

Childhood Obesity Chronic Care Model

Arizona Health Care Cost Containment System – Kim Elliott, Ph.D., C.P.H.Q.

Background

Obesity in children and adolescents is a serious issue with many health and social consequences that continue into adulthood. Implementing prevention programs and getting a better understanding for children is important to controlling the obesity epidemic. Obesity-related diseases cost the United States economy more than \$100 billion every year.⁶

According to James Marks, M.D., M.P.H., Director, National Center for Chronic Disease Prevention and Health Promotion Centers for Disease Control and Prevention, Body Mass Index (BMI) greater than 45 percent increases per capita health care costs by \$732 per year and for Medicaid by \$864 per capita per year. It costs each taxpayer \$175 to per year to cover the health care costs of obesity in the Medicaid population.⁵

Inactivity and poor diet cause at least 300,000 deaths in a year in the United States. Only tobacco causes more preventable deaths. Almost half of young people aged 12-21 and more than a third of high school students do not participate in vigorous physical activity on a regular basis. Fewer than one in four children get 20 minutes of vigorous activity every day of the week. Less than one in four get at least half an hour of any type of physical activity every single day.⁶

Physical activity peaks in the tenth grade, at eleven hours per week as the median, and then begins a steady decline that is likely to continue into the adult years. In all grade levels, girls get significantly less activity than boys.⁶

Childhood obesity may lead to increased risk of the following conditions/chronic disease in adults:

- Heart disease
- Back disorders
- Diabetes
- Sleep Apnea
- Hypertension
- Liver disease
- Gallbladder disease
- End State Renal Disease
- Breast cancer
- Orthopedic problems
- Skin disorders²

Population Factors

More children in this country are overweight than ever before, about double the number who were heavy in the late 1970s. The latest statistics are part of the National Health and Nutrition Examination Survey by the Centers for Disease Control and Prevention (CDC) and show:

- 13 percent of children ages 6-11 were overweight in 1999, up from 11 percent in 1988-1994, and 7 percent in the late 1970s.⁴
- 14 percent of children ages 12 to 19 were overweight in 1999, up from 11 percent in 1988-1994 and 5 percent in the late 1970s.⁴

Identification

A measurement called percentile of Body Mass Index (BMI) is used to identify overweight and obesity in children and adolescents. The Centers for Disease Control (CDC), the supplier of national growth charts and prevalence data, avoids using the word “obesity” for children and adolescents. Instead, they suggest two levels of overweight: 1) the 85th percentile an “at risk” level, and 2) the 95th percentile, the more severe level. The 95th percentile:

- Corresponds to a BMI of 30, which is the marker for obesity in adults. The 85th percentile corresponds to the overweight reference point for adult, which is a BMI of 25.
- Is recommended as a marker for children and adolescents to have an in-depth medical assessment.
- Identifies children that are very likely to have obesity persist into adulthood.
- Is associated with elevated blood pressure and lipids in older adolescents, and increases their risk of diseases.
- Is a criteria for more aggressive treatment.
- Is a criteria in clinical research trials of childhood obesity.¹

Prevention

Teaching healthy behaviors at a young age is important since change becomes more difficult with age. Behaviors involving physical activity and nutrition are the cornerstone of preventing obesity in children and adolescents. Families and schools are the two most critical links in providing the foundation for those behaviors.³

Children learn eating and exercise habits from parents and other caretakers. While it is crucial to develop a patient-centered approach in the prevention of childhood obesity, education must be provided to the entire family to ensure a successful outcome. If adults in the home learn about good nutrition, healthy food choices and preparation and the importance of daily exercise and incorporate these things into their daily lives, it will positively impact the child.

Children spend much of their time in schools or other educational sites such as Head Start, therefore, these sites play a key role in the prevention of childhood obesity.

There are many factors that contribute to causing child and adolescent obesity – some are modifiable and others are not.²

Modifiable

- Physical activity – lack of regular exercise.
- Sedentary behavior – high frequency of television viewing, computer usage, and similar behavior that takes up time that can be used for physical activity.
- Socioeconomic status – low family incomes and non-working parents.
- Eating habits – over-consumption of high-calorie foods. Some eating patterns that have been associated with this behavior are eating when not hungry, eating while watching TV or doing homework.
- Environment – some factors are over-exposure to advertising of foods that promote high-calorie foods and lack of recreational facilities.²

Non-changeable causes include:

- Genetics – greater risk of obesity has been found in children of obese and overweight parents.²

Increasing daily activity that is fun and interactive can generate a feeling of well-being, improve overall self-esteem and can assist in childhood obesity prevention.

