Childhood and Adolescent Obesity: Pediatric Obesity Pilot Project Curricular Materials Development and Literature Review

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The Pediatric Obesity Pilot Project

- An initiative aiming to integrate childhood obesity guidelines into clinical primary care and community settings across Colorado.
- To provide physicians with the tools they need to diagnose and treat children struggling with obesity.
- Implement an intervention for obese children in the primary care setting based on the 5-2-1-0 initiative.
Why is this important?

- Childhood overweight and obesity have reached epidemic levels in the United States.
  - 25% of US children overweight
  - 11% obese
- Epidemic extends to other parts of the developed world.
- Obesity becoming more prevalent in many developing nations.
Why is this important?

- Obesity contributes to major causes of death in the USA.
- Risk factor for
  - Atherosclerotic cardiovascular disease
  - Type 2 diabetes
  - Dyslipidemia
  - Hypertension
  - Some cancers
  - Depression
  - Breathing problems
- Health consequences often seen in adults, but may occur while still children such as T2DM.
- Some consequences are very specific to childhood, often psychosocial but growth can be effected (early maturation for example)
Why is this important?

- Once overweight or obese, losing weight is very difficult.
- Approaches aiming to encourage diet and exercise in these individuals in efforts to combat the epidemic have had little impact.
- Thus prevention is now becoming a primary focus.
- Intervention strategies for children to prevent obesity in the first place is becoming priority.
- Intervening for obese children is also priority as it is a critical period to instill habits that will prevent adult obesity if successful.
Why is this important?

- Prevention may be achieved through a variety of interventions targeting built environment, physical activity, and diet.
- Some potential strategies for intervention in children can be implemented by targeting preschool institutions, schools or after-school care services for influencing diet and physical activity.
- Parents and other caregivers are essential components of interventions. Many programs aim to educate families.
The Pediatric Obesity Pilot Project

- Aims to integrate both prevention and management strategies of pediatric obesity in the primary care setting as new recommendations from the U.S. Preventive Services Task Force call for moderate-to high-intensity interventions for obese patients.
  - Health TeamWorks Childhood Obesity Guidelines
  - Fit Family Challenge intervention model
Fit Family Challenge Selection Criteria

- Pilot practices selected to participate.
  - Family practices
  - Pediatric practices

- Measure BMI and take survey assessing habits
Fit Family Challenge (FFC) Flow Chart

Child with appointment for well child check or sports physical completes Heart Smart Kids (HSK) assessment.

Clinic invites child/family to participate in FFC
- Collects Baseline weight, height, BP
- Refers to clinic care manager (CM)

Care Manager Baseline Visit:
- Completes action plan with child/family
- Sets up weekly contact time and method
- Invites child/family to attend monthly classes for 12 months

Weekly: Care Manager contacts child via text message, email, or phone to report on action plan goal progress

Monthly: Child/family attend class at clinic
- Measure weight, height, BP
- Reset action planning goal

12 month Data Collection:
- Weight, height, BP
- Retake HSK survey

BMI ≥ 85% NO

Clinic assesses 5-2-1-0; completes action plan for prevention. Provide appropriate patient tools.

Follow-up at 1 year or as needed.

YES

6 Month Visit (no class): Care Manager meets individually with child/family
- Measure weight, height, BP
- Retake HSK survey
- Reset action planning goal
What’s my part in this?

- CU collaborating with Colorado Academy of Family Physicians on the Pediatric Obesity Pilot Project
  - Cara Coxe (Wellness Programs Manager)
- Bonnie Jortberg is heading CU’s part of the project
  - MSA mentor
  - Senior instructor of School of Medicine in Department of Family Medicine
  - Registered Dietician
What’s my part in this?

- Develop the curricular materials used in the pediatric obesity pilot project to educate selected participants about health issues related to their obesity as an intervention.
- Develop a community resource guide (recreation centers, Colorado outdoor activities) to encourage the physical activity aspect of the intervention specifically.
- Healthy recipes resource specifically encouraging eating more fruits and vegetables.
What’s my part in this?

- Survey FFC participants’ satisfaction with the Family Guide.
My MSA Summer Project

- Develop the Family Guide for the program
  - 10 modules
  - Researched and included information about the module’s health topics
  - Found other resources and developed my own handouts for family to set and reach goals (activity planner, shopping planner, nutrition fact food label quick guide, etc.)
The Intervention

- 10 module framework based on the 5-2-1-0 guidelines for childhood obesity prevention
  - 5 fruits and vegetables/day
  - Less than 2 hours of screen time/day
  - 1 hour of physical activity/day
  - 0 sweetened beverages/day
The Intervention

- Module 1 → Fruits and Vegetables
- Module 2 → Limit Screen Time
- Module 3 → Physical Activity
- Module 4 → Zero Sweetened Beverages
- Module 5 → Individual meeting with Care Manager
• Module 6 → Cooking and Label Reading
• Module 7 → Portion Distortion and Eating Out
• Module 8 → A Family Affair
• Module 9 → Building Self-Esteem
• Module 10 → Healthy Bodies for Life
My MSA Summer Project

• Literature Review
  • Pediatric Obesity
    • Prevalence
    • Health consequences
    • Importance of interventions
    • Current research on what interventions work
    • Recommendations for interventions
References