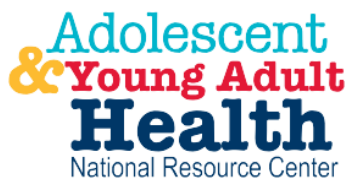


Adolescent and Young Adult Health Measures

*A Menu of Options for Practice-Based
Quality Improvement*



Version 1

January 2016

Table of Contents

Acknowledgments	3
Introduction	4
Emerging issues	6
Measures	6
Data Sources	10
Sampling Strategy	10
Target Goals	11
Measure Table of Contents	12
Adolescent and Young Adult Measures	14
References	34
Appendix I: Adolescent Pre-Visit Questionnaire Elements	35
Appendix II: Adolescent Pre-Visit Questionnaire/Interview Elements: Strengths	36
Adolescent and Young Adult Measures Reference Table	37



Acknowledgments

The research and development of these *Adolescent and Young Adult Health Measures* was led by Barbara Frankowski, MD, MPH and Alexandra Highet at the National Improvement Partnership Network (NIPN), University of Vermont. NIPN leadership, particularly Wendy Davis, MD and Judy Shaw, EdD, MPH, RN, provided critical insight and support. Additionally, NIPN's project team Rachel Wallace-Brodeur, MS, MEd and Stephen DeVoe provided further research and technical editing support. Jane McGrath, MD, Director of Envision New Mexico and Medical Director of the University of New Mexico School-Based Health Center, also contributed adolescent health expertise. Charles Irwin, MD, Director of the Adolescent and Young Adult Health National Resource Center (AYAH-NRC) and of the National Adolescent and Young Adult Health Information Center (NAHIC) at the University of California, San Francisco; Sally Adams, PhD, RN, Data Coordinator and Analyst of NAHIC; and M. Jane Park, MPH, Project Coordinator of NAHIC, provided guidance and research input, particularly with respect to the young adult population.

We would like to acknowledge financial support from the Maternal and Child Health Bureau (Grant #45MC27709), which provided support for much of the personnel time (S. DeVoe, A. Highet, R. Wallace-Brodeur, C. Irwin, S. Adams and M.J. Park).

Adolescent and Young Adult Health Measures

Introduction

As a step towards strengthening the reporting of Improvement Partnership (IP) outcomes, the *National Improvement Partnership Network* (NIPN) is establishing a set of standard process measures, to be used to assess and track improvement within and among pediatric and family practices. Defining a measure set for each topic area within the realm of pediatric care is important for measuring improvement across all IPs, as well as for standardizing the reporting of outcomes and impact. The following *Adolescent and Young Adult Health Measures* are aimed at strengthening primary care preventive services for the adolescent and young adult patient population (defined here as ages 11¹ to 26²).

This Adolescent and Young Adult Measure Set is intended to be used as a reference tool to provide guidance to practices measuring improvement in health care quality specific to adolescents and young adults (henceforth abbreviated as AYA). It is not intended to be a rigid protocol for conducting the Well Visit, but rather a flexible and fluid set of guidelines. As research and evidence-based medicine continue to expand, measures may be added, modified, or subtracted. Incorporating every measure into the Well Visit is an incredible challenge for the provider; appreciating the comprehensiveness of this measure set and considering how certain measures could be incorporated into the practice Well Visit is in itself a significant step forward. NIPN hopes that by selecting and evaluating adherence to these measures, practices will improve their care of AYA patients and move toward better population-level health outcomes.

In recent decades, adolescence and young adulthood have become recognized as critical periods of the life course, during which behaviors are cemented and the individual begins to take independent control of his or her health. The AYA Well Visit is therefore an opportunity for the pediatric or primary care provider to perform a comprehensive medical check-up, as well as health surveillance and screening to identify medical and behavioral risks. As noted by Jasik and Ozer, preventive care is a critical component of primary care for the following reasons: 1) nearly all morbidity and mortality is preventable within adolescence; and 2) the formation of numerous health and lifestyle behaviors of adolescents during this period have enduring health-effects across the lifespan.³ Clear guidelines recommending the periodicity of the well visit for young adults age 22-26 do not exist, but striving for annual visits seems prudent especially since the Affordable Care Act

