Healthy Kids, Healthy Michigan

Advocates of Healthy Weight in Children

Healthy Weight, Overweight & Obesity Clinical Decision Support Tools for Children Ages 2-18

Prepared for use with the Michigan Care Improvement Registry Body Mass Index Surveillance Tool

Materials developed by members of Healthy Kids, Healthy Michigan, Health, Family and Child Care Services Policy Action Team, Family & Provider Resources Task Force

March, 2011

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Contact Healthy Kids, Healthy Michigan at healthykidshealthymi@gmail.com for more information.

Preface

With funding from the National Governor's Association, the Michigan Department of Community Health convened a statewide coalition, now known as Healthy Kids, Healthy Michigan Coalition, to identify top policy priorities for the state's efforts in childhood obesity prevention and treatment. Creation of a body mass index (BMI) surveillance system was selected by the Coalition as one of six policy priorities to pursue in the Coalition's first year, 2009. With one of the most advanced immunization information systems in the nation, the coalition recommended that BMI surveillance be added to the Michigan Care Improvement Registry (MCIR). Virtually every health care provider in the state already has access to the MCIR and many use it daily, to track and guide care in selected areas such as immunizations and lead screening.

The team planning the surveillance system recognized that Michigan's health care providers needed streamlined tools to apply expert guidelines to the screening, diagnosis and treatment of childhood obesity, and that the surveillance system presented an opportunity to bring such tools into the care setting. With internal funding from its Childhood Obesity Prevention Mission Project, staff from the Altarum Institute conducted a focus group with providers in the state to further specify provider needs that might be addressed through the new surveillance system.

With support from the American Heart Association, and under the auspices of the Healthy Kids, Healthy Michigan's (HKHM) Health, Family and Child Care Services Policy Action Team (HPAT), Ms. Sarah Poole convened the Family and Provider Resources Task Force which developed the tools presented in this report. Tailored for the age, gender, and weight status of children, the tools are designed to help providers efficiently assess children's risk for obesity, guide their investigation of co-morbidities, and streamline healthy weight and physical activity counseling.

The tools are consistent with the "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" (Barlow, 2007) and with the recommendations of the U.S. Preventive Services Task Force that all children be screened for obesity, and that children age six and above receive counseling to achieve a healthy weight (USPSTF, 2010).

The tools were developed after a review of similar tools developed by other organizations and institutions, especially *Nemours Health & Prevention Services* and the Maine Center for Public Health.

Authors of this document would like to thank Dr. Tom Peterson, Co-Chair (along with Dr. Susan Woolford) of the Health, Family and Child Care Services Policy Action Team; current and former staff of the Michigan Department of Community Health, especially Ms. Shannon Carney Oleksyk; and each of our institutions for supporting our time to produce these documents.

Table of Contents

INSTRUCTIONS FOR USE 5

HEALTHY WEIGHT TOOLS 6

Weight Status: Healthy Weight Children Ages 2-5 Years Old 7

Weight Status: Healthy Weight Children Ages 6-11 Years Old 9

Weight Status: Healthy Weight Patients Ages 12-18 Years Old 11

OVERWEIGHT TOOLS 13

Weight Status: Overweight Children Ages 2-5 Years Old 14

Weight Status: Overweight Children Ages 6-11 Years Old 17

Weight Status: Overweight Patients Ages 12-18 Years Old 20

OBESE TOOLS 23

Weight Status: Obese Children Ages 2-5 Years Old 24

Weight Status: Obese Children Ages 6-11 Years Old 27

Weight Status: Obese Patients Ages 12-18 Years Old 30

Instructions for use of the Clinical Decision Support Tools

These tools are designed to be used in conjunction with the Michigan Care Improvement Registry's body mass index (BMI) surveillance system, but may also be used independently based on a limited set of information about each child including the child's weight status as determined by BMI percentile. MCIR will calculate the BMI based on the child's measured height and weight, determine the BMI percentile in relation to a standard reference population, and then assign a weight status based on standard classifications of:

WEIGHT STATUS	BMI Percentile
Normal weight	5th – 84th
Overweight	85th – 94th
Obese	>95th

The tools consist of several components, each tailored for the specific age group (2-5, 6-11 and 12-18) and weight status as shown above:

- A survey tool for providers to determine a child's behavioral and family history risk factors
- A four part clinical form which includes:
    - assessment of specific medical risks for that child
    - assessment of behavioral risks and readiness to change
    - counseling tailored according to whether or not the child has medical risks posed by obesity
    - assessment and plan including a summary of referrals provided and behavior change goals identified

The survey and clinical guidance documents are designed to be incorporated into the existing flow of a provider office. The short survey tool can be completed by the caregiver and/or child while sitting in the waiting room prior to the visit, or, with minor modifications, it can be administered orally by a clinician during the visit.

While the survey questions are very similar on all tools, they vary slightly according to a child's age. For example, questions relating to portion size and quantity vary. It is also assumed that a caregiver will be responding for children ages 2-5 while older children will answer on their own.

The clinical decision support tools are tailored by weight status category (healthy weight, overweight, obese) and age group (2-5, 6-11, 12-18). Once a child's age and weight status category is determined using BMI percentile, the appropriate decision support tool can be selected and used to guide the clinician through appropriate assessment and counseling. The Overweight and Obese category decision support tools offer guidance on how to assess for specific health risks related to weight status and encourage the clinician to use the completed survey in identifying current behavior and attitude practices which may contribute to risk. Finally, based on the findings of the physical exam and the review of current behavior practices, the clinician is provided with a recommended course of treatment and referral, when appropriate.

The clinical decision support tools are also designed to be interactive and to become a part of the patient chart. They guide the provider through an age-appropriate review of systems and medical exam, provide space to fill out what was communicated with the patient and family, as well as space to outline the next steps for follow up. In addition to guiding providers through weight assessment and treatment, each of the clinical decision support tools offers clinicians resources for further information and education and as well as recommendations for possible billing codes and guidance.

