OBESITY MEDICINE EDUCATION COLLABORATIVE
Obesity Competencies

obesitymedicine.org/OMEC

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OBESITY SOCIETY

Table of Contents

Message from the OMEC Steering Committee

A major challenge facing medical educators today is adequately training current and future physicians, nurse practitioners, and physician assistants in the prevention and treatment of obesity. However, the educational response to this escalating problem during undergraduate medical education (UGME) and graduate medical education (GME) has been limited due to the shortage of qualified faculty members who are trained in the science and practice of obesity medicine; limited time in a crowded curriculum; and lack of recognition of obesity by a primary or specialty board.

Nonetheless, it is paramount to develop a competent and knowledgeable clinician workforce that can provide adequate care to the 38% of U.S. adults and 17% of U.S. children and adolescents who have obesity.

One path toward reaching this goal is the development of comprehensive obesity-focused competencies. The rationale for this approach is three-fold:

1 Medical training is competency-based.

2 It is acknowledged that assessment drives learning.

3 Having a comprehensive set of readily available curated competencies will facilitate widespread usage.

To this end, the Obesity Medicine Education Collaborative (OMEC) has developed the first set of obesity-related competencies based on the Six Core Domain Competencies of the Accreditation Council for Graduate Medical Education (ACGME) that can be used in UGME and GME training programs.

The competencies were deliberately developed for learners at multiple stages of training and among different disciplines, since all trainees must be sufficiently qualified to care for patients with obesity. Additionally, since most medical, nursing, and PA curricula are now competency-based, the competencies were designed to be seamlessly utilized within the training assessment framework. Depending on the particular competency, measurement benchmarks that assess knowledge, skills, behavior, and attitudes are included to facilitate evaluator ratings. Similar to competencies in other fields of practice, they can be used for both formative and summative assessments.

For more information, please visit **obesitymedicine.org/OMEC** or email **omec@obesitymedicine.org**.

On behalf of OMEC, it is our hope that routine and more robust assessment of learners will increase their competence to prevent and treat obesity.

In good health,

Robert Kushner, MD, MS, FACP, FTOS, The Obesity Society
Deborah Bade Horn, DO, MPH, MFOMA, Obesity Medicine Association
W. Scott Butsch, MD, MSc, FTOS, The Obesity Society

Executive Summary

The Obesity Medicine Education Collaborative (OMEC) is an intersociety initiative that was formed in March 2016 and spearheaded by the Obesity Medicine Association (OMA), The Obesity Society (TOS), and the American Society for Metabolic and Bariatric Surgery (ASMBS). The mission of OMEC is to promote and disseminate comprehensive obesity medicine education across the continuum spanning undergraduate medical education (UGME), graduate medical education (GME), and fellowship training.

This executive summary reviews the methods and processes undertaken by the Collaborative to develop obesity medicine educational competencies[1].

A steering committee comprised of OMA, TOS, and ASMBS members[2] was joined by representatives from 12 additional professional societies and organizations[3] to form working groups. Using the Six Core Domain Competencies[4] of the Accreditation Council for Graduate Medical Education (ACGME) as a guiding framework, working group members collaborated by in-person meetings, email exchange, and conference calls between August 2016 and September 2017 to develop 32 obesity-related competencies with specific measurement and assessment benchmarks. The draft competencies, along with a vetting survey, were subsequently sent out for external review in October 2017 to 17 professional societies and organizations[5]. Results of the review were sent back to the working groups to revise the competencies based on comments.

A final document of 32 obesity-related competencies and associated benchmarks was completed in April 2018. The competencies are intended to be used by medical, nursing, and PA educators.

The 6 Core Domains and number of competencies are as follows:

Domain	Count
Patient Care and Procedural Skills	5
Medical Knowledge	13
Practice-Based Learning and Improvement	5
Interpersonal and Communication Skills	3
Professionalism	2
System-Based Practice	4
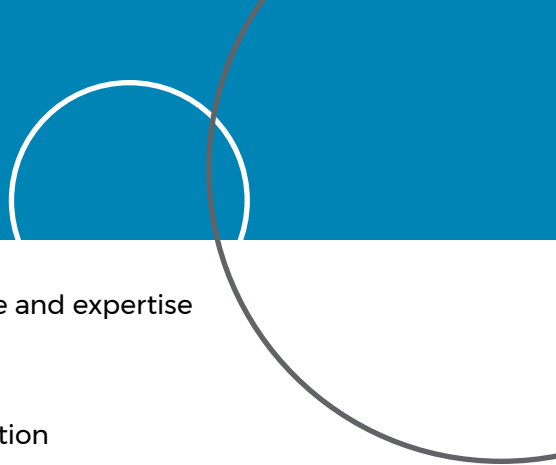
[1] Competency is an observational ability of a health professional, integrating multiple components such as knowledge, skill, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure acquisition.

[2] Kushner RF, Horn D, Butsch S, Pennings N, Lazarus E, Morton J, Brethauer S, Matter S, Apovian C.

[3] American Association of Clinical Endocrinologists (AACE), American Congress of Obstetricians and Gynecologists (ACOG), American Association of Nurse Practitioners (AANP), American Academy of PAs (AAPA), American College of Lifestyle Medicine (ACLM), American College of Preventive Medicine (ACPM), American Osteopathic Association (AOA), Association of Colleges of Osteopathic Medicine (AACOM), American Society of Nutrition (ASN), Endocrine Society (ES), Society of Behavioral Medicine (SBM), Society of General Internal Medicine (SGIM).

[4] Six Domain Competency framework: Practice-based Learning & Improvement, Patient Care and Procedural Skills, Systems-Based Practice, Medical Knowledge, Interpersonal and Communication Skills, and Professionalism

[5] American Society of Addiction Medicine (ASAM), American College of Preventative Medicine (ACPM), American Gastroenterological Association (AGA), Society of General Internal Medicine (SGIM), American Congress of Obstetricians and Gynecologists (ACOG), American Academy of Sleep Medicine (AASM), Academy of Nutrition and Dietetics (AND), American College of Physicians (ACP), American Medical Association (AMA), American Academy of Pediatrics (AAP), Endocrine Society (ES), American Academy of Family Physicians (AAFP), American Association of Clinical Endocrinologists (AACE), American Academy of PAs (AAPA), Association of American Medical Colleges (AAMC), American Heart Association (AHA), American Medical Women's Association (AMWA).