¹ While there are many ways to define the adolescent and young adult age categories, our definition is from age 11 to the 26th birthday. *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents*, 3rd ed., the national standard for pediatric preventive care, defines 9 and 10 as the 'middle childhood' years, and the adolescent age range as 11 through 21. Therefore, our definition is in alignment with the *Bright Futures* for the beginning age of adolescence. However, there are cases for which ages 9 and 10 should be classified for adolescent care. This is due to their pertinence to several important adolescent benchmarks and health indicators: for instance, Universal Lipid Screening is recommended for ages 9 to 11, as well as 17 to 21, and the HPV vaccine, while recommended beginning at age 11, is approved for and can be given as early as age 9.

² Several national institutes and guidelines are now recognizing the 'young adult' age range as independent from and an important middle ground between adolescence and adulthood. The lower limit is generally 18, as this is the agreed-upon beginning of adulthood. The upper limit of 'young adult' is generally the 26th birthday to align with the 2010 Affordable Care Act, which allows youth to remain on their parental insurance until this date.

³ Jasik CB, Ozer EM. Preventive health care for adolescents and young adults. In: Neinstein LS, Gordon CM, Katzman DK, Rosen DS, Woods ER, eds. *Adolescent health care: A practical guide*. 6th ed. Philadelphia, PA: Lippincott Williams & Wilkins. In press.

covers annual visits for this age group. While recommendations regarding periodicity do not exist, Ozer et al. have identified a set of evidence-based preventive services for young adults,⁴ with clinical tools available for guiding delivery of those services.⁵

However, the effectiveness of AYA preventive health services is offset by low use of preventive services for these patient populations. The Department of Health and Human Services *2013 Annual Report on the Quality of Care for Children in Medicaid and CHIP* reported the median “Well Care” visit rate for adolescents (ages 12 to 21) in FFY 2012 as 41.7%, compared to a 67.7% median “Well Child” visit rate for children (ages 3 to 6).⁶ Preventive visit rates are similarly low for the young adult population: the National Adolescent Health and Information Center reported that 47.8% of young adults (ages 18 to 25) received routine examinations in 2011, which is a modest increase from the pre-Affordable Care Act rate in 2009 (44.1%).⁷ Data also illustrate that young adults are “the least likely age group to be insured, use ambulatory medical care services, and have a usual source of care.”⁸ Since the AYA population underutilizes preventive services with no guarantee of regular annual visits to a medical home, it is critically important to design a Well Visit that comprehensively assesses health and well-being when the AYA patient presents for a visit.

The AYA preventive visit requires a different approach and skill-set to that of the pediatric visit. Youth-parent relationships and confidentiality policies are particularly important variables to take into account while evaluating the patient’s health. The provider must be aware of the patient’s right to confidential care and privacy, but also recognize that most adolescents and many young adults continue to reside within a family structure, under which the parental role continues to be of central importance in the young person’s routine and health. In addition, patients over 18 are considered ‘adults’ and therefore entitled to completely confidential care, but providers must be mindful of young adults who are insured under a parent or guardian’s coverage, as Explanation of Benefits (EOB) statements can result in a breach of confidentiality.

While the AYA Well Visit includes medical assessments, fact gathering and routine procedures (such as immunizations that are standard to pediatric practice), the psychosocial evaluation and assessment of behavioral health factors (such as substance abuse, sexuality, and mental health) are less tangible and depend heavily on patient-provider communication and trust. For example, many of the components of this Measure Set are recommended for a wide range of ages and developmental stages. Screening for chlamydia (measure 5.3) and screening for alcohol use (measure 6.3) are recommended for patients 11-26, but performing such screens for a younger adolescent requires a different approach from the same screens for a young adult. It is beyond the scope of this document to recommend different age-based approaches⁹, but these nuances should be kept in mind. Interviewing the AYA, developing a supportive relationship, and drawing out relevant information in a meaningful way, while also respecting maturity and right to confidentiality, represents an added challenge to the pediatric or family medicine provider. Therefore, these *Adolescent and Young Adult Health Measures* are designed to both highlight and give credit to these psychosocial components of the Well Visit, and allow providers to measure their progress towards implementing them into standard practice.

