

2013 **SURVEY FINDINGS**
OF CHILDREN'S HOSPITALS

obesity SERVICES



CHILDREN'S
HOSPITAL
ASSOCIATION

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PREFACE

It's far better to prevent childhood obesity than to face the challenge of reversing it. It comes as no surprise, then, that the national spotlight shines on prevention strategies to improve children's health. But, a quieter, yet increasingly critical movement is afoot for children who are already overweight or obese. Many children's hospitals are taking hard aim at this nationwide epidemic with specialized weight management programs.

The Children's Hospital Association ("Association") surveyed 118 member hospitals to gauge current overweight and obesity services. The goals: assist member hospitals in benchmarking their weight management programs and provide a clear picture of children's hospital responses to pediatric obesity that can be shared more broadly.

This report highlights findings of the Association's 2013 Obesity Services Survey. Before looking at the data, we set the stage for why pediatric overweight and obesity treatment programs are critical for tackling this nationwide health epidemic facing children and adolescents.

INTRODUCTION

He is four years old. We'll call him Adam.



Adam lives with severe orthopedic problems. He has bowed legs. His growth and development are hindered because he simply doesn't have the strength to move his own body mass. His weight is holding him back and harming his health. Already.

“Adam” is a patient at the Texas Center for the Prevention and Treatment of Childhood Obesity at Dell Children's Medical Center of Central Texas in Austin, which focuses on reversing obesity trends in children and reducing long-term illnesses caused by being overweight or obese.

“This is a massive health epidemic facing children, as no other disease affects a greater proportion of U.S. children,” says Stephen J. Pont, M.D., M.P.H., F.A.A.P., medical director of the Center and chair of the American Academy of Pediatrics (AAP) inaugural Section on Obesity. “If you want your institution to be a national leader in children's health, you need a plan – or better, a center – to address childhood obesity.”

Eight- to 18-year-old adolescents spend an average of 7.5 hours a day using entertainment media, including TV, computers, video games, cell phones and movies. Only one-third of high school students get the recommended levels of physical activity (Let's Move!, 2014).

THE HARD TRUTHS ABOUT PEDIATRIC OBESITY

Childhood in America isn't what it once was. Gone are the days of playing outside until twilight. Video games are in, kickball is out. Balanced, home cooked meals are often replaced with faster, less healthy options.

This has much to do with how the country has changed over the years. With more dual-working families and single parents juggling jobs and children, there is less time for smart meal choices, physical activity and – in cases where parents struggle financially – limited access to healthy foods. Parental safety concerns sometimes trump outdoor time. For some children, genetic factors like a slow metabolism put them even more at risk of being overweight or obese. The changing landscape of childhood, and genetic, environmental and behavioral factors, are colliding to establish a critical new specialty area of children's health care: the treatment of overweight and obesity.

“This parallels the emergence of the child abuse specialty,” says Sandra G. Hassink, M.D., F.A.A.P, director of the Nemours Pediatric Obesity Initiative at Nemours/Alfred I. duPont Hospital for Children in Wilmington, DE, and director of the AAP Institute for Healthy Childhood Weight. “In the beginning, we knew child abuse was a problem, and it was being recognized. However, it took time for the body of work to emerge as a specialty. Obesity is following the same trajectory of other specialties that have emerged over time.”

As the health care needs of pediatric patients evolve, health care providers and hospital administrators have a responsibility to evolve with them. As advocates for children's health, children's hospitals can develop, implement and collaborate on treatment programs to help reverse childhood overweight and obesity trends:

- More than one-third of children and adolescents were overweight or obese in 2012 (Ogden, Carroll, Kit, Flegal, 2014).
- Obesity has more than doubled in children and quadrupled in adolescents in the last 30 years (Ogden, et al., 2014; National Center for Health Statistics, 2011; U.S. Department of Health and Human Services, 2012).
- Overweight adolescents have a 70 percent likelihood of becoming overweight adults (Office of the Surgeon General, 2010).

With these trends comes strong potential for significant health consequences. A 2010 Centers for Disease Control (CDC) report on studies related to consequences of childhood obesity shows obese youth are more likely to have risk factors for cardiovascular disease like high cholesterol or high blood pressure. In one study of five- to 17-year-old patients, 70 percent of obese patients had at least one risk factor for cardiovascular disease and 39 percent had two or more (Freedman, 2007).

Children and adolescents who are obese are at greater risk of diabetes, joint and bone problems, sleep apnea and asthma, as well as social and psychological problems due to low self-esteem, stigmatization (Office of the Surgeon General, 2010; Dietz, 2004) and bullying, all of which can impact performance in school and social settings and cause difficulties that can last into adulthood (Swartz, 2003).

Over the long term, these patients face increased risk of adult obesity, heart disease, stroke, certain cancers, osteoarthritis (Office of the Surgeon General, 2010), liver failure and a multitude of other chronic and potentially fatal conditions. With such a bleak outlook, many children's hospitals are directly addressing childhood overweight and obesity in their strategic plans.

“If we went back 25 years, obesity was viewed as less of a health issue and more a cosmetic, social issue,” says Stephen R. Daniels, M.D., Ph.D., pediatrician-in-chief, L. Joseph Butterfield Chair in Pediatrics, Children's Hospital Colorado. “We have learned that it has so many co-morbidities and can affect every organ system from head to toe.”

COST OF OBESITY

Childhood obesity is estimated to cost the United States more than \$14 billion annually (Brookings Institution, 2010), a figure that jumps to approximately \$168 billion when obese children become obese adults (childrennow.org). A 2007 study by Thomson Healthcare and Child Health Corporation of America projected that between 2006 and 2020, morbidities associated with childhood obesity will prompt hospitals to spend at least \$8.6 billion (in 2007 dollars) for construction of additional beds to care for these patients.

No matter what the costs, there's no denying the need. In the Children's Hospital Association's 2013 Obesity Services Survey, approximately 61 percent of respondents said childhood obesity was an area of concern on their hospital's most recent community health needs assessment.

"We are seeing type 2 diabetes in school-age patients and liver disease in pre-school patients," says Hassink. "We know these children are at risk for disease in adulthood and for adult diseases in childhood. The watch-and-wait approach no longer works."

A PARADIGM SHIFT

Much of the national discussion and programming around childhood obesity zeroes in on prevention. National programs, like First Lady Michelle Obama's Let's Move! and NFL Play 60, both of which aim to keep youth active and healthy, bask in the glow of national media attention. Countless local, spin-off programs stretch across the country, and children's hospitals nationwide maintain prevention programs of their own. While prevention is critical, a nearly solitary responsibility of children's hospitals is to treat – in coordination with the child's primary care physician – children who are already overweight or obese.

TREATING OVERWEIGHT AND OBESITY

In 2007, an expert committee convened by the American Medical Association, Department of Health and Human Services Health Resources and Services Administration and the CDC, called for a four-stage approach to weight management for patients age two to 19 years.

Stages are identified in terms of the patient's body mass index (BMI), comorbidities, parental weight status, progress in treatment to date and willingness of the family to participate.

Stage 1 – a prevention program managed by a primary care physician

Stage 2 – a structured weight management program managed by a primary care physician together with a pediatric health care provider, such as a dietitian

Stage 3 – a comprehensive intervention involving a multidisciplinary obesity care team that can provide structured monitoring, counseling and assessment at specified intervals and interventions as needed, often at a children's hospital

Stage 4 – tertiary care interventions that can include medication, very low-calorie diets or bariatric surgery

As Stage 3 multidisciplinary care providers, children's hospitals are primarily managing care for children who are obese (>95 percentile for BMI) or severely obese (>99 percentile for BMI). An increasingly evident problem is a disproportionate number of patients aren't seeking care until they are severely obese patients. Data from a 2010 Children's Hospital Association retrospective review of the 13 participating children's hospital weight management programs in the Pediatric Obesity Weight Evaluation Registry (POWER) shows:

- 61.4 percent of patients were severely obese and 35 percent were obese at presentation
- More than 90 percent of patients two to five years old were severely obese at presentation
- Nearly 75 percent of patients presented with a comorbidity

TREATMENT CHALLENGES

No matter when or how they present, countless challenges can stand in the way of effective treatment for pediatric patients who are overweight or obese. One of the most common challenges pediatric weight management programs and clinics face is attrition, with many studies reporting attrition rates greater than 50 percent (Sallinen Gaffka, Hampl, Frank, Santos and Rhodes, 2013).

In 2011, the FOCUS on a Fitter Future collaborative – sponsored by the Children’s Hospital Association – interviewed parents who prematurely withdrew their children from Stage 3 pediatric weight management programs at 13 children’s hospitals. Respondents expressed concern over flexibility with appointment times and treatment locations, citing time conflicts (50 percent), program flexibility (33 percent) and program dissatisfaction (17 percent) as reasons for discontinuing treatment (Sallinen Gaffka et al., 2013). With some weight management programs designed to see patients as often as three or more times a week, families must maintain attendance and home follow-up to help their children succeed.