HEALTHY WEIGHT TOOLS

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Space for auto-populated information including name, DOB, sex, BMI

Weight Status: This child's BMI percentile puts her/him in the **Healthy Weight** category (BMI 5th to 84th percentile)

AAP MANAGEMENT/TREATMENT RECOMMENDATIONS BASED ON BMI PERCENTILE

This child falls within the category of Healthy Weight. The American Academy of Pediatrics recommends that all children receive prevention messaging. Consider use of the attached Patient/Parent Survey to promote overweight and obesity prevention.

The American Academy of Pediatrics recommends the following elements be incorporated into overweight and obesity prevention messaging:

1. Limit consumption of sugar-sweetened beverages.
2. Encourage consumption of diets with recommended quantities of fruits and vegetables.
3. Limit television and other screen time (the AAP recommends no television viewing before 2 years of age and thereafter no more than 2 hours of television viewing per day)
4. Eat breakfast daily.
5. Limit eating out at restaurants, particularly fast food restaurants.
6. Encourage family meals during which parents and children eat together.
7. Allow child to self-regulate his or her food.
    - Find ways to reward good behavior other than with food.
    - Parents say "what & when", children say "how much".

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Caregivers of Children Ages 2-5 years old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 6 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

Space for auto-populated information including name, DOB, sex, BMI

Weight Status: This child's BMI percentile puts her/him in the **Healthy Weight** category (BMI 5th to 84th percentile)

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3. Limit television and other screen time (the AAP recommends no television viewing before 2 years of age and thereafter no more than 2 hours of television viewing per day).
4. Eat breakfast daily.
5. Limit eating out at restaurants, particularly fast food restaurants.
6. Encourage family meals during which parents and children eat together.
7. Allow child to self-regulate his or her food.
    - Find ways to reward good behavior other than with food.
    - Parents say "what & when", children say "how much."

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Parents of Children Ages 6-11 Years Old

Patient Name: _____
Age: _____ **Date:** _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — **Very concerned**

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — **Very ready**

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — **Very confident**

1	2	3	4	5	6	7	8	9	10

Space for auto-populated information including name, DOB, sex, BMI

Weight Status: This child's BMI percentile puts her/him in the **Healthy Weight** category (BMI 5th to 84th percentile)

AAP MANAGEMENT/TREATMENT RECOMMENDATIONS BASED ON BMI PERCENTILE

This child falls within the category of Healthy Weight. The American Academy of Pediatrics recommends that all children receive prevention messaging. Consider use of the attached Patient/Parent Survey to promote overweight and obesity prevention.

The American Academy of Pediatrics recommends the following elements be incorporated into overweight and obesity prevention messaging:

1. Limit consumption of sugar-sweetened beverages.
2. Encourage consumption of diets with recommended quantities of fruits and vegetables.
3. Limit television and other screen time (the AAP recommends no television viewing before 2 years of age and thereafter no more than 2 hours of television viewing per day).
4. Eat breakfast daily.
5. Limit eating out at restaurants, particularly fast food restaurants.
6. Encourage family meals during which parents and children eat together.
7. Allow child to self-regulate his or her food.
    - Find ways to reward good behavior other than with food.
    - Parents say "what & when", children say "how much."

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- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Patients Ages 12-18 Years Old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our patients. Please take a moment to answer the following questions. We realize how busy families and children are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face individuals each day.

	Please circle true or false.	
1. I eat 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. I eat a healthy breakfast every day.	**True**	**False**
3. I usually eat dinner at the table with other family members.	**True**	**False**
4. I eat take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. I participate in physical activity for at least 1 hour each day. ***This would include sports as well as general play where you are up and moving.**	**True**	**False**
6. I drink fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. I drink less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. I spend more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. I have a TV in my bedroom.	**True**	**False**
10. I have drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

I have (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

OVERWEIGHT TOOLS

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Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This 2-5 year old's BMI percentile puts her/him in the **overweight** category **(BMI 85th to 94th percentile)**

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

a. Assess Vitals: Is the patient hypertensive? ⇨ **N** **Y**

Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
2	95th	102	103	104	105	107	108	109	61	62	62	63	64	65	65
3	95th	104	104	105	107	108	109	110	65	66	66	67	68	68	69
4	95th	105	106	107	108	110	111	112	68	68	69	70	71	71	72
5	95th	107	107	108	110	111	112	113	70	71	71	72	73	73	74

Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
2	95th	101	102	104	106	108	109	110	59	59	60	61	62	63	63
3	95th	104	105	107	109	110	112	113	63	63	64	65	66	67	67
4	95th	106	107	109	111	112	114	115	66	67	68	69	70	71	71
5	95th	108	109	110	112	114	115	116	69	70	71	72	73	74	74

b. Is the child taking any of these obesogenic medications? ⇨ **N** **Y**

Antipsychotics____ Mood Stabilizers____ TCA___ Anticonvulsants____ Prednisone____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher? ⇨ **N** **Y**

Total Cholesterol ≥ 170 ___ LDL ≥ 110 ___ Triglycerides > 110 ___ HDL < 40 ___

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS? ⇨ **N** **Y**

- ☐ Anxiety, irritability, somatization (Depression)
- ☐ Abdominal pain (GERD, Gall bladder disease, constipation)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain, limping (SCFE)
- ☐ Headaches (Pseudotumor cerebrai)

e. Physical Exam – Are comorbidities noted on the physical exam? ⇨ **N** **Y**

Potential Causes of Obesity

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Undescended testicle (Prader-Willi syndrome
- ☐ Dysmorphic features (Genetic disorders)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)

Potential Comorbidities/Complications of Obesity

- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease)
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)

f. Review assessment tool – is family history positive for any of the following? ⇨ **N** **Y**

Family Hx: Obesity ___ HTN___ Type 2 DM ___ Hyperlipidemia ___ Early MI ___ Early Stroke ___

If any above medical risks are noted "Yes" in Step 1 use tailored approach Step 3b.

STEP 2: REVIEW BEHAVIOR TARGETS & FAMILY READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not Usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 6 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record number from survey tool

_____Concern about child's diet & physical activity habits? _____Ready to make changes? _____Confidence in ability to make changes?