⁴ Ozer EM, Urquhart J, Brindis CB, Park MJ, Irwin CE, Jr. Young adult preventive health care guidelines: There but can't be found. *Arch Pediatr Adolesc Med.* 2012;166(3):240-7. doi: 10.1001/archpediatrics.2011.794.

⁵ Summary of recommended guidelines for clinical preventive services for young adults ages 18-26. National Adolescent and Young Adult Health. Updated November 2015. Available at: http://nahic.ucsf.edu/wp-content/uploads/2013/10/Final_Screening-Guidelines-Nov-2015.pdf

⁶ See: <http://medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2013-Ann-Sec-Rept.pdf>, p. xxiv.

⁷ Lau JS, Adams SH, Park MJ, Boscardin WJ, Irwin CE Jr. Improvement in preventive care of young adults after the Affordable Care Act: The Affordable Care Act is helping. *JAMA Pediatr.* 2014;168(12):1101-06. doi:10.1001/jamapediatrics.2014.1691.

⁸ Ibid.

⁹ Consult *Bright Futures Guidelines for Health Supervision of Infants, Children and Adolescents*, 3rd ed. for further guidance.

A note about the age range: while NIPN has defined the AYA age range as 11-26, Improvement Partnerships and practices can and should modify this range to fit their state and regional policies, practice protocols, patient populations, or otherwise.

Emerging issues

As this measure set is being put forward, there are numerous other important emerging issues that are worthy of exploring. Some of these include:

- Transition from pediatric to adult health care
- Children and Youth with Special Health Care Needs
- Mental health issues (other than depression)
- Insurance coverage for AYA
- Guidelines for Young Adult Male Health

Measures

To develop these *Adolescent and Young Adult Health Measures*, a crosswalk of pediatric measures was first constructed, and AYA-specific measures endorsed by a national measure steward were identified. While recommendations and guidelines from multiple national institutes were synthesized to define measure stewards, the *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents, 3rd Edition*, published by the American Academy of Pediatrics and accepted as the standard for pediatric preventive health care by the Patient Protection and Affordable Care Act¹⁰, was relied upon as the clinical “gold standard.”

The Adolescent and Young Adult Measures are organized into eight categories:

1. **Preventive Services**
2. **Patient Engagement**
3. **Nutrition, Physical Activity and Cardiovascular Risks**
4. **Safety and Violence**
5. **Sexual Health**
6. **Substance Use**
7. **Mental Health**
8. **Immunizations**

Preventive Services are the standard components of every health supervision visit. Some measures are recommended universally, at every age (such as Blood Pressure and BMI) or at selected ages (such as hearing and vision testing). Others denote the appropriate medical test to be performed if risk factors are identified. For example, if a female AYA patient presents with irregular menses and a low-iron diet, a follow-up anemia test – either hemoglobin or hematocrit – should be given. In this case, an anemia-focused quality improvement project would focus on the percentage of patients with identified risk factors for anemia who

¹⁰ As stated in Section 2713 of the Patient Protection and Affordable Care Act: “A group health plan and a health insurance issuer offering group or individual health insurance coverage shall, at a minimum provide coverage for and shall not impose any cost sharing requirements for (3) with respect to infants, children, and adolescents, evidence-informed preventive care and screenings provided for in the comprehensive guidelines supported by the Health Resources and Services Administration.” US Congress. *Patient Protection and Affordable Care Act, Patient Protection and Affordable Care Act of 2010 (P.L. 111-148)*. <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>.

received a hemoglobin or hematocrit test to confirm them as anemic. Practices may also choose, however, to measure the percentage of patients for whom risk factors for a selected medical or risk category were assessed and identified.

Patient Engagement, though not often documented and difficult to measure, is the “heart” of the high-quality preventive visit. Through these components, a trustworthy relationship is built between the provider and patient, the AYA is encouraged to speak openly and honestly about their health with the stage being set to address and mitigate identified behavioral risks. The strengths-based approach to preventive care and anticipatory guidance is endorsed by *Bright Futures*. Ongoing research shows that identifying and building strengths can alter risk-taking and unhealthy behaviors, and also helps to address social determinants of health.