Special thanks to the working group members, who dedicated their time and expertise to developing the 32 obesity medicine competencies:

- **Robert Kushner, MD, MS, FACP, FTOS,** The Obesity Society
- **Deborah Bade Horn, DO, MPH, MFOMA,** Obesity Medicine Association
- **W. Scott Butsch, MD, MSc, FTOS,** The Obesity Society
- **Caroline Apovian, MD, FACP, FACN, FTOS,** The Obesity Society
- **Jamy Ard, MD, FTOS,** The Obesity Society
- **Sarah Armstrong, MD,** American Academy of Pediatrics
- **Daniel Bessesen, MD, FTOS,** Endocrine Society
- **Stacy Brethauer, MD, FASMBS,** American Society for Metabolic and Bariatric Surgery
- **Joshua Brown, PhD, FTOS,** The Obesity Society
- **John Cleek, MD,** The Obesity Society and Obesity Medicine Association
- **Mark DeFrancesco, MD,** American Congress of Obstetricians and Gynecologists
- **Katherine Duncan, MD,** Fellow Representative
- **Colony Fugate, DO,** The Obesity Society and Obesity Medicine Association
- **Angela Golden, DNP, FNP-C, FAANP,** American Association of Nurse Practitioners
- **Sherri Sheinfeld Gorin, PhD,** Society of Behavioral Medicine
- **Carol Gorney, MPAS, PA-C,** American Academy of PAs
- **Eduardo Grunvald, MD, FACP,** The Obesity Society and Obesity Medicine Association
- **Adarsh K. Gupta, DO, MS, FACOFP,** American Osteopathic Association
- **George Guthrie, MD, MPH,** American College of Lifestyle Medicine
- **Leon I. Igel, MD, FACP, FTOS,** Society of General Internal Medicine
- **Madeline Joseph, MD, FAAP, FACEP,** Obesity Medicine Association
- **Scott Kahan, MD, MPH, FTOS,** American College of Preventive Medicine and The Obesity Society
- **Rekha Kumar, MD,** The Obesity Society
- **Ethan Lazarus, MD, FOMA,** Obesity Medicine Association
- **Samer Mattar, MD,** American Society for Metabolic and Bariatric Surgery
- **Janet McGill, MD,** American Association of Clinical Endocrinologists
- **John Morton, MD, MPH, FTOS,** American Society for Metabolic and Bariatric Surgery
- **Connie Newman, MD, FACP, FAHA, FAMWA,** The Obesity Society and American Medical Women's Association
- **Judith Ockene, PhD, MA, MEd,** Society of Behavioral Medicine
- **Sherry Pagoto, PhD,** Society of Behavioral Medicine
- **Magdalena Pasarica, MD, PhD,** The Obesity Society
- **Nicholas Pennings, DO, FOMA,** Obesity Medicine Association
- **Heidi Silver, PhD,** American Society of Nutrition
- **Taraneh Soleymani, MD, FTOS,** The Obesity Society
- **Chris Still, DO, FACP, FTOS,** The Obesity Society
- **Virginia E. Uhley, PhD, RDN,** The Obesity Society
- **Amanda Velazquez, MD, FTOS,** Resident Representative
- **Pankaj Vij, MD, FACP,** American College of Lifestyle Medicine
- **Megan Winters,** Medical Student Representative
- **Adrienne Youdim, MD, FACP,** The Obesity Society

Supporting Organizations

The following organizations have lent their support through endorsement of the OMEC competencies.

The Obesity Society (TOS)

Obesity Medicine Association (OMA)

American Society of Metabolic and Bariatric Surgery (ASMBS)

Academy of Nutrition and Dietetics (AND)

American Academy of PAs (AAPA)

American Association of Clinical Endocrinologists (AACE)

American Association of Nurse Practitioners (AANP)

American Board of Obesity Medicine (ABOM)

American College of Osteopathic Pediatricians (ACOP)

American College of Surgeons (ACS)

American Medical Women's Association (AMWA)

American Society for Gastrointestinal Endoscopy (ASGE)

Association for Bariatric Endoscopy (ABE)

Endocrine Society

Obesity Action Coalition (OAC)

Obesity Canada

Society of Behavioral Medicine (SBM)

Society of General Internal Medicine (SGIM)

Society of Teachers of Family Medicine (STFM)

World Obesity Federation (WOF)

OMEC Competencies

Below is a list of the 32 OMEC competencies by domain group.

PATIENT CARE AND PROCEDURAL SKILLS
5 COMPETENCIES

1 Elicits comprehensive obesity-focused medical history.

2 Performs and documents a comprehensive physical examination for the assessment of obesity.

3 Effectively applies clinical reasoning skills when ordering and interpreting appropriate laboratory and diagnostic tests during the evaluation of patients with obesity.

4 Utilizes evidence-based models of health behavior change to assess patients' readiness to change in order to effectively counsel patients for weight management.

5 Engages the patients and their support systems in shared decision- making by incorporating their values and preferences in the development of a comprehensive personalized obesity management care plan.

MEDICAL KNOWLEDGE
13 COMPETENCIES

1 Demonstrates knowledge of obesity epidemiology.

2 Demonstrates knowledge of energy homeostasis and weight regulation.

3 Demonstrates knowledge of anthropometric (body composition) measurements and clinical assessments of energy expenditure.

4 Demonstrates knowledge of the etiologies, mechanisms, and biology of obesity.

5 Demonstrates knowledge of obesity-related comorbidities and the corresponding benefits of body mass index (BMI) reduction.

6 Applies knowledge of the principles of primary, secondary, and tertiary prevention of obesity to the development of a comprehensive, personalized obesity management care plan.

7 Applies knowledge of obesity treatment guidelines to the development of a comprehensive, personalized obesity management care plan.

8 Applies knowledge of using nutrition interventions to develop a comprehensive, personalized obesity management care plan.

9 Applies knowledge of using physical activity interventions to develop a comprehensive, personalized obesity management care plan.

10 Applies knowledge of using behavioral interventions to develop a comprehensive, personalized obesity management care plan.

11 Applies knowledge of using pharmacological treatments of obesity as part of a comprehensive, personalized obesity management care plan.

