Executive Summary: ShapeUp Visit Note

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Clinicians in pediatric primary care are faced with a growing number of overweight and obese children daily. Approximately 22% of American children are considered overweight while an additional 17% are considered obese. This reflects a 50% increase in one generation (Schetchikova, 2009). Overweight and obese children are at increased risk for the development of chronic illnesses such as diabetes, asthma, heart disease, chronic obstructive pulmonary disease, and joint disorders creating an increase in healthcare expenditures (Rice, Thombs, Leach, & Rehm, 2008; Small, Anderson, Sidora-Arcoleo, & Gance-Cleveland, 2009). Children and adolescents who are affected by chronic illness prior to adulthood are more likely to experience chronic illness as they progress into adulthood creating further economic impact to healthcare (Beno, Hinchman, Kibbe, & Trowbridge, 2005; Fennoy, 2008; Resnicow, Davis, & Rollnick, 2006). Early identification and intervention in pediatric obesity are critical in the efforts of pediatric primary care providers because children visit their primary care clinician less often than during infancy allowing fewer opportunities to discuss chronic health concerns. Clinicians must therefore make the most of each visit incorporating overweight and obesity evaluation and management into routine visits including collaborative approaches such as motivational interviewing to help children and families reach their own conclusions in personal health management. Clinicians need the appropriate tools to drive the visit maximizing their use of time and ability during each visit. Use of an encounter form that incorporates elements of overweight and obesity screening along with counseling related to nutrition, behavior and physical activity is necessary during these routine visits.

Although early identification and intervention seem to be simple solutions to the growing problem of pediatric overweight and obesity, primary care providers have had difficulty
making progress in the quest for improvement (Resnicow et al., 2006; Perrin, Finkle, & Benjamin, 2007; Small, Anderson, Sidora-Arcoleo, & Gance-Cleveland, 2009). In part this is due to the infrequent visits with older children. Fewer visits with the child and family often inhibit the ability to tackle sensitive issues such as overweight and obesity. As many as 19% of school age children in the southwest are reported as having had no physician visit in a 12-month time period (Centers for Disease Control [CDC], 2008). In addition to fewer visits, several other barriers have been identified as threats to adequate assessment and intervention in the fight against the obesity epidemic. Barriers include limited time to conduct assessments, lack of clinician knowledge about treatment, feelings of inadequacy of providers in their ability to counsel overweight adolescents, feelings of defeat due to the growing prevalence of childhood obesity, and lack of knowledge of evidence-based treatment guidelines regarding pediatric obesity (Small et al.; Perrin et al.; and Resnicow et al.). A logical step in removing several of these barriers is the development of a visit tool that incorporates assessment criteria, evidence-based guidelines, and motivational interviewing techniques to enable the provider to confidently promote patient and family involvement in breaking the cycle of obesity.

Review of Literature

Healthcare providers are routinely faced with pediatric overweight and obesity. There are few interventions, however, that have been found to be effective in decreasing the growing epidemic (Small, Melnyk, & Strasser, 2007). Guidelines were in process of development as early as 1994 in light of the rising adiposity in children and were first published in 1998 (Small et al., 2009). Despite the presence of these early guidelines, there has been no improvement in the national statistics for childhood overweight and obesity (Small et al.).
Since 1994 several tool-kits and guidelines for prevention and treatment of pediatric obesity have been developed by healthcare groups in the recent past. The Texas Pediatric Society (2005) launched *Pediatric Obesity: A Clinical Toolkit for Healthcare Providers* in order to facilitate the implementation of evidence-based care among Texas pediatricians. This kit contains detailed information related to diagnosis, treatment, billing considerations, and patient handouts. Patient handouts are written in simple, easy-to-understand language for parents and children. All handouts and assessments are provided in Spanish. Although information is included regarding treatment algorithms, the kit does not provide a sample encounter form.

