Perspectives on Obesity Programs at Children's Hospitals: Insights From Senior Program Administrators

abstract

OBJECTIVE: The obesity epidemic has resulted in an increasing number of children needing multidisciplinary obesity treatment. To meet this need, pediatric obesity programs have arisen, particularly in children's hospitals. In 2008, the National Association of Children's Hospitals and Related Institutions (NACHRI) convened FOCUS on a Fitter Future, a group drawn from NACHRI member institutions, to investigate the needs, barriers, and capacity-building in these programs.

METHODS: Senior administrators of the 47 NACHRI member hospitals that completed an application to participate in the FOCUS group were invited to complete a Web-based survey. The survey targeted 4 key areas: (1) perceived value of the obesity program; (2) funding mechanisms; (3) administrative challenges; and (4) sustainability of the programs.

RESULTS: Nearly three-quarters of the respondents reported that their obesity programs were integrated into their hospitals' strategic plans. Obesity programs added value to their institutions because the programs met the needs of patients and families (97%), met the needs of health care providers (91%), prevented future health problems in children (85%), and increased visibility in the community (79%). Lack of reimbursement (82%) and high operating costs (71%) were the most frequently cited challenges. Respondents most frequently identified demonstration of program effectiveness (79%) as a factor that is necessary for ensuring program sustainability.

CONCLUSIONS: Hospital administrators view tackling childhood obesity as integral to their mission to care for children. Our results serve to inform hospital clinicians and administrators as they develop and implement sustainable pediatric obesity programs. *Pediatrics* 2011; 128:S86–S90

AUTHORS: Ihuoma Eneli, MD, MS,^a Victoria Norwood, MD,^b Sarah Hampl, MD,^c Michelle Ferris, LCWS,^d Trillium Hibbeln, MEd,^e Kellee Patterson, MPH,^a Maureen Pomietto, MN, RN,^f and Sandra Hassink, MD^g

^aCenter for Healthy Weight and Nutrition, Nationwide Children's Hospital, Columbus, Ohio; ^bDepartment of Pediatric Nephrology, University of Virginia, Charlottesville, Virginia; ^cGeneral Pediatrics and Weight Management, Children's Mercy Hospitals and Clinics, Kansas City, Missouri; ^dChildren's Medical Center Dallas, Dallas, Texas; ^eAdministration, Helen DeVos Children's Hospital, Grand Rapids, Michigan; ^fObesity Treatment Program, Seattle Children's, Seattle, Washington; and ^gNemours Obesity Initiative and Department of Pediatrics, Alfred I. duPont Institute, Wilmington, Delaware

KEY WORDS

administrator, obesity programs, children

ABBREVIATION

NACHRI—National Association of Children's Hospitals and Related Institutions

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Address correspondence to Ihuoma Eneli, MD, MS, Center for Healthy Weight and Nutrition, Nationwide Children's Hospital, 700 Children's Dr, Columbus, OH 43205. E-mail: ihuoma.eneli@nationwidechildrens.org

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In response to the obesity epidemic, pediatric obesity programs have arisen within health care settings, particularly at children's hospitals. Approximately half of all children's hospitals across the United States provide some type of obesity program.¹ Although obesity care might not have been a core competency of children's hospitals 25 years ago, it is quickly gaining traction as a necessary part of services offered by children's hospitals. Currently, the *U.S. News & World Report* survey that determines the "top 30 children's hospitals" includes questions on whether the hospital has a multidisciplinary weight-management clinic and/or obesity program.² The 2007 Expert Committee, convened by the US Department of Health and Human Services and the American Medical Association, proposed that multidisciplinary obesity programs that offer intensive lifestyle intervention, very low-calorie diets, and bariatric surgery are needed.³ These treatment modalities are reserved for children with a BMI at the >95th percentile and significant comorbidities, children who have not responded to previous diet, physical activity, and behavioral interventions, and children who have a BMI at the >99th percentile.³

Although demand for obesity-management programs is high, there are numerous challenges to developing and sustaining a program. These challenges include the cost of a large number of clinic personnel, the intensity of interventions, lack of reimbursement for multidisciplinary care, attrition rates, additional expense for specialized furniture and physical space, and identifying appropriate clinical and administrative outcome measures. To understand and address the challenges and build support and capacity for pediatric obesity management, the National Association of Children's Hospitals and Related Institu-

tions (NACHRI) convened FOCUS on a Fitter Future. Each participating multidisciplinary hospital team in the FOCUS group identified a designated medical champion who had primary responsibility for the program and a senior-level hospital administrator as the executive sponsor for the team.