Nutrition, Physical Activity, and Cardiovascular Risks include measures that apply universally, as well as additional steps to be taken for patients with identified risk factors (such as elevated BMI). These measures are heavily drawn from *NIPN’s Healthy Weight Measures*.¹¹

Safety and Violence measures are key behavioral health indicators, endorsed by *Bright Futures*, which are important to address alongside the standard medical visit components. The seven elements identified (Family/Partner Violence; Fighting; Helmets; Seat Belts; Alcohol While Driving; Guns; and Bullying) are not a comprehensive list, and may vary due to local or regional demographics and policies. See Healthy People 2020 for other suggested safety issues to consider.¹²

Sexual Health and **Substance Use** measures address some of the behaviors and choices that impact immediate morbidity and mortality for the AYA population, as well as adult health outcomes. These aspects of the patient’s well-being should be identified and screened, and modified through counseling and strategies where appropriate. Measures are included that address initial follow-up for some of these behaviors (such as STI Counseling 5.6), where evidence exists for such action.

Mental Health includes evidence-based measures that document screening and initial intervention for depression. Other mental health issues are currently beyond the scope of this document.

Immunizations and the patient’s vaccination status should be reviewed at every visit to the pediatrician or family medicine physician. For this reason, the suggested denominator for these measures is different. As immunization recommendations are constantly evolving, particularly for newer vaccines such as the 9-valent Human Papillomavirus vaccine and Serogroup B Meningococcal vaccine, providers should consult the Advisory Committee for Immunization Practices (ACIP) for up-to-date recommendations. The immunization measures focus on completion of each vaccine series (for example, the complete 3-dose series for Human Papillomavirus vaccine), but providers may wish to measure initiation of a vaccine series instead.

Appendix I: Adolescent Pre-Visit Questionnaire Elements has been included to highlight key elements that should be contained in a pre-visit questionnaire in order to identify risks and strengths. All these elements are included in *Bright Futures’* Questionnaires for the 11-21 age group, and are available on the *Bright Futures* website.¹³ However, practices can crosswalk their own Pre-Visit Questionnaire to determine if all key elements are included, and if not, can modify their own questionnaire accordingly.

¹¹ See: <https://www.uvm.edu/medicine/nipn/documents/NIPNHealthyWeightMeasures.pdf>.

¹² See: <https://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives>.

¹³ See: <https://brightfutures.aap.org/>.

Appendix II: Adolescent Pre-Visit Questionnaire/Interview Elements: Strengths has been included to assist practices who are less familiar with incorporating a strength-based approach into their preventive services visits with AYA. Additional resources are included.

The Reference Table that accompanies the *Adolescent and Young Adult Health Measures* presents a crosswalk of relevant guidelines, evidence reviews and recommendations, measure stewards, federal mandates, and supportive information for each measure. The pediatric or family medicine provider can use this crosswalk to identify which guidelines recommend a particular assessment or screen, as well as its inclusion in core measure sets and national quality standards. This is not an exhaustive synthesis of evidence; clinical guidelines specific to preventive care are particularly difficult to identify for the young adult age group. However, it is a useful tool for selecting measures and designing quality improvement projects. If the content area for a particular measure has been studied in randomized, case-controlled trials and the evidence has been evaluated by a national organization (such as the USPSTF or the NHLBI), this is noted in the table. Not all content areas have been studied with similar rigor. Additional measures were selected because they address critically important aspects of *Bright Futures* recommendations or have been tested in previous quality improvement published studies. Where possible, grades of evidence, definitions of recommendations and measures, and supportive information are listed in the endnotes following the table.

A full list of definitions for the abbreviations used in the *Reference Table* is noted below:

AACAP: American Academy of Child and Adolescent Psychiatry
AADP: American Academy of Pediatric Dentistry
AAP: American Academy of Pediatrics
ADA: American Dental Association
ACIP: Advisory Committee on Immunization Practices
ACO: Accountable Care Organization
ACOG: American Congress of Obstetricians and Gynecologists
BF: Bright Futures
CDC: Centers for Disease Control and Prevention
CHIPRA: Children's Health Insurance Program Reauthorization Act
CMS: Centers for Medicare and Medicaid Services
DQA: Dental Quality Alliance
GLAD-PC: Guidelines for Adolescent Depression in Primary Care
HEDIS: Healthcare Effectiveness Data and Information Set
ICSI: Institute for Clinical Systems Improvement
MCHB: Maternal and Child Health Bureau
NHLBI: National Heart, Lung and Blood Institute
NPM: National Performance Measure
USPSTF: United States Preventive Services Task Force

