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Introduction

- 1/3 of US children aged 2-19 years are overweight or obese
- Overweight children are:
 - More likely to come from low socioeconomic backgrounds
 - More likely to become obese adults
 - At risk for significant comorbidities as adolescents or adults including Diabetes and Heart Disease
- There is found to be a connection between obesity and depression, anxiety and self esteem
- Some psychiatric medications can increase the possibility of obesity and metabolic disease
- There are opportunities in primary care and psychiatric offices

Methods

- **Equip for Life (EFL) is a project with a three part design, the first of which is being studied**
- **Setting:** Urban pediatrics practice that serves as the resident teaching clinic for Children's Hospital of Pittsburgh (CHP). This location is home to a Healthy Habits 4 Life (HH4L) clinic, a clinic focusing on weight management through the use of motivation interviewing for at risk youth.
- **Screening:** Children between ages 10-18 years are eligible. They must have a BMI >85th percentile and have no physical impairment that would interfere with their ability to exercise
- **Intervention:**
 - Children are given a pedometer with the goal of 8000 steps per day.
 - Follow-up visits at 3, 6, and 12 months as per HH4L. At each visit we collect:
 - Anthropometric data including BMI and blood pressure
 - A survey about the child's degree of physical activity, knowledge of parks, and attitudes towards exercise
 - Impact of Weight on Quality of Life (IWQOL) survey that asses changes in psychiatric symptoms
 - Participants' survey results will be compared to their previous responses
 - Children meeting 8000 steps/day earn free sports equipment
- **Hypothesis:** At least half of all participants will:
 - Meet their goal of 8000 steps/day
 - Show a statistically significant improvement in knowledge of where to play, positive attitude towards exercise, and number of days/week engaging in physical activity
 - Improved scores on the IWQOL
- Approval was obtained by the UPMC Institutional Review Board

Three – Part Project Design

Part 1: Taking Steps

- Adolescents at the HH4L Clinic are recruited to participate in EFL for a research study (see Methods for more details)
- Goal is to understand the benefit of a targeted intervention towards physical activity in a low-income population on body mass index, attitudes about exercise, and mental health outcomes

Adolescents are given a pedometer



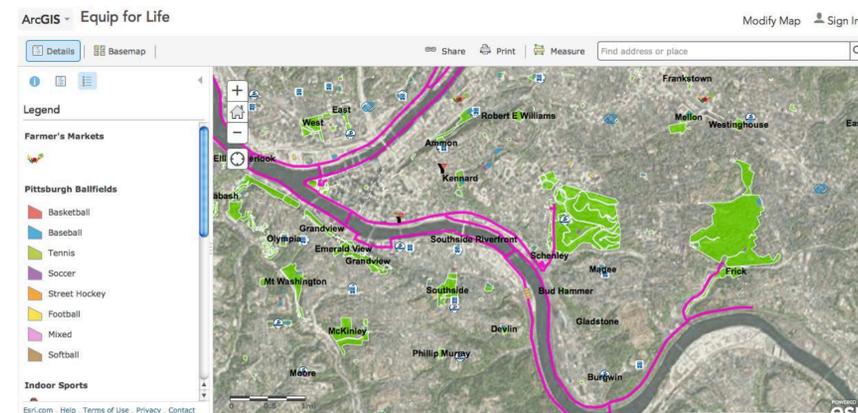
Goal of 8000 steps per day



At 3, 6, and 12 months, earn free sports equipment!

Part 2: Interactive Map

- Partnering with Carnegie Mellon University, we constructed an interactive map of Pittsburgh labeling free places to play both indoors and outdoors.
- Map includes parks, tennis courts, basketball courts, public pools and more.
- Evolving resource with updates about free activities and suggested bus routes.



Part 3: Organized Play Activities with your Doctor

- Outdoor events in the patients' neighborhoods
- Focused on activity such as walking, dancing, or organized sports
- Access to helmets for biking



Measurable Outcomes

Goals for the Research Study

- **Recruitment:** At least 100 children and adolescents to EFL
- **Outcome Measures:**
 - 1) Mean physical activity in days per week
 - 2) Knowledge about where to exercise
 - 3) Perceived value of exercise
 - 4) Change in mental health evaluated through scales
 - 5) Change in BMI percentile

Next Steps

Goals for the Entire Program

- Continue to recruit adolescents
- Continue to build partnerships with local parks and health organizations to collaborate for events and building on the map
- Expand part or all of this project to the remainder of the resident continuity clinic and other community clinics and possibly psychiatric clinics
- Consider expanding resources to the remaining community practices associated with Children's Hospital of Pittsburgh

Thank You

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- Children's Hospital Foundation
- Child Life Department at Children's Hospital

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