Convened by the Children’s Hospital Association, **FOCUS on a Fitter Future** is a multi-disciplinary collaborative designed to study clinical pediatric weight management programs and techniques for practice improvement. The group spanned four cohorts over five years, working to develop guidance, new understanding and consensus for a coordinated medical answer as one part of the multi-sectoral challenge of obesity. Sunset at the end of 2013, outcomes from the group’s work are ongoing. Visit www.childrenshospitals.net/obesity for consensus thinking on treatment and administrative functions of hospital based weight management programs in both peer reviewed and white papers including:

- An eight-article supplement to the journal *Pediatrics* titled “Pediatric Obesity: Practical Applications and Strategies from Primary to Tertiary Care”
- Realizing the Vision: Continuity of Care for Children and Adolescents with Obesity
- Planning, Building and Sustaining a Pediatric Weight Management Program: A Survival Guide
- Advancing a Healthy Hospital Initiative
- Children’s Hospitals Respond to the Childhood Obesity Epidemic, a value piece used in public policy efforts



“The best success is when the entire family is ready to make a lifestyle change,” says Hassink, a 30-year expert and founder of the weight management program at Alfred I. duPont Hospital for Children back in 1988. “When you find out what lifestyle changes work, you help patients and their families find ways to keep it up forever, because obesity is a chronic disease.”

Like many new fields before it, the field of childhood obesity treatment and prevention is evolving and characterized by debate, differences and variety clinical pathways and protocols. Such challenges typical of a nascent field are compounded by poor reimbursement by public and commercial payors which foster instability and threaten long-term sustainability. Yet despite these challenges, children’s hospitals hold a unique position in the community and have a responsibility to meet the healthcare needs of the pediatric population, needs that with increased frequency include treatment for overweight and obesity.

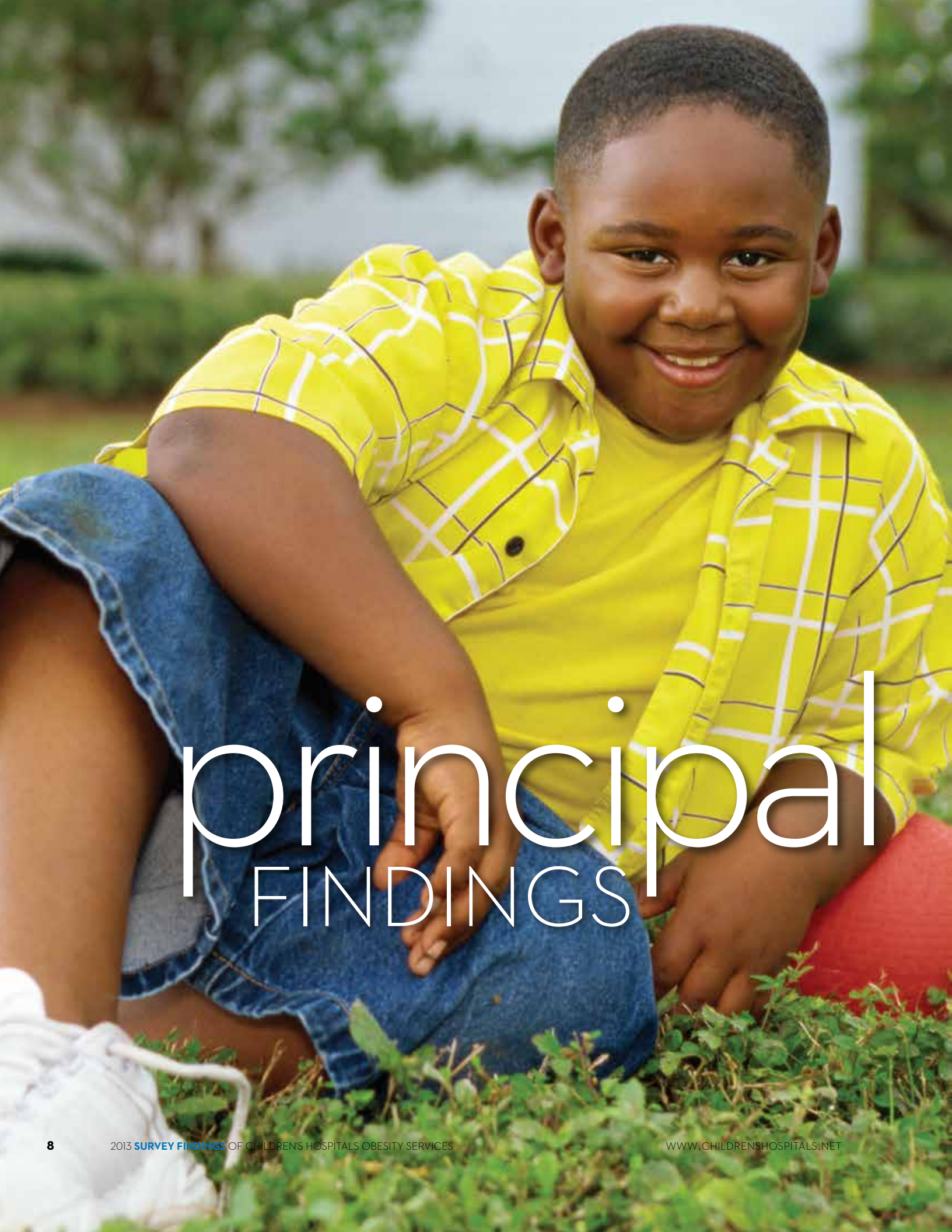
“The majority of families making at least three visits to the Center (at Dell Children’s Medical Center) find that their child’s BMI percentile improves,” says Pont. “And we continually seek to provide resources to primary care physicians in our community, which builds solid relationships and helps foster a strong allegiance to our hospital. We are committed to our patients’ health not only while they are at our center, but when they return to the communities where they live.”

In fact, Pont adds, as healthcare continues to evolve, children’s hospitals will be expected to work to improve not just individual patient health outcomes, but to improve broader community and population health as well – and few programs are as well positioned as childhood obesity centers to lead that charge.

“Promoting wellness is virtually the same thing as obesity prevention,” says Pont. “And obesity prevention and treatment approaches are on the same continuum. Obesity treatment is just more intense.”

According to Daniels, children’s hospitals should share new treatment strategies – and their results – that ensure the best care, health and future for young patients across the country.

“Different people come to different conclusions about the best way to implement treatment strategies,” says Daniels. “Treating obesity is about treating behaviors in an environment that makes those behaviors difficult to change. You need a high level of interest from the hospital and a deep commitment from the faculty to make it work.”



principal FINDINGS

PRINCIPAL FINDINGS

Summarized below are principal findings from 2013 Survey Findings of Children’s Hospitals Obesity Services. Respondents to the survey represent 118 children’s hospitals and 85 comprehensive weight management departments (Stage 3 services).

- Majority of patients seen are severely obese** The majority of patients receiving comprehensive weight management services in children’s hospitals have a BMI that classifies them as obese (31%) or severely obese (58%), demonstrating that as in other subspecialties, children’s hospitals are seeing the sickest kids.
- Caseload is increasing** Of those offering comprehensive weight management services, 60 percent report an increase in caseload over the last three years.
- Multidisciplinary, comprehensive services are the norm** Among the 85 respondents offering comprehensive weight management services, there is uniformity in what is being offered with nutrition therapy provided by nearly all respondents (99%), followed by medical assessment (92%), medical monitoring (89%), behavior counseling (86%) and exercise or physical therapy (80%).
- Weight management services are not financially self-sustaining** Most respondents (84%) report operating at a loss in 2012, with 15 percent breaking even and only 2 percent (one program) reporting operating with revenue exceeding expenses. The current payor mix for these programs, in aggregate, favors Medicaid or other public insurance (53%), with just over one third of patients using commercial insurance (35%). However, it is important to note the range that exists among hospitals, as some programs rely 100 percent on Medicaid, while others operate 100 percent self-pay programs.
- Programs believe they meet Federal recommendations** The US Preventative Services Task Force (USPSTF) recommends weight management programs offer 25 contact hours over six months for successful outcomes. Two-thirds of respondents with programs agree their Stage 3 program meets USPSTF guidelines, but there is very little uniformity in program length. In fact, only about 40 percent report offering programs of six months or longer, demonstrating the diversity in how weight management programs are designed.
- Policies for identification of obesity are lacking** The survey findings show less than half of all respondents (42%) have a policy in all hospital settings - inpatient, outpatient and primary care clinics - to identify obesity. Identification is not only important for treatment of the obesity and its co-morbid conditions, but to ensure that obese patients are receiving safe and appropriate care whatever the reason for their visit.
- Childhood obesity is an issue of community need** A majority of respondents (61%) report obesity has been identified as an area of concern on their hospital’s most recent community health needs assessment.

2013 Obesity Services Survey



The importance of pediatric overweight and obesity treatment programs is clear. Next, dive into the data on the current state of these services at children's hospitals. See how many institutions offer programs, what they look like, how they are funded and who they are treating.

RESPONDENTS

Surveys were returned from 124 respondents, representing 118 of the 218 children's hospitals contacted – a response rate of 54 percent. The majority of respondents are from children's hospitals within hospitals or systems (59%), followed by freestanding children's hospitals (34%), and specialty hospitals (6%).