Graded recommendations given in the *Reference Table* from the US Preventive Services Task Force (USPSTF) and the National Heart, Lung, and Blood Institute (NHLBI) are as follows:

USPSTF Grade Definitions:¹⁴

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

NHLBI Evidence Grading System:¹⁵

Grade	Evidence
A	Well-designed randomized controlled trials or diagnostic studies performed on a population similar to the guideline's target population
B	Randomized controlled trials or diagnostic studies with minor limitations; genetic natural history studies; overwhelmingly consistent evidence from observational studies
C	Observational studies (case-control and cohort design)
D	Expert opinion, case reports, or reasoning from first principles (bench research or animal studies)

¹⁴ See: <http://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions>.

¹⁵ See: <https://www.nhlbi.nih.gov/health-pro/guidelines/current/cardiovascular-health-pediatric-guidelines/full-report-chapter-1>.

Statement Type	Definition	Implication
Strong Recommendation	The Expert Panel believes that the benefits of the recommended approach clearly exceed the harms and that the quality of the supporting evidence is excellent (grade A or B). In some clearly defined circumstances, strong recommendations may be made on the basis of lesser evidence when high-quality evidence is impossible to obtain and the anticipated benefits clearly outweigh the harms.	Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
Recommendation	The Expert Panel feels that the benefits exceed the harms but the quality of the evidence is not as strong (grade B or C). In some clearly defined circumstances, recommendations may be made on the basis of lesser evidence when high-quality evidence is impossible to obtain and when the anticipated benefits clearly outweigh the harms.	Clinicians should generally follow a recommendation but remain alert to new information and sensitive to patient preferences.
Optional	Either the quality of the evidence that exists is suspect (grade D) or well-performed studies (grade A, B or C) show little clear advantage to one approach versus another.	Clinicians should be flexible in their decision-making regarding appropriate practice, although they may set boundaries on alternatives; patient and family preference should have a substantial influencing role.
No recommendation	There is both a lack of pertinent evidence (grade D) and an unclear balance between benefits and harms.	Clinicians should not be constrained in their decision-making and be alert to new published evidence that clarifies the balance of benefit versus harm; patient and family preference should have a substantial influencing role.

Data Sources

Data for the measures included in this document can be obtained from:

- Conducting chart reviews
- Reviewing practice EHR records
- Reviewing claims or billing statements
- Accessing registries (such as state immunization registries)

Sampling Strategy

Based on collective experience and the methodology referenced below, many IPs approach data collection in the following manner. Data should be collected from 30 charts at the beginning of the project and at the end of the project (pre- and post-test data), with 10 charts selected for at least two review periods (10 charts reviewed one-third of the way through the project and then 10 charts reviewed two-thirds of the way through the project period) to gauge progress.¹⁶ Many sites select 10 charts for review each month of the project, in

¹⁶ Thirty charts were chosen based on sample size calculations using the following assumptions: 1) Power of 0.80; 2) P-value of 0.05; Standard deviation of 0.50; and 3) Effect size of 0.40. The calculation uses the sample size formula provided in, “Kadam P, Bhalerao S. Sample size calculation. *Int J Ayurveda Res.* 2010;1(1): 55–7. doi: 10.4103/0974-7788.59946” and the assumptions were based on results reported in, “Shaw JS, Norlin C, Gillespie RJ, Weissman M, McGrath J. The National Improvement Partnership Network: State-

order to increase the number of Plan-Do-Study-Act (PDSA) cycles and are able to demonstrate achievement gained by the project's end.

If a larger state-wide agency (such as the Maternal and Child Health Bureau, Medicaid, or a private insurer) is working with practices or sponsoring an AYA quality improvement initiative, statewide practice data (such as claims data or state immunization registry data) may be accessible. In that case, the quality improvement team may wish to collect more comprehensive data beyond practice-level chart review. However, data collection would still be required at the individual provider level if documentation is needed to meet ABP Maintenance of Certification, Part 4 requirements or ABFM Maintenance of Certification, Part IV requirements.