12 Applies knowledge of the surgical treatments of obesity as part of a comprehensive, personalized obesity management care plan.

13 Applies knowledge of emerging treatment modalities for obesity to the development of a comprehensive, personalized obesity management care plan.

PRACTICE-BASED LEARNING AND IMPROVEMENT
5 COMPETENCIES

1 Evaluates strengths and deficiencies in knowledge of obesity medicine, and sets and achieves goals for improvement.

2 Analyzes practice systems using quality improvement methods to monitor and optimize obesity care.

3 Utilizes resources to locate, interpret, and apply evidence from scientific studies regarding obesity treatment and its co-morbidities.

4 Uses information technology related to obesity treatment to optimize delivery of care including electronic health records, software applications, and related devices (i.e., accelerometers, resting metabolic rate and body composition analysis technology).

5 Effectively educates patients, students, residents, and other health professionals on the disease of obesity.

INTERPERSONAL AND COMMUNICATION SKILLS
3 COMPETENCIES

1 Uses appropriate language in verbal, nonverbal, and written communication that is non-biased, non-judgmental, respectful, and empathetic when communicating with patients with obesity.

2 Uses appropriate language in verbal, nonverbal, and written communication that is non-biased, non-judgmental, respectful, and empathetic when communicating about patients with obesity with colleagues within one's profession and other members of the healthcare team.

3 Demonstrates awareness of different cultural views regarding perceptions of desired weight and preferred body shape when communicating with the patient, family, and other members of the healthcare team.

PROFESSIONALISM
2 COMPETENCIES

1 Demonstrates ethical behavior and integrity when counseling patients and their families who are living with overweight or obesity.

2 Displays compassion and respect toward all patients and families who are living with overweight or obesity.

SYSTEMS-BASED PRACTICE
4 COMPETENCIES

1 Works collaboratively within an interdisciplinary team dedicated to obesity prevention and treatment strategies.

2 Advocates for policies that are respectful and free of weight bias.

3 Utilizes chronic disease treatment and prevention models to advance obesity intervention and prevention efforts within the clinical, community, and public policy domains.

4 Describes the costs of obesity intervention and prevention with regards to the individual, health care system, and community.

Educator Instructional Guide

EASY STEPS TO USING THE OMEC COMPETENCIES

The Obesity Medicine Education Collaborative (OMEC) was created to support training programs in the implementation of the obesity competencies, as well as to provide reliable assessment of performance of the competencies. The goal is to promote, disseminate, and improve comprehensive obesity medicine education across the continuum of medical education programs for physicians, nurse practitioners, and PAs.

The OMEC competencies were designed using the existing six ACGME domains. Within the six domains, there are 32 obesity-related competencies with specific measurement and assessment benchmarks to facilitate performance assessment.

The competencies can be applied to:

1 Formative or summative assessment of learners within a training program

2 Assessment of existing or planned curricula

3 Assessment of non-training educational environments

? For questions regarding the implementation or use of the OMEC competencies at your program, institution, society, or company, please contact **omec@obesitymedicine.org** to be connected with one of the steering committee members or an OMEC ambassador in your region.

Instructions for Assessment of Learners Within a Training Program

Choose the competencies to be evaluated.

☐ **Full or Partial Evaluation – Select from 6 Domains and 32 Competencies**
Appropriate for formative or summative evaluation during training at the start, midpoint, and completion of a rotation, training year, or full training program.

☐ **Selected Domain Evaluation**
Appropriate for shorter assignments, such as a journal club, M&M, or quality improvement project. These assignments may only cover a few competencies given limited time or limited focus.

Choose a Likert scale, either 1-5 or 1-9.
Check with your institution or department to determine which scale has been chosen for consistency across learners.

Determine an acceptable benchmark score for your learner population.
In the sample assessment form (Exhibit A), a blue bar has been placed below the Likert scales as an example. Consider your group of learners (medical students, nurse practitioner students, PA students, residents, or fellows). The "acceptable" benchmark goal will change for different levels of learners and is set by your program or rotation. **See Exhibit A on page 14**.

Score the learner by scanning the five benchmark descriptions for the competency being evaluated and selecting an appropriate score.

Identify the method of assessment.
This could be direct observation, journal club presentations, chart review, or another method of assessment.

Provide supporting details.
Positive observations: Give the learner specific examples in which he or she excelled.
Suggestions for improvement: Provide learners with areas to refocus.

Note: Some competencies have suggested metrics or examples in the "Notes" box to help the evaluator be more objective in the score.

Consider a self-assessment by the learner at the start of the evaluation period and repeat the self-assessment at the end of evaluation period.

Instructions for Assessment of Existing or Planned Curricula

Choose the educational content to be evaluated. This could be a curriculum or CME offerings by the institution or entity.

Evaluation:

- [ ] Evaluate using all 6 domains and 32 competencies.
- [ ] Use OMEC as a framework to map the current content.
- [ ] Identify the domains and competencies successfully addressed.
- [ ] Identify gaps for improvement based on competencies or entire domains that are minimal or absent in the current content.

Improvement:

- [ ] Identify topics or opportunities that can be added or adjusted to address competency gaps noted above.
- [ ] Use the OMEC map of your program to plan for improvement in future educational choices.

Instructions for Assessment of Non-Training Educational Environments

The OMEC competencies can provide a road map for education of individuals, companies, institutions, and societies that work or operate closely with medical prescribers in the field of obesity medicine. Not all six domains apply in these scenarios; for example, many patient care competencies would not apply to non-medical providers.

However, many of the competencies around professionalism, medical knowledge, interpersonal and communication skills, system-based practice, and practice improvement can be applied in a variety of environments that relate to obesity.

Example #1: A hospital system can identify competencies to focus and drive staff training around the care of patients with obesity.

Example #2: An industry partner that provides an obesity-related product or service – such as a medication or surgical device for the treatment of obesity – can choose competencies to incorporate into employee training in an effort to better understand the field and the healthcare providers with whom they interact.

SAMPLE ASSESSMENT FORM (EXHIBIT A)
See page 14 for the sample assessment form.

Consider your group of learners (medical students, nurse practitioner students, PA students, residents, fellows, or other learners) and determine an acceptable benchmark score for your learner population. The "acceptable" benchmark goal will change for different learner levels and is set by you and your program or rotation.