Create an active environment:

- Make time for family-outings to participate in regular physical activities that everyone enjoys
- Start an active neighborhood program. Join together with other families for group activities
- Assign active chores to every family member such as vacuuming, washing the car or mowing the lawn. Rotate the schedule of chores to avoid boredom from routine.
- Enroll the child in a structured activity that he or she enjoys, such as gymnastics, martial arts, etc.
- Instill an interest in children to try a new sport by joining a team at school or in the community.
- Limit the amount of TV watching.³

Busy lifestyles often lead to poor nutritional choices, such as greasy, fat-laden, fast foods. These foods are often eaten while on-the-go or in front of the TV set. Creating an eating environment, which is interactive, healthy and free from distractions, is an important aspect of childhood obesity prevention.

Create a Healthy Eating Environment:

1. Implement the same healthy diet (rich in fruits, vegetables, and grains) for the entire family, not just select individuals. Avoid foods that are high in calories, fat or sugar.
2. Plan times when food can be prepared together. Children enjoy participating and can learn about healthy cooking and food preparation.
3. Eat meals together, at the dinner table, at regular times. Avoid other activities during mealtimes such as watching TV.
4. Avoid rushing to finish meals. Eating too quickly does not allow enough time to digest and to feel a sense of fullness.

5. Have snack foods available that are low-calorie and nutritious. Fruit, vegetables and yogurt are some examples.
6. Avoid serving portions that are too large.
7. Avoid forcing children to eat if he/she is not hungry. If the child shows atypical signs of not eating, consult a healthcare professional.
8. Limit the frequency of fast-food eating to no more than once per week.
9. Avoid using food as a reward or the lack of food as punishment.³

Potential Treatments

Little conclusive research is available regarding surgical and pharmacological treatment of child and adolescent obesity. Treatment for childhood obesity consistently focuses on behavioral intervention. Prevention and treatment utilizing nutritional, behavioral and physical activity interventions are recommended in children and adolescents. A child's readiness to change, eating patterns, physical activity levels and television viewing habits are all critical factors in ensuring healthy outcomes.

The following are recommended, evidence-based services utilized to prevent and to treat childhood obesity:

Nutrition

- S9470 – Nutrition counseling, dietitian (open code – using for ALTCS)
- 97802 – Initial face-to-face encounter with nutritionist, 15 minute segments (open code – AHCCCS fee schedule \$16.33)
- 97803 – Re-assessment by nutritionist, 15 minute segments (open code – AHCCCS fee schedule \$16.33)

Physiotherapy

- S9451 - Exercise classes, non physician provider, per session (closed code – recommend opening for specific provider type)

Health Education (purpose behavior modification):

- S0315 Disease management program; initial assessment and initiation of the program
- S0316 – Follow-up/reassessment

Integrated Care Services (Psychologists, Registered Nurse Practitioners, Certified Independent Social Workers, Social Workers, Certified Marriage/Family Therapists, and Certified Professional Counselors)

- 96150 Health and behavior assessment (eg, health-focused clinical interview, behavioral observations, psycho-physiological monitoring, health-oriented questionnaires) (26.42 per 15 minute increment)
- 96151 re-assessment (\$25.31 per 15 minute increment)
- 96152 Health and behavior intervention (\$24.20 per 15 minute increment)
- 96153 group – 2 or more patients (\$5.60 per 15 minute increment)
- 96154 family with the patient present (\$23.82 per 15 minute increment)
- 96155 family without the patient present (\$23.82 per 15 minute increment)

The following treatment options are typically used with severely obese adolescents where other risk factors are present.

Pharmacotherapy:

The U.S. Food and Drug Administration has not yet approved the use of any drugs to treat obesity in children. However, clinical trials are under way. Recommendations state pharmacotherapy may be considered in extreme but rare cases where other factors or comorbidities are present.

Bariatric Surgery:

Some children's hospitals are now either offering or planning to offer bariatric surgery, commonly referred to as stomach stapling, to obese teenagers. Bariatric surgery is not reversible, and requires stringent dietary

compliance. In this procedure, doctors reduce the size of the stomach with a surgical staple and shorten the small intestine. In addition to limiting the amount of food consumed, it causes biochemical responses in the body that are not well understood. Teens typically lose up to 25 percent of their body weight within six months of completing the bariatric surgery. The procedure can cost \$40,000 and is not currently covered by most insurance.

