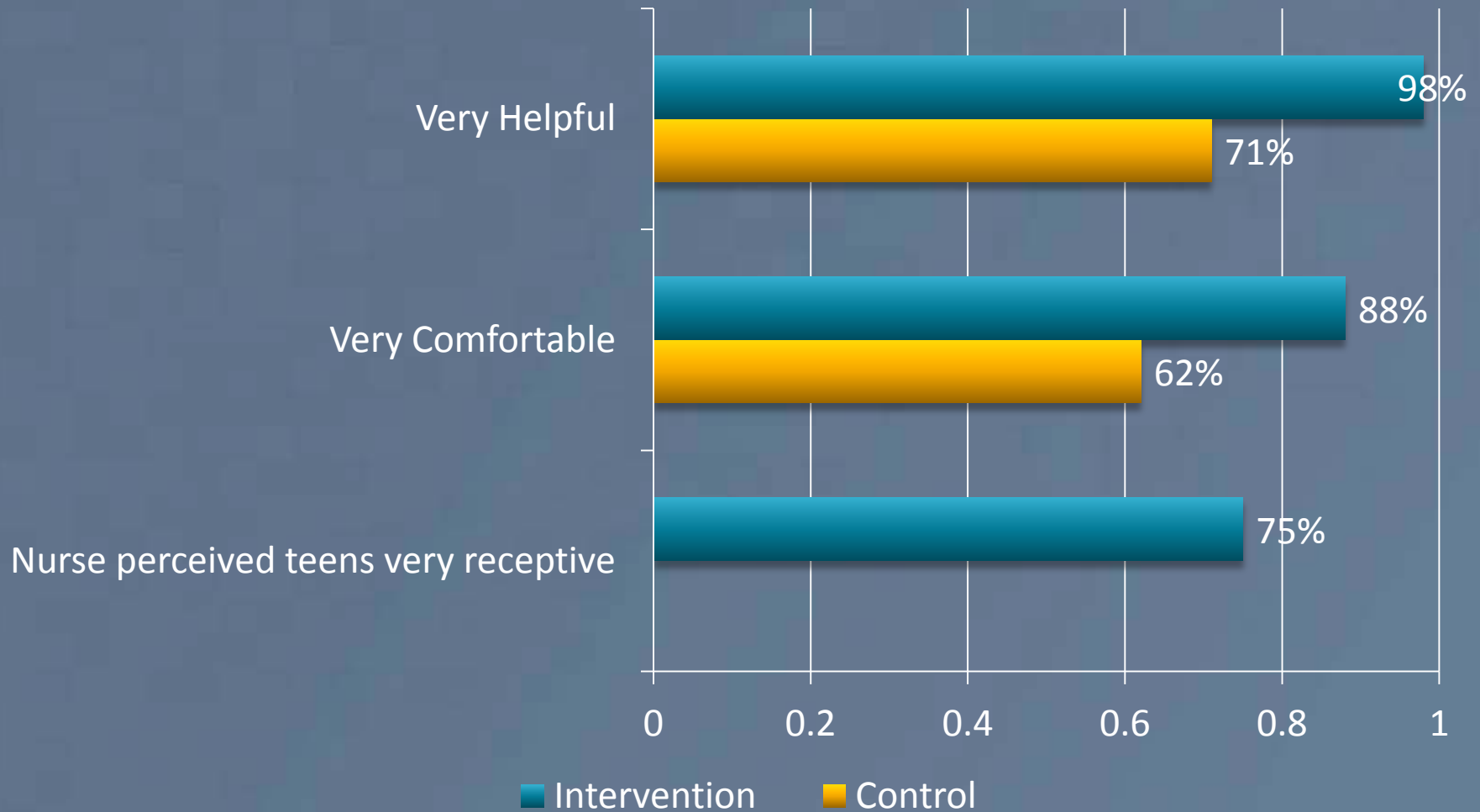
Protocol and materials very helpful



Ability to Counsel



# The intervention engaged teens and had high acceptability





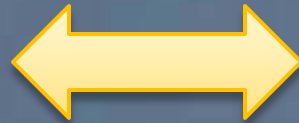
# The 6-session intervention improved selected self-reported behaviors but not BMI



# Lessons learned.....



# Establishing and nurturing personal relationships, trust, and shared goals with community partners is key



- Identified their adolescent health concerns/priorities:
  - ↓ OW/OB among teens
    - Fit their mission and responsibilities
- Engaged administrators to support nurse in this role



# Adaptation of intervention to setting and population requires close collaboration and mutual respect of unique contributions

## School Health Unit/School nurses

- Experience caring for OW/OB teens
- Understand work flow, feasibility in school setting
- Current practice/style
- Skills and credibility to deliver health-related counseling

## UMMS researchers and nutritionists

- Empirical evidence , treatment recommendations (CDC)
- Theoretical frameworks
- Intervention design expertise
- Evaluation skills

## JOINT INTERVENTION DESIGN WORKING GROUP: LGFG

Pilot testing – work out kinks

Focus groups with OW/OB teens, their parents, school nurses, school staff and administrators



# Train community interventionists based on core competencies needed; conduct with community partners



## Knowledge

- Scope of problem
- Recommendations (diet, PA, SB)
- Theoretical framework, counseling approach

## Skills/confidence

- Protocol review and demonstration
- Practice with feedback
- Implementation “tips from the field” (barriers and tested strategies), brainstorm



## Motivation

- Compatibility with mission, job responsibilities
- Evidence underlying protocol



# Factors facilitating implementation and sustainability occur at multiple levels

## School Administration

Fit mission (education/health of students)

Did not interfere with academic classes

See as school nurse role/job

## School Nurse

Compatible with role/mission

Confident in ability to conduct intervention

Intervention protocol and materials clear, easy to use (high fidelity)

Teen comfort/acceptability reinforced delivery

## OW/OB Teens

High acceptability- very comfortable talking with nurse re: weight

Perceived helpfulness

Non-interference with academic classes facilitated session adherence

Easily access nurse without parental involvement, transportation or cost

# Barriers to implementation and sustainability occur at multiple levels → identify, address and/or study

BARRIER	SOLUTIONS/RESEARCH DIRECTIONS
<b>School</b> Sustaining institutional support	<ul style="list-style-type: none"> <li>• Reinforce benefits (improved health → academics) , address concerns</li> <li>• Engage school staff to support efforts</li> </ul>
Lack of PA opportunities	<ul style="list-style-type: none"> <li>• After school exercise program – <b>LGFG-E</b></li> </ul>
<b>School Nurse</b> Time/conflict with other duties	<ul style="list-style-type: none"> <li>• Resources to protect time for intervention delivery (e.g., floating nurse)</li> <li>• Group format , maximize nurse time – <b>LGFG-G</b></li> </ul>
Ongoing delivery	<ul style="list-style-type: none"> <li>• Incorporate into performance evaluation</li> </ul>
<b>OW/OB Adolescent</b> Participation	<ul style="list-style-type: none"> <li>• Process to let students know of program</li> <li>• Identify and address barriers to participation</li> </ul>
Lack of social support for weight loss efforts	<ul style="list-style-type: none"> <li>• Group format – <b>LGFG-G</b></li> <li>• Social networking technology – <b>LGFG-G</b></li> </ul>

# Questions?



**“Snow White was poisoned by an apple, Jack found a giant in his beanstalk, and look what happened to Alice when she ate the mushroom! And you wonder why I won’t eat fruit and vegetables?!”**



# Theoretical Framework for Intervention