In the sample assessment form on the next page, a blue bar has been placed above the middle benchmark as an example of a benchmark or goal that a medical student, nurse practitioner student, or PA student might achieve as acceptable for their training level. The blue bar might be moved above the fourth benchmark for residents and above the fifth benchmark for a learner in a fellowship program.

OBESITY MEDICINE COMPETENCY ASSESSMENT SAMPLE FORM

Level of Education (UGME, GME, Fellowship)		Competency Domain	

INSTRUCTIONS:

This evaluation should be based on observations of the _____. Typical _____ are expected to achieve the benchmark level of competency (highlighted in blue) at this stage of their health professional careers. Occasionally, _____ may be above or below the benchmark. Please also provide specific positive observations and suggestions for improvement.

1	2	3	4	5	6	7	8	9
1		2		3		4		5

Method of Assessment (e.g., MCQ Exam, OSCE Exam, Patient Observation, Chart Review, Oral Exam, Reflections, Checklist, Global Rating, Simulation)

Positive Observations:

Suggestions for Improvement:

OBESITY MEDICINE
Competency Assessment

PATIENT CARE AND PROCEDURAL SKILLS
(5 COMPETENCIES)

1 **Competency:** Elicits comprehensive obesity-focused medical history.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Complete history taking is insensitive, disorganized, and/or misses important details for patients with simple weight management challenges.		Complete history taking is reasonably sensitive and uses people-first language, is fairly organized and complete, missing few important details for patients with simple weight management challenges.		Complete history taking is patient and family-centered, uses people-first language, is organized and complete, is appropriate for gathering obesity-related information, and is efficient for patients with simple weight management challenges.		Complete history taking is patient and family-centered, uses people-first language, is organized and complete, is appropriate for gathering obesity-related information, and is efficient for patients with moderate weight management challenges.		Complete history taking is patient and family-centered, uses people-first language, is organized and complete, is appropriate for gathering obesity-related information, and is efficient for patients with complex clinical and psychological weight management challenges.

PATIENT CARE AND PROCEDURAL SKILLS
(5 COMPETENCIES)

2 **Competency:** Performs and documents a comprehensive physical examination for the assessment of obesity.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Physical examination is incomplete, techniques are inaccurate and insensitive to patient's modesty and comfort during physical examination; incomplete documentation of findings.	Physical examination contains key components; techniques are fairly appropriate and fairly sensitive to patient's modesty and comfort during physical examination; fairly complete documentation of findings.	Physical examination is usually complete and focused, technique is mostly accurate, usually ensures patient's modesty and comfort during physical examination; documentation of findings are mostly complete and organized for patients with simple weight management challenges.	Physical examination is consistently complete, systematic, and focused appropriately using accurate techniques that ensure patient's modesty and comfort; documentation of findings is complete and well organized for patients with moderate weight management challenges.	Physical examination is consistently complete, systematic, and focused appropriately using accurate techniques that ensure patient's modesty and comfort; documentation of findings is complete and well organized for patients with complex weight management challenges.

PATIENT CARE AND PROCEDURAL SKILLS
(5 COMPETENCIES)

3 **Competency:** Effectively applies clinical reasoning skills when ordering and interpreting appropriate laboratory and diagnostic tests during the evaluation of patients with obesity.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Use of evidence-based laboratory and diagnostics tests is incomplete or disorganized, orders unnecessary or non-evidence-based tests, clinical reasoning and interpretation of data is limited, and differential diagnosis is limited or not supported.	Use of laboratory and diagnostic tests is organized, clinical reasoning and interpretation are missing a few key components but differential diagnosis is supported.		Use of laboratory and diagnostic tests is organized, clinical reasoning and interpretation of data support differential diagnosis and include the diagnosis for simple cases of obesity.			Use of laboratory and diagnostic tests is organized and efficient without extraneous diagnostics for moderately challenging cases of obesity, clinical reasoning and interpretation of data are accurate and support the correct diagnosis.		Use of laboratory and diagnostic tests is organized and efficient without extraneous diagnostics in complex cases of obesity, clinical reasoning and interpretation of data are accurate and support the correct diagnosis.

PATIENT CARE AND PROCEDURAL SKILLS
(5 COMPETENCIES)

4 **Competency:** Utilizes evidence-based models of health behavior change to assess patients' readiness to change in order to effectively counsel patients for weight management.

1	2	3	4	5	6	7	8	9
1	2		3		4		5	

Counseling for weight management is performed, but evidence-based models of health behavior change are not used. The goals are incomplete and provider-centered.	Counseling for weight management is sometimes performed using evidence-based models of health behavior change. Goals provided are sometimes clear, thorough, and patient-centered for patients with simple weight management challenges.	Counseling for weight management is usually performed using evidence-based models of health behavior change. Goals provided are clear, thorough, and patient-centered. Counseling is usually efficient for patients with simple weight management challenges.	Counseling for weight management is consistently performed using evidence-based models of health behavior change. Goals provided are clear, thorough, and patient-centered. Counseling is consistently efficient for patients with moderate weight management challenges.	Counseling for weight management is consistently performed using evidence-based models of health behavior change. Goals provided are clear, thorough, and patient-centered. Counseling is consistently efficient for patients with complex weight management challenges.

5 **Competency:** Engages the patients and their support systems in shared decision-making by incorporating their values and preferences in the development of a comprehensive personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Patients and their support systems are rarely engaged in shared decision-making, and the management plan is non-personalized for patients with simple weight management challenges.		Patients and their support systems are sometimes engaged in shared decision-making to develop a fairly personalized obesity management plan for patients with simple weight management challenges.		Patients and their support systems are usually engaged in shared decision-making to develop a comprehensive personalized obesity management plan for patients with simple weight management challenges.		Patients and their support systems are consistently engaged in shared decision-making to develop a comprehensive personalized obesity management plan for patients with moderate weight management challenges.		Patients and their support systems are consistently engaged in shared decision-making to develop a comprehensive personalized obesity management plan for patients with complex weight management challenges.

COMPETENCY DOMAIN:
MEDICAL KNOWLEDGE
(13 COMPETENCIES)

1 **Competency:** Demonstrates knowledge of obesity epidemiology.