Costs of Treatment

The number of AHCCCS enrolled children three through 19 years of age, as of December 31, 2003, was approximately 333,591. Based on national prevalence rates for childhood obesity, it is anticipated that approximately 14 percent or 46,702, of those children are either obese, overweight or at risk of being obese/overweight. The following are cost estimates, based on the anticipated number of potential children in the population requiring medical intervention, utilizing the AHCCCS fee schedule.

Medical Nutritional Therapy

- 46,702 children x 1 initial visit (15 minutes) at \$16.33 = \$762,643.66
- 46,702 children x 2 re-assessment visits at \$16.33 = \$1,525,287.32

Potential Medical Nutritional Therapy Costs: \$2,287,930.98

Health Education Counseling

It is anticipated that health education counseling, treatment of depression, etc. would be referred through the Regional Behavioral Health System (RBHA) thereby being included in the Arizona Department of Health Services capitation rates. Increased utilization of RBHA services would need to be evaluated to ensure appropriate capitation payments. If behavioral health counseling for childhood obesity is provided outside the RBHA system, the following costs, at a minimum, could be anticipated:

- 46,702 individual psychotherapy visits 20-30 minutes at \$65.99 per session = \$3,081,864.98
- 46,702 x 50 percent individual psychotherapy visits 40-45 minutes at \$99.72 per session = \$2,328,561.72

Potential Health Education Costs: \$5,410,426.79

Physiotherapy

Increasing physical activity in children is sometimes dependent on children having access to a safe and healthy environment in which to get physical. AHCCCS children are sometimes living in neighborhoods that are not conducive for walking or other types of outdoor activities. Providing the ability for AHCCCS enrolled children to learn about increasing physical activity, is an important part of the childhood obesity program.

Potential Physiotherapy Costs: \$

Pharmacotherapy

Pharmacotherapy treatment for children is not recommended, except in extreme situations in which there are other significant risk factors. Therefore, it is not anticipated that there will be a significant pharmacotherapy expense attributed to treating childhood obesity.

Bariatric Surgery

Bariatric Surgery is not currently recommended for children, except in extreme situations in which there are other significant risk factors. This option would require extensive behavioral health counseling and nutritional counseling as part of the process. It is not anticipated that there would be a significant bariatric surgery expense attributed to treating childhood obesity.

Future Impact

It is anticipated that by including some or all of the above referenced obesity prevention methods in the benefit structure, future health care expenditures due to chronic disease can be significantly reduced. Based on the per capita expenditure of \$864 for treatment related to chronic disease for the adult Medicaid population, health care expenditures for children identified as overweight or at risk of being overweight

could be reduced by approximately \$40,350,528, for the AHCCCS target population as they reach adulthood.

Goals

1. Decrease by five percent, the number of children ages 0-20 with BMI greater than 25.
2. Increase by five percent, the number of children (with a BMI less than 25) ages 0-20 that maintain a BMI less than 25.

Improvement Plan

1. Community – Resources and Policies

- A. *Establish linkages with organizations to develop support programs and policies.*
 - Identify organizations, and their contacts, to begin collaboration process.
 - *Indian Health Service (IHS)* ▪ AHCCCS Contractors
 - Arizona Department of Health Services (ADHS) ▪ American Diabetes Association (ADA)
 - Head Start/Schools/Preschools ▪ Arizona Academy of Family Practice (AAFP)
 - Women, Infants, Children (WIC) ▪ Arizona Academy of Pediatricians (AAP)
 - Form childhood obesity work group
- B. *Link to community resources for defrayed education and materials.*
 - Partner with AHCCCS Contractors, ADHS, Schools, WIC, Tribal Community to distribute educational materials to families/children they serve.
 - In collaboration with community and AHCCCS Contractor partners, develop and distribute a childhood obesity community resource list.
 - Distribute community resource list, along with other established outreach materials, such as Contractor EPSDT mailings and possibly prenatal educational materials, which Contractors routinely send out.
- C. *Encourage participation in community education classes and support groups.*
 - Partner with ADHS, Tribal community and Head Start to plan visits to day care programs, pre-schools and schools to offer interactive and fun childhood obesity education to at-risk (Medicaid children/all children) and obese children. Focus on the need for good nutritional choices and exercise.
- D. *Raise community awareness through networking, outreach, and education.*
 - Partner with AHCCCS Contractors, ADHS, Schools, WIC, Tribal Community to increase awareness and distribute educational materials to families/children they serve.
 - Partner with ADHS, Tribal community and Head Start to plan visits to day care programs, pre-schools and schools to offer interactive and fun childhood obesity education to at-risk and obese children. Focus on the need for good nutritional choices and exercise.
- E. *Provide a list of community resources to patients, families, and staff.*
 - Work with community partners and AHCCCS Contractors to develop a community resource list.
 - Distribute community resource list, along with other established outreach materials, such as Contractor EPSDT mailings and possibly prenatal educational materials, which Contractors routinely send out.
 - Supply community referral lists to Promotoras for distribution and use in educational opportunities.