The response mirrors the makeup of the Association's membership. The Association recognizes the difference in member type often reflects differences in programs, budgets and services. For that reason, some relevant charts and tables are stratified by member type to allow for easier peer benchmarking. (For complete methodology, including limitations, see page 33).

INFRASTRUCTURE FOR RESPONSE

While national data tells us obesity is prevalent in the United States, understanding the role obesity plays in our hospital's communities and the attention given to the issue within the institution is an important place to start.

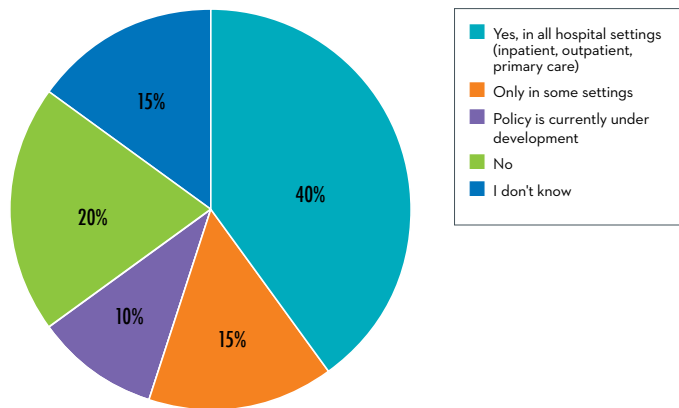
Identification of obesity is crucial for establishing a safe hospital environment and is one component of having a healthy hospital. For more information on improving your hospital environment, including patient safety resources for obese patients, visit www.childrenshospitals.net/healthyhospitals.

Respondents indicate obesity was identified as a concern on 59 percent (68 of 115) of the hospital’s community health needs assessments. Only 4 percent of respondents indicate it was not identified as an issue of concern and the remaining 37 percent did not know either way.

Obesity is incorporated into the strategic plan in 55 percent of hospitals with comprehensive weight management programs. Thirteen percent said specifically that it is not in their strategic plan, while 32 percent did not know.

Whether offering comprehensive services or not, identification of obesity is important for the safety and well-being of patients. The survey findings show less than half of all institutions (40%) (46 of 115) have a policy in all hospital settings – inpatient, outpatient and primary care clinics – to identify obesity. Fifteen percent of respondents have a policy in some settings and 20 percent don’t have one at all.

Figure 1
Identification of Obesity
(N=115)

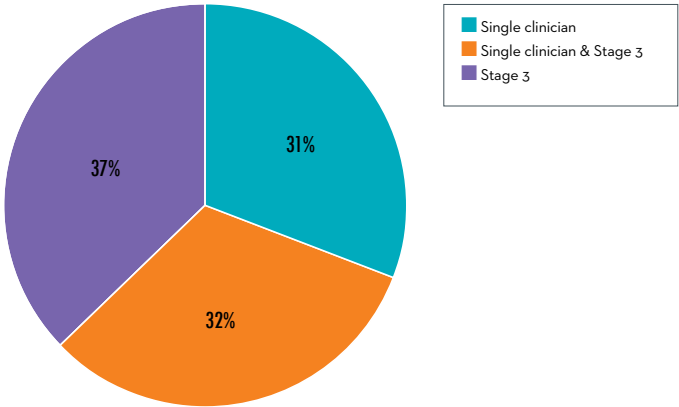


CLINICAL RESPONSE

Nearly all hospitals responding to the survey (97%) (114 of 118) offer some type of clinical services to address pediatric obesity, but there is great diversity in the type of service offered, including many hospitals offering more than one type of service.

When services are offered, single clinician services, where patients are treated for overweight or obesity with clinicians in a singular discipline – one-on-one with a dietitian or physician – are the sole type of obesity services offered by 31 percent of respondents. An additional 32 percent of respondents offer both single clinician services and those of a multidisciplinary team (Stage 3), while 37 percent only offer weight management treatment from a multidisciplinary team (Stage 3).

Figure 2:
Weight Management Services Offered
(n=114)



Obesity programs are typically described according to stages. Stages are identified in terms of the patient’s body mass index (BMI), comorbidities, parental weight status, progress in treatment to date and willingness of the family to participate.

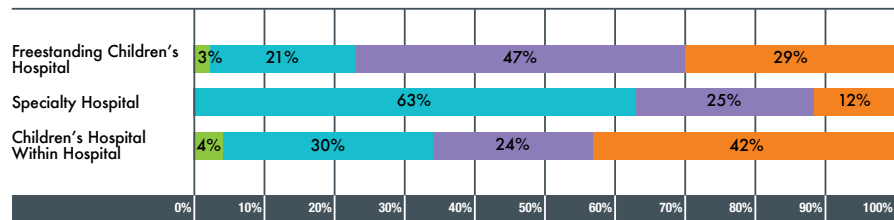
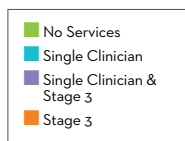
- STAGE 1 -** a prevention program managed by a primary care physician
- STAGE 2 -** a structured weight management program managed by a primary care physician together with a pediatric health care provider, such as a dietitian
- STAGE 3 -** a comprehensive intervention involving a multidisciplinary obesity care team that can provide structured monitoring, counseling and assessment at specified intervals and interventions as needed, often at a children’s hospital
- STAGE 4 -** tertiary care interventions that can include medication, very low-calorie diets or bariatric surgery

Planning, Building and Sustaining a Pediatric Obesity Program: A Survival Guide is a resource developed by FOCUS on a Fitter Future to support the development of comprehensive weight management services. Filled with practical tips ranging from articulating rationale for an obesity program to building a staff team and highlighting benefits to the institution, this guide can be found at www.childrenshospitals.net/obesity.



The survey findings demonstrate the type of services offered varies by hospital type. Single clinician services are offered by all three member types, but are most frequently the only type of weight management services offered by specialty hospitals (63%) as compared to freestanding (21%) or children’s hospitals within hospitals (30%). Freestanding hospitals are most likely to offer a combination of single clinician and Stage 3 (47%), while children’s hospitals within hospitals are most likely to only offer Stage 3 services (42%).

Figure 3:
Obesity Services by Hospital Type
(N=118)



Of the 39 respondents who offer no services or only single clinician services, 24 provided more detail on why comprehensive services are not provided:

- Four hospitals report they do not offer the services because they are allied with another provider who does.
- Nine hospitals indicate having previously offered Stage 3 services but closed the program.
- 11 hospitals plan to develop Stage 3 services within the next three years.

COMPREHENSIVE WEIGHT MANAGEMENT **SERVICES**

This findings report presents children's hospitals' comprehensive weight management response (also referred to as Stage 3). Of the 124 surveys received, 85 report offering Stage 3 services (69%) and 49 report offering Stage 4 services (40%). The 85 programs represent 79 hospitals, as five hospitals offer Stage 3 services in multiple departments and completed more than one survey.

The next several sections present an in-depth look at services offered in a Stage 3 response, the composition of teams providing services and frequency in which they are available. While the stages outlined on page 12 provide a basic framework, there is still great diversity in how hospitals structure their weight management services.

STAGE 3: CLINICS AND PROGRAMS



A comprehensive weight management response (Stage 3) can be delivered in either a clinic or program setting. For the purpose of this survey, a Stage 3 clinic and program were defined as follows:

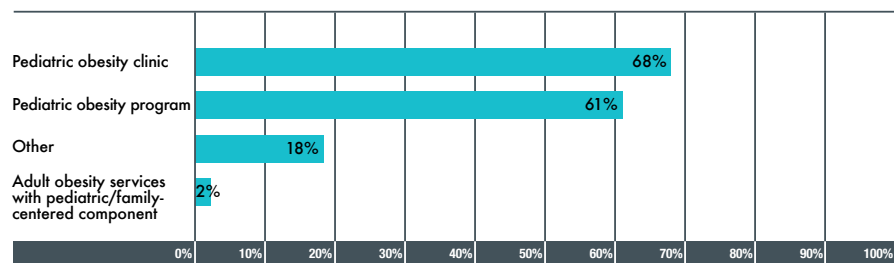
Clinic: multidisciplinary treatment offered without a defined treatment period or a specified frequency.

Program: multidisciplinary treatment following a curriculum and delivered over a specified duration of time with a specified number of visits.

