

# Pediatric Obesity Weight Evaluation Registry (POWER)

## What Is POWER?

POWER is a centralized data repository for the on-going collection and maintenance of demographic and clinical data from hospital-based pediatric weight management programs (WMPs) across the country. The mission of POWER is to better understand and improve the health outcomes of youth with obesity who are participating in multi-component WMPs. A multi-component WMP for youth with obesity offers treatment that includes nutrition, physical activity and behavioral strategies. This multi-site data set will be used for collaborative research efforts and quality improvement initiatives. The goals of POWER are to:



- Establish a national registry of children and adolescents participating in multi-component WMPs to serve as a resource to promote high quality research as it relates to the evaluation and management of childhood and adolescent obesity.
- Identify characteristics of multi-component WMPs for youth with obesity in the US and evaluate their association(s) with health outcomes and care delivery.
- Identify characteristics, such as demographic, anthropometric and clinical measures, of patients participating in multi-component WMPs for overweight and obese youth and evaluate their association(s) with health outcomes and care delivery.
- Promote collaborative partnerships with other groups and individuals who share similar goals to POWER

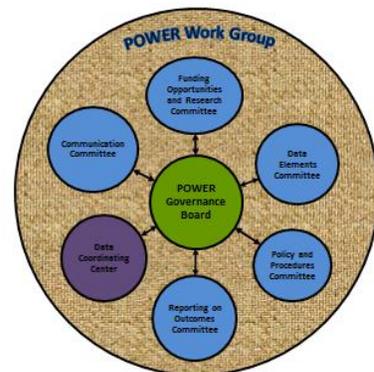
A multi-site retrospective cohort POWER study was conducted among 6,737 youth with obesity (age 2 to 17 years) who presented for weight management from 2009 to 2010 at 13 children’s hospitals’ pediatric weight management programs that participated in the “FOCUS on a Fitter Future” initiative sponsored by the Children’s Hospital Association. The study found too many children were presenting late for care, with very severe obesity and increased risk for developing diabetes, hypertension and high cholesterol. Jasik et al. *Childhood Obesity* October 2015: 11(5); 630-7.

## What Has Been Accomplished by the prospective POWER project?

- There are currently 32 participating sites in the prospective POWER project, representing 22 states. A governance structure for POWER was designed to support a structured, participatory and transparent decision-making process. The goal is to be inclusive of all site representatives, with final decisions made by the POWER Governance Board following input received from POWER Work Group members.



## **POWER: Governance Structure**



- A program profile survey of POWER sites was conducted, covering 12 content themes including provider specialty, intervention strategies, and program format and duration. The results of this survey will be used when evaluating program characteristics that are associated with improved health outcomes

- Centralized data collection system for POWER has been operational since June 2014, with data on 3,643 patients. Established the POWER “Dashboard” for quarterly reporting on baseline patient characteristics and outcomes.

### Baseline Characteristics by Weight Status

STUDY COHORT N = 3643			WEIGHT STATUS		
Characteristics	n	Total	Obesity N=1039 29%	Severe Obesity N=2604; 71%	
				Class 2 N=1312 36%	Class 3 N=1292 35%
<b>Race</b>					
Black	742	19%	16%	40%	44%
White	1883	52%	29%	36%	36%
Other/Mixed	447	13%	37%	39%	25%
Unknown/Not reported	541	16%	31%	32%	37%
<b>Ethnicity</b>					
Hispanic	1108	32%	26%	41%	33%
Non-Hispanic	2258	58%	25%	33%	42%
Unknown	277	11%	21%	34%	45%
<b>Age (years)</b>					
2-5	179	5%	21%	33%	47%
6-11	1750	49%	30%	39%	32%
12-17	1714	46%	27%	35%	38%
<b>Gender</b>					
Female	1997	54%	31%	37%	32%
Male	1646	46%	25%	35%	40%
<b>Insurance</b>					
Public/Medicaid	2187	59%	26%	35%	39%
Private	1057	30%	31%	36%	33%
Self-pay/Other /None	28	1%	42%	20%	38%
Unknown/Not reported	371	10%	18%	36%	47%

### Why Do We Need a Pediatric Obesity Registry?

Prevention of childhood obesity is imperative. However, 13 million US children have already developed obesity, and are projected to cost over 14 billion dollars in future healthcare dollars. *We need effective treatment options for children and adolescents today.* Across the country, medical providers have gathered teams of nutrition and activity experts to offer treatment for children and adolescents with obesity in clinical settings. We do not know how many clinical obesity treatment programs exist, we do not know how they are structured, and we do not know which ones, or which elements, are effective. *The goal of the registry is to seek out and identify, through systematic and careful data collection, best practices for the treatment of child obesity.*

### Benefits to Participating in the Next 2-year Cycle of the POWER Project:

- Benchmark** key outcomes for hospital-based pediatric weight management programs
- Generate** meaningful, high quality site-specific clinical data sets for individual participating sites
- Drive** new comparative effectiveness research studies and quality improvement initiatives
- Establish** evidence-based guidelines for improved assessment and management of pediatric obesity

### What Does it Take to Participate?

- 2-year commitment** from senior leadership at your institution to enroll in the next 2-year cycle of the POWER project
- Key staff member** identified for data collection and submission for your site
- Demographic and clinical data obtained at your site meets the **minimum set of data elements** for POWER
- Receipt of **\$6,000 enrollment fee** to participate in the next 2-year cycle of the POWER project, which will cover participation through June 30, 2018.
- Obtain **IRB approval and informed consent/assent from patient families** to collect prospective clinical data

### Data Coordinating Center (DCC) for POWER: Goals:

- Obtain high-quality, complete data across multiple sites
- Ensure timely data collection using the Medidata RAVE® Electronic Data Capture System for web-based data entry and/or electronic data uploads
- Provide timely access to aggregate and site-specific data bases
- Provide aggregate and site-specific reports on a quarterly basis that summarize baseline patient characteristics and outcomes