- Ensure availability of community referral lists at key sites, such as WIC clinics, schools, day care programs, Head Start and physician and dental offices.

2. **Health System – Organization of Health Care**

- A. *Make improving childhood obesity and childhood obesity prevention a part of the organization's vision, mission, goals, performance improvement, and business plans.*
- Obtain support from the AHCCCS Director and Executive Management on the Childhood Obesity Model.
 - Ensure Childhood Obesity initiatives are part of Agency's goals and performance improvement plans.
- B. *Ensure senior leaders and staff visibly support and promote the effort to reduce/prevent childhood obesity.*
- Continue project with support from the AHCCCS Director and Executive Management.
 - Continue to show support and promotion of the project through continuous staff involvement and collaboration with other agencies and Contractors on the issues.
- C. *Assign day-to-day leadership for continued clinical improvement.*
- Identify project lead and point of contact for AHCCCS
 - Identify project lead and point of contact for AHCCCS Contractors.
- D. *Integrate Collaborative models into the Quality Improvement Program.*
- Designate childhood obesity as the subject of the next AHCCCS Medical Audit.
 - Incorporate large, small and rural Contractors in the audit. Consider including the AHCCCS fee-for-service (FFS) population in the Medical Audit.

3. **Self-Management Support**

- A. *Use childhood obesity prevention self-management tools that are based on evidence of effectiveness.*
- Collaborate with American Diabetes Association (ADA), Arizona Department of Health Services (ADHS), Arizona Academy of Pediatrics (AAP), Arizona Academy of Family Practice (AAFP), Arizona Medical Association (ArMA) and AHCCCS Contractors to identify and establish recommendations/guidelines for member/parent childhood obesity prevention self-management.
 - Ensure culturally sensitive nutritional self-management tools, techniques and diets are included in self-management program.
 - Ensure self-management program includes consultation with nutritionist and/or behavioral health providers as appropriate.
- B. *Set and document self-management goals collaboratively with members.*
- Collaborate with AHCCCS Contractors and community partners on developing tools for members to document childhood obesity prevention/intervention goals and to track progress.
 - Collaborate with AHCCCS Contractors and community partners to develop incentive based program that rewards member participants triggered by periodic monitoring visits with primary care physician (PCP) where participation in goals/activities can be validated.
 - Establish collaborative support and active intervention process through training of AHCCCS Contractor EPSDT, case management, and other staff as appropriate.
 - Collaborate with AHCCCS Contractors and community partners on the feasibility of developing and implementing an internet-based self-management website, that would also include helpful hints, diet and nutrition and exercise ideas.

- C. *Train providers on how to help patients with self-management goals.*
 - Develop and implement evidence-based tools to assist providers in implementing culturally sensitive childhood obesity prevention counseling and interventions within their practices.
 - Collaborate with AHCCCS Contractors and community partners on implementing childhood obesity training sessions (in-office and community based) with pediatric and family practice/general practice provider offices.
 - Collaborate with external partners, such as ADA, AAP, AAFP, ArMA, to develop and implement a continuing education program related to childhood obesity for providers.
 - Establish collaborative support and active intervention process through training of AHCCCS Contractor EPSDT, case management, and other staff as appropriate.
 - Include childhood obesity prevention as a topic at AHCCCS Medical Director, CEO and QM/MCH meetings in efforts to obtain buy-in/support and maintain momentum once implemented.