Likewise, the National Association of Pediatric Nurse Practitioners (NAPNAP) (2006) published the *Healthy Eating and Activity Together (H.E.A.T.) Guidelines* the following year. The guidelines provide age specific, evidence-based information with emphasis on history, measurements, physical examination, education, and assessment. Recommendations are further delineated into categories of early identification, developmental considerations, nutrition, physical activity, and advocacy with rationale and evidence-based references given for each clinical practice recommendation. A supplementary, in-depth toolkit was also published. The tool kit, however, is out of circulation at this time leaving no access to a sample encounter form.

Other toolkits and guidelines are becoming available although there is limited circulation. For example, Blue Cross Blue Shield has recently developed a guideline for pediatric primary care providers but in order to receive the guideline, the clinician must participate in an on-line survey (K. Bookout, personal communication, November 5, 2009).

Motivational interviewing (MI) is a form of counseling that has been used with some success in adolescents and adults with regard to smoking cessation, diabetes care, dietary intervention, and physical activity modification (Resnicow et al., 2006). It is a powerful tool
when attempting to encourage behavior change (Texas Pediatric Society, 2009). The goal of motivational interviewing is to help the individual arrive at an understanding of how current behavior may impact future outcomes. MI uses a patient- and family-centered approach to discussions. Family centered communication includes core concepts such as communication, partnership, education, and health promotion and illness prevention and has been widely used in pediatric healthcare (Benjamin, Cimino, Hafler, & Bernstein, 2002). The use of MI in childhood overweight and obesity is a developing methodology. Research of MI has shown remarkable effectiveness in reducing associated risk factors associated with overweight and obesity in adults but few studies have evaluated its success in children (Soderlund, Nordqvist, Angbratt, & Nilson, 2009).

Methods

Elements of several evidence-based guidelines and tools were evaluated and combined to create a visit note for use by pediatric primary care providers (see Appendix A). The National Initiative for Children’s Healthcare Quality (2007) published online development tools for pediatric overweight and obesity. These recommendations were incorporated into the encounter form. The tool is color coded and divided into sections following the SHAPE acronym. The S-section (orange) contains information typically found within the subjective area of an encounter form such as patient demographics, height, weight, and chief complaint. The comprehensive tool incorporates “history” within the H-section of the encounter. The history of the patient and family along with pertinent data specific to presence of comorbidities are collected for both. The A-section contains the physical, lifestyle, and mental assessments of the patient. In addition, patients and families are asked to complete a readiness survey and nutrition survey to give an accurate picture of where they fall in terms of readiness for change. Following the
comprehensive physical assessment are questions related to current lifestyle and mental status. Finally, within this section, is the assessment of the patient which includes specific diagnoses related to obesity and identified comorbidities. The P-section stands for plan. Each patient is evaluated for necessary labs and referrals to specialists such as cardiology and endocrinology. The educational component is captured within the planning section. This allows the provider to reassess readiness of the patient and family periodically as education is provided regarding comorbidities and risk factors. It is recommended that patients and parents submit to a 6-month commitment with visits to the provider every two to four weeks. A discussion of this commitment is carried out during the planning phase of the visit. The E-section is the area of the tool addressing the evaluation of whether or not the patient met his goals during the timeframe specified. Additionally, counseling notes and motivational interviewing techniques are described to prompt the clinician during the visit. An instructional tool for form completion has been provided in Appendix B.

Evaluation and Outcomes

The tool developed within this project has been evaluated by the physicians in the practice as well as a practicing family nurse practitioner. Modifications have been made based on verbal feedback from each. It is anticipated that this visit note will be piloted in the primary care setting of 18 & Under MD during the second quarter of 2010. There are three providers in the office (2 physicians and 1 nurse practitioner.) It is expected that by utilizing this visit note, providers will have clear, concise, evidence-based guidelines for management of pediatric overweight and obesity. Tool development proved a daunting task. However, with the increased number of guidelines and references in the literature, it is easy to determine the components for inclusion in the tool.
Summary and Recommendations

Concise yet comprehensive approaches to patient care visits are paramount as clinicians continue to battle pediatric overweight and obesity. Tool development is an important part of creating a barrier free environment to improving the approach to patients and families who are in various stages of readiness. Utilizing the ShapeUp tool will create an atmosphere within the visit that promotes motivational interviewing techniques with the goal of improving patient and family commitment to healthier lifestyles. After piloting the ShapeUp visit note, revisions will be made and the tool will be utilized on a broader scope. Ultimately, this tool will be converted to an on-line format utilizing dropdown menus, prompts, and flowcharting to direct the clinician’s use of the tool and personalize the recommendations for each patient.
References


Appendix A

Tool.