Within the NACHRI FOCUS group, participants identified the initial step in building a viable and sustainable obesity program as a clear understanding of the expectations from their senior administrators. However, a common challenge for programs is a misalignment of program expectations between program staff and administrators. Most program champions have expertise in patient care and tracking clinical outcomes but might poorly grasp the business implications of their program, such as efficient use of personnel, program capacity, reimbursements, and financial viability. However, administrators tend to expect clinical or program outcomes that cannot be supported by the current state of practice for childhood obesity interventions. Our study objective was to examine the perspectives, challenges, and expectations of senior administrative personnel involved in a hospital-based pediatric obesity program. Although these expectations might vary on the basis of the unique circumstances of each hospital and program, there are common and recurring themes in how senior-level administrators collectively view the sustainability of obesity programs.

METHODS

Executive sponsors of the 47 NACHRI member hospitals that completed an initial application to participate in the FOCUS group were invited to complete a brief Web-based survey. The survey targeted 4 key areas: (1) perceived value of the obesity program; (2) funding mechanisms; (3) administrative

challenges; and (4) sustainability of the programs.

Summary statistics were generated for all variables of interest. Statistical significance for bivariate categorical data (eg, program characteristics, length of program, funding sources, program challenges, perception of value added by program, and job title of respondents) was assessed by using the χ^2 or Fisher's exact test. All analyses were performed with SAS 9.1 software (Research Triangle Park, NC).

RESULTS

Seventy-two percent (34 of 47) of the executive sponsors of the 47 NACHRI member hospitals that met the selection criteria completed the survey. Of the 47 hospitals, 42% of the obesity programs were under the auspices of the general pediatrics or ambulatory departments, and 55% were in a subspecialty division. Twenty-six percent of the respondents were chief executive officer/chief operating officer/president, 21% were vice president, and 50% were section chief. The length of time the programs had been in existence varied; 36% had existed for <2 years, 42% for 2 to 6 years, and 21% for >6 years. Programs within freestanding children's hospitals were more likely to have been in existence for >6 years compared with programs within specialty children's hospitals (eg, pediatric rehabilitation hospitals or hospitals within a larger health system or hospital) (100% vs 0%; $P = .03$).

Nearly three-quarters of the respondents reported that their obesity programs were integrated into their hospitals' strategic plans, and 79% ranked the obesity program as "very important" or "important." According to the respondents, obesity programs added value to the institutions, because they met the needs of patients and families (97%); met the needs of health care providers (91%); prevented future

TABLE 1 Reported Challenges Facing Obesity Programs

Challenge	n (%)
Lack of reimbursement	29 (85)
High operating costs (overhead)	24 (71)
Inadequate space/facility	19 (56)
Not financially viable	14 (41)
Lack of demonstrable outcomes	12 (35)
Personnel problems	5 (15)
Poor patient recruitment	5 (15)
Inadequate expertise	2 (6)
Lack of leadership	2 (6)
Lack of support from board or top administration.	1 (3)

Respondents were asked to select every applicable answer.

health problems in children (85%); and increased visibility in the community (79%). Lack of reimbursement (82%) and high operating costs (71%) were the most frequently cited challenges (Table 1). Newer programs were more likely to report lack of demonstrable outcomes as a challenge (Fig 1). Institutional support (75%) and clinical revenue (72%) formed the bulk of program financial support (Fig 2). Only 3 (8%) of the programs were funded solely by clinical revenue, whereas 15 (42%) had ≥ 3 funding sources. Of the 3 programs that were self-sufficient on clinical revenue, 1 had been in existence for <2 years, whereas the other 2 had been operational for 2 to 6 years. One program only had an inpatient obesity service for children admitted with serious comorbid conditions.

DISCUSSION

Children's hospital administrators reported benefits of an obesity program related to the universal children's hospital mission of providing service to children and communities. These results suggest that senior hospital administrators view tackling childhood obesity as integral to their mission to care for children, which is an encouraging finding. These programs fulfill a community need, but they tend to be poorly reimbursed and have significant overhead costs. Indeed, inade-

FIGURE 1

Program outcomes to ensure sustainability identified by administrators. Source: Perspectives on Obesity Programs at Children's Hospitals Survey.

