



# qualitycourier

## The results are in! Outcomes from the Childhood Overweight and Obesity Study

### Introduction

As announced in the spring 2008 Quality Courier, Mercer Government Human Services Consulting (Mercer), a part of Mercer Health & Benefits LLC, the State's External Quality Review Organization, began a study, at the request of Division of Medicaid & Medical Assistance (DMMA), to evaluate the pediatric weight assessment and management practices of clinicians caring for Medicaid and CHIP clients. Over 150 clinicians throughout the State of Delaware participated in the study and more than 250 medical records of children and adolescents aged 2 - 18 were reviewed.

State of Delaware	2005	2007
Percentage of obese high school students	14.1	13.3
Percentage of overweight high school students	15.1	17.5

Source: Robert Wood Johnson Foundation, "F as in Fat", 2007, and 2008 reports from Trust for America's Health



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## Outcomes from the Childhood Overweight and Obesity Study *continued from page 1*



	Number of providers with EPSDT services during 2007	Number of members with EPSDT services performed in 2007
Total	434	24,343
Initial sample plan (95% CI & 5% ME)	205	379
Final sample (95% CI & 6% ME)	166	300

In addition to the medical record review, nurse abstractors met and interviewed clinicians and office staff. This process helped to gather additional information about the tools, processes, barriers and successes of implementing the American Academy of Pediatric (AAP) evidence-based guidelines for the screening and treatment of overweight and obesity into the provider practice setting.

**Calculation of BMI was performed only 40% of the time, although enough data existed to calculate BMI percentiles 92% of the time.**

The study's pertinent findings and recommendations include further support in developing programs and initiatives to support resource identification, provider educations and tools, member and community outreach and review of Medicaid benefits and reimbursement policies associated with the screening and treatment of pediatric and adolescent overweight and obesity services.

### Study design

To ensure a collaborative process, DMMA utilized key stakeholders to help guide the study development. Individuals from the State's managed care organizations, the Division of Public Health, Division of Child Mental Health, Nemours and the Medical Society of Delaware participated in a series of work group meetings throughout the design, implementation, data collection and analysis process of the study.

Mercer employed a multi-stage random sample to identify clinicians and patients for participation into the study. The methodology provided a final sample size that allowed for statistical inference at a 95% confidence level and a 6% margin of error. Of the 166 providers who participated in the study, a total of 49 randomly sampled interviews were conducted. It should be noted that the raw number  $n = 49$  provides a 90% confidence interval and 10% margin of error. While 300 charts were abstracted, the total number of charts received (meeting the 2 - 18

years of age requirement) with sufficient information to be included into the review was 290 charts. This change from the final sample plan did not affect the confidence interval level or the margin of error.

### General results

Documentation of weight and height are necessary to calculate an individual's Body Mass Index (BMI). In addition to weight and height, age and gender must also be captured in order to appropriately determine the BMI percentile. Based on the results of medical record review, it can be concluded that providers are capturing the necessary objective data in a consistent fashion, to calculate a child or adolescent's BMI and BMI percentile. However, physicians did not routinely utilize the objective data they collected to calculate a patient's BMI. In fact, calculation of BMI was performed only 40% of the time, although enough objective data existed to correctly calculate BMI percentiles 92% of the time.

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## Documentation of Risk Factor Data

Indicator	Description	2008 rate
1	Percentage of children/adolescents who had their age documented	100%
2	Percentage of children/adolescents who had their gender documented	100%
3	Percentage of children/adolescents who had weight documented	98%
4	Percentage of children/adolescents who had height documented	92%
5	Percentage of children/adolescents who had BMI documented	40%
6	Percentage of children/adolescents documented as being overweight or obese in the medical record	13%
7	Percentage of children/adolescents who had blood pressure documented	82%

Risk level stratification can be determined based on assessment of current medical conditions, assessment of family history and routine lab work. According to current guidelines, risk should be thoroughly assessed through obtaining a focused history of the patient and their family as well as assessment of the patient’s activity patterns, eating behaviors and lab work, if appropriate. Of the 184 children/adolescents who were categorized as “within normal range”, 37% (or 68/184) were assessed to have some type of risk factor. Furthermore, of the 36 children/adolescents categorized as being overweight, 53% (or 19/36) were assessed as having risk factors. The above statistics represent values calculated by the nurse abstractors based off of the objective criteria noted in the chart and not off actual provider documentation, as provider documentation of BMI risk level was absent over 84% of the time.

During the focused interview component of the study, clinicians stated that they were knowledgeable of the AAP guidelines and used them for screening and treatment of overweight and obesity within their practice. However, there was definite disparity between what clinicians perceived as being the application of the AAP guidelines within their practice and what the chart review actually demonstrated.

It is recognized that many barriers exist to the implementation and consistent application of evidence-based guidelines. To help understand and develop actions to address those issues, clinicians were asked for their perceptions of the biggest barriers.