- D. *Follow-up and monitor self-management goals.*
 - Establish collaborative support and active intervention process through training of AHCCCS Contractor EPSDT, case management, and other staff as appropriate.
 - Collaborate with AHCCCS Contractors and community partners on the feasibility of developing and implementing an internet-based self-management website, that would also include helpful hints, diet and nutrition and exercise ideas.
 - Collaborate with AHCCCS Contractors and community partners to develop incentive based program that rewards member participants triggered by periodic monitoring visits with primary care physician (PCP) where participation in goals/activities can be validated.

- E. *Use group visits to support self-management.*
 - Collaborate with external partners, such as ADHS, ADA, AHCCCS Contractors, school systems to develop and implement a school-based education program, focusing on diet/nutrition and exercise, related to childhood obesity prevention.

- F. *Tap community resources to achieve self-management goals.*
 - In collaboration with external partners, identify community resources that can be utilized to assist members in achieving self-management goals.
 - Partner with ADHS, tribal community and Head Start to plan visits to day care programs, pre-schools and schools to offer interactive and fun childhood obesity education to at-risk (all Medicaid) and obese children. Focus on the need for good nutritional choices and exercise.
 - Collaborate on methods to involve community fitness centers in the childhood obesity initiative.

4. **Delivery System Design**

- A. *Use the registry to proactively review care and plan visits.*
 - Create a registry utilizing data extracted from the EPSDT Forms
 - Develop a scanable or electronic EPSDT Form to ensure accurate and complete data
 - Write an Issue Paper to examine why a scanable EPSDT form is needed and obtain Executive Management support of the endeavor.
 - Create an EPSDT Form Registry work group
 - Increase provider's use of the EPSDT forms. Forms must be complete and submitted to the Contractors.
 - Require Contractors to measure provider's use of the EPSDT form and increase rate.

- B. *Assign roles, duties, and tasks for planned visits to a multi-disciplinary care team. Use*

cross-training to expand staff capability.

- Train AHCCCS staff to work with Contractors on childhood obesity.
- Form work group on childhood obesity to include Contractor personnel, Arizona Department of Health Services (ADHS), WIC and representatives from ADA, ArMA, AAFP, and the AAP.
- Partner with ADHS, Tribal community and Head Start to plan visits to day care programs, pre-schools and schools to offer interactive and fun childhood obesity education to at-risk and obese children. Focus on the need for good nutritional choices and exercise.

C. *Use planned visits in individual and group settings.*

- Partner with ADHS, Tribal community and Head Start to plan visits to day care programs, pre-schools and schools to offer interactive and fun childhood obesity education to at-risk and obese children. Focus on the need for good nutritional choices and exercise.
- Partner with WIC to offer nutrition and physical fitness education/information in their clinics.

D. *Make designated staff responsible for follow-up by various methods, including outreach workers, telephone calls and home visits.*

- Write an Issue Paper to examine why the Contractor's EPSDT Quarterly Report submissions should include a section on Childhood Obesity activities and evaluations. An Issue Paper will be required for this added requirement.
- Identify a Childhood Obesity contact with each Contractor.
- Require a section on Childhood Obesity initiatives and activity monitoring as a section in the annual QM/QI Plan submission.
- Review Childhood Obesity related activities and outcomes at on-site Operational and Financial Reviews.
- Identify ways to measure interventions

E. *Use promotoras and community health worker programs for outreach.*

- Obtain information on *Promotoras* from Contractors that have successful programs, i.e., Phoenix Health Plan, to develop plan for including childhood obesity information in their outreach efforts.
- Collaborate with ADHS to offer childhood obesity education through their community health programs.
- Collaborate with WIC clinics to distribute nutrition and physical fitness childhood obesity information.

5. Decision Support

A. *Embed evidence-based guidelines in the care delivery system.*

- Collaborate with American Diabetes Association (ADA), Arizona Department of Health Services (ADHS), Arizona Academy of Pediatrics (AAP), Arizona Medical Association (ArMA), Arizona Association of Family Practice (AAFP) and AHCCCS Contractors to identify and establish recommendations for member/parent childhood obesity prevention self-management.
- Ensure culturally sensitive nutritional self-management tools, techniques and diets are included in self-management program.

B. *Establish linkages with key specialists to assure that primary care providers have access to expert support.*

- Ensure self-management program includes consultation with nutritionist, behavioral health providers, and other key specialties as appropriate.

C. *Provide skill-oriented interactive training programs for all AHCCCS, AHCCCS Contractor and community resource staff in support of childhood obesity prevention.*

- Establish collaborative support and active intervention process through training of AHCCCS Contractor EPSDT, case management, and other staff as appropriate.