0-3=Not Ready **4-6=Unsure** **7-10=Ready**

STEP 3: TAILOR APPROACH TO FAMILY/PATIENT

	3a. OVERWEIGHT WITH NO MEDICAL RISK FACTORS (PREVENTION)	3b. OVERWEIGHT WITH MEDICAL RISK FACTORS (STAGE 1: PREVENTION PLUS)
GOAL	Weight velocity maintenance.	Weight maintenance or slow weight gain.* * Review weight for age curve. If weight percentile is stable over time (ie weight velocity is stable) consider continued weight velocity maintenance.
RECOMMEN-DATIONS	• Provide basic education specific to weight classifications and review the medical risks associated with obesity. • Target problem behaviors identified in Step 2. • Review prevention messages (e.g. 5210) • Praise current practice when appropriate.	• Counsel and guide parents through goals they set themselves using Step 2. • **If low parental concern (i.e. pre-contemplation, 0 to 3) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.
LABS	Obtain fasting lipid profile. Repeat every 3-5 years if normal.	Obtain fasting lipid profile. Repeat every 3-5 years if normal.
FOLLOW UP	*Yearly for health maintenance.* Consider more frequently to confirm weight percentile is stable (especially if history is unknown).	*Monthly ideally.* If no progress in 6 months, advance to Stage 2 (Structured Weight Management).

STEP 4: ASSESSMENT & PLAN

Labs (check those obtained during visit)

_____ Fasting lipid profile

_____ Other _____

Recommended Follow Up

_____ Weeks

_____ Months

_____ Year

Referrals: _____ None _____Yes (list below)

_____

_____

_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: _____weight counseling _____physical activity counseling _____nutrition counseling

Agreed upon goals from target behaviors in 2a (above)

_____

_____

_____

OTHER NOTES:_____

_____

_____

_____

Provider Signature: _____ **Date:** _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity_Outreach_281184_7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
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Survey for Caregivers of Children Ages 2-5 years old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 6 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

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Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This **6-11** year old's BMI percentile puts her/him in the **overweight** category **(BMI 85th to 94th percentile)**

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

a. Assess Vitals: Is the patient hypertensive?

N Y

Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
6	95th	108	109	110	111	113	114	115	72	72	73	74	74	75	76
7	95th	110	111	112	113	115	116	116	73	74	74	75	76	76	77
8	95th	112	112	114	115	116	118	118	75	75	75	76	77	78	78
9	95th	114	114	115	117	118	119	120	76	76	76	77	78	79	79
10	95th	116	116	117	119	120	121	122	77	77	77	78	79	80	80
11	95th	118	118	119	121	122	123	124	78	78	78	79	80	81	81

Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
6	95th	109	110	112	114	115	117	117	72	72	73	74	75	76	76
7	95th	110	111	113	115	117	118	119	74	74	75	76	77	78	78
8	95th	111	112	114	116	118	119	120	75	76	77	78	79	79	80
9	95th	113	114	116	118	119	121	121	76	77	78	79	80	81	81
10	95th	115	116	117	119	121	122	123	77	78	79	80	81	81	82
11	95th	117	118	119	121	123	124	125	78	78	79	80	81	82	82

b. Is the child taking any of these obesogenic medications?

N Y

Antipsychotics____ Mood Stabilizers____ TCA____ Anticonvulsants____ Prednisone_____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher?

N Y

Total Cholesterol ≥ 170_____ LDL ≥ 110 _____ Triglycerides > 110 _____ HDL < 40 _____

For ages ≥10 also obtain: ALT or AST >60 on two occasions _____

Fasting glucose >100 (impaired glucose tolerance) _____ OR >126 (diabetes) _____

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS?

N Y

- ☐ Anxiety, school avoidance, social isolation (Depression)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Shortness of breath, exercise intolerance (Asthma, lack of physical conditioning)
- ☐ Abdominal pain (GERD, constipation, gallbladder disease, NAFLD)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain (SCFE, limping)
- ☐ Headaches (Pseudotumor cerebri)
- ☐ Nocturnal Enuresis (Obstructive sleep apnea)

e. Physical Exam – Are comorbidities noted on the physical exam?

N Y

Potential Causes of Obesity

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)
- ☐ Goiter (hypothyroidism)
- ☐ Undescended testicle (Prader-Willi syndrome)
- ☐ Dysmorphic features (Genetic disorders)

Potential Comorbidities/Complications of Obesity

- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease)
- ☐ Wheezing (Asthma)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)
- ☐ Advanced Tanner Stage (Premature puberty in 7 yo white girls, 6 yo black girls, 9 yo boys)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)

f. Review assessment tool – is family history positive for any of the following?

N Y

Family Hx: Obesity ____ HTN____ Type 2 DM ____ Hyperlipidemia ____ Early MI ____ Early Stroke ____

If any above medical risks are noted "Yes" in Step 1 use tailored approach Step 3b.

STEP 2: REVIEW BEHAVIOR TARGETS & FAMILY READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 6 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record number from survey tool

_____Concern about child's diet & physical activity habits? _____Ready to make changes? _____Confidence in ability to make changes?

0-3=Not Ready **4-6=Unsure** **7-10=Ready**

STEP 3: TAILOR APPROACH TO FAMILY AND PATIENT

	3a. OVERWEIGHT WITH NO MEDICAL RISK FACTORS (PREVENTION)	3b. OVERWEIGHT WITH MEDICAL RISK FACTORS (STAGE 1 - PREVENTION PLUS)
GOAL	Weight velocity maintenance.	Weight maintenance or slow weight gain.
RECOMMEN-DATIONS	• Provide basic education specific to weight classifications and review the medical risks associated with obesity. • Target problem behaviors identified in Step 2. • Review prevention messages (e.g. 5210) • Praise current practice when appropriate.	• Counsel and guide parents & patients (if appropriate) through goals they set themselves based on problem behaviors identified in Step 2a . • **If low parental / patient concern (i.e. pre-contemplation, 1-3 in Step 2b) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.
LABS	Obtain fasting lipid profile. Repeat every 3-5 years if normal.	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST for 10 yo & greater. Repeat every 3-5 years if normal.
FOLLOW UP	*Yearly for health maintenance.* Consider more frequently to confirm weight percentile is stable, especially if history is unknown.	*Monthly ideally.* If no progress is made in 3-6 months, Stage 2 (Structured Weight Management) should be considered.

