

May 20th, 12:30 PM

# Implementation and Utilization of Mobile Technology In Adolescent Bariatric Surgery Patients

Jonathan Green  
*University of Massachusetts Medical School*

Jeremy T. Aidlen  
*University of Massachusetts Medical School*

Sherry L. Pagoto  
*University of Massachusetts Medical School*

*See next page for additional authors*

Follow this and additional works at: [https://escholarship.umassmed.edu/cts\\_retreat](https://escholarship.umassmed.edu/cts_retreat)

Part of the [Behavior and Behavior Mechanisms Commons](#), [Health Information Technology Commons](#), [Pediatrics Commons](#), [Surgery Commons](#), and the [Surgical Procedures, Operative Commons](#)

---

Green, Jonathan; Aidlen, Jeremy T.; Pagoto, Sherry L.; and Bram, Jennifer, "Implementation and Utilization of Mobile Technology In Adolescent Bariatric Surgery Patients" (2016). *UMass Center for Clinical and Translational Science Research Retreat*. 28.  
[https://escholarship.umassmed.edu/cts\\_retreat/2016/posters/28](https://escholarship.umassmed.edu/cts_retreat/2016/posters/28)

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact [Lisa.Palmer@umassmed.edu](mailto:Lisa.Palmer@umassmed.edu).

---

**Presenter Information**

Jonathan Green, Jeremy T. Aidlen, Sherry L. Pagoto, and Jennifer Bram

**Keywords**

bariatric surgery, adolescents, obesity, mobile technology

**Creative Commons License**

Creative

Commons

Attribution-

Noncommercial-

Share

Alike

3.0

License

This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 3.0 License](https://creativecommons.org/licenses/by-nc-sa/3.0/).

## Implementation and Utilization of Mobile Technology In Adolescent Bariatric Surgery Patients

Jonathan Green MD<sup>1</sup>, Jeremy T. Aidlen MD<sup>2</sup>, Sherry Pagoto PhD<sup>3</sup> Jennifer Bram MD<sup>4</sup>

<sup>1</sup>Department of General Surgery, <sup>2</sup> Department of General Surgery, Division of Pediatric Surgery, <sup>3</sup> Department of Medicine, Division of Preventative and Behavioral Medicine, <sup>4</sup> Department of Pediatrics

University of Massachusetts Medical School, Worcester MA

### ABSTRACT:

Obesity is the most prevalent chronic disease of childhood. Obese adolescents are likely to become obese adults with significant associated co-morbidities and early mortality. In Massachusetts, 30% of children ages 10-17 are overweight or obese. It is projected that 48% of Massachusetts' adults will be obese by 2030. In March of 2015, the Good Fit Adolescent Weight and Wellness Center opened, with a goal of addressing this issue with a proven multidisciplinary approach.

Mobile technology continues to develop at a rapid pace. Adolescent access to mobile technology on smart phones and tablets continues to increase. Mobile fitness tracker applications are numerous and easy to use for today's tech savvy teens. Successful weight loss and health maintenance is variable and has been difficult to validate with this technology so far.

The purpose of this study is to evaluate existing mobile applications to be used by adolescent patients in the Good Fit Center. Our aim is to determine whether adolescent patients will be compliant with diet and exercise challenges sent through a mobile application and social media platform. We will work closely with dietitians, physicians and surgeons to evaluate feasibility and compliance within the first year of this project. In the second year, we will then test the functionality of this mobile application as it relates to patient success in the Good Fit program.

The proposed research is a novel multimodal study combining behavioral sciences research, clinical outcomes research, and mobile technology to help to better understand the fitness management of adolescents struggling with morbid obesity. The findings of our research may have a number of important implications. These include the refinement of existing fitness strategies, as well as the development of a new useful piece of technology to combat obesity and improve the health and clinical outcomes of our nation's children.

Corresponding Author: Jonathan Green MD, [jonathan.green@umassmemorial.org](mailto:jonathan.green@umassmemorial.org)