Target Goals

IPs and participating practices should agree on target goals for their AYA health improvement projects. For **Preventive Services** and **Immunizations** measures, sites should aim for achieving a high target goal between 80% and 95% of each targeted measure depending on baseline, since these are routine components of the preventive visit. Other measures may be less integrated into practice standards for the AYA visit and have lower baseline rates, so IPs should select their targets accordingly.

One method for choosing target goals for outcome measures is to adapt a method developed by the Minnesota Department of Health's Quality Incentive Payment System¹⁷ and used by the Oregon Health Authority.¹⁸ This methodology used by the Oregon Health Authority recommends participants to have at least a 10% reduction in the gap between its baseline and the benchmark. For example, if at baseline, a practice performs 50% on a particular measure, the IP may assign a target of 75%. There is a 25% difference between the baseline and the target, and the practice must reduce this gap by 10%, or by 2.5 % points (25×0.10) to meet the improvement target. In this example, the practice must improve to 52.5% to meet the improvement target.

Oregon has added improvement "floors" to cases where the improvement target is minimal. Under this option, the IP could institute a 1 to 3 percentage point improvement floor, depending on the measure. If the IP chose an improvement floor of 3 percentage points, the practice would need to improve from 50% to 53% to meet the improvement target, rather than to 52.5%.

based partnerships that improve primary care quality. *Acad Pediatr*. 2013;13(6 Suppl):S84-94. doi: 10.1016/j.acap.2013.04.001." If estimated effect sizes are below 0.36, a larger sample size will be necessary.

¹⁷ See: <http://www.health.state.mn.us/healthreform/measurement/20150619qipsRpt2015final.pdf>.

¹⁸ See: <http://www.oregon.gov/oha/analytics/CCODData/Improvement%20Targets%20--%20Revised%20September%202013.pdf>.

Measure Table of Contents

**Italicized measures are those which should be performed following positive risk identification; all other measures should be performed universally, although some measures are universal only for certain ages.*

Measure #		Page #
1.0 Preventive Services		
1.1	Annual Well Visit	14
1.2	Pre-Visit Questionnaire to Assess Risks	14
1.3	Physical Exam	14
1.4	Weight Assessment: Body Mass Index (BMI) Percentile or BMI	15
1.5	Weight Classification Documentation	15
1.6	Blood Pressure and/or Blood Pressure Percentile	16
1.7	Vision Testing (Snellen Test)	16
1.8	<i>Hearing Testing (Audiometry)</i>	16
1.9	<i>Anemia Test</i>	17
1.10	<i>Tuberculosis Test</i>	17
1.11	Dental Home Verification	18
2.0 Patient Engagement		
2.1	Confidentiality Policy Reviewed with Patient (and Parent when appropriate)	18
2.2	Private Time with Patient During Visit	18
2.3	Pre-Visit Questionnaire to Assess Strengths	18
2.4	Patient (Parent) Strengths Discussed	19
2.5	Patient (Parent) Concerns Actively Elicited	19
2.6	Patient (Parent) Concerns Addressed	19
3.0 Nutrition, Physical Activity, and Cardiovascular Risks		
3.1	Counseling for Nutrition	20
3.2	Counseling for Physical Activity	20
3.3	Universal Lipid Screening	20
3.4	<i>Readiness to Change</i>	22
3.5	<i>Self-management Goal</i>	22
4.0 Safety and Violence		
4.1	Family/Partner Violence	23
4.2	Fighting	23
4.3	Helmets	23
4.4	Seat Belts	23
4.5	Alcohol while Driving	23
4.6	Gun Access	23
4.7	Bullying	23
5.0 Sexual Health		
5.1	Sexual Activity Screening	23
5.2	Universal HIV Screening	23
5.3	<i>Chlamydia Screening</i>	25
5.4	<i>Gonorrhea Screening</i>	26
5.5	<i>Syphilis Screening</i>	27
5.6	<i>STI Counseling</i>	27
5.7	<i>Pregnancy Test</i>	27
5.8	<i>Birth Control Methods Counseling</i>	28
5.9	<i>Cervical Cancer Screening</i>	28