STEP 4: ASSESSMENT & PLAN

Labs (check those obtained during visit)

_____ Fasting lipid profile
_____Fasting glucose (≥ 10 yo)
_____ALT / AST (≥ 10 yo)
_____ Other _____

Recommended Follow Up

_____ Weeks
_____ Months
_____Year

Referrals: ____ None ____Yes (list below)

_____
_____
_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: ____weight counseling ____physical activity counseling ____nutrition counseling

Agreed upon goals for target behaviors from 2a:

OTHER

NOTES:_____

_____ _____
_____ _____
_____ _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity_Outreach_281184_7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Parents of Children Ages 6-11 Years Old

Patient Name: _____
Age: _____ **Date:** _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

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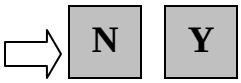
Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This **12-18** year old's BMI percentile puts her/him in the **overweight category (BMI 85th to 94th percentile)**

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

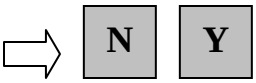
a. Assess Vitals: Is the patient hypertensive?



Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP % 95	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
12		119	120	121	123	124	125	126	79	79	79	80	81	82	82
13		121	122	123	124	126	127	128	80	80	80	81	82	83	83
14		123	123	125	126	127	129	129	81	81	81	82	83	84	84
15		124	125	126	127	129	130	131	82	82	82	83	84	85	85
16		125	126	127	128	130	131	132	82	82	83	84	85	85	86
17		125	126	127	129	130	131	132	82	83	83	84	85	85	86

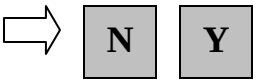
Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP % 95	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
12		119	120	122	123	125	127	127	78	79	80	81	82	82	83
13		121	122	124	126	128	129	130	79	79	80	81	82	83	83
14		124	125	127	128	130	132	132	80	80	81	82	83	84	84
15		126	127	129	131	133	134	135	81	81	82	83	84	85	85
16		129	130	132	134	135	137	137	82	83	83	84	85	86	87
17		131	132	134	136	138	139	140	84	85	86	87	87	88	89

b. Is the child taking any of these obesogenic medications?



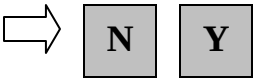
Antipsychotics____ Mood Stabilizers____ TCA___ Anticonvulsants____ Prednisone____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher?



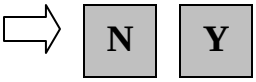
Total Cholesterol ≥ 170_____ LDL ≥ 110 _____ Triglycerides > 110 _____ HDL < 40 _____
ALT or AST >60 on two occasions _____
Fasting glucose >100 (impaired glucose tolerance) OR >126 (diabetes)

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS?



- ☐ Anxiety, school avoidance, social isolation (Depression)
- ☐ Abdominal pain (GERD, Gall bladder disease, constipation)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Shortness of breath, exercise intolerance (Asthma, lack of physical conditioning)
- ☐ Hirsuitism, excessive acne, irregular menses - <9 cycles per yr (Polycystic ovarian syndrome)
- ☐ Tobacco use (Increased cardiovascular risk)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain (SCFE)
- ☐ Headaches (Pseudotumor cerebri)
- ☐ Nocturnal Enuresis (Obstructive sleep apnea)

e. Physical Exam – Are comorbidities noted on the physical exam?



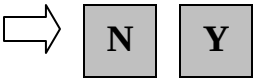
Potential Causes of Obesity

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)
- ☐ Goiter (hypothyroidism)
- ☐ Undescended testicle (Prader-Willi syndrome)
- ☐ Dysmorphic features (Genetic disorders)

Potential Comorbidities/Complications of Obesity

- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease)
- ☐ Wheezing (Asthma)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Excessive acne, hirsutism (Polycystic ovarian syndrome)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)

f. Review assessment tool – is family history positive for any of the following?



Family Hx: Obesity ___ HTN___ Type 2 DM ___ Hyperlipidemia ___ Early MI ___ Early Stroke ___

If any above medical risks are noted "Yes" in Step 1 use tailored approach Step 3b.

STEP 2: REVIEW BEHAVIOR TARGETS & PATIENT READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 12 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record number from survey tool

_____Concern about child's diet & physical activity habits? _____Ready to make changes? _____Confidence in ability to make changes?

0-3=Not Ready **4-6=Unsure** **7-10=Ready**

STEP 3: TAILOR APPROACH TO PATIENT/FAMILY

	3a. OVERWEIGHT WITH NO MEDICAL RISK FACTORS (PREVENTION)	**3b. OVERWEIGHT WITH MEDICAL RISK FACTORS (STAGE 1 - PREVENTION PLUS)**
GOAL	Weight velocity maintenance.	Weight maintenance or slow weight gain.
RECOMMEN-DATIONS	• Provide basic education specific to weight classifications and review the medical risks associated with obesity. • Target problem behaviors identified in Step 2. • Review prevention messages (e.g. 5210) • Praise current practice when appropriate.	• Counsel and guide parents & patients (if appropriate) through goals they set themselves based on problem behaviors identified in Step 2a . • **If low parental / patient concern (i.e. pre-contemplation, 1-3 in Step 2b) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.
LABS	Obtain fasting lipid profile. Repeat every 3-5 years if normal.	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST for 10 yo & greater. Repeat every 3-5 years if normal.
FOLLOW UP	*Yearly for health maintenance.* Consider more frequently to confirm weight percentile is stable, especially if history is unknown.	*Monthly ideally.* If no progress is made in 3-6 months, Stage 2 (Structured Weight Management) should be considered.