**There was a definite disparity between what clinicians perceived as being the application of the AAP guidelines and what the chart review actually demonstrated.**

They were described as follows:

- Non-compliance with dietary instructions by parents and children
- Language/ethnic and cultural barriers
- Transportation issues
- Appointment access for weight management specialists and weight management programs
- Lack of safe exercise areas
- Monetary concerns

These same barriers were reiterated when clinicians were asked if Medicaid members had different needs when screening and implementing treatment for overweight and obesity. The table on the next page summarizes the barriers indicated by point of attribution.

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## Barriers by Point of Attribution

Society/Community	Provider/Healthcare system	Patient/Family
Transportation	Scheduling at convenient times	Compliance
Food advertisement	Time to spend with patient/families	Money
Economy	Lack of referral resources	Parental role models
Cultural	Long wait for specialty programs	Lack of family involvement
Lack of safe place to exercise	Communication between specialty programs	Motivation of patient and family
Language barriers		Lack of time
		Lack of information
		No family meals and/or healthy menu

### Study recommendations

As a result of the information attained during the medical record review and during the focused interview sessions, Mercer developed a set of recommendations. The primary recommendation of this study was to continue the Stakeholder group through which a large constituency has already been convened and was capable of addressing a broad array of interventions focused on improving the screening, assessment and treatment of childhood overweight and obesity within the State of Delaware.

### The primary recommendation of this study was to continue the Stakeholder group.

Additional recommendations included the creation of work groups specifically tasked to address five critical areas identified by the study:

- Resource and access to weight management services
- Provider education and tools
- Member and community outreach and tools
- Benefits and reimbursement
- Evaluation, reporting and metrics

Since the writing of the report, DMMA has worked with the Stakeholder group to identify work group chairs and committee members to review recommendations and develop appropriate plans and actions to address the study findings. Additionally, these work groups have become subcommittees of the Quality Initiatives Task Force which will review progress of the groups.

Please contact Debbie Anderson at 602 522 8579 if you would like to obtain a copy of, or more information about, the study or if you would like additional information on how to participate in one of the Committee work groups. ■

## Quality Improvement Initiatives task force update

The Quality Improvement Initiatives (QII) task force convened on October 23, 2008, December 4, 2008, and January 22, 2009.

During the October meeting, an update was given to the group regarding the State's prescription drug utilization review program. It was announced that, as of October 17, 2008, the criteria changed for allergy medications, with the first line agent now being Claritin®. In order for other allergy medications to be authorized, the patient must have asthma as a diagnosis.

Additionally, two presentations were given to the group in October:

- **Long-Term Care (LTC) Inter-Rater-Reliability (IRR) for Reimbursement and Pre-Screening** – An IRR quality activity was completed for both Reimbursement and Pre-Screening. For Reimbursement, it was found that the LTC unit achieved 94.70% accuracy in 2006 and 98.99% accuracy in 2008, which was well above the 90% goal. For the Pre-Screening IRR quality activity, it was found that the pre-screening IRR team had 100% accuracy in determination of level of care and has improved from 90.41% on the first IRR to 95.10% in the second. The LTC unit will continue with three reviews per year to ensure that each county has undergone a review.

- **Trauma Focused Cognitive Behavioral Therapy** – An overview was presented of the grant given to the State as well as the goals of the grant, which focused on treatment of children with behavioral health issues surrounding traumatic stress.

The November and December meetings were combined into one meeting held in early December to accommodate for the holiday and vacation schedules. During this meeting, Delaware Physicians Care, Inc., one of the State-contracted managed care organizations, reported on its rank of 15th in the top Medicaid Programs in the country by the National Committee for Quality Assurance.

There were also two presentations given to the task force in December:

- **Diamond State Plan (DSP) Emergency Room (ER) Usage Project** – An analysis was completed on the DSP population ER usage, indicating approximately 50% of the ER visits fell into the Low Acuity Non-Emergent (LANE) categories. DSP plans to focus on educating members on the proper use of the ER in order to reduce the LANE visits.
- **Childhood Overweight and Obesity Focus Study** – The results of the study were presented to the task force. For more detail, see the in-depth article on the study in this edition of the Courier.

The January meeting marked the first meeting of the new calendar year, which entailed the group reviewing the roles and responsibilities of the task force members as well as approving all the goals of the committee for 2009.

- **Goal 1:** The QII task force will be an integrated structure supporting ongoing quality oversight, tracking, and monitoring of Medicaid funded programs and waivers.
- **Goal 2:** The QII task force will be the central forum for the communications and collaboration for quality strategies, plans, and activities.
- **Goal 3:** The QII task force will provide the opportunities to develop systematic and integrated approaches to quality activities.

The next QII task force meeting was scheduled for February 26, 2009. ■

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### Questions or Comments

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