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Title: *“Foundations of Fitness: A Clinic-Community Partnership to Address Pediatric Obesity.”*

Scientific Abstract

Background: Approximately 17% of US children have obesity resulting in significant childhood co-morbidities and increased lifetime risk of adult obesity, diabetes, cardiovascular disease and cancer. Guidelines recommend intensive lifestyle programs as first-line treatment, yet few pediatric practices are equipped to provide this. Clinical-community partnerships are well-positioned to address this care gap.

Objective: This proposal aims to assess whether a community-delivered lifestyle program offered in adjunct to primary care obesity management is feasible, acceptable, effective, and easily implemented in a rural care setting.

Method: We will recruit 40 children aged 7-13 years and adult caregivers from CHaD pediatrics to participate in the Foundations of Fitness Program following a control period of usual pediatric care. A mixed-methods approach using qualitative interviews and study questionnaires, combined with objective measures of adiposity and fitness will assess study outcomes.

Results: Findings will be presented to the Carter Community Building Association board, at DHMC Pediatric grand rounds, and through the Pediatric Academic Society annual meeting and peer-reviewed journal.

Conclusions: If effective, this pilot would provide preliminary data to support a shift in the provision of pediatric obesity care from clinic to clinic-community teams allowing for greater intensity of treatment in an accessible setting as recommended by current guidelines.

Next steps: Pilot data will inform a future National Institute of Health R01 proposal aimed at further testing this model regionally in CHaD pediatrics practices in partnership with other regional community centers. This research could extend care to under-resourced communities that lack access to tertiary weight management centers.

Community Abstract

The magnitude of the health issue: The prevalence of childhood obesity nationally among 6- to 11-year-olds was 18.4%, and 20.6% among 12- to 19-year-olds.¹ Locally, rates of obesity have doubled and have, in some cases, tripled; a recent study found that 28% of third-graders were overweight or obese.² Obesity-related medical costs consume 10% of all medical spending, and childhood obesity comprises nearly a third of that.³

Knowledge Gap: This proposal aims to assess whether a community-delivered lifestyle program offered in adjunct to primary care obesity management is feasible, acceptable, effective, and can be easily implemented in a rural care setting. This research builds on other community-clinical partnerships to promote child health, which have generally been offered in more urban settings with concentrated populations.

Community collaborators/organizations: The Carter Community Building Association (CCBA) is the lead community stakeholder and will staff and conduct the proposed program in partnership with a Weight & Wellness center research team. CCBA has facilities, equipment, and licensed professional staff trained in fitness and nutrition. They are well respected in the community and have a history of program development and assessment.

Long-term policy implications: The Foundations of Fitness program will provide a vehicle for examining specific approaches to recruitment/retention of participants, and a health promotion lifestyle program in a rural community setting. It will generate significant objective data to help guide and test future approaches and increase effectiveness of the training offered.

Literature Citations:

1. Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of Obesity Among Adults and Youth: United States, 2015- 2016. NCHS Data Brief. 2017(288):1-8.
2. Ely A. Upper Valley Public Health Region Community Health Improvement Plan: 2015 to 2017. 2015.
3. New Hampshire State Health Improvement Plan: 2013-2020. Charting a Course to Improve the Health of New Hampshire.