1	2	3	4	5	6	7	8	9
1	2		3		4		5	
Lacks basic knowledge of overweight and obesity incidence and prevalence, effects on morbidity and mortality, and demographic associations and distributions for children and adults. Cannot identify common environmental, socioeconomic, and behavioral contributors to the obesity epidemic at the population level.	Has basic knowledge of overweight and obesity incidence and prevalence, effects on morbidity and mortality, and demographic associations and distributions for children and adults. Can identify common environmental, socioeconomic, and behavioral contributors to the obesity epidemic at the population level.	Has average knowledge of overweight and obesity incidence, prevalence, and trends, effects on morbidity and mortality, and demographic associations and distributions for children and adults. Demonstrates knowledge of common environmental, socioeconomic, and behavioral contributors to the obesity epidemic at the population level.	Has above average knowledge of overweight and obesity incidence, prevalence, and trends, effects on morbidity and mortality, and demographic associations and distributions for children and adults. Demonstrates knowledge of common and subtle environmental, socioeconomic, and behavioral contributors to the obesity epidemic at the population level.	Has exceptional knowledge of overweight and obesity incidence, prevalence, and trends, effects on morbidity and mortality, and demographic associations and distributions for children and adults. Demonstrates knowledge of common, subtle, and theorized environmental, socioeconomic, and behavioral contributors to the obesity epidemic at the population level.

COMPETENCY DOMAIN:
MEDICAL KNOWLEDGE
(13 COMPETENCIES)

2 **Competency:** Demonstrates knowledge of energy homeostasis and weight regulation.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Lacks basic knowledge of energy homeostasis and weight regulation, including cellular and biochemical energy storage/transfer, thermody-namics, and energy expenditure.		Has basic knowledge of energy homeostasis and weight regulation, including cellular and biochemical energy storage/transfer, thermody-namics, and energy expenditure.		Has average knowledge of energy homeostasis and weight regulation, and can apply that knowledge to the clinical care of patients.		Has above average knowledge of energy homeostasis and weight regulation, including entero-neuroendo-crine physiology, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of energy homeostasis and weight regulation, including entero-neuroendocrine physiology, and can apply that knowledge to the clinical care of complex patients.

MEDICAL KNOWLEDGE
(13 COMPETENCIES)

3 **Competency:** Demonstrates knowledge of anthropometric (body composition) measurements* and clinical assessments of energy expenditure.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of body composition measurements and clinical assessments of energy expenditure (e.g., Harris-Benedict (HB) and Mifflin-St. Jeor (MSJ) equations).	Has basic knowledge of body composition measurements and clinical assessments of energy expenditure (e.g., HB and MSJ equations).		Has average knowledge of body composition measurements (including bioimpedance, skinfold measurements) and clinical assessments of energy expenditure (e.g., HB and MSJ equations), and can apply that knowledge to the clinical care of patients.			Has above average knowledge of body composition measurements (including bioimpedance, skinfold measurements, DXA) and clinical assessments of energy expenditure (e.g., HB and MSJ equations, indirect calorimetry), and can apply that knowledge to the clinical care of patients. Recognizes indications, limitations, and utility of various measurements.		Has exceptional knowledge of body composition measurements (including bioimpedance, skinfold measurements, DXA, cross-sectional imaging, underwater weighing) and clinical assessments of energy expenditure (e.g., HB and MSJ equations, indirect calorimetry, doubly-labeled water, metabolic chamber), and can apply that knowledge to the clinical care of complex patients. Can distinguish nuanced differences between various technologies and measurements, and is able to apply the appropriate study for clinical or investigational purposes.

*Body composition measurements may include weight for length, BMI, BMI percentile, BMI z-score, BMI % relative to 95th percentile, waist circumference (WC), and waist-to-hip ratio (WHR).

4 **Competency:** Demonstrates knowledge of the etiologies, mechanisms and biology of obesity.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of the etiologies, mechanisms, and biology of obesity.	Has basic knowledge of the etiologies, mechanisms, and biology of obesity.		Has average knowledge of the etiologies, mechanisms, and biology of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of the etiologies, mechanisms, and biology of obesity, and can apply that knowledge to the clinical care of patients.		Has comprehensive knowledge of the etiologies, mechanisms, and biology of obesity, and can apply that knowledge to the clinical care of complex patients.

MEDICAL KNOWLEDGE
(13 COMPETENCIES)

5 **Competency:** Demonstrates knowledge of obesity-related comorbidities and the corresponding benefits of body mass index (BMI) reduction.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of obesity-related comorbidities and the corresponding benefits of BMI reduction.	Has basic knowledge of obesity-related comorbidities and the corresponding benefits of BMI reduction.		Has average knowledge of obesity-related comorbidities and the corresponding benefits of BMI reduction, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of obesity-related comorbidities and the corresponding benefits of BMI reduction, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of obesity-related comorbidities and the corresponding benefits of BMI reduction, and can apply that knowledge to the clinical care of complex patients.

6 **Competency:** Applies knowledge of the principles of primary, secondary, and tertiary prevention of obesity to the development of a comprehensive, personalized obesity management care plan.[*]

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of the principles of primary, secondary, and tertiary prevention for the prevention and treatment of obesity.	Has basic knowledge of the principles of primary, secondary, and tertiary prevention for the prevention and treatment of obesity.		Has average knowledge of the principles of primary, secondary, and tertiary prevention for the prevention and treatment of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of the principles of primary, secondary, and tertiary prevention for the prevention and treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of the principles of primary, secondary, and tertiary prevention for the prevention and treatment of obesity, and can apply that knowledge to the clinical care of complex patients.

*Definitions in the context of obesity. Primary prevention: prevent development of overweight/obesity. Secondary prevention: reduce BMI to prevent development of weight–related complications. Tertiary prevention: reduce BMI to prevent progression or worsening of established weight–related complications.

7 **Competency:** Applies knowledge of obesity treatment guidelines to the development of a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of guidelines for the treatment of obesity.	Has basic knowledge of guidelines for the treatment of obesity.		Has average knowledge of guidelines for the treatment of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of guidelines for the treatment of obesity, and can apply that knowledge to the clinical care of patients. Recognizes limitations of guidelines with respect to individual patient care.		Has exceptional knowledge of guidelines for the treatment of obesity, and can apply that knowledge to the clinical care of complex patients. Recognizes the evidence base for obesity treatment guidelines, limitations of guidelines with respect to individual patient care, and areas of continued scientific uncertainty.