[Image: Visit Note: Overweight and Obese Children/Adolescents]

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age:</th>
<th>DOB:</th>
<th>Today's Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (%):</td>
<td>Wt(%):</td>
<td>BMI(%):</td>
<td>Waist Circumference:</td>
</tr>
<tr>
<td>BP:</td>
<td>HR:</td>
<td>RR:</td>
<td>Temp:</td>
</tr>
<tr>
<td>Weight Classification (circle one):</td>
<td>Overweight</td>
<td>Obese</td>
<td></td>
</tr>
</tbody>
</table>

**Chief Complaint:**

**Review of Systems:** (Comorbidities/Risk factors/Contributing factors) Complete on initial visit.
- [ ] No change
- Sleep Apnea  Y/N
- Pseudotumor Cerebri  Y/N
- Dyslipidemia  Y/N
- HTN  Y/N
- GERD  Y/N
- Wt. bearing Joint Pain  Y/N
- PCOS  Y/N
- Acanthosis Nigricans  Y/N
- Psychological Adjust.d/o  Y/N
- T2DM  Y/N
- Hypothyroidism  Y/N
- Cushing Syndrome  Y/N
- SGA  Y/N
- Prader-Willi Synd  Y/N
- Post-Malignancy Tx  Y/N
- Low Birth Wt  Y/N
- Previous Wt. loss attempts  Y/N: Specify:

**Medications:** None or Specify:

**Family History:** Obesity  Y/N
- Diabetes  Y/N
- HTN  Y/N
- Cardiovascular Disease  Y/N
- [ ] No change
- Depression  Y/N
- Other:

**Social History:** School/Daycare: __________________________ Who lives in home?
- [ ] No change
- Who helps parent? __________________________ Other information:
- School concerns? __________________________ Bullying?

**Physical Assessment:** General: _____WDWN _____NAD _____Playful _____Active _____Flat Affect _____Other:
- HEENT: _____ATNC _____PEERL _____NOSE: _____Clear _____Congested _____Noisy breathing
- MOUTH: _____pink _____MMM
- TMs: R: _____clear _____dull _____exudate _____effusion _____cerumen
- L: _____clear _____dull _____exudate _____effusion _____cerumen
- Neck: _____supple _____no nuchal rigidity _____no LAD _____shoddy LAD _____goiter _____Acanthosis nigricans
- Lungs: _____CTAB _____No incr WOB _____Decreased BS _____crackles _____ronchi _____wheezing _____retractions
- _____Tachypnea _____stridor
**Executive Summary: Shape Up**

- **CV:** ___RRR ___No murmur ___No rub ___No gallop ___NL S1S2 ___Murmur
- **Abd:** ___soft ___nontender ___nondistended ___NABS ___No HSM ___No masses
- **Extremities:** WWP ___2+ pulses ___no clubbing ___no cyanosis ___no edema ___FROM
- **Neuro:** ___MAEW ___strength 5/5 ___nl tone ___nl gait ___no mental status changes

<table>
<thead>
<tr>
<th>DTRs:</th>
</tr>
</thead>
</table>

| GU: ___ NI genitalia ___ Tanner Stage: ___ Testes ↓↓ ___Rash ___Candidiasis |

| Skin: ___ No rashes ___ eczema |

**Lifestyle Habits (Ask your patient the following at each visit):**

- What do you eat in a typical day for B/L/D/Snacks? Indicate number of servings in the blank provided.
  - Cereal ___
  - Bread/Bagel___
  - Fruit ___
  - Eggs ___
  - Milk ___
  - Yogurt ___
  - Cheese ___
  - Chips ___
  - Lunch Meat___
  - Chicken___
  - Fish ___
  - Beef ___
  - Pasta ___
  - Vegetables ___
  - Crackers___
  - Peanut butter___
  - Cookies___
  - Snack crackers ___
  - Soda ___
  - Juice ___
  - Water ___