6.0 Substance Use		
6.1	Tobacco Use and Exposure Screening	29
6.2	<i>Medical Assistance with Smoking and Tobacco Use Cessation</i>	29
6.3	Alcohol Use Screening	29
6.4	<i>Counseling for Alcohol Use/Misuse</i>	30
6.5	Marijuana/Illicit Drug Use Screening	30
6.6	<i>Counseling for Marijuana/Illicit Drug Use</i>	30
7.0 Mental Health		
7.1	Screening for Clinical Depression	30
7.2	<i>Intervention or Follow-Up for Clinical Depression</i>	31
7.3	<i>Suicide Screening</i>	31
8.0 Immunizations		
8.1	Tetanus, Diphtheria, Pertussis (Tdap/TD)	31
8.2	Meningococcal	31
8.3	<i>Serogroup B Meningococcal (Men B)</i>	32
8.4	Human Papillomavirus (HPV)	32
8.5	Influenza	32
8.6	<i>Pneumococcal (conjugate)</i>	32
8.7	<i>Pneumococcal (polysaccharide)</i>	33
8.8	Childhood Immunizations: Catch-Up	33
8.9	Adolescent Immunizations: Catch-Up	33
8.10	Immunizations: Documented Refusal	34

Adolescent and Young Adult Measures

Target Population: Patients aged 11 to 26¹



Measure	#	Measure Definition	Ages ²	Target Goal
1.0 Preventive Services				
Annual Well Visit	1.1	<p>Percentage of patients seen for a Well Visit during the past year. Must show evidence of all the following:</p> <ul style="list-style-type: none"> • Health and development history (physical and mental) • Physical exam • Health education/anticipatory guidance <p>Numerator: Number of patients seen for a Well Visit during the defined measurement period.</p> <p>Denominator: Number of patients who were “active”³ in the practice during the defined measurement period.</p>	11 to 26 (BF, HEDIS)	
Pre-Visit Questionnaire to Assess Risks	1.2	<p>Percentage of patients seen for a Well Visit for whom a pre-visit risk assessment* was performed during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit who completed a pre-visit risk assessment during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p> <p>*See “Appendix I: Adolescent Pre-Visit Questionnaire Elements.”</p>	11 to 21 (BF)	
Physical Exam	1.3	<p>Percentage of patients seen for a Well Visit for whom a physical exam was performed during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom a physical exam was performed during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 21 (BF)	

¹ The target population is from the 11th birthday through the 26th birthday.

² Age ranges defined by *Bright Futures* or other recommendations listed in the “Reference Table” are given here for further information. However, these age ranges should not be interpreted as rigid. Clinicians and practices should define ages for specific measures as appropriate to the demographics and needs of their patient populations, particularly with respect to the young adult population.

³ “Active” is denoted by a patient seen for any visit in the past 24 months, or as defined by practice parameters.

Measure	#	Measure Definition	Ages ²	Target Goal																				
Weight Assessment: Body Mass Index (BMI) Percentile or BMI	1.4	<p>Percentage of patients seen for a Well Visit for whom Body Mass Index (BMI) percentile (11-19) or BMI (20-26) was documented during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit who had BMI percentile or BMI documentation during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF, USPSTF)																					
Weight Classification Documentation	1.5	<p>Percentage of patients seen for a Well Visit who had weight classification (status) documentation. Based on Body Mass Index (BMI) Percentile ranking according to the following chart for ages 11-19:</p> <table><tr><th>Percentile Ranking</th><th>Weight Status</th></tr><tr><td>Less than 5th percentile</td><td>Underweight</td></tr><tr><td>5th percentile to less than 85th percentile</td><td>Healthy Weight</td></tr><tr><td>85th percentile to less than 95th percentile</td><td>Overweight</td></tr><tr><td>Equal to or greater than 95th percentile</td><td>Obese</td></tr></table> <p>Or based on Body Mass Index (BMI) according to the following chart for adults ages 20-26:</p> <table><tr><th>BMI</th><th>Weight Status</th></tr><tr><td>Below 18.5</td><td>Underweight</td></tr><tr><td>18.5 – 24.9</td><td>Normal or Healthy Weight</td></tr><tr><td>25.0 – 29.9</td><td>Overweight</td></tr><tr><td>30.0 and Above</td><td>Obese</td></tr></table> <p>Numerator: Number of patients seen for a Well Visit who had weight classification documentation during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	Percentile Ranking	Weight Status	Less than 5 th percentile	Underweight	5 th percentile to less than 85 th percentile	Healthy Weight	85 th percentile to less than 95 th percentile	Overweight	Equal to or greater than 95 th percentile	Obese	BMI	Weight Status	Below 18.5	Underweight	18.5 – 24.9	Normal or Healthy Weight	25.0 – 29.9	Overweight	30.0 and Above	Obese	11 to 26 (BF, HEDIS; composite with counseling for nutrition and physical activity)	
Percentile Ranking	Weight Status																							
Less than 5 th percentile	Underweight																							
5 th percentile to less than 85 th percentile	Healthy Weight																							
85 th percentile to less than 95 th percentile	Overweight																							
Equal to or greater than 95 th percentile	Obese																							
BMI	Weight Status																							
Below 18.5	Underweight																							
18.5 – 24.9	Normal or Healthy Weight																							
25.0 – 29.9	Overweight																							
30.0 and Above	Obese																							