Eighty five respondents report having Stage 3 services. Of those, 58 offer pediatric obesity clinics (68%), 52 offer pediatric obesity

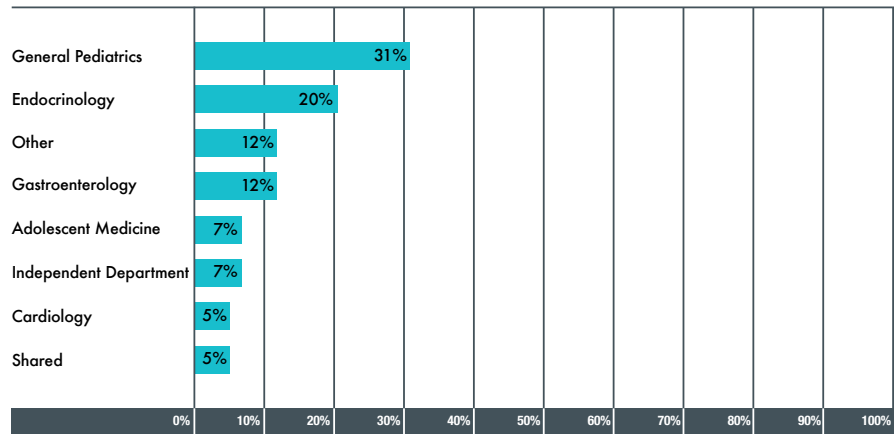
programs (61%) and two offer adult obesity services with a supplemental pediatric or family-centered component (2%). An additional 15 sites reported offering “other” Stage 3 services which include family-centered programs for parent and child, adolescent-focused services and programs offered in conjunction with community partners.

Figure 4:
Stage 3 Services
(N=85)



The “home base” departments for weight management services – whether a clinic or program – vary. General Pediatrics is the most frequently cited home base (31%), followed by Endocrinology (21%), Gastroenterology (12%) and Adolescent Medicine (7%). Weight Management is an independent department at 7 percent of responding hospitals. Further demonstrating the diversity in approach, 10 hospitals selected “other” and reported their program or clinic is housed in departments including Nutrition, Surgery, Outpatient Services, Community Outreach and Education, Pediatric Therapies, Psychiatry and Sports Medicine.

Figure 5:
Home Base Department for
Stage 3 Services
(N=84)



Leadership Support

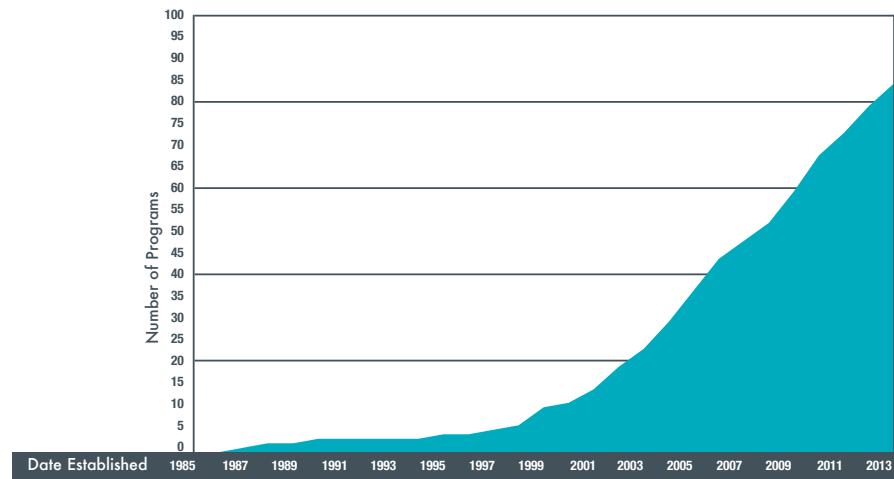
69 percent of respondents from Stage 3 programs feel they have a champion for obesity treatment within their hospital's executive or medical leadership.

fact

The role of different specialty areas within weight management teams has been examined as part of the Association’s childhood obesity webinar series. Sixty-minute webinars are available at www.childrenshospitals.net/obesitywebinars that look at the role of nurses, psychologists, registered dietitians and physical activity within weight management teams.

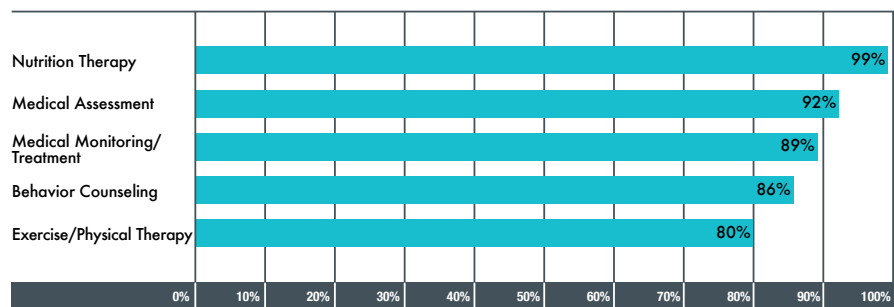
For some children’s hospitals, Stage 3 is a recent addition, with six respondents beginning services in the past year. The longest standing program reported has been in operation for 26 years. The median age of these services is seven years.

Figure 6:
Growth of Stage 3 Services
(N=82)



While the weight management field is still considered nascent, evidence shows (Barlow, 2007) a multidisciplinary approach offers the best chance of success – a strategy embraced by the overwhelming majority of respondents. Nutrition therapy is provided by nearly all respondents (99%), followed by medical assessment (92%), medical monitoring (89%), behavior counseling (86%) and exercise or physical therapy (80%).

Figure 7:
Multidisciplinary Services Offered by Programs and Clinics
(N=85)

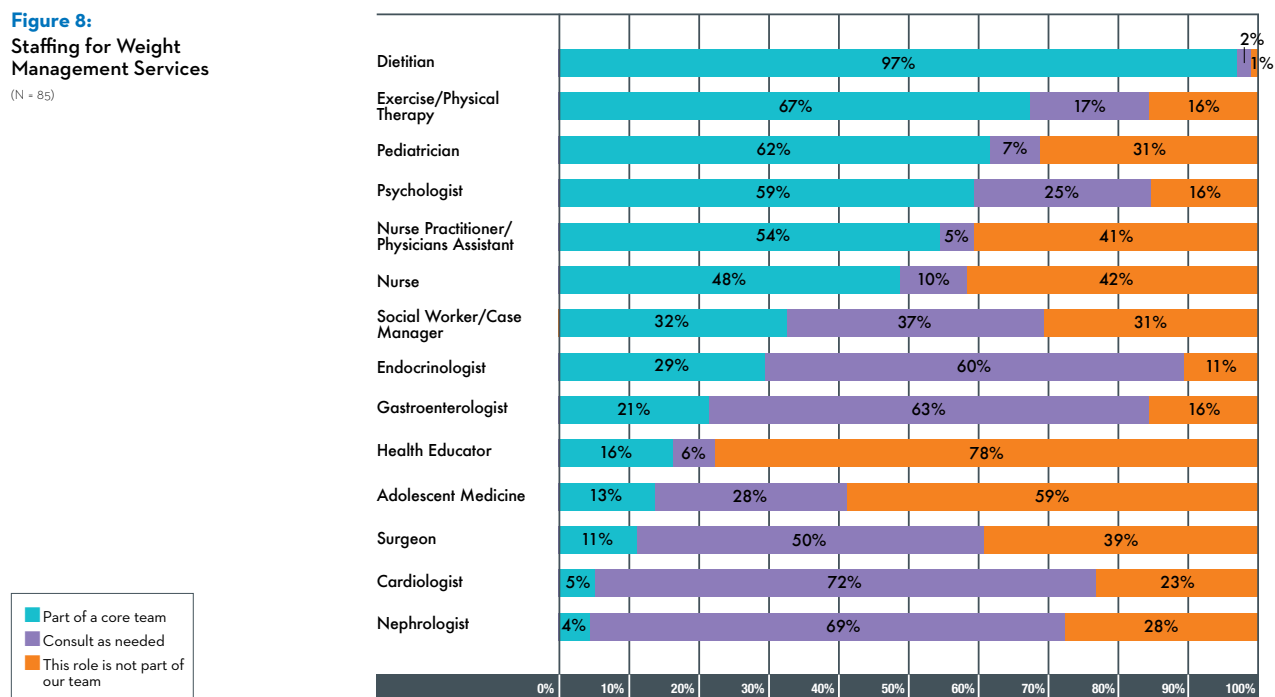


STAFFING IN STAGE 3 PROGRAMS AND CLINICS

Consistent with diverse clinical services is equal diversity in staffing size and composition. The median number of full-time equivalents (FTEs) devoted to weight management services is 2.4, ranging from .04 to 13.90. Frequently, dedicated weight management staff consult with additional specialists as needed. Specialists who are available for consult but are not part of the team were not counted as FTE. The graph below demonstrates the specialty areas most commonly found in weight management clinic and/or program teams and whether the role is part of the core team, available for consult as needed or not part of the team.

Figure 8:
Staffing for Weight Management Services

(N = 85)



Comprehensive weight management services typically include four key roles.