- What type of exercise do you do, & how often (minutes per day)?
  - Walking ____PE____
  - Recess ____
  - Biking ___
  - Running ___
  - WiiFit ___

- Other (specify) ___

- What other activity do you get in a typical day? practice for sports___
  - games for sports___
  - computer games ___
  - television ___
  - texting ____

- Other (specify) ___

- During the past month have you been bothered by:
  - Feeling down, blue, depressed or hopeless? Y/N
  - Feelings of little interest or pleasure in doing things? Y/N

**Readiness Survey Complete?**

- Y ___ N (Circle stage. If already complete, proceed to assessment.)

<table>
<thead>
<tr>
<th>Precontemplation</th>
<th>Contemplation</th>
<th>Preparation</th>
<th>Action</th>
<th>Maintenance</th>
<th>Relapse/Recycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Survey Complete?</td>
<td>Y ___ N (If already complete, proceed to assessment.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Assessment:** (include wt. classification, comorbidities, readiness to change):

<table>
<thead>
<tr>
<th>Plan:</th>
<th>(Plan is based on readiness to change. Tailor intervention according to readiness. If BMI ≥95%, fasting glucose, total cholesterol and lipid panel (LFTs) are warranted.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs:</td>
<td>None</td>
</tr>
<tr>
<td>Referrals:</td>
<td>None</td>
</tr>
</tbody>
</table>

| Education (Pt/Family) re: Comorbidities/Risk Factors | Y ___ N |
| Education (Pt/Family) re: Lifestyle Changes | Y ___ N |
**Goals:** (Use DARN-C for change talk.)

<table>
<thead>
<tr>
<th>D=Desire: What is the desired change?</th>
<th>O=Outcome (e.g., amt. of weight loss)</th>
<th>P=Process (e.g., portion control, increasing activity, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A=Ability: What is his/her ability to make change?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R=Reasons: Why should he/she change?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=Needs: Why does he/she need change?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C=Commitment: Strong statements of change (“I will,” “I may,” etc.)</td>
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</table>

**Food & Exercise Journal:**  
Y  N

**Specific Counseling:**

**Follow-up:**

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Clinician Signature and Date
Appendix B

Tool instructions.

Visit Note: Instructions for completion

Name: __________________________ Age: _______ DOB: _______ Today’s Date: _______
Height (%): _______ Wt (%): _______ BMI (%): _______ Waist Circumference: _______
BP: _______ HR: _______ RR: _______ Temp: _______

Weight Classification (circle one):
- Overweight
- Obese

Chief Complaint: __________________________

1. Complete subjective information to include Patient Demographics, Measurements, Weight Classification, and Chief Complaint.

Review of Systems: (Comorbidities/Risk factors/Contributing factors) Complete on initial visit.
- □ No change

Sleep Apnea Y/N Pseudotumor Cerebri Y/N Dyslipidemia Y/N
HTN Y/N GERD Y/N Wt. bearing Joint Pain Y/N PCOS Y/N
Acanthosis Nigricans Y/N Psychological Adjust.d/o Y/N T2DM Y/N
Hypothyroidism Y/N Cushing Syndrome Y/N SGA Y/N
Prader-Willi Synd Y/N Post-Malignancy Tx Y/N Low Birth Wt Y/N
Previous Wt. loss attempts Y/N: Specify:

Medications: None or Specify:

Family History: Obesity Y/N Diabetes Y/N HTN Y/N Cardiovascular Disease Y/N
- □ No change Depression Y/N Other:

Social History: School/Daycare: _______ Who lives in home? ______________________
Who helps parent? _______ Other information: ______________________
School concerns? _______ Bullying? ______________________

2. Complete the review of systems to include specific comorbidities and contributing factors to overweight and obesity. A “no change” option is present for use at subsequent visits.
3. Complete medications section. Include herbal supplements and multivitamins. This section to be completed at each visit.
4. Complete the family history section for presence of disease. A “no change” option is present for use at subsequent visits.
5. Complete social history. A “no change” option is present for use at subsequent visits.