Measure	#	Measure Definition	Ages ²	Target Goal
Blood Pressure and/or Blood Pressure Percentile	1.6	<p>Percentage of patients seen for a Well Visit for whom Blood Pressure Percentile (11 to 17) and/or Blood Pressure (18 to 25) and/or was documented during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom Blood Pressure Percentile (11 to 17) and/or Blood Pressure (18 to 25) was documented during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF, USPSTF)	
Vision Testing (Snellen Test)	1.7	<p>Percentage of patients seen for a Well Visit for whom a Vision Test (Snellen Test) was conducted at the recommended ages during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom a Vision Test was conducted at least once for each age interval during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit for each age interval during the defined measurement period.</p>	12; 15; 18 ⁴	
Vision Test following identified risk	1.7R	<p><u>Risk factor:</u> Trouble seeing</p> <p>Percentage of patients seen for a Well Visit with identified risk for whom a Vision Test was conducted during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk for whom a Vision Test was conducted during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
Hearing Testing (Audiometry) ⁵	1.8	<p>Percentage of patients aged 10 who had a Well Visit for whom a Hearing Test (Audiometry) was conducted during the defined measurement period.</p> <p>Numerator: Percentage of patients aged 10 seen for a Well Visit for whom a Hearing Test was conducted during the defined measurement period.</p> <p>Denominator: Percentage of patients aged 10 seen for a Well Visit during the defined measurement period.</p>	10 (BF)	

⁴ *Bright Futures, 3rd ed.* age recommendations: 12 (or once during early adolescence), 15 (or once during middle adolescence), 18 (or once during late adolescence), p. 61.

⁵ If routine hearing testing was not performed at age 10, this could be performed and documented at the next patient visit.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Hearing Test following identified risk</i>	1.8 R	<p><u>Risk factor:</u> Trouble hearing</p> <p>Percentage of patients seen for a Well Visit with identified risk for which a Hearing Test was conducted during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk for which a Hearing Test was conducted during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
<i>Anemia Test</i>	1.9	<p><u>Risk factors:</u> Males and females: diet low in iron Females: menses > 5 days or excessive menstrual bleeding</p> <p>Percentage of patients seen for a Well Visit with identified risk(s) for which an Anemia Test (hemoglobin or hematocrit) was conducted during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk(s) for which an Anemia Test was conducted during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 21 (BF)	
<i>Tuberculosis Test</i>	1.10	<p><u>Risk factors:</u> Travel history Family member or contact with TB Incarcerated HIV positive</p> <p>Percentage of patients seen for a Well Visit with identified risk(s) for which a Tuberculosis Test (Tuberculosis Skin Test (PPD), or Interferon Gamma-Release Assay (IGRA))⁶ was conducted during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk(s) for which a Tuberculosis Test was conducted during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 26 (BF, ACOG)	

⁶ Populations in which the IGRA is preferred for testing:

- Persons who have received BCG (either as a vaccine or for cancer therapy); and
- Persons from groups that historically have poor rates of return for TST reading

See: CDC Fact Sheets: Interferon-Gamma Release Assays (IGRAs) - Blood Tests for TB Infection; <http://www.cdc.gov/tb/publications/factsheets/testing/igra.htm>