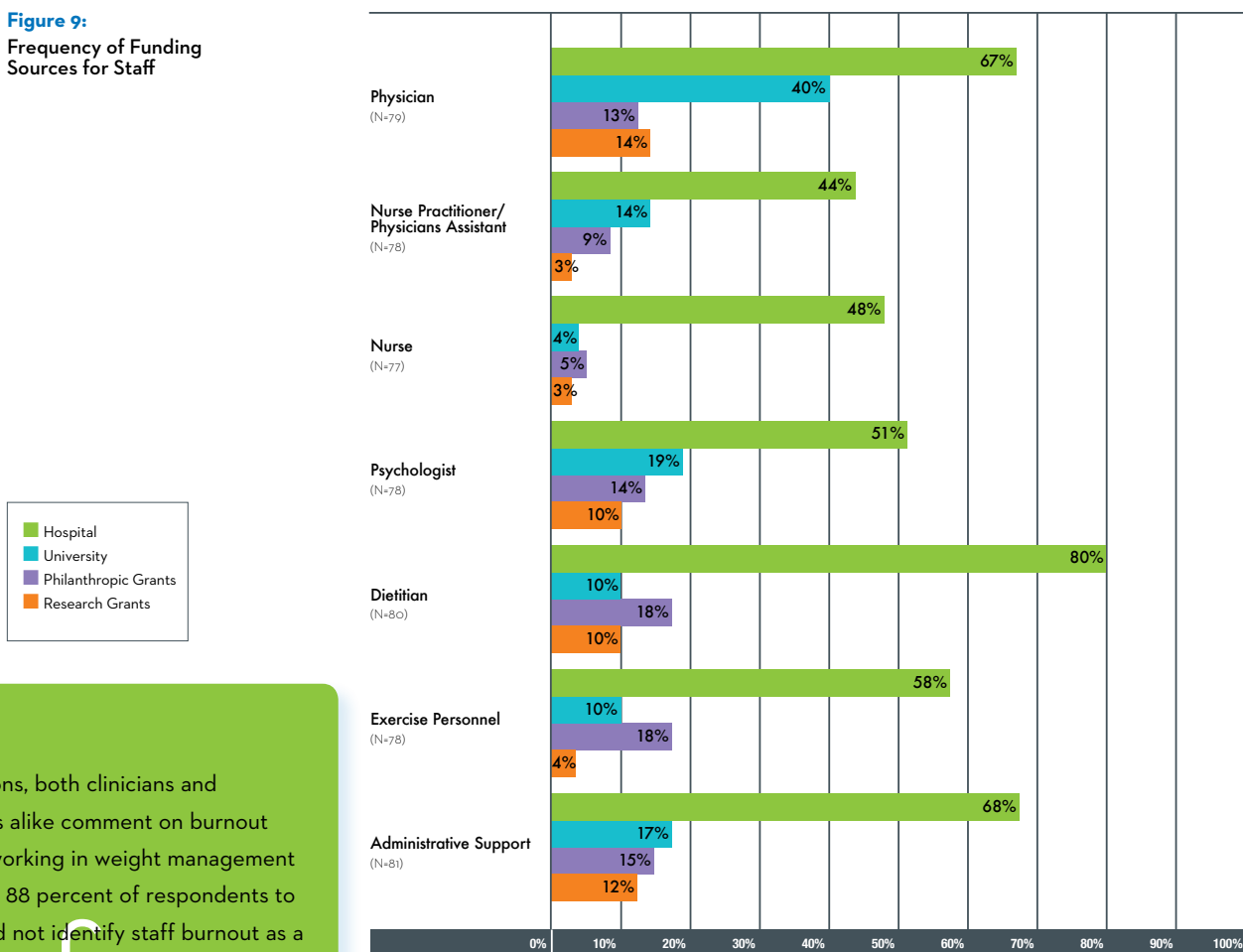
- 97 percent of teams have a dietitian
- 86 percent of teams have one or more physician
- 75 percent of teams have a mental health professional
- 67 percent of teams have a physical activity specialist

Further examination of the physician role shows:

- 59 percent of teams have one physician, 20 percent have two and 7 percent have three or more as part of the core team.
- When there are multiple physicians within the core team (two or more physicians), a pediatrician usually accounts for one (87%). The most common physician specialties on the core team include pediatrician (62%), endocrinologist (29%), and gastroenterologist (21%).
- Very few teams have nephrologists (4%) or cardiologists (5%) dedicated to the core team, but they are the most frequently cited specialty consultants at 69 percent and 72 percent respectively.
- 14 percent of teams don't have a physician as a core member of the team. One-third of those teams do have a nurse practitioner or physician's assistant as a dedicated member of the team.

Funding for staff positions across all roles primarily comes from the hospital, as seen in the chart below, with additional support coming from the university and grant funding.

Figure 9:
Frequency of Funding Sources for Staff



Staff Burnout

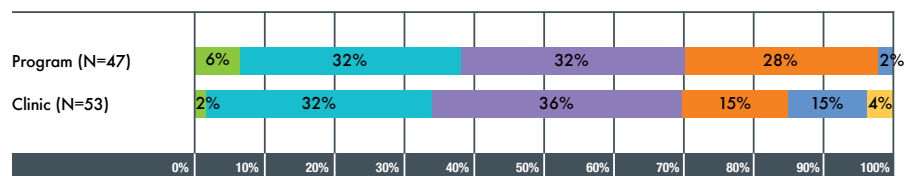
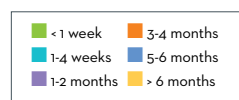
In conversations, both clinicians and administrators alike comment on burnout among staff working in weight management programs, yet 88 percent of respondents to this survey did not identify staff burnout as a problem in their team.

fact

WAIT TIME FOR STAGE 3 PROGRAMS AND CLINICS

Wait time is an issue of importance in many pediatric specialty areas and weight management programs are no different. Respondents were asked the wait time for new patients in both clinics and programs. The answers in both cases were similar, with roughly one-third of respondents reporting a one to four week wait and another third reporting a one to two month wait for both clinics and programs.

Figure 10:
Wait Time for Stage 3 Services

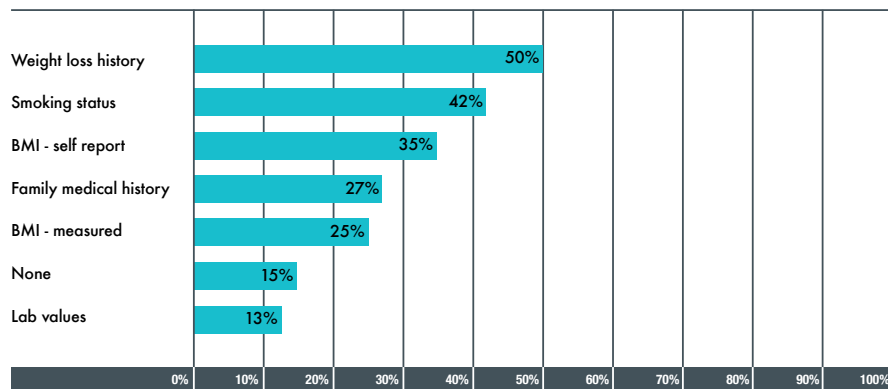


PARENTAL INVOLVEMENT IN STAGE 3 PROGRAMS AND CLINICS

Achieving a healthy weight takes effort from more than just the child; family engagement is a hallmark of weight management. This dynamic is recognized by a majority of respondents who require a parent or caregiver to participate in treatment with the patient. Sixty-seven respondents (81%) have a universal requirement in place and an additional seven sites (8%) require parent or caregiver participation if the child is under a certain age. The remaining sites (11%) do not require parental involvement.

Many sites also collect information regarding the parent or caregiver's health status. The most common information collected from parents and caregivers is their own weight loss history, as well as smoking status. One third of sites obtain a self-reported BMI from parents and a quarter measure the parent's BMI.

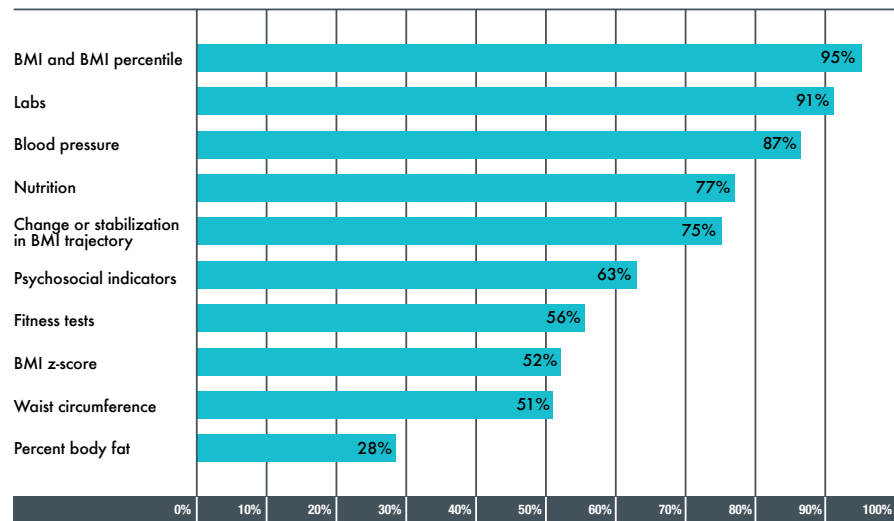
Figure 11:
Data Collected About Parents/Caregivers
(N=84)



While weight management success may be measured in pounds lost, there are many other factors that help define success and a number of additional outcomes collected and measured. The most common data point, BMI and BMI percentile, is a weight measure, but the other top items include lab work, blood pressure, change in nutrition habits, psychosocial indicators and fitness tests. The change or stabilization in the BMI trajectory is also frequently used as an outcome measure.

