Body System: Pediatrics		
Session Topic: Pediatric Obesity		
Educational Format		**Faculty Expertise Required**
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	**Learning Objective(s) that will close the gap and meet the need**	**Outcome Being Measured**
• Knowledge and practice gaps exist with regard to developing collaborative long-term weight loss programs for overweight and/or obese patients. • Less than 1% of eligible patients receive pharmacotherapy for their obesity. • Physicians may not adequately educate overweight and/or obese patients on the health benefits of physical activity, resulting in patients not understanding the importance of disease prevention and risk reduction that adherence to exercise may bring. • Adolescents frequently do not understand the link between obesity and lifestyle choices or the connection to future morbidities • Obese patients frequently do not receive an obesity	1. Implement a screening protocol for all children between the ages of 6-18 years in accordance with the USPSTF recommendation. 2. Develop an integrated obesity management plan that includes intensive behavioral interventions and encourages whole family involvement. 3. Describe a motivational interviewing strategy and explain how that strategy can promote patient behavior change. 4. Establish coding practices for appropriate billing for diet and preventive care counseling.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

diagnosis or weight-related counseling. • Physicians have significant barriers to providing obesity care, including lack of time, inadequate training in weight counseling, and the need to place greater priority on comorbid conditions; including several studies that have also documented negative physician attitudes (e.g., weight stigma), doubt that counseling will have an effect on patient behavior, and feeling that obesity is the responsibility of the patient.		

ACGME Core Competencies Addressed (select all that apply)			
X	Medical Knowledge		Patient Care
X	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations for implementing a screening protocol for all children between the ages of 6-18 years in accordance with the USPSTF recommendation.
- Provide recommendations for developing an integrated obesity management plan that includes intensive behavioral interventions and encourages whole family involvement
- Provide recommendations and resources for developing a motivational interviewing strategy and explain how that strategy can promote patient behavior change.

- Provide recommendations for establishing coding practices for appropriate billing for diet and preventive care counseling.

Needs Assessment

Obesity is at epidemic levels in the United States, including the pediatric population.[1] About one in three children and adolescents are currently overweight or obese. Childhood obesity has become so severe that diseases that once affected only adults are now appearing in children. For example, type 2 diabetes mellitus in children was historically rare; it now constitutes nearly one half of all new cases of diabetes among children. Research shows that childhood and adolescent obesity can cause health problems such as asthma, hypertension, sleep apnea, and increased incidence of lower extremity injuries and with more persistent related complications.[2,3] Long term implications of this epidemic include increased risk of becoming obese adults, with all of the associated health sequalae: type 2 diabetes, hypertension, osteoarthritis, gout, dyslipidemia, cardiovascular disease, and biliary tract disease. There is also a strong relationship between obesity and cancers of the colon, breast, endometrium, esophagus, and kidney.[4] Given the current rate of childhood obesity, this generation of Americans are likely to see declining lifespan compared to older populations.

The evidence shows that the most effective interventions to address prevention and management of childhood obesity are those that involve intensive behavioral intervention (involving at least 26 contact hours), whole family involvement, and an interdisciplinary team approach (including utilization of community resources).[3-7] The use of a motivational interviewing strategy has also been, and continues to be studied and shows promising results by helping to promote patient behavior change and improve patient outcomes and satisfaction.[5-7]

Practice Gaps

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have statistically significant and meaningful knowledge and practice gaps in the medical skill necessary to provide optimal management of pediatric obesity in their practice.[8] More specifically, CME outcomes from 2012-2016 AAFP FMX (formerly Assembly) obesity-related sessions, indicate that physicians have knowledge and practice gaps regarding approaching patients about their weight; effective use of dietary recall; helping patients identify weight loss goals; effectively using motivational interviewing (e.g. OARS); counseling patients about effective lifestyle modifications for diet and exercise; helping patients establish weight loss goals; developing collaborative treatment plans, including efficacious use of pharmacotherapy, lifestyle modification, and referral for bariatric surgery; effective use of follow-ups for monitoring and support; having an awareness of patent education materials, tools, and resources, including structured programs such as AAFP AIM-HI; utilizing a health and nutrition specialist; and appropriate coding and billing to optimize reimbursement.[9-13]

A review of the literature identifies the following gaps in care:

- Obesity rates in low-income preschool-aged children have declined, but continue to exceed those in the general population.[14]

- The rate of T2DM among youth in the U.S. continues to rise in parallel with the rise in obesity rates, particularly among Asian/Pacific Islanders and Native Americans.[15,16]

Tight office schedules and poor reimbursement make it difficult for family physicians to address obesity and obesity prevention thoroughly.[3,17] Additionally, families do not usually seek help for weight management for their children, and parents do not always recognize when their children are overweight.[3] It is therefore important that assessment, counseling and treatment be incorporated into other visits (acute and chronic care, and well-child visits).[4]

