An Innovative Educational Intervention to Enhance the Effectiveness of Clinical Care for Obesity Management and Medical Education in South Carolina

Morris J. Blachman, Ph.D.[1] & Robert J. Malcolm, M.D.[2]

1. University of South Carolina School of Medicine-Palmetto Health Richland CME Organization; 2. Medical University of South Carolina CME

RATIONALE

Background

- South Carolina is 7th highest in national obesity rates, with 31% of the adult population reportedly obese[1].
- Rates of obesity are higher in minority (i.e., Blacks & Hispanics) persons than in Whites[2].
- Obese adults are at increased risk for a variety of physical, psychological, and social morbidities[3].
- Given the diverse set of medical problems associated with obesity, primary health care settings have been identified as critical for the successful proactive management of obesity. However, weight management issues are reportedly addressed by providers only 65% of the time even when obesity has been established[4].
- Obesity patients who receive weight management counseling from physicians are significantly more likely to participant in weight reduction efforts than those who do not[5].

Identified Needs Related to Obesity Management

Need for Training on Obesity Management

- Negative provider attitudes toward obese patients adversely impact the quality of care delivered[6].
- Many physicians lack sufficient training in cultural competency to address the needs of racially/ethnically diverse obese patients[7].
- Physicians have specifically identified communication skill deficits as a barrier to treating patient obesity[8].
- Inadequate knowledge about obesity and associated treatment options partially account for the under-diagnosis and treatment of obesity[9,10].
- Patients report a desire for improved obesity management services from their providers[11].

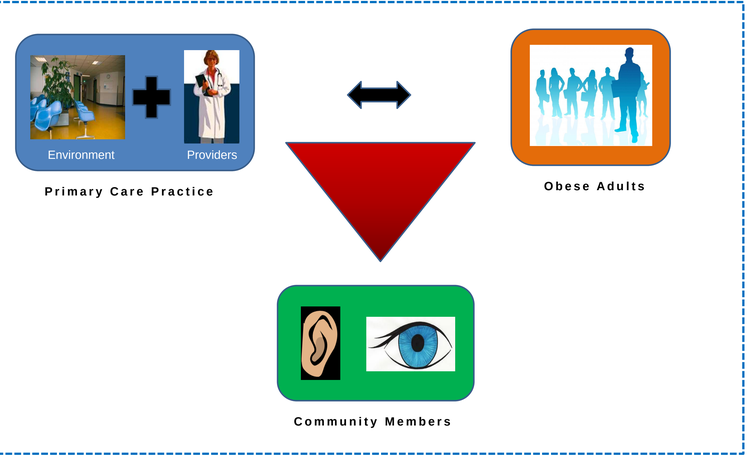
Need for Improved Patient-Provider Relationship

- The perceived quality of the patient-provider relationship influences patient attitudes about seeking health care[12] and the extent to which physicians perceive obesity as a topic that is appropriate to raise with the patient[13].
- Physicians that are perceived as disrespectful, insincere or emotionless have been found to be less likely to inspire behavioral change[14].

Need for Systems-Based Improvements to Provide Obese-Sensitive Care

- Primary care office settings are rarely designed to meet the needs of obese patients adequately[15].
- Aspects of the office environment, including physical (e.g., size of the waiting room chairs, large blood pressure cuffs, weight scales), structural (e.g., size of restroom stalls), and functional features (e.g., office protocol) can influence patient experiences[16].

Figure 1. Wave I Needs Assessment Triangulation of Data



QUALITY IMPROVEMENT INTERVENTION

Aim

To increase the capacity of primary care practices to address the needs of obese persons and thereby improve the quality of obesity management within the heathcare system.

Method

- The SC Obesity Initiative is a statewide quality intervention involving patient-centered, system-based approaches. It is a collaboration among USCSOM-PHR CME Organization, MUSC CME, & AXDEV Group, Inc.
- The Initiative is comprised of four phases:

❖ *Phase I* (Study & Develop) entails an extensive literature search followed by two waves of need assessments. To capture the breadth of issues surrounding obesity management, the first assessment involves triangulating information from the perspective of primary care providers, obese persons, and community members (see *Figure 1.*). The specific variables of interest for the Wave I Needs Assessment are show in *Table 1.* The second needs assessment is informed by the first assessment and focuses specifically on the practice gaps of 3-5 pilot sites. In Phase I, both qualitative and quantitative data are collected via focus groups, interviews and observational studies of primary care environments. Data from the Wave II Needs Assessment informs the development of the obesity quality intervention program.

❖ *Phase II* (Pilot Test & Improve) involves piloting, evaluating and improving the quality intervention program at 3-5 primary care office.

❖ *Phase III* (Expand Intervention) involves expanding the obesity intervention to multiple primary care practices, including those within a large community-based hospital system in South Carolina.

❖ *Phase IV* (Statewide Dissemination) involves partnering with multiple health care systems for statewide dissemination of the obesity intervention.