Figure 12:
Data Collected to
Measure Outcomes

(N=79)

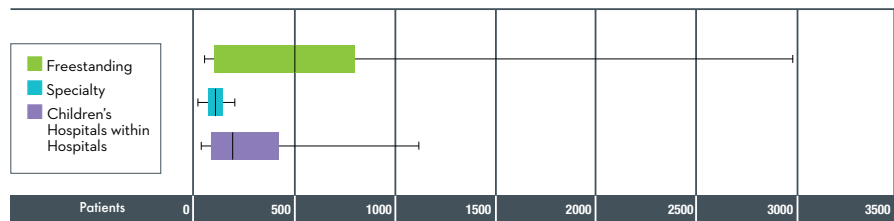


STAGE 3: CASELOAD IN CLINICS AND PROGRAMS

Survey respondents were asked to quantify their patient caseload in 2012, as well as recent trends in caseload. The 82 percent who responded report their caseload ranged from 30 to 2974 patients, with a median caseload of 201 patients.

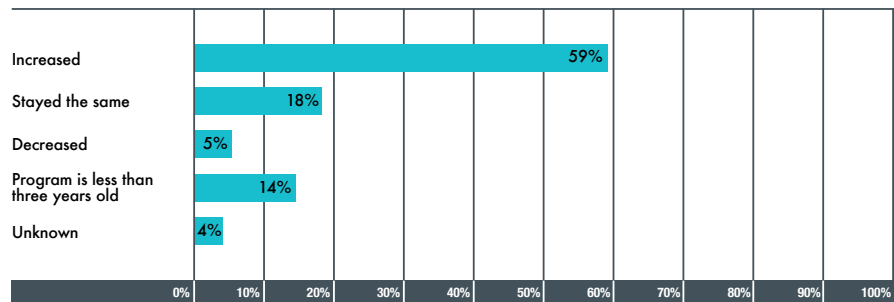
Caseload does vary by hospital type, with freestanding children’s hospitals seeing a median caseload of 500 patients, specialty hospitals seeing 116 and children’s hospitals within hospitals or systems seeing 168.

Figure 13:
Total Patients Seen for Stage 3 Services in 2012 by Hospital Type
(N=70)



When asked how caseload has changed over the past three years, 59 percent report an increase, 18 percent report no change and 5 percent of respondents report a decrease in caseload.

Figure 14:
Caseload Change
(N=8)



Respondents who indicate a change in caseload were asked if there was a particular demographic fluctuation associated with the trend. Of the 33 respondents who report a noticeable change, two areas were mentioned frequently: seven sites have seen an increase in patients under age 8 and an additional seven sites report an increase in Hispanic patients.

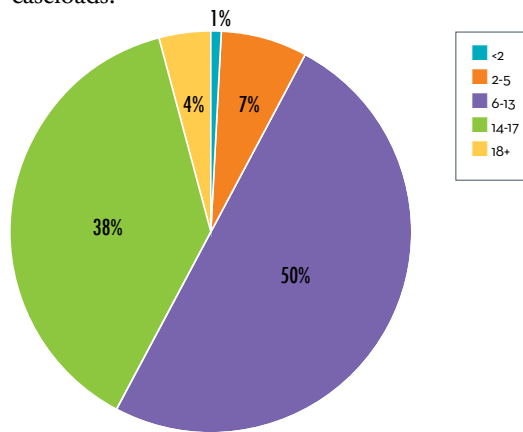
PATIENT DEMOGRAPHICS: STAGE 3 PROGRAMS AND CLINICS

The following patient demographic section contains results from 66 respondents.

Respondents report that half of the patients seen are 6-13 years old, with an additional 38 percent in the 14-17 age range. Children under five (8%) and adolescents over 18 (4%) make up much smaller portions of weight management caseloads.

Figure 15:
Patients by Age

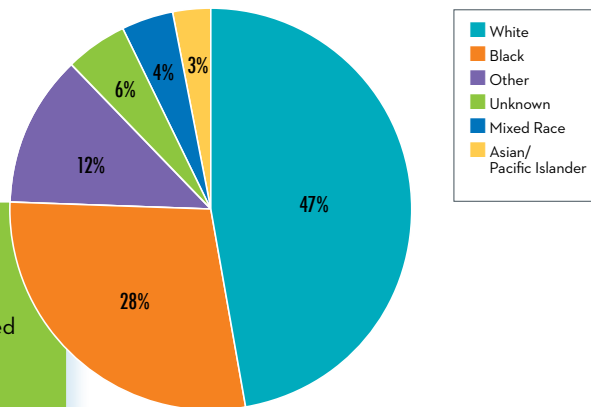
(N=66)



The primary race of patients seen is white (47%), followed by black (28%). Ethnicity was gathered in a separate question, where respondents reported that 28 percent of patients were Hispanic, while 65 percent were non-Hispanic. Ethnicity was unknown in 6 percent of patients.

Figure 16:
Patients by Race

(N=66)



National Prevalence

Data from the 2011-2012 National Health and Nutrition Examination Survey (NHANES), conducted by the CDC, indicates obesity rates (>95th percentile) among youth 2-19 years of age as: whites, 14%; blacks, 20%; and Hispanics, 22%.

fact

UNDERSTANDING BMI PERCENTILE

BMI is reported differently when measuring obesity in children and adolescents than is the practice with adults. The measurement still begins with a calculation based on weight and height, then adds a step for youth to plot that number on the CDC BMI-for-age growth charts by gender for a percentile ranking.

This percentile ranking indicates the relative position of an individual's BMI compared to their peers of the same age and sex. (CDC, 2011)

Percentile Range	Weight Status Category
BMI < 5th percentile	Underweight
BMI 5th-84th percentile	Healthy Weight
BMI 85th-94th percentile	Overweight
BMI ≥ 95th percentile	Obese
BMI ≥ 99th percentile	Severe Obesity

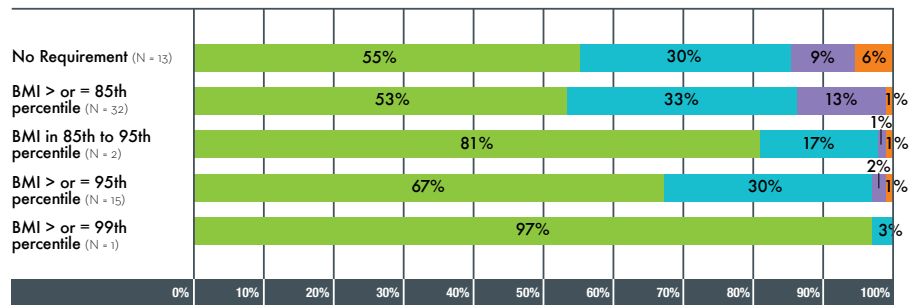
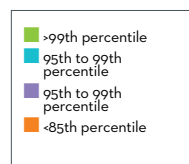
BMI PROFILE

“Overweight” is classified as a BMI above the 85th percentile and is the point when Stage 3 intervention is recommended. Nearly half of respondents (48%) require patients have a BMI above the 85th percentile to be eligible for treatment and 25 percent require a BMI at or above the 95th percentile. At the other end of the spectrum, 24 percent have no BMI restriction.

When looking at BMI distribution of patients seen in 2012 it is evident that whether a restriction is in place or not, the majority of patients receiving Stage 3 services in children's hospitals have a BMI that classifies them as “obese” (31%) or “severely obese” (58%).

Figure 17:
Relationship of BMI Distribution to Eligibility Requirements

(N=63)



Measuring BMI

A strong majority of respondents (94%) report their hospital has electronic health records, but fewer report having access to obesity-specific growth curves (77%) that are helpful tools when working with obese patients.

fact

STAGE 3: PROGRAMS

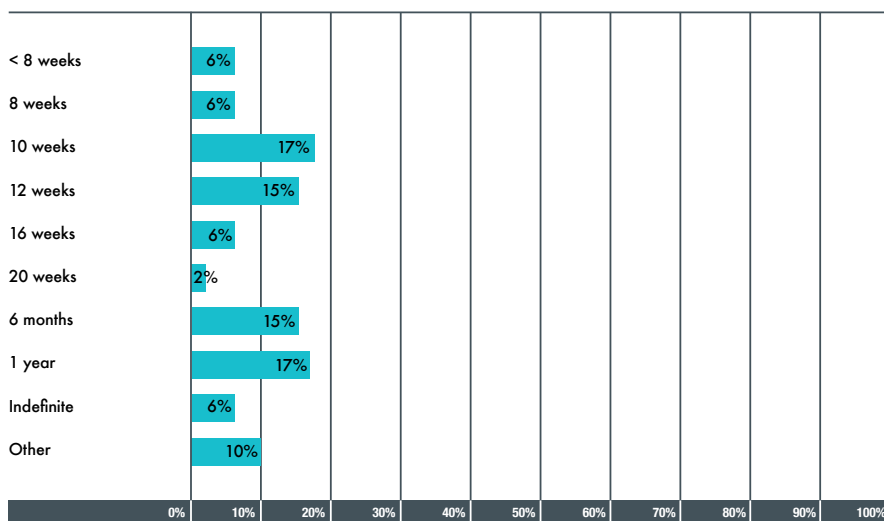
The data presented thus far represents both programs and clinics in Stage 3 services. This section looks exclusively at Stage 3 programs, those with a defined duration and curriculum. As a reminder, 52 of the 85 respondents offering Stage 3 services offer a defined program (61%).