**Physical Assessment**

General: ___WDWN ___NAD ___Playful ___Active ___Flat Affect ___Other: 
HEENT: ___ATNC ___PEERL NOSE: ___ Clear ___Congested ___Noisy breathing MOUTH: ___pink ___MM

TMs: R: ___clear ___dull ___exudate ___effusion ___cerumen _______________________
L: ___clear ___dull ___exudate ___effusion ___cerumen _______________________

Neck: ___supple ___no nuchal rigidity ___no LAD ___shoddy LAD ___goiter ___Acanthosis nigricans

Lungs: ___CTAB ___No incr WOB ___Decreased BS ___crackles ___ronchi ___wheezing ___retractions ___Tachypnea ___stridor _________________________________________________

CV: ___RRR ___No murmur ___No rub ___No gallop ___Nl S1S2 ___Murmur

Abd: ___soft ___nontender ___nondistended ___NABS ___No HSM ___No masses

Extremities: ___WWP ___2+ pulses ___no clubbing ___no cyanosis ___no edema ___FROM

Neuro: ___MAEW ___strength 5/5 ___nl tone ___nl gait ___no mental status changes ____________

DTRs: _____________________________________________________________________________________

GU: ___Nl genetalia ___Tanner Stage: ___ Testes ↓↓ ___Rash ___Candidiasis ______________

Skin: ___No rashes ___eczema

**Lifestyle Habits** (Ask your patient the following at each visit):

What do you eat in a typical day for B/L/D/Snacks? Indicate number of servings in the blank provided.

- Cereal ___
- Bread/Bagel___
- Fruit ___
- Eggs ___
- Milk ___
- Yogurt ___
- Cheese___
- Chips ___
- Lunch

- Chicken___
- Fish ___
- Beef ___
- Pasta ___
- Vegetables ___
- Crackers ___
- Peanut butter ___
- Cookies ___
- Snack crackers ___
- Soda ___
- Juice ___
- Water

What type of exercise do you do, & how often (minutes per day)? Walking ____PE____ Recess ____ Biking ___

Running ___ __WiFit ___

Other (specify) ___

What other activity do you get in a typical day? practice for sports___ games for sports___ computer games ___

television ___texting ___ Other (specify) ___

During the past month have you been bothered by:

Feeling down, blue, depressed or hopeless? Y/N Feelings of little interest or pleasure in doing things? Y/N

**Readiness Survey Complete?**

Y ___ N (Circle stage. If already complete, proceed to assessment.)

**Nutrition Survey Complete?**

Y ___ N (If already complete, proceed to assessment.)

**Assessment** (Include wt. classification, comorbidities, readiness to change):

6. Complete the physical assessment section of the form with each visit.

7. The lifestyle section of the form is to be completed at each visit. The clinician should ask the patient about daily habits related to food intake, activity, exercise, and depression screening.

8. Readiness survey completion should be indicated. This may be provided to patient families for completion while in the waiting area. It may also be posted on the clinic website for downloading by the family prior to their arrival.

Precontemplation: (“I can’t” and “I won’t”). Patients are characterized by reluctance, rebellion, resignation and rationalization. They may be uninformed of long term consequences of
overweight and obesity. They may be aware of consequences but rationalize behaviors. The cons of changing behavior are greater than the pros of changing behavior. The provider coach must listen to the patient during the evaluation remaining calm and explanatory. Do not push the individual. Emphasize the positive aspects of change. Help identify barriers to change and provide alternatives.

Contemplation: (“I may”). In this phase patients are aware of their problem and thinking about change (likely in the next 90 days). Cons of changing still outweigh benefits of changing yet they may not know how to get started. These patients are waiting for something to happen to them to make them change. They are generally open to learn. The provider coach should emphasize the importance of making small steps and minor behavior changes instead of final outcomes. Help the patient find ways to overcome barriers to action and encourage them to find a motivator.