MEDICAL KNOWLEDGE
(13 COMPETENCIES)

8 **Competency:** Applies knowledge of using nutrition interventions to develop a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of nutrition interventions for the treatment of obesity.	Has basic knowledge of nutrition interventions for the treatment of obesity.		Has average knowledge of nutrition interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of nutrition interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of nutrition interventions for the treatment of obesity, and can apply that knowledge to the clinical care of complex patients.

9 **Competency:** Applies knowledge of using physical activity interventions to develop a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Lacks basic knowledge of physical activity guidelines and interventions for the treatment of obesity.		Has basic knowledge of physical activity guidelines and interventions for the treatment of obesity.		Has average knowledge of physical activity guidelines and interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has above average knowledge of physical activity guidelines and interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of physical activity guidelines and interventions for the treatment of obesity, and can apply that knowledge to the clinical care of complex patients.

10 **Competency:** Applies knowledge of using behavioral interventions* to develop a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of behavioral interventions for the treatment of obesity.	Has basic knowledge of behavioral interventions for the treatment of obesity.		Has average knowledge of behavioral interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of behavioral interventions for the treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of behavioral interventions for the treatment of obesity, and can apply that knowledge to the clinical care of complex patients.

*e.g., behavior therapy strategies, psychological counseling, sleep regulation, stress reduction

11 **Competency:** Applies knowledge of using pharmacological treatments of obesity as part of a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Does not recognize anti-obesity medication as an appropriate form of therapy. Lacks basic knowledge of the age-appropriate pharmacotherapeutic options for the treatment of obesity, including their indications, contraindications, side effects, and mechanisms of action.	Recognizes anti-obesity medication as an appropriate form of therapy, and has basic knowledge of the age-appropriate pharmacotherapeutic options for the treatment of obesity, including their indications, contraindications, side effects, and mechanisms of action.		Has average knowledge of the age-appropriate pharmacotherapeutic options for the treatment of obesity, including their indications, contraindications, side effects, and mechanisms of action, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of the age-appropriate pharmacotherapeutic options for the treatment of obesity, including their indications, contraindications, side effects, and mechanisms of action, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of the age-appropriate pharmacotherapeutic options for the treatment of obesity, including their indications, contraindications, side effects, and mechanisms of action, and can apply that knowledge to the clinical care of complex patients.

12 **Competency:** Applies knowledge of the surgical treatments of obesity as part of a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Does not recognize bariatric surgery as an appropriate form of therapy or the options available. Lacks basic knowledge of the mechanisms of action and metabolic/clinical outcomes.	Recognizes age-appropriate bariatric surgery as an appropriate form of therapy and the options available. Has basic knowledge of the mechanisms of action and metabolic/clinical outcomes.		Has average knowledge of the surgical options for the treatment of obesity, mechanisms of action, and metabolic/clinical outcomes, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of the surgical options for the treatment of obesity, mechanisms of action, and metabolic/clinical outcomes, and can apply that knowledge to the pre- and post-operative clinical care of patients.		Has exceptional knowledge of the evidence-based patient selection for surgical options for the treatment of obesity, mechanisms of action, and metabolic/clinical outcomes, and can apply that knowledge to the pre- and post-operative clinical care of complex patients.

13 **Competency:** Applies knowledge of emerging treatment modalities* for obesity to the development of a comprehensive, personalized obesity management care plan.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Lacks basic knowledge of emerging modalities for the treatment of obesity.	Has basic knowledge of emerging modalities for the treatment of obesity.		Has average knowledge of emerging modalities for the treatment of obesity, and can apply that knowledge to the clinical care of patients.			Has above average knowledge of emerging modalities for the treatment of obesity, and can apply that knowledge to the clinical care of patients.		Has exceptional knowledge of emerging modalities for the treatment of obesity, and can apply that knowledge to the clinical care of complex patients.

*e.g., devices, medications, procedures/surgeries, endoscopic bariatric therapies (EBTs), electronic applications/technologies

COMPETENCY DOMAIN:
PRACTICE-BASED LEARNING AND IMPROVEMENT
(5 COMPETENCIES)

1 **Competency:** Evaluates strengths and deficiencies in knowledge of obesity medicine and sets and achieves goals for improvement.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Unable to evaluate strengths and deficiencies in knowledge of obesity medicine, and unable to set goals for improvement.	Able to evaluate few strengths and deficiencies in knowledge of obesity medicine, and able to set and achieve limited goals for improvement.		Able to evaluate some strengths and deficiencies in knowledge of obesity medicine, and able to set and achieve some goals for improvement.			Able to evaluate most strengths and deficiencies in knowledge of obesity medicine, and able to set and achieve most goals for improvement.		Able to comprehensively evaluate strengths and deficiencies in knowledge of obesity medicine, and able to consistently set and achieve goals for improvement.

PRACTICE-BASED LEARNING AND IMPROVEMENT
(5 COMPETENCIES)

2 **Competency:** Analyzes practice systems using quality improvement methods to monitor and optimize obesity care.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Unable to analyze practice systems using quality improvement methods to monitor and optimize obesity care.	Able to analyze some practice systems using quality improvement methods to monitor and optimize obesity care.		Able to analyze a wide range of basic practice systems using quality improvement methods to monitor and optimize obesity care.			Able to analyze more advanced practice systems using quality improvement methods to monitor and optimize obesity care.		Consistently able to analyze complex practice systems using quality improvement methods to monitor and optimize obesity care.

PRACTICE-BASED LEARNING AND IMPROVEMENT
(5 COMPETENCIES)

3 **Competency:** Utilizes resources to locate, interpret, and apply evidence from scientific studies regarding obesity treatment and its co-morbidities.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Unable to utilize resources to locate, interpret, or apply evidence from scientific studies regarding obesity treatment and its co-morbidities.	Able to utilize resources to locate evidence, but unable to interpret or apply evidence from scientific studies regarding obesity treatment and its co-morbidities.		Able to utilize resources to locate evidence and beginning to interpret, but not able to apply evidence from scientific studies regarding obesity treatment and its co-morbidities.			Able to utilize resources to locate and interpret evidence, and begins to apply evidence from scientific studies regarding obesity treatment and its co-morbidities.		Consistently utilizes resources to locate, interpret, and apply evidence from scientific studies regarding obesity treatment and its co-morbidities.