STAGE 3 PROGRAM DURATION AND FREQUENCY

The U.S. Preventative Services Task Force (USPSTF) recommends a standard of moderate to high intensity for weight management programs, involving a minimum of 25 hours of contact with a child/family over six months. Two-thirds of those offering Stage 3 programs (66%) agree their program meets these guidelines. However, the data still shows great diversity in program structure.

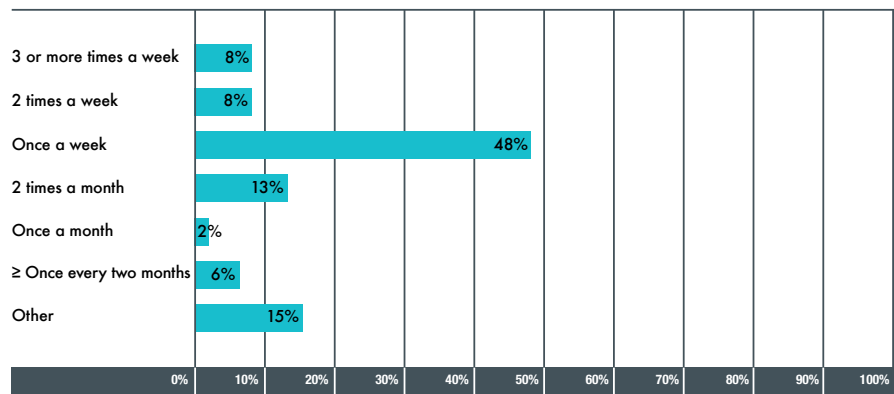
The survey did not identify a program length offered by a majority of respondents. The two most frequent responses for program length, 10 weeks and one year, were each only selected by 17 percent of respondents. Programs 12 weeks and six months in length were each offered by 15 percent of respondents. All other categories were selected by fewer than 10 percent of respondents. These data point to no majority opinion or practice in modeling program duration.

Figure 18:
Program Length
(N=48)



In contrast, the frequency of visits did show more common ground among programs, with 48 percent of respondents reporting their program is designed to see patients once a week and 64 percent seeing patients one or more times per week. There is a great deal of variety beyond that, with the next highest response category as “other” with seven dissimilar responses.

Figure 19:
Frequency of Visits
(N=48)



An area that shows program similarity is the availability of a “maintenance” or less intensive phase of treatment, with 71 percent responding “yes”. Nearly half the programs offering maintenance (46%) have no established length, allowing patients to return at will. The remaining half of respondents demonstrate great variety in duration of maintenance phases.

PATIENT RETENTION IN STAGE 3 PROGRAMS

Using a program’s own definition of enrollment and completion, respondents were asked what percentage of patients enrolled in 2012 completed the program. The average completion rate was 59 percent, with a range of 2 percent to 93 percent.

Patient Retention

The retention rate among respondents that agreed their program met the USPSTF recommendations was slightly higher than those that do not, with an average retention rate of 62 percent in programs who meet the standard versus 52% in programs that don't.

fact

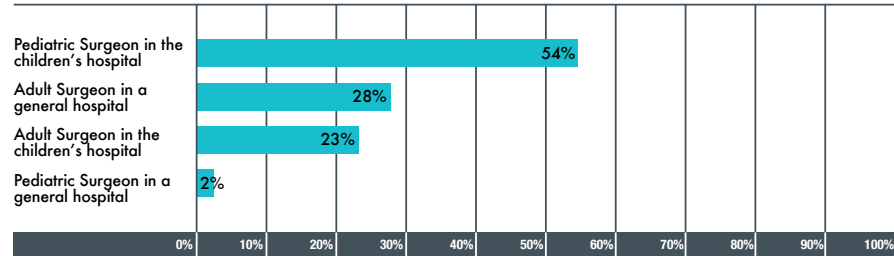
STAGE 4: SERVICES

The most intensive obesity treatment level is Stage 4, which can include bariatric surgery, medication, very low-calorie diets or inpatient hospitalization. Stage 4 services are offered by 49 of 124 respondents (39%).

Among the 49 sites offering Stage 4 services, 43 offer bariatric surgery (88%). Of those, 26 sites offer bariatric surgery as a track of the Stage 3 services, while 17 offer it through a program independent of Stage 3 services.

Slightly more than half of sites (54%) offering bariatric surgery use a pediatric surgeon in the children's hospital, while 28 percent use an adult surgeon in a general hospital and 23 percent use an adult surgeon in the children's hospital. Only 2 percent of respondents have a pediatric surgeon performing bariatric surgery in a general hospital. Some sites have more than one bariatric surgeon and respondents were able to indicate if that was the case.

Figure 20:
Bariatric Surgery
(N=43)



Other less frequently cited Stage 4 services include:

- 43 percent use prescription medication for weight loss
- 41 percent use very low calorie diets or supplements for weight loss
- 24 percent offer inpatient hospitalization with a primary purpose of weight loss

STAGE 3: PAYMENT & REIMBURSEMENT FOR CLINICS AND PROGRAMS

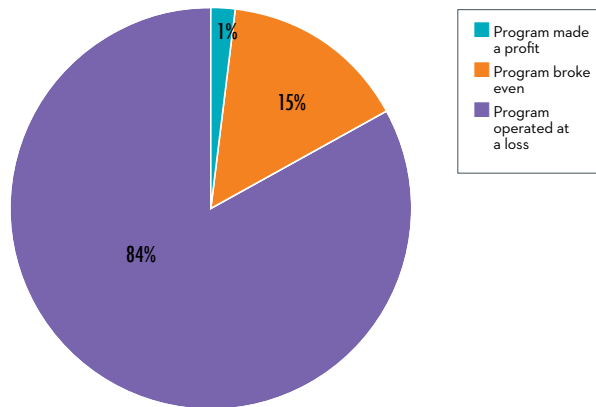
Reimbursement is a pervasive problem for children’s hospitals; weight management services are no different. In fact, the still-developing field has more challenges than many other pediatric specialty areas. Two major challenges include:

- Reimbursement rates differ for varying members of multidisciplinary teams
- Evidenced-based outcomes that payors look for to set rates don’t widely exist, further contributing to reimbursement challenges.

Reimbursement is critical and as such, 59 percent of respondents report that payment shapes how they organize their weight management practice.

The graph below demonstrates the majority of programs (84%) report operating at a loss in 2012, with 15 percent breaking even and only 1 percent (one program) reports operating with revenue exceeding expenses.

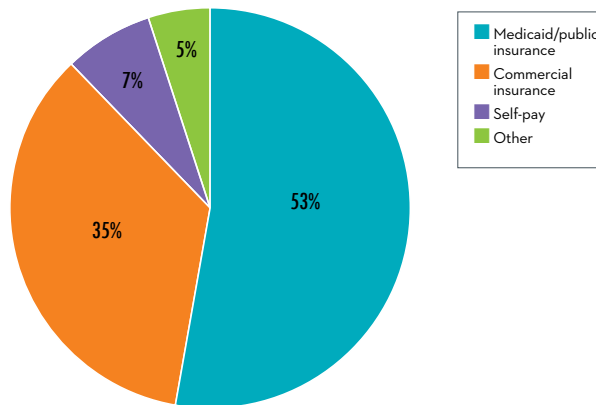
Figure 21:
Financial Status
(N=62)



For a majority of programs operating at a loss, the shortfall between expenses and revenue was covered by the hospital (82%). A shared burden between the hospital and university is indicated by 12 percent of respondents. A small minority (6%) indicate this is the university's sole burden.

In aggregate, respondents report a payor mix that favors Medicaid or other public insurance (53%), with just over one-third of patients using commercial insurance (35%). However, it is important to note the range that exists among hospitals, as some programs rely 100 percent on Medicaid, while others operate 100 percent self-pay services.