STEP 4: ASSESSMENT & PLAN

Labs (check those obtained during visit)

_____ Fasting lipid profile
_____Fasting glucose
_____ALT / AST
_____ Other _____

Recommended Follow Up

_____ Weeks
_____ Months
_____Year

Referrals: ____ None ____Yes (list below)

_____
_____
_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: ____weight counseling ____physical activity counseling ____nutrition counseling

Agreed upon goals for target behaviors from 2a:

_____
_____
_____

OTHER NOTES:_____
_____
_____
_____

Provider Signature: _____ **Date:** _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity_Outreach_281184_7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Patients Ages 12-18 Years Old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our patients. Please take a moment to answer the following questions. We realize how busy families and children are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face individuals each day.

	Please circle true or false.	
1. I eat 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. I eat a healthy breakfast every day.	**True**	**False**
3. I usually eat dinner at the table with other family members.	**True**	**False**
4. I eat take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. I participate in physical activity for at least 1 hour each day. ***This would include sports as well as general play where you are up and moving.**	**True**	**False**
6. I drink fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. I drink less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. I spend more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. I have a TV in my bedroom.	**True**	**False**
10. I have drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

I have (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

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OBESE TOOLS

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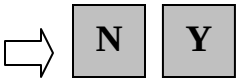
Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This 2-5 year old's BMI percentile puts her/him in the **obese category (BMI ≥95th percentile)**

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

a. Assess Vitals: Is the patient hypertensive?



Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
2	95th	102	103	104	105	107	108	109	61	62	62	63	64	65	65
3	95th	104	104	105	107	108	109	110	65	66	66	67	68	68	69
4	95th	105	106	107	108	110	111	112	68	68	69	70	71	71	72
5	95th	107	107	108	110	111	112	113	70	71	71	72	73	73	74

Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
2	95th	101	102	104	106	108	109	110	59	59	60	61	62	63	63
3	95th	104	105	107	109	110	112	113	63	63	64	65	66	67	67
4	95th	106	107	109	111	112	114	115	66	67	68	69	70	71	71
5	95th	108	109	110	112	114	115	116	69	70	71	72	73	74	74

b. Is the child taking any of these obesogenic medications?

Antipsychotics____ Mood Stabilizers____ TCA___ Anticonvulsants____ Prednisone____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher?

Total Cholesterol ≥ 170 ___ LDL ≥ 110 ___ Triglycerides > 110 ___ HDL < 40 ___

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS?

- ☐ Anxiety, school avoidance, social isolation (Depression)
- ☐ Abdominal pain (GERD, Gall bladder disease, constipation)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain (SCFE)
- ☐ Headaches (Pseudotumor cerebri)

e. Physical Exam – Are comorbidities noted on the physical exam?

Potential Causes of Obesity

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Undescended testicle (Prader-Willi syndrome)
- ☐ Dysmorphic features (Genetic disorders)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)

Potential Complications of Obesity

- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease (NAFLD))
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)

f. Review assessment tool – is family history positive for any of the following?

Family Hx: Obesity ___ HTN___ Type 2 DM ___ Hyperlipidemia ___ Early MI ___ Early Stroke ___

If any above medical risks are noted refer as appropriate.

STEP 2: REVIEW BEHAVIOR TARGETS & FAMILY READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day.
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 6 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record numbers from survey tool

_____Concern about child's diet & physical activity habits? **0-3=Not Ready**

_____Ready to make changes? **4-6=Unsure**

_____Confidence in ability to make changes? **7-10=Ready**

STEP 3: TAILOR APPROACH TO FAMILY/PATIENT

START WITH STAGE 1 (PREVENTION PLUS) AND PROGRESS AS NOTED TO STAGES 2, 3 OR 4

	Stage 1: Prevention Plus	Stage 2: Structured Weight Management
GOAL	Weight maintenance (weight loss of up to 1 lb/mo may be acceptable if BMI is >21 or 22kg/m2).	Weight maintenance (weight loss of up to 1 lb/mo may be acceptable if BMI is >21 or 22kg/m2).
RECOMMEN-DATIONS	• Counsel and guide parents through goals they set themselves. • **If low parental concern (i.e. pre-contemplation) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.	• A structured meal plan developed by a dietician (refer as needed) or clinician who has received additional training in developing this kind of eating plan for children. • Reduction of sedentary screen time ≤1 hour per day. • Supervised physical activity or active play totaling 60 minutes per day. • Monitor above behavior through use of logs. • Planned reinforcement for achieving targeted behaviors. **As needed, refer for help to dietician, behavioral counselor, physical therapist, personal trainer.*
LABS	Obtain fasting lipid profile. Repeat every 2 years if normal.	Obtain fasting lipid profile. Repeat every 2 years if normal.
FOLLOW UP	*Monthly ideally.* If no progress is made in 6 months, advance to Stage 2 (Structured Weight Management) if family is ready.	*Monthly ideally*. If no progress is made in 6 months progress to Stage 3 (Comprehensive Multidisciplinary Intervention) if family is ready.

Labs (check those obtained during visit)

____ Fasting lipid profile

____ Other _____

Recommended Follow Up

_____ Weeks

_____ Months

Referrals: ____ None ____Dietician

____Physical Therapist ____Personal Trainer

____Behavioral Counselor

____Other_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: ____weight counseling ____physical activity counseling ____nutrition counseling

Agreed upon goals for target behaviors from 2a:

_____

_____

_____

OTHER NOTES:_____

_____

_____

_____

Provider Signature: _____ **Date:** _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity_Outreach_281184_7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Caregivers of Children Ages 2-5 years old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 6 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — **Very concerned**

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — **Very ready**

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — **Very confident**

1	2	3	4	5	6	7	8	9	10

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Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This **6-11** year old's BMI percentile puts her/him in the **obese** category

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

a. Assess Vitals: Is the patient hypertensive?

N Y

Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
6	95th	108	109	110	111	113	114	115	72	72	73	74	74	75	76
7	95th	110	111	112	113	115	116	116	73	74	74	75	76	76	77
8	95th	112	112	114	115	116	118	118	75	75	75	76	77	78	78
9	95th	114	114	115	117	118	119	120	76	76	76	77	78	79	79
10	95th	116	116	117	119	120	121	122	77	77	77	78	79	80	80
11	95th	118	118	119	121	122	123	124	78	78	78	79	80	81	81

Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP %	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
6	95th	109	110	112	114	115	117	117	72	72	73	74	75	76	76
7	95th	110	111	113	115	117	118	119	74	74	75	76	77	78	78
8	95th	111	112	114	116	118	119	120	75	76	77	78	79	79	80
9	95th	113	114	116	118	119	121	121	76	77	78	79	80	81	81
10	95th	115	116	117	119	121	122	123	77	78	79	80	81	81	82
11	95th	117	118	119	121	123	124	125	78	78	79	80	81	82	82

b. Is the child taking any of these obesogenic medications?