PRACTICE-BASED LEARNING AND IMPROVEMENT
(5 COMPETENCIES)

4 **Competency:** Uses information technology related to obesity treatment to optimize delivery of care including EHRs, software applications, and related devices (i.e., accelerometers, resting metabolic rate, and body composition analysis technology).

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Unable to use any forms of information technology related to obesity treatment to optimize delivery of care including EHRs, software applications, and related devices.	Able to use a few limited forms of information technology related to obesity treatment, but with an incomplete comprehension, and therefore unable to optimize delivery of care including EHRs, software applications, and related devices.		Able to use basic forms of information technology related to obesity treatment to optimize delivery of care including EHRs, software applications, and related devices.			Able to use most forms of information technology related to obesity treatment to optimize delivery of care including EHRs, software applications, and related devices.		Very proficient in the use of information technology related to obesity treatment to optimize delivery of care including EHRs, software applications, and related devices.

PRACTICE-BASED LEARNING AND IMPROVEMENT
(5 COMPETENCIES)

5 **Competency:** Effectively educates patients, students, residents, and other health professionals on the disease of obesity.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Unable to educate patients, students, residents, and other health professionals on the disease of obesity.	Provides ineffective or incomplete education to patients, students, residents, and other health professionals on the disease of obesity.		Effectively provides basic education to patients, students, residents, and other health professionals on the disease of obesity in basic clinical cases.			Effectively educates patients, students, residents, and other health professionals on the disease of obesity in common, more advanced clinical cases.		Consistently and effectively educates patients, students, residents, and other health professionals on the disease of obesity in a full spectrum of scenarios, including challenging clinical cases.

INTERPERSONAL AND COMMUNICATION SKILLS
(3 COMPETENCIES)

1 **Competency:** Uses appropriate language in verbal,[*] nonverbal, and written communication that is non-biased, non-judgmental, respectful, and empathetic when communicating with patients with obesity.

1	2	3	4	5	6	7	8	9
1	2		3		4		5	

Verbal, nonverbal, and written communication is biased, judgmental, disrespectful, and/or not empathetic when communicating with patients with obesity.	Occasionally utilizes verbal, nonverbal, and written communication that is inappropriate when engaging with patients with obesity, but corrects when pointed out.	Utilizes verbal, nonverbal, and written communication that is appropriate when engaging with patients with obesity.	Consistently utilizes appropriate verbal, nonverbal, and written communication that is tailored to individual circumstances when engaging with patients with obesity, including challenging situations.	Consistently and effortlessly utilizes appropriate verbal, nonverbal, and written communication that is clear, concise, and tailored to individual circumstances when engaging with patients with obesity in all situations.

*Verbal — includes people-first and weight-friendly language

INTERPERSONAL AND COMMUNICATION SKILLS
(3 COMPETENCIES)

2 **Competency:** Uses appropriate language in verbal[1], nonverbal, and written communication that is non-biased, non-judgmental, respectful, and empathetic when communicating about patients with obesity with colleagues within one's profession and other members of the healthcare team.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Verbal, nonverbal, and written communication is biased, judgmental, and/or disrespectful when communicating with healthcare professionals in clinical and non-clinical settings.[2]	Occasionally utilizes verbal, nonverbal, and written communication that is inappropriate when engaging healthcare professionals in clinical and non-clinical settings, but corrects when pointed out.		Utilizes verbal, non-verbal, and written communication that is appropriate when engaging healthcare professionals in clinical and non-clinical settings.			Consistently utilizes appropriate verbal, nonverbal, and written communication that is tailored to individual circumstances when engaging healthcare professionals in clinical and non-clinical settings, including challenging situations.		Consistently and effortlessly utilizes appropriate verbal, nonverbal, and written communication that is clear, concise, and tailored to individual circumstances when engaging healthcare professionals in clinical and non-clinical settings and in all situations.

[1]Verbal — includes people-first and weight-friendly language

[2]Non-clinical — includes discussions outside of patient care setting such as back office, hallways, cafeteria, or social settings

INTERPERSONAL AND COMMUNICATION SKILLS
(3 COMPETENCIES)

3 **Competency:** Demonstrates awareness of different cultural views regarding perceptions of desired weight and preferred body shape when communicating with the patient, family, and other members of the healthcare team.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Exhibits specific episodes of cultural insensitivity when communicating with others.[1]		Exhibits lack of appreciation for cultural diversity and preferences when communicating with others, but corrects when pointed out.		Demonstrates an appreciation of cultural diversity and preferences when communicating with others and makes use of interpreter services when indicated.		Consistently demonstrates an appreciation of cultural diversity and preferences when communicating with others, consistently uses interpreter services when indicated and in challenging situations, addresses adversity[3] or denial to change. Recognizes implicit and explicit bias in patients, family, staff, and self.		Consistently demonstrates an appreciation of cultural diversity and preferences when communicating with others in all situations, role models and teaches these qualities to other members of the healthcare team. Recognizes and addresses implicit and explicit bias in patients, family, staff, and self.

[1] Others = including patient, family and other members of the healthcare team

[2] Diversity and preferences = including language, ideal body weight and shape, family rituals, lifestyle practices, food choices, and/or use of alternative medicines

[3] Adversity = including thorough exploration of cultural barriers or any additional comments

COMPETENCY DOMAIN:
PROFESSIONALISM
(2 COMPETENCIES)

1 **Competency:** Demonstrates ethical behavior and integrity when counseling patients and their families who are living with overweight or obesity.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Exhibits lack of competence, honesty, responsibility, and/or trustworthiness and exhibits bias when counseling patients and families who are living with overweight or obesity, and fails to acknowledge or correct when pointed out.	Exhibits lack of competence, honesty, responsibility, trustworthiness, and/or exhibits bias when counseling patients and families who are living with overweight or obesity, but corrects when pointed out.		Exhibits competence, honesty, responsibility, trustworthiness, and lack of bias when counseling most if not all patients and families who are living with overweight or obesity.			Consistently exhibits competence, honesty, responsibility, trustworthiness, and lack of bias when counseling patients and families who are living with overweight or obesity, including in challenging situations.		Consistently exhibits competence, honesty, responsibility, trustworthiness, and lack of bias when counseling patients and families who are living with overweight or obesity in all situations, and acts as a role model to teach these qualities to others.