Table 1. Key Variables of Interest

		WAVE I NEEDS ASSESSMENT / WAVE II								
		Healthcare Providers		Obese Adults						Cmm Pvdrs
		Physicians	Practice Staff	Obese Females	Obese Males	Obese-Whites	Obese-Blacks	Obese-Hispanics	Obese Persons	Community Providers
Attitudes toward & experiences with:	obese females	X	x							
	obese males	X	X							
	obese-Whites	X	X							
	obese-Blacks	X	X							
	obese-Hispanics	X	X							
	obese persons of varying weight levels	X	X							
	obesity management/services received	X	X	X	X	X	X	X		
	obesity	X	X	X	X	X	X	X		
	health care provider-patient relationship	X	X	X	X	X	X	X		
	primary care practice providers			X	X	X	X	X		
	appropriateness of primary care facility	X	X						X	
Knowledge/ Skills relating to:	communication	X	X							
	cultural competence	X	X							
Perceived:	barriers to obesity treatment	X	X	X	X	X	X	X		X
	facilitators of obesity treatment	X	X	X	X	X	X	X		X
Insights into:	obese person perceptions of primary care providers									X
	primary care provider perceptions of obese persons									X
	primary care provider-patient relationship									X

TARGETED OUTCOMES

- The SC Obesity Initiative seeks to improve health outcomes in obese adults by intervening at the provider level (see *Figure 2.*).

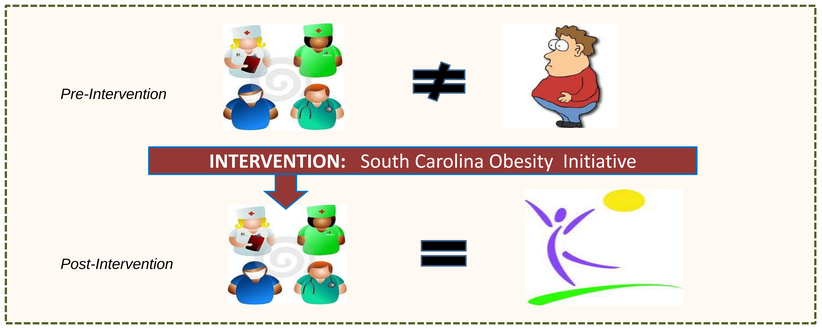
Primary Care Level Outcomes

- Primary care providers are more competent to engage in obesity management (e.g., improved communication skills, cultural sensitivity and knowledge about obesity management) as well as more sensitive to the needs of obese persons (i.e., positive attitudinal changes).
- Primary care offices are better equipped to manage obesity (i.e., physical, structural and functional improvements).

Patient Level Outcomes

- Improved patient satisfaction
- Improved patient treatment adherence
- Reduction in patient BMI, waist circumference, and weight
- Reduction in patient co-morbidity (rates, severity)

Figure 2. Intervening via Primary Care Providers to Achieve Desired Patient Outcomes



SELECTED KEY CHALLENGES & SOLUTIONS

Planning Stage:

➢ *Challenge:* To establish a shared vision, a common language, and a mutually agreed upon logic model for the SC Obesity Initiative among a diverse group of team members from two different institutional contexts.
➢ *Solution:* Engage in extensive discussions and face-to-face meetings to clarify, to iron out differences, and to achieve full agreement of all the key aspects of the project.

➢ *Challenge:* To establish a sense of shared ownership and responsibilities among collaborators.
➢ *Solution:* Engage in shared decision making and delegate tasks according to individual interests and skills.

Implementation Stage (Anticipated):

➢ *Challenge:* To overcome the participation barrier of time constraints among primary care providers.
➢ *Solution:* Develop an intervention that incorporates two principles: 1) embed the process as much as possible within the workflow, and 2) communicate how this intervention will help the primary care provider better meet their own primary care practice needs and interests in serving their patients.

➢ *Challenge:* To balance the need to ensure the fidelity of intervention across multiple sites with the requirement to be sensitive to the variation and diversity of practice settings and patient populations.
➢ *Solution:* To ensure the full fidelity of process and principle while tailoring the needs assessment to develop customized practice interventions to meet the particular needs of the individual practices.

LESSONS LEARNED*

- Collective learning and process brings greater clarity.
- Using the format of an overarching logic model allows for shared understanding and for aligning decisions and resources with the project aim.
- Developing a solid review of the literature is invaluable in establishing the scope of the project, and for selecting evidence-based interventions.
- Multi-disciplinary teams are enormously valuable because they yield diverse perspectives and help guard against group-think.
- Developing a formal structure and process for collaboration (e.g., identifying project leads, information sharing system) in the early stages of the project is exceedingly helpful.
- Frequent communication in an agreed upon structure is a requisite to sustain connection and avoid duplication or lapses for projects that involves multiple organizations and sites.

* Per Phase I of the SC Obesity Initiative

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For additional information, please contact Victoria Chien, M.A. (Project Director)
Email: victoria.chien@uscmed.sc.edu; Office #: 803-434-4998