N Y

Antipsychotics____ Mood Stabilizers____ TCA___ Anticonvulsants____ Prednisone____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher?

N Y

Total Cholesterol ≥ 170_____ LDL ≥ 110 _____ Triglycerides > 110 _____ HDL < 40 _____

For ages ≥10 also obtain: ALT or AST >60 on two occasions _____

Fasting glucose >100 (impaired glucose tolerance) _____ OR >126 (diabetes) _____

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS?

N Y

- ☐ Anxiety, school avoidance, social isolation (Depression)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Shortness of breath, exercise intolerance (Asthma, lack of physical conditioning)
- ☐ Abdominal pain (GERD, constipation, gallbladder disease, NAFLD)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain (SCFE, limping)
- ☐ Headaches (Pseudotumor cerebri)
- ☐ Nocturnal Enuresis (Obstructive sleep apnea)

e. Physical Exam – Are comorbidities noted on the physical exam?

N Y

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)
- ☐ Goiter (hypothyroidism)
- ☐ Undescended testicle (Prader-Willi syndrome)
- ☐ Dysmorphic features (Genetic disorders)

Potential Comorbidities/Complications of Obesity

- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease)
- ☐ Wheezing (Asthma)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)
- ☐ Advanced Tanner Stage (Premature puberty in 7 yo white girls, 6 yo black girls, 9 yo boys)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)

f. Review assessment tool – is family history positive for any of the following?

N Y

Family Hx: Obesity ___ HTN___ Type 2 DM ___ Hyperlipidemia ___ Early MI ___ Early Stroke ___

If any above medical risks are noted refer as appropriate.

STEP 2: REVIEW BEHAVIOR TARGETS & FAMILY READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 6 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record number from survey tool

_____Concern about child's diet & physical activity habits? _____Ready to make changes? _____Confidence in ability to make changes?

0-3=Not Ready **4-6=Unsure** **7-10=Ready**

STEP 3: TAILOR APPROACH TO FAMILY/PATIENT

START WITH STAGE 1 (PREVENTION PULUS) AND PROGRESS AS NOTED TO STAGE 2, 3 OR 4

	STAGE 1: PREVENTION PLUS	STAGE 2: STRUCTURED WEIGHT MANAGEMENT
GOAL	**BMI 95th-99th percentile** – Gradual weight loss (1 lb/mo or 0.5 kg/mo) **BMI >99th percentile** – Weight loss (max is 2 lb/wk)	**BMI 95th-99th percentile** – Gradual weight loss (1 lb/mo or 0.5 kg/mo) **BMI >99th percentile** – Weight loss (max is 2 lb/wk)
RECOMMENDATIONS	• Counsel and guide parents & patients (if appropriate) through goals they set themselves based on problem behaviors identified in Step 2a . • **If low parental / patient concern (i.e. pre-contemplation, 1-3 in Step 2b) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.	• A structured meal plan developed by a dietician or clinician (refer as needed) who has received additional training in developing this kind of eating plan for children. • Reduction of sedentary screen time ≤1 hour per day. • Supervised physical activity or active play totaling 60 minutes per day. • Monitor above behavior through use of activity logs. • Planned reinforcement for achieving targeted behaviors. **As needed, refer for help to dietician, behavioral counselor, physical therapist, personal trainer.*
LABS	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST for 10 yo & greater. Repeat every 2 years, if normal.	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST for 10 yo & greater. Repeat every 2 years, if normal.
FOLLOW UP	*Monthly ideally.* If no progress in 3-6 months advance to Stage 2 (Structured Weight Management) if family is ready. **BMI >99th percentile** – Stage 2 or 3 should be considered	*Monthly ideally.* If no progress in 3-6 months advance to Stage 3 (Comprehensive Multidisciplinary Intervention) if family is ready. **For BMI >99th percentile** consider referral to Stage 4 (Tertiary Care Intervention).

STEP 4: ASSESSMENT & PLAN

Labs (check those obtained during visit)

____ Fasting lipid profile
____ Fasting glucose (≥ 10 yo)
____ALT / AST (≥ 10 yo)
____ Other _____

Recommended Follow Up

_____ Weeks
_____ Months

Referrals: ____ None ____Dietician
____Physical Therapist ____Personal Trainer
____Behavioral Counselor
____Other_____
_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: ____weight counseling ____physical activity counseling ____nutrition counseling

Agreed upon goals for target behaviors from 2a above:

_____
_____
_____

OTHER NOTES:_____
_____
_____
_____

Provider Signature: _____ **Date:** _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity Outreach 281184 7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Parents of Children Ages 6-11 Years Old

Patient Name: _____
Age: _____ **Date:** _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our families. Please take a moment to answer the following questions. We realize how busy parents are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face families each day.

	Please circle true or false.	
1. My child eats 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. My child eats a healthy breakfast every day.	**True**	**False**
3. My child usually eats dinner at the table with other family members.	**True**	**False**
4. My child eats take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. My child participates in physical activity for at least 1 hour each day. *This would include sports as well as general play where you are up and moving.	**True**	**False**
6. My child drinks fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. My child drinks less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. My child spends more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. My child has a TV in the bedroom.	**True**	**False**
10. My child has drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

My child has (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your child's diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

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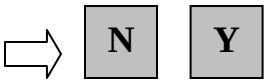
Pt Name, DOB, date of visit, BMI percentile, height percentile will all be auto populated at the top of this page.

Weight Status: This **12-18** year old's BMI percentile puts her/him in the **obese** category **(BMI ≥95th percentile)**

STEP 1: ASSESS THE CURRENT AND FUTURE WEIGHT-RELATED DISEASE BURDEN.

a. Assess Vitals: Is the patient hypertensive?