FIGURE 2

Lack of demonstrable outcomes compared with age of the program. Source: Perspectives on Obesity Programs at Children's Hospitals Survey.

quate reimbursement for services was the most frequently cited challenge. More than a decade ago, the median reimbursement rate for children enrolled in a children's hospital weight-management program was only 11%.⁴ Although there have been improvements in reimbursements, they are not universal.⁵ Insurers balk at covering obesity-related services and cite lack of evidence-based treatments, variability in outcome measures, and poor or short-term treatment outcomes that are not sustainable.⁶ This might change on the basis of the re-

cent US Preventive Health Services Task Force report, which showed that multidisciplinary obesity treatment is effective.⁷ In its systematic review, BMI declined by 1.9 to 3.3 units 6 to 12 months after moderate- to high-intensity programs, which is a clinically significant effect that indicates a longer-term benefit.

With the large number of personnel and intensity of interventions, pediatric obesity programs usually have high operating expenses.⁸ These expenses are exacerbated by low recruitment

rates or high rates of attrition typical of obesity programs.⁸ High attrition rate is linked to poor quality of care, lack of insurance coverage, inconvenient time or location, and program length.^{9,10} Patients and their families often list poor insurance coverage as a reason for program dropout.¹⁰ Given that 71% of administrators identify high operating costs as a challenge, program staff need to understand and create a business plan that maximizes efficiency and reduces cost.

Only 24% of the respondents cited downstream revenue as a value added, which suggests that in the prevailing difficult reimbursement environment, most administrators are aware that financial return on investment is not the short-term goal. This perspective is especially relevant given that obesity programs largely depend on institutional support. Hospitals need to develop a long-term plan to ensure financial sustainability of their programs and to collectively push for a national framework for improving insurance reimbursement for obesity care. The 3 programs that reported that they were financially sufficient on clinical revenue present an opportunity for further case study. Information garnered from future structured interviews of these programs will be exceedingly helpful to hospitals and clinicians who are contemplating starting a stage 3 program. In addition, identifying characteristics common to programs in existence for >6 years will offer valuable insights on how programs can be sustained in different clinical and administrative settings.

Senior administrators most commonly cited demonstration of program effectiveness, an outcome largely under the control of the program team, as the outcome that would ensure a program's sustainability. This belief seems to be in line with the feelings of

patients and their families. Quality of care has repeatedly been cited as the most important factor influencing program retention.^{9,11,12} However, program effectiveness might be difficult to demonstrate. Extant literature suggests that, although improvements in lipid profile, blood pressure, and insulin resistance might occur, the decline in BMI associated with weight-management programs tends to be small.^{13–17} In addition, inadequate patient and family engagement and high attrition rates in programs decrease the chances for them to have significant positive outcomes. Demonstration of program effectiveness might be of particular concern for programs in existence for <2 years. Young programs might not adequately plan for the personnel and financial resources needed to track and analyze program outcomes. Administrators should be aware of these barriers when evaluating the success of a program, especially during the first 2 years. Future studies will need to examine the relationship between financial viability, institutional support, demonstrated clinical effectiveness, and sustainability.

As conducted, this survey had some potential drawbacks. We were unable to determine the characteristics of obesity programs at the hospitals that did not respond to the survey. Limiting our study population only to member hospitals of the NACHRI that applied to be part of the FOCUS group affects generalizability of the study. Because application to the FOCUS group required the support of a senior administrator, our findings might represent a more favorable impression from administrators than actually exists in other programs. The survey did not obtain feedback from the administrators about individual-level data on outcomes or the financial viability of the programs in their own institutions. We expected that most administrators

would answer the questions from their general experiences with their programs, which was the objective of the study. Finally, our results do not reflect the views by administrators at non-hospital-based pediatric facilities with programs or adult programs that treat adolescents.

Nonetheless, to our knowledge, this study is the first to provide some insight on how administrators perceive pediatric obesity programs within the scope of a complex health care environment. Clearly, administrators are critical to any obesity program, and a program's survival relies on their support. By understanding the perspectives of these administrators, program champions can better communicate the benefits and barriers to program success and improve the likelihood of continued administrative and institutional support. Likewise, administrators can use the feedback shared by their colleagues toward improving their program's effectiveness and sustainability.

CONCLUSIONS

It is the responsibility of children's hospitals to embrace the care of the obese child as integral to their mission and strategic vision. To achieve this goal, hospital administrators must recognize and support the multidisciplinary team of health care professionals in the continuum of care for the obese child. Hospital administrators acknowledge that obesity programs can satisfy multiple and valuable institutional strategic objectives, which is encouraging as we address the burgeoning number of obese children in the United States. Our results will enhance understanding and communication between program champions and their administrators and strengthen the quality of care in and viability and sustainability of pediatric obesity programs.

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