Family physicians need to understand the recommended approach to managing and preventing childhood obesity.[4] Current recommendations from the AMA Expert Committee on the Assessment, Prevention, and Treatment of Child and adolescent Overweight and Obesity; US Preventive Services Task Force, American Academy of Family Physicians, and American Academy of Pediatrics advise that primary care physicians are in the unique position to significantly impact the development of the disease. These organization provide recommendations regarding screening and management strategies .[3,4]

Despite the existence of established guidelines and recommendations, many primary care providers fail to successfully implement them.[18] There is evidence that family physicians and other primary care providers are uncomfortable in managing pediatric obesity. According to one study, only 12 percent of pediatricians reported the ability to effectively manage obesity.[4] This is due in part to a lack of tools necessary to consistently integrate the strategies into practice. The Obesity Society, the Obesity Action Coalition, the Strategies to Overcome and Prevent (STOP) Obesity Alliance and the American Society for Metabolic and Bariatric Surgery developed the Take 5 Challenge to help health care professionals better understand how to address obesity. Supported by the AAFP and many other groups, the Take 5 Challenge provides resources to family physicians to assist in effective conversations with patients, and in making a plan that works for them.[1] Other evidence-based childhood weight management programs (such as the 4 stage approach, and the Six to Success program) have been developed to assist primary care providers in the implementation of the clinical guidelines.[18] Family physicians require continuing medical education to gain the knowledge and skills to effectively address the epidemic of childhood obesity among patients in their practice.

Physicians may improve their care of pediatric patients who are obese or overweight by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[19-26]

- The AAFP recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status. (2017)
- The AAFP recommends that all children participate in physical activity for at least an average of 30-60 minutes a day and encourages parents and schools to make physical activity a priority. Prolonged periods of physical inactivity should also be discouraged in both the home and school.

- The USPSTF recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status. (Grade B)
- Overall, children up to 12 years of age benefited from school-based obesity prevention interventions; this effect was not demonstrated among adolescents 13 years and older. Although the overall effect size was small, interventions that promoted physical activity, alone or in combination with diet, were effective in slowing or preventing increases in BMI when compared with control interventions. (Strength of Recommendation: C, based on consensus, disease-oriented evidence, usual practice, expert opinion, or case series.)
- All children with confirmed hypertension and overweight children with prehypertension should be evaluated for additional risk factors for cardiovascular disease, including screening for diabetes mellitus and hyperlipidemia.
- All children with prehypertension or hypertension should make therapeutic lifestyle changes to lower blood pressure, including losing weight if overweight, consuming a healthy diet low in sodium, getting regular physical activity, and avoiding tobacco and alcohol use.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Adolescent Health Screening and Counseling[22]
- High Blood Pressure in Children and Adolescents[21]
- Health Maintenance in School-aged Children: Part I. History, Physical Examination, Screening, and Immunizations[20]
- Health Maintenance in School-aged Children: Part II. Counseling Recommendations[19]
- Adding health education specialists to your practice[27]
- Envisioning new roles for medical assistants: strategies from patient-centered medical homes[28]
- The benefits of using care coordinators in primary care: a case study[29]
- Engaging Patients in Collaborative Care Plans[30]
- Health Coaching: Teaching Patients to Fish[31]
- Encouraging patients to change unhealthy behaviors with motivational interviewing[32]
- Integrating a behavioral health specialist into your practice[33]
- How to Help Your Patients Choose Wisely[34]
- Simple tools to increase patient satisfaction with the referral process[35]
- Familydoctor.org - Childhood Obesity (patient education)[36]