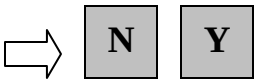
Blood Pressure Table for GIRLS by Age and Height Percentile															
Age	BP % 95	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
12		119	120	121	123	124	125	126	79	79	79	80	81	82	82
13		121	122	123	124	126	127	128	80	80	80	81	82	83	83
14		123	123	125	126	127	129	129	81	81	81	82	83	84	84
15		124	125	126	127	129	130	131	82	82	82	83	84	85	85
16		125	126	127	128	130	131	132	82	82	83	84	85	85	86
17		125	126	127	129	130	131	132	82	83	83	84	85	85	86

Blood Pressure Table for BOYS by Age and Height Percentile															
Age	BP % 95	Systolic BP (mmHg) ←Percentile of Height→							Diastolic BP (mmHg) ←Percentile of Height→						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
12		119	120	122	123	125	127	127	78	79	80	81	82	82	83
13		121	122	124	126	128	129	130	79	79	80	81	82	83	83
14		124	125	127	128	130	132	132	80	80	81	82	83	84	84
15		126	127	129	131	133	134	135	81	81	82	83	84	85	85
16		129	130	132	134	135	137	137	82	83	83	84	85	86	87
17		131	132	134	136	138	139	140	84	85	86	87	87	88	89

b. Is the child taking any of these obesogenic medications?

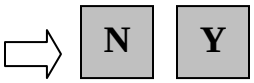
Antipsychotics____ Mood Stabilizers____ TCA___ Anticonvulsants____ Prednisone____ SSRI____

c. Laboratory Assessment - Are any levels above borderline or higher?



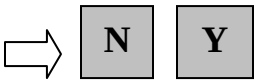
Total Cholesterol ≥ 170_____ LDL ≥ 110 _____ Triglycerides > 110 _____ HDL < 40 _____
ALT or AST >60 on two occasions _____
Fasting glucose >100 (impaired glucose tolerance)_____ OR >126 (diabetes)_____

d. Assess Comorbidities and ROS – Is there presence of comorbidites from the ROS?



- ☐ Anxiety, school avoidance, social isolation (Depression)
- ☐ Abdominal pain (GERD, Gall bladder disease, constipation)
- ☐ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression)
- ☐ Night breathing problems (Sleep apnea, hypoventilation syndrome, asthma)
- ☐ Shortness of breath, exercise intolerance (Asthma, lack of physical conditioning)
- ☐ Polyuria, polydipsia, wt loss (DM)
- ☐ Hip/knee pain (SCFE)
- ☐ Headaches (Pseudotumor cerebri)
- ☐ Nocturnal Enuresis (Obstructive sleep apnea)
- ☐ Tobacco use (Increased cardiovascular risk)
- ☐ Hirsuitism, excessive acne, irregular menses - <9 cycles per yr (Polycystic ovarian syndrome)

e. Physical Exam – Are comorbidities noted on the physical exam?



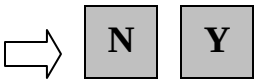
Potential Causes of Obesity

- ☐ Violaceous striae (Cushing's syndrome)
- ☐ Poor linear growth (Hypothyroidism, Cushing's, Prader-Willi)
- ☐ Goiter (hypothyroidism)
- ☐ Undescended testicle (Prader-Willi syndrome)
- ☐ Dysmorphic features (Genetic disorders)

Potential Comorbidities/Complications of Obesity

- ☐ Acanthosis nigricans (NIDDM, insulin resistance)
- ☐ Hepatomegaly (Nonalcoholic fatty liver disease)
- ☐ Wheezing (Asthma)
- ☐ Abdominal tenderness (Gall bladder disease, GERD, NAFLD)
- ☐ Excessive acne, hirsutism (Polycystic ovarian syndrome)
- ☐ Lower leg bowing (Blount's disease)
- ☐ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri)
- ☐ Tonsillar hypertrophy (Sleep apnea)
- ☐ Limited hip range of motion (Slipped capital femoral epiphysis)

f. Review assessment tool – is family history positive for any of the following?



Family Hx: Obesity ___ HTN___ Type 2 DM ___ Hyperlipidemia ___ Early MI ___ Early Stroke ___

If any above medical risks are noted refer as appropriate.

STEP 2: REVIEW BEHAVIOR TARGETS & FAMILY READINESS FOR CHANGE

a. Reinforce positive behaviors noted on survey tool and note risky behaviors below.

- ☐ Eats <5 svgs fruit & veggies every day.
- ☐ Does not eat a healthy breakfast every day.
- ☐ Does not usually eat meals at the table with family.
- ☐ Eats take out or fast food ≥2x per week.
- ☐ Spends >2 hours TV &/or computer time per day.
- ☐ Physical activity less than 1 hr per day.
- ☐ Drinks > 1 sugar sweetened beverage per day
- ☐ Drinks 2% or greater milk.
- ☐ Drinks > 6 oz 100% fruit juice per day.
- ☐ TV in bedroom.

b. Assess readiness for change – Record number from survey tool

_____Concern about child's diet & physical activity habits? _____Ready to make changes? _____Confidence in ability to make changes?