Preparation: (“I will”). Patients are planning to change and may even take some action toward change. They plan to institute change within 30 days. The barriers to change and benefits of change are equal. The provider coach may suggest local seminars or provide video learning materials. Help the individual create a system of monitoring and tracking progress.

Action: (“I am”’) This phase requires a considerable commitment of time and energy. External motivation is required. Patients are building new behavior patterns and are at greatest risk of relapse in this phase. The benefits of change finally outweigh the barriers to change. The provider coach must continue helping the patient prepare for triggers and barriers. Counsel individuals regularly setting small weekly goals. Plan for relapse.

Maintenance: (“I still am”) Regular action for more than 6 months. It is now easier to maintain new habits. Chance of relapse is far less but still possible. The provider coach must reinforce relapse prevention and help them learn to cope with relapse. Focus on the long range goals of the patient. Start to discuss variety in exercise and dietary measures. Encourage the patient to help others who are actively pursuing weight change behaviors.

Relapse and Recycle: (“I failed”) This patient has stopped any new activity and has regressed to an earlier stage of readiness. She may or may not want to resume. Relapse and recycle is a normal stage in the process of change. The provider coach must help the individual move beyond frustration and resume positive changes.

9. A detailed nutritional survey is also utilized to determine educational needs for nutritional behaviors.

10. The assessment nutritional survey should include the primary diagnosis such as obesity along with any comorbidities discovered in the review of symptoms.
Executive Summary: Shape Up

Education (Pt/Family) re: Comorbidities/Risk Factors

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

Education (Pt/Family) re: Lifestyle Changes (handout) Nutrition (handout/demo)
Increased Physical Activity Behavior Modification Nutrition/Family Counseling

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

11. Plan is based on readiness to change. Tailor intervention according to readiness. If BMI ≥95%, fasting glucose, total cholesterol and lipid panel (LFTs) are warranted.

12. Education of Comorbidities and Risk Factors: If the patient/family is not motivated, reassess readiness periodically. Knowledge of child’s growth status can be a strong motivator for parents’ readiness to change.

13. Education about lifestyle changes, behavioral modification, nutrition, and increased physical activity. **Key points**: A 6-month commitment is recommended. Follow up on a regular interval is recommended (q 2-4 weeks). Coach patients in collaborative approach, not authoritatively. Help parents understand they are coaches as well as role models. Communicate that the first attempt may not get the patient to the goal. Help the patient make the argument for change. Assess and reassess readiness. Help the patient identify discrepancies between current and future behaviors. Support self-efficacy. Use open ended questions. Provide frequent affirmations. Reflective listening helps patient resolve ambivalence about areas of change. Summarize conversations. Help children achieve decisional balance. Discuss Goal Setting. Determine whether goal is an outcome goal or process goal.

**Goals:** (Use DARN-C for change talk.)

<table>
<thead>
<tr>
<th>D=Desire: What is the desired change?</th>
<th>Outcome (e.g., amt. of weight loss)</th>
<th>Process (e.g., portion control, increasing activity, etc.)</th>
</tr>
</thead>
</table>

**Food & Exercise Journal**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
</tr>
</thead>
</table>

**Specific Counseling:**

**Follow-up:**

14. The evaluation section of the form includes goal setting. Goals should be differentiated between outcome and process goals. Outcome goals are those specific to weight loss amounts, clothing size changes, and achievement of specific activity goals (i.e., completion of 5K race). Process goals are those that should be revisited at regular follow-up visits. These include positive changes in decisions such as food choices, portion control, and incremental increases in physical activity. The DARN-C approach may be used in helping patients identify goals, ability to make changes, reasons to change, need for change and solidify with commitment.
15. A food and exercise journal should be provided on the first visit and reviewed at subsequent visits.

16. If other co-morbid features are revealed within the assessment, specific counseling should be included. If the individual demonstrates struggles with certain aspects of change (e.g., lifestyle, nutritional, behavioral), describe counseling provided to the child/family.

17. Follow-up. Describe any discussion with the patient or family related to lab values, tests, phone consultation with other specialists, etc.