D. Educate members and their parents about guidelines.

- Collaborate with AHCCCS Contractors and community partners on developing parent education and support tools related to their support role in preventing or reducing childhood obesity.
- Collaborate with AHCCCS Contractors and community partners on the feasibility of developing and implementing an internet-based self-management website, that would also include helpful hints, diet and nutrition, exercise ideas, and information for parents.
- Collaborate with AHCCCS Contractors and community partners on developing messages and educational material to assist members and their parents regarding recommendations related to childhood obesity prevention/intervention goals and how to track progress.
- Establish collaborative support, education and active intervention process through training of AHCCCS Contractor EPSDT, case management, and other staff as appropriate.

6. Clinical Information Systems

A. Establish a childhood obesity registry

- Collaborate with AHCCCS Contractors and community partners regarding the development of a registry for childhood obesity prevention. Consider utilizing EPSDT Tracking Forms to capture information, once scanable or electronic formats have been developed and implemented.
- Ensure implementation of the registry by all AHCCCS Contractors/others as appropriate.

B. Develop processes for use of the childhood obesity registry, including designating personnel to enter data, assure data integrity, and maintain the registry.

- Through contract or policy, ensure that AHCCCS Contractors have adequate human and system resources to ensure completion and accuracy of data in the childhood obesity registry.
- For fee-for-service members, AHCCCS should ensure that adequate human and system resources are available to ensure completion and accuracy of data in the childhood obesity registry.

C. Use the childhood obesity registry to generate reminders and care-planning tools for individual patients.

- In collaboration with AHCCCS Contractors and community partners, develop consistent educational messages to be utilized to remind and support members identified in the childhood obesity registry. Note: processes should be developed to ensure that all at-risk children and parents are included in educational mailings in efforts to *prevent* childhood obesity.
- Utilize the childhood obesity registry to notify primary care physicians, of children overdue for a monitoring and support visit.
- Ensure tag lines, articles regarding the prevention of childhood obesity are included in general member mailings/educational material such as newsletters, preventive health mailings, etc.

D. Use the registry and the AHCCCS Decision Support System to provide feedback and to report outcomes of activities/interventions.

- Baseline data pertaining to the overall prevalence of childhood obesity may be measured utilizing the 2004 AHCCCS Medical Audit Process. This would allow

chart review data collection, based on a statistically significant random sample of the populations.

- Quarterly updates regarding interventions implemented, educational mailings, outreach, completed EPSDT Tracking Forms received and entered, educational effort utilized to improve EPSDT Tracking Form submission rates, will be included in the AHCCCS EPSDT Quarterly Reports submitted by Contractors.
- In collaboration with AHCCCS Contractors, standardized reporting of the status of the childhood obesity prevention efforts will be reported, utilizing data from the childhood obesity registry. Decreases in individual's body mass index (BMI) will be included as a measure (reported as a percent of the total population in the registry).
- Utilizing the AHCCCS Decision Support System, determine if there was an increase in preventive health visit utilization that may be attributed to the childhood obesity prevention communication/activities.

References

¹ American Obesity Association, *Finally A Cure for Obesity! Childhood Obesity*. Available at: <http://obesity1.tempdomainname.com/subs/childhood/prevalence.shtml>. Accessed February 12, 2004.

² American Obesity Association, *Finally A Cure for Obesity! Childhood Obesity Causes*. Available at: <http://obesity1.tempdomainmane.com/subs/childhood/causes.shtml>. Accessed February 11, 2004.

³ American Obesity Association, *Finally A Cure for Obesity! Childhood Obesity Prevention*. Available at: <http://obesity1.tempdomainname.com/subs/childhood/prevention.shtml>. Accessed February 11, 2004.

⁴ Centers for Disease Control & Prevention, *Guidelines for School and Community Programs: Promoting Lifelong Physical Activity*, U.S. Department of Health and Human Services, March, 1997.

⁵ Governor's Call to Action: Healthy Weight for Children and Their Families Conference 2004, *Healthy Weight for Children and Their Families: Why is This Important*, Marks, James, M.D., M.P.H., Director, National Center for Chronic Disease Prevention and Health Promotion Centers for Disease Control and Prevention, January 30, 2004, Black Canyon Conference Center.

⁶ National Association for Sport and Physical Education, *Shape of Our Nation's Children Fact Sheet*. Ruston, VA, 2003.