0-3=Not Ready **4-6=Unsure** **7-10=Ready**

STEP 3: TAILOR APPROACH TO PATIENT/FAMILY
START WITH STAGE 1 (PREVENTION PLUS) AND PROGRESS AS NOTED TO STAGES 2, 3 OR 4

	STAGE 1: PREVENTION PLUS	STAGE 2: STRUCTURED WEIGHT MANAGEMENT
GOAL	Weight loss (maximum is 2 lbs/wk)	Weight loss (maximum is 2 lbs/wk)
RECOMMEN-DATIONS	• Counsel and guide parents & patients (if appropriate) through goals they set themselves based on problem behaviors identified in Step 2a . • **If low parental / patient concern (i.e. pre-contemplation, 1-3 in Step 2b) attempt to motivate by educating family regarding medical risk factors associated with obesity.** • Refer or order appropriate follow-up testing for co-morbidities.	• A structured meal plan developed by a dietician or clinician (refer as needed) who has received additional training in developing this kind of eating plan for children. • Reduction of sedentary screen time ≤1 hour per day. • Supervised physical activity or active play totaling 60 minutes per day. • Monitor above behavior through use of activity logs. • Planned reinforcement for achieving targeted behaviors. **As needed, refer for help to dietician, behavioral counselor, physical therapist, personal trainer.*
LABS	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST. Repeat every 2 years, if normal.	Obtain fasting lipid profile. Obtain fasting glucose & ALT/AST. Repeat every 2 years, if normal.
FOLLOW UP	*Monthly ideally.* If no progress in 3-6 months, advance to Stage 2 (Structured Weight Management) if family is ready. **BMI >99th percentile** – Stage 2 or 3 should be considered instead of Stage 1 if patient/family are motivated.	*Monthly ideally.* If no progress in 3-6 months advance to Stage 3 (Comprehensive Multidisciplinary Intervention) if family is ready. **BMI >99th percentile** consider referral for Stage 4 (Tertiary Care Intervention) if patient/family are motivated.

STEP 4: ASSESSMENT & PLAN

Labs (check those obtained during visit)

____ Fasting lipid profile
____ Fasting glucose
____ALT / AST
____ Other _____

Recommended Follow Up

_____ Weeks
_____ Months

Referrals: ____ None ____Dietician
____Physical Therapist ____Personal Trainer
____Behavioral Counselor
____Other_____
_____

Counseling occurred for _____ minutes and comprised 50% or more of visit. _____Yes _____ No

Topics addressed: ____weight counseling ____physical activity counseling ____nutrition counseling

Agreed upon goals for target behaviors from 2a above:

_____
_____
_____

OTHER NOTES:_____
_____
_____
_____

Provider Signature: _____ **Date:** _____

Billing Information - This section is for information only and cannot be taken as a guarantee of payment for services. Check with the patient's health plan directly to determine eligibility and billing requirements.

Hypertension	401.9	Obesity	278.00	BMI 85th to < 95th %tile	V85.53	BMI, ≥ 95th %tile	V85.54	Type 2 DM	250.00
Hyperlipidemia	272.0	Obstructive sleep ap	780.57	Primary Cushing syndrome	255.0	Excessive wt gain	783.1	GERD	530.81
Sleep disturb.	780.50	Inappropriate diet	V69.1	Physical activity counseling	V65.41	Nutrition counseling	V65.3	PCOS	256.4
Anxiety	300.0	Lack of exercise	V69.0	Acanthosis nigricans acquired	701.2	Hypertriglyceridemia	272.1	Asthma	493.9
Gallstones	574.20	Depression	311.0	Nonalcoholic fatty liver dis	571.8	Hypothyroidism	244.9	Constipation	564.0
Fam hx of type 2 DM	V18.0	Elevated BP	796.2	Fam hx of cardiovascular dis	V17.3	Fam hx of type 2 DM	V18.0		

For more information and clarification on billing for pediatric obesity prevention, assessment and treatment services for patients on straight Medicaid, access a Medicaid ' L Letter' at http://www.michigan.gov/documents/mdch/L-09-15-Obesity_Outreach_281184_7.pdf

Resources & References

- "Expert Committee Recommendations Regarding the Prevention, Assessment and Treatment of Childhood and Adolescent Overweight and Obesity: Summary Report" Barlow, Sarah E. & the Expert Committee. *Pediatrics* 2007; 120; S164-S192.
- Blue Cross Blue Shield of Michigan Pediatric Healthy Weight Toolkit - http://www.bcbsm.com/pdf/pediatric_healthy_weight_toolkit.pdf
- American Academy of Pediatrics. *What Families Can Do* featuring the 5210 message. http://www.aap.org/obesity/families.html?technology=1
- Recommended daily intake amounts of fruits and vegetables based on age and sex can be found at www.mypyramid.gov ; http://www.choosemyplate.gov/
- Blue Cross Blue Shield of Michigan Good Health Club Physician Toolkit - http://www.bcbs.com/innovations/childhood-obesity-prevention/good-health-club-physician.html

Survey for Patients Ages 12-18 Years Old

Patient Name: _____
Age: _____ Date: _____

In our office, we are interested in discussing the aspects of a healthy lifestyle with all of our patients. Please take a moment to answer the following questions. We realize how busy families and children are and how difficult it is to do all the right things! The questions below reflect only a small number of the challenges that face individuals each day.

	Please circle true or false.	
1. I eat 5 or more servings of fruits and vegetables on most days.	**True**	**False**
2. I eat a healthy breakfast every day.	**True**	**False**
3. I usually eat dinner at the table with other family members.	**True**	**False**
4. I eat take out, fast food, or other restaurant food less than two times per week.	**True**	**False**
5. I participate in physical activity for at least 1 hour each day. ***This would include sports as well as general play where you are up and moving.**	**True**	**False**
6. I drink fat free or 1% milk rather than 2% or whole milk.	**True**	**False**
7. I drink less than 12 ounces of 100% fruit juice every day.	**True**	**False**
8. I spend more than 2 hours per day in front of the TV or computer.	**True**	**False**
9. I have a TV in my bedroom.	**True**	**False**
10. I have drinks with sugar (punch, fruit drinks, sports drinks, soda, icees, etc) on most days of the week.	**True**	**False**

I have (circle the correct answer):

Parent or sibling who is overweight or obese.
Yes No

Siblings, parents, grandparents, aunts or uncles with:

Diabetes Type 2	Yes	No
High blood pressure	Yes	No
High cholesterol	Yes	No
Heart attack before age 55	Yes	No
Stroke before age 55	Yes	No

Circle the number which best reflects where you are at on the number continuum.

How concerned are you about your diet and physical activity habits?

Not concerned — Very concerned

1	2	3	4	5	6	7	8	9	10

How ready are you to make changes?

Not ready — Very ready

1	2	3	4	5	6	7	8	9	10

How confident are you that you can make changes?

Not confident — Very confident

1	2	3	4	5	6	7	8	9	10

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