Figure 22:
Payor Mix for Weight
Management Services
(N=67)



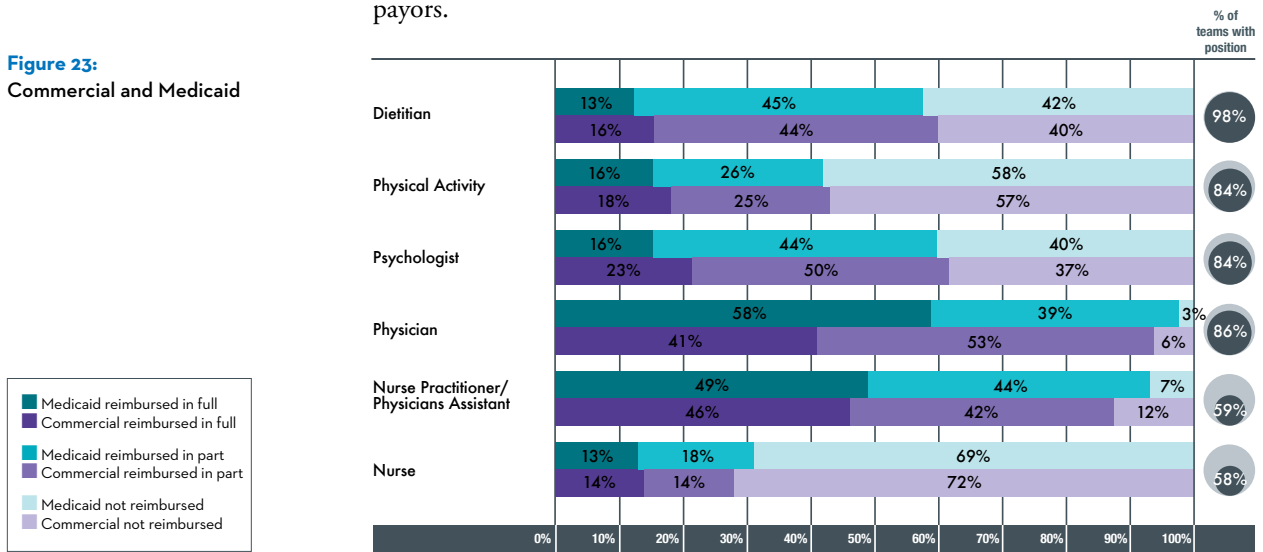
Medicaid and Obesity Payment

While this survey groups Medicaid or other public payors together, in reality, as a program jointly funded by the federal and state governments and managed by the states, Medicaid coverage of obesity services can vary dramatically depending on location. For children enrolled in Medicaid, services that are deemed medically necessary are covered through the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit. This can include obesity related services, though states have flexibility in how they interpret what services are “medically necessary.”

If you are unsure of what is covered by Medicaid in your state, or would like to advocate for expanded coverage, your hospital's government relations staff can be a great resource. Building a relationship with government relations, and sharing your patient's stories with them will help them be better advocates for your patients.

Respondents were asked which services are typically reimbursed in full, in part or not at all for each clinician on the team. The survey further broke down this payment data by payor – commercial insurance and Medicaid or other public insurance. The following chart demonstrates remarkable similarities between payors.

Figure 23:
Commercial and Medicaid



EDUCATION AND OUTREACH

While the 2013 Obesity Services Survey focuses primarily on the clinical response, there are a series of questions that look at how children’s hospitals are reacting to the obesity epidemic outside hospital walls. These questions capture data on children’s hospitals’ community education and awareness building programs.

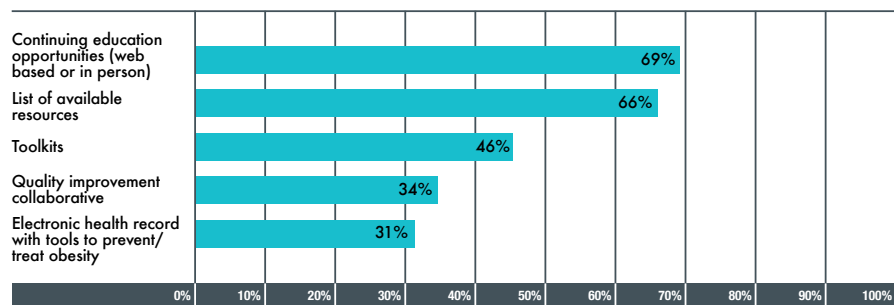
EDUCATION

Children’s hospitals have a long history of providing education, both to members of the community and the next generation of pediatric care providers. Survey respondents with established weight management services (N = 85) were asked about the educational programs and support for physicians, residents and allied health professionals.

PRIMARY CARE PROVIDERS

The vast majority of respondents (90%) provide some type of support or education to help primary care physicians improve their practice in preventing and treating childhood obesity. The type of support ranges from continuing education opportunities (69%) and resource lists (66%) to toolkits (46%) and participation in quality improvement projects (34%).

Figure 24:
Resources for Primary
Care Providers
(N=83)



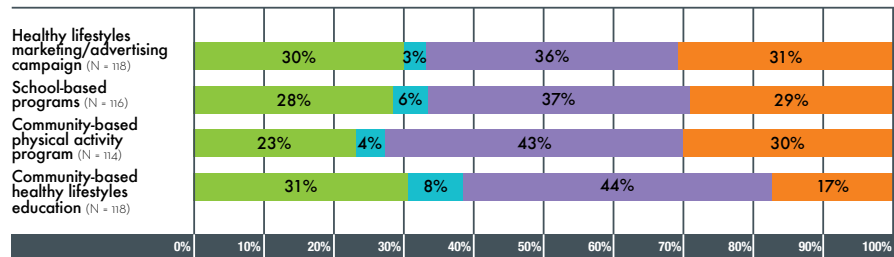
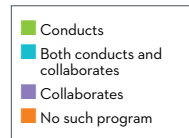
RESIDENTS AND ALLIED HEALTH PROFESSIONALS

Pediatric obesity identification, treatment and prevention training was provided to residents and hospital-based physicians (83%) and allied health professionals (62%) in 2012. The training was most frequently delivered through grand rounds or other lectures (78%). Residents received training through their standard curricula in 66 percent of responding hospitals and had the option for an elective during their residency in 45 percent. An obesity fellowship program is available at eight (12 %) of the responding institutions.

COMMUNITY EDUCATION

Survey respondents share information about the community outreach and childhood obesity education they provide. As hospitals often work in partnership with the community, respondents indicate if they conduct the work, have a role in it or do not have a program.

Figure 25:
Hospital Involvement in
Obesity Prevention



CONCLUSION



The Children’s Hospital Association’s first attempt to comprehensively map clinical response to childhood obesity among our member institutions took place in 2007. That survey was a launch point for the improvement collaborative, FOCUS on a Fitter Future, referenced throughout this report.

With the 2013 Survey of Children’s Hospitals Obesity Services, the Association seeks to bookend the five-year collaborative and begins to benchmark more broadly the children’s hospital response to obesity in children.

The data presented in this report goes a long way to answering, “Who is doing what and how?” This benchmarking is a first step to better understand what works in weight management and what programs prove to be most sustainable.

METHODOLOGY

The survey was fielded using Survey Monkey during September and October 2013. An obesity program director for each member hospital was identified and confirmed prior to the survey launch. The survey was sent to a designated hospital administrator if an obesity program director could not be identified. Three follow-up reminder emails were sent to non-responding hospitals after the initial invitation.

The survey content was developed by Children’s Hospital Association staff with significant input from a member advisory committee. The committee included representation from all member hospital types – freestanding, hospitals within hospitals and specialty. The advisors had diverse clinical backgrounds, representing the disciplines most commonly found in pediatric weight management programs. The survey was pilot tested by the advisory committee and modified for clarity and scope prior to implementation.

Data was exported from Survey Monkey to Statistical Product and Service Solutions (SPSS) for analysis. A total of 125 responses were received from 118 institutions. Multiple responses came from hospitals that operate more than one Stage 3 weight management program. The 118 responses were from 218 institutions contacted, a response rate of 54 percent. The respondents were from 41 states and Washington, DC and representative of Association membership – 67 percent from children’s hospitals within hospitals, 37 percent from freestanding children’s hospitals, and 7 percent from specialty hospitals. This is comparable to the percentage of Association hospitals in each category.

LIMITATIONS

The Children’s Hospital Association is a voluntary membership association and the survey data are responses from Association members and cannot be generalized to all children’s hospitals. The survey findings may be influenced by respondent bias. Respondents with well-developed weight management services may have been more motivated to complete the survey than those hospitals with a less structured approach to childhood obesity. Additionally, respondents who have had prior involvement in the Association’s childhood obesity activities may have been more likely to respond.

DEFINITIONS

For purposes of analysis in this report, respondents were grouped into one of three hospital types based on clinical services provided, recognition as a primary teaching site and governance structure.

Freestanding children’s hospital: Self-governing children’s hospitals that care for patients with conditions normally requiring a stay of less than 30 days.

Children’s hospitals within hospitals: Medical institution with integral children’s services that is part of another hospital or hospital system

Specialty children’s hospital: Self-governing, long stay and independent hospitals that treat children with chronic or congenital conditions, generally rehabilitation, burn and orthopedics.

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ABOUT THE CHILDREN'S HOSPITAL ASSOCIATION

The Children's Hospital Association advances child health through innovation in the quality, cost and delivery of care. Representing more than 220 children's hospitals, the Association is the voice of children's hospitals nationally. The Association champions public policies that enable hospitals to better serve children and is the premier resource for pediatric data and analytics, driving improved clinical and operational performance of member hospitals. Formed in 2011, Children's Hospital Association brings together the strengths and talents of three organizations: Child Health Corporation of America (CHCA), National Association of Children's Hospitals and Related Institutions (NACHRI) and National Association of Children's Hospitals (N.A.C.H.). The Children's Hospital Association has offices in Washington, DC and Overland Park, KS.

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