References

1. Crawford C. Take 5 Challenge Tasks Physicians With Focusing on Obesity. *AAFP News.* 2016.
2. Sundin BA, Moreno E, Neher JO, St Anna L. Obesity and joint injuries in children. *American family physician.* 2015;91(5):320-322.
3. Crawford C. USPSTF: Screen Children, Adolescents for Obesity. *AAFP News.* 2016.
4. Rao G. Childhood obesity: highlights of AMA Expert Committee recommendations. *American family physician.* 2008;78(1).
5. Ebbeling CB, Antonelli RC. Primary care interventions for pediatric obesity: need for an integrated approach. *Pediatrics.* 2015;135(4):757-758.
6. Pollak KI, Nagy P, Bigger J, et al. Effect of teaching motivational interviewing via communication coaching on clinician and patient satisfaction in primary care and pediatric obesity-focused offices. *Patient education and counseling.* 2016;99(2):300-303.
7. Seburg EM, Olson-Bullis BA, Bredeson DM, Hayes MG, Sherwood NE. A review of primary care-based childhood obesity prevention and treatment interventions. *Current obesity reports.* 2015;4(2):157-173.
8. AAFP. 2012 CME Needs Assessment: Clinical Topics. American Academy of Family Physicians; 2012.
9. American Academy of Family Physicians (AAFP). AAFP FMX CME Outcomes Report. Leawood KS: AAFP; 2016.
10. American Academy of Family Physicians (AAFP). AAFP FMX CME Outcomes Report. Leawood KS: AAFP; 2015.
11. American Academy of Family Physicians (AAFP). 2012 AAFP Scientific Assembly: CME Outcomes Report. Leawood KS: AAFP; 2012.
12. American Academy of Family Physicians (AAFP). 2013 AAFP Scientific Assembly: CME Outcomes Report. Leawood KS: AAFP; 2013.
13. American Academy of Family Physicians (AAFP). AAFP Assembly CME Outcomes Report. Leawood KS: AAFP; 2014.
14. Pan L, Freedman DS, Sharma AJ, et al. Trends in Obesity Among Participants Aged 2-4 Years in the Special Supplemental Nutrition Program for Women, Infants, and Children - United States, 2000-2014. *MMWR Morbidity and mortality weekly report.* 2016;65(45):1256-1260.
15. Mayer-Davis EJ, Lawrence JM, Dabelea D, et al. Incidence Trends of Type 1 and Type 2 Diabetes among Youths, 2002-2012. *The New England journal of medicine.* 2017;376(15):1419-1429.
16. Valenzuela JM, Seid M, Waitzfelder B, et al. Silverstein and WFB Prevalence of and Disparities in Barriers to Care Experienced by Youth with Type 1 Diabetes. *The Journal of pediatrics.* 2014;164(6):1369-1375.e1361.

17. Sherwood NE, Levy RL, Langer SL, et al. Healthy Homes/Healthy Kids: a randomized trial of a pediatric primary care-based obesity prevention intervention for at-risk 5-10 year olds. *Contemporary clinical trials.* 2013;36(1):228-243.
18. Cygan HR, Baldwin K, Chehab LG, Rodriguez NA, Zenk SN. Six to success: improving primary care management of pediatric overweight and obesity. *Journal of Pediatric Health Care.* 2014;28(5):429-437.
19. Riley M, Locke AB, Skye EP. Health maintenance in school-aged children: Part II. Counseling recommendations. *American family physician.* 2011;83(6):689-694.
20. Riley M, Locke AB, Skye EP. Health maintenance in school-aged children: Part I. History, physical examination, screening, and immunizations. *American family physician.* 2011;83(6):683-688.
21. Riley M, Bluhm B. High blood pressure in children and adolescents. *American family physician.* 2012;85(7):693-700.
22. Ham P, Allen C. Adolescent health screening and counseling. *American family physician.* 2012;86(12):1109-1116.
23. Saguil A, Stephens M. Interventions to prevent childhood obesity. *American family physician.* 2012;86(1):30-32.
24. American Academy of Family Physicians (AAFP). Physical Activity in Children. *AAFP Policies* 2006;
25. American Academy of Family Physicians (AAFP). Obesity - Children and adolescents. *Clinical Preventive Service Recommendation* 2017;
26. Force USPST. Screening for obesity in children and adolescents: Us preventive services task force recommendation statement. *JAMA : the journal of the American Medical Association.* 2017;317(23):2417-2426.
27. Chambliss ML, Lineberry S, Evans WM, Bibeau DL. Adding health education specialists to your practice. *Family practice management.* 2014;21(2):10-15.
28. Naughton D, Adelman AM, Bricker P, Miller-Day M, Gabbay R. Envisioning new roles for medical assistants: strategies from patient-centered medical homes. *Family practice management.* 2013;20(2):7-12.
29. Mullins A, Mooney J, Fowler R. The benefits of using care coordinators in primary care: a case study. *Family practice management.* 2013;20(6):18-21.
30. Mauksch L, Safford B. Engaging Patients in Collaborative Care Plans. *Family practice management.* 2013;20(3):35-39.
31. Ghorob A. Health Coaching: Teaching Patients to Fish. *Family practice management.* 2013;20(3):40-42.
32. Stewart EE, Fox CH. Encouraging patients to change unhealthy behaviors with motivational interviewing. *Family practice management.* 2011;18(3):21-25.
33. Reitz R, Fifield P, Whistler P. Integrating a behavioral health specialist into your practice. *Family practice management.* 2011;18(1):18-21.
34. Lin K, O'Gurek DT, Rich R, Savoy ML. How to Help Your Patients Choose Wisely. *Family practice management.* 2015;22(4):28-34.
35. Jarve RK, Dool DW. Simple tools to increase patient satisfaction with the referral process. *Family practice management.* 2011;18(6):9-14.
36. FamilyDoctor.org. Childhood Overweight and Obesity. 2011;