Childhood Obesity Chronic Care Model

Community Resources and Policies	Health System Organization of Health Care	Self-Management Support	Delivery System Design	Decision Support	Clinical Information Systems
<p>Identify key partners to begin collaboration process.</p> <p>Form childhood obesity work group with key partners.</p> <p>Childhood Obesity Work Group Agenda:</p> <ul style="list-style-type: none"> ▪ develop patient-centered approach. ▪ plan visits to educational sites to offer interactive childhood obesity education with focus on nutrition and exercise. ▪ develop/distribute a childhood obesity community resource list. ▪ develop plan to offer childhood obesity education through participating existing community health programs. ▪ develop plan to utilize <i>promotoras</i> for childhood obesity outreach efforts. ▪ develop resources for group education. ▪ develop flow chart for patient charts. 	<p>Obtain Executive Management Support for model.</p> <p>Embed in organization strategic plans</p> <p>Identify key partner participants in the project.</p> <p>Develop methods to measure success of interventions.</p> <p>Integrate Childhood Obesity initiatives and activity monitoring into Contractor annual QM/QI Plan and during OFR processes.</p> <p>Designate childhood obesity as the subject of the next AHCCCS Medical Audit.</p> <p>Obtain Executive Management support to incorporate Childhood Obesity reporting into Contractor EPSDT Quarterly Report submissions.</p>	<p>Develop and implement</p> <ul style="list-style-type: none"> ▪ Childhood Obesity Prevention Program incentives that rewards member for participation. ▪ tools for members to document goals/track progress. ▪ an internet-based, self-management website. ▪ childhood obesity provider office training sessions. ▪ school based interactive childhood obesity education, with focus on nutrition and exercise. ▪ a provider childhood obesity continuing education program. ▪ evidence-based, culturally sensitive tools to assist practitioners in implementing counseling/interventions. ▪ a childhood obesity community resource list. ▪ self-management program that includes consultation with nutritionist, behavioral health, and culturally sensitive nutritional tools, techniques and diets. <p>Train AHCCCS Contractor EPSDT, case management, and other staff as appropriate.</p>	<p>In collaboration with key partners develop and implement:</p> <ul style="list-style-type: none"> ▪ a Childhood Obesity Registry. ▪ a scannable or electronic EPSDT Tracking Form to ensure accurate and complete BMI. ▪ processes to increase provider's use and submission of the EPSDT Tracking Forms. ▪ process to measure provider's use of the EPSDT form. ▪ a process to build effective case management to assure continuity and regular follow up. 	<p>In collaboration with key partners develop and implement:</p> <ul style="list-style-type: none"> ▪ recommendations for member/parent childhood obesity prevention/self-management. ▪ self-management program that includes consultation with nutritionist and/or behavioral health providers as appropriate, culturally sensitive nutritional tools, techniques and diets. ▪ visits to schools to offer interactive childhood obesity education with focus on nutrition and exercise. ▪ parent education and support tools related to support role in preventing or reducing childhood obesity. ▪ process to determine feasibility of implementing an internet-based, self-management website. ▪ educational program to assist members/parents regarding childhood obesity prevention/intervention goals recommendations and how to track progress. <p>Train AHCCCS Contractor EPSDT, case management, and other staff as appropriate.</p>	<p>In collaboration with key partners develop and implement:</p> <ul style="list-style-type: none"> ▪ system capabilities for a scannable/ electronic EPSDT Form to ensure accurate/complete data and to populate a registry. ▪ system capabilities for a Childhood Obesity Registry. ▪ through contract or policy, processes to ensure adequate human and system resources to implement Childhood Obesity Program. ▪ for fee-for-service members, adequate human and system resources to ensure completion/accuracy of data in the Childhood Obesity Registry. ▪ support and reminder educational messages to members identified in the Childhood Obesity Registry/at-risk members. ▪ practitioner notifications, monitoring and evaluation processes utilizing the Childhood Obesity Registry. ▪ tag lines/articles regarding the prevention of childhood obesity and include in general member mailings/educational material.. ▪ processes to standardize reporting of the status of childhood obesity prevention efforts. ▪ processes to measure baseline/ ongoing data pertaining to prevalence of childhood obesity. ▪ processes utilizing the AHCCCS Decision Support System, to determine status of preventive health visits related to childhood obesity prevention communication/activities.

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