COMPETENCY DOMAIN:
PROFESSIONALISM
(2 COMPETENCIES)

2 **Competency:** Displays compassion and respect toward all patients and families who are living with overweight or obesity.

1	2	3	4	5	6	7	8	9
1	2		3		4		5	
Exhibits lack of compassionate, respectful behavior and/or exhibits bias when working with patients and families who are living with overweight or obesity, and fails to acknowledge or correct when pointed out.	Exhibits lack of compassionate, respectful behavior and exhibits bias when working with patients and families who are living with overweight or obesity, but corrects when pointed out.		Exhibits compassionate and respectful behavior and lack of bias when working with most if not all patients and families who are living with overweight or obesity.		Consistently exhibits compassionate and respectful behavior and lack of bias when working with patients and families who are living with overweight or obesity, including in challenging situations.		Consistently exhibits compassionate and respectful behavior and lack of bias when working with patients and families who are living with overweight or obesity in all situations, and acts as a role model to teach these qualities to others.	

COMPETENCY DOMAIN:
SYSTEMS-BASED PRACTICE
(4 COMPETENCIES)

1 **Competency:** Works collaboratively within an interdisciplinary team dedicated to obesity prevention and treatment strategies.

1	2	3	4	5	6	7	8	9
1		2		3		4		5
Limited understanding of the role of the physician (both generalist and specialist), advanced practice providers, other allied health professionals, and community members, agencies, and policy makers in the prevention and treatment of obesity.	Able to describe, in detail, the scope of practice for physicians, advanced practice providers, and allied health professionals, but inconsistently engages interprofessional team members. Has a superficial understanding of the role of various community members, agencies, and policy makers in the prevention and treatment of obesity.	Able to describe, in detail, the scope of practice for physicians, advanced practice providers, and allied health professionals, as well as the roles various community members, agencies, and policy makers play in the prevention and treatment of obesity. Clearly articulates mechanisms in which interdisciplinary teams work together to achieve a common goal. Actively participates in multidisciplinary teams within the clinical setting.	Effectively engages multidisciplinary team members in the clinical setting to provide comprehensive obesity treatments, and works collaboratively with interdisciplinary team members to advance obesity prevention and intervention efforts in community settings. Has a superficial understanding of policy-level change processes, but may begin to participate in broader advocacy efforts.	Exemplifies leadership within both clinical and community settings. Effectively organizes medical-community collaboratives to design and implement obesity prevention and intervention initiatives and guide multidisciplinary teams to impact policy-level change.

2 **Competency:** Advocates for policies which are respectful and free of weight bias.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Knowledge of the professional literature and currently available resources regarding weight bias is limited.	Aware of the professional literature and currently available resources regarding weight bias; however, proactive efforts to reduce weight bias within the clinical setting are limited.		Is a role model for peers in demonstrating respectful patient care; proactively seeks to reduce weight bias within the clinical setting; however, efforts to reduce the effects of weight bias at the community and policy levels are limited.			Efforts to reduce weight bias within the clinical setting are robust; effectively utilizes the professional literature and currently available resources regarding weight bias to educate peers; actively engages other professionals to reduce weight bias.		Effectively utilizes the professional literature and currently available resources regarding weight bias to advocate on behalf of his/her patients beyond the clinical setting. This may include educating community members and policy makers or lobbying to healthcare administrators/ payers for resources that improve patient outcomes and delivery of care or decrease potential for bias.

SYSTEMS-BASED PRACTICE
(4 COMPETENCIES)

3 **Competency:** Utilizes chronic disease treatment and prevention models to advance obesity intervention and prevention efforts within the clinical, community, and public policy domains.

1	2	3	4	5	6	7	8	9
1		2		3		4		5

Has knowledge of chronic disease treatment and prevention models is superficial.	Able to describe, in detail, the various chronic disease treatment and prevention models; however, application within clinical, community, and public policy settings is limited.	Utilizes population-based data to drive clinical practice decision-making in the care of individuals with overweight or obesity; actively engages individuals with overweight or obesity and their families to reduce barriers to health within the environment and health care delivery systems; however, care coordination is inefficient and limited to health care delivery systems; application within community and public policy domains is limited.	Effectively and efficiently coordinates comprehensive, patient-centered care in both clinical and community settings; application within the public policy domain is limited.	Actively advocates for public policy changes that reduce environmental barriers to health, reduce health care systems inefficiencies, improve health care accessibility for individuals with overweight or obesity, and reduce barriers to care coordination between the health care team and community agencies.

RELEVANT METRICS:
Clearly articulates the impact of health care delivery systems and accessibility, care coordination, environmental conditions, psychological wellbeing, and various systems of influence (e.g., interpersonal, community, policy) on health and health behaviors.

RELEVANT MODELS:
Social ecological model l Social determinants of health l Chronic care model l Biopsychosocial model

COMPETENCY DOMAIN:
SYSTEMS-BASED PRACTICE
(4 COMPETENCIES)

4 **Competency:** Describes the costs of obesity intervention and prevention with regards to the individual, the health care system, and community.

1	2	3	4	5	6	7	8	9
1	2		3			4		5
Knowledge regarding the direct, indirect and human costs of obesity is superficial.	Describes, in detail, the direct, indirect, and human costs of obesity. Knowledge regarding the costs of obesity intervention and prevention efforts at the individual, health care system, community, and population levels is limited.		Compares and contrasts the direct, indirect, and human costs of obesity with the costs of obesity intervention and prevention efforts at the individual, health care system, community, and population levels. Uses this information to inform clinical decision-making.			Effectively and efficiently educates peers and community members concerning the costs of obesity in relation to the costs of obesity intervention and prevention efforts. Applies knowledge of the costs of obesity and obesity prevention and intervention to clinical decision-making, quality improvement projects, and advocacy efforts.		Has an advanced and detailed understanding of the costs of obesity and obesity intervention and prevention efforts. Participates in cost-benefit analysis and contributes to peer-reviewed literature. Effectively and efficiently educates policy makers with regards to the costs of obesity in relation to the costs of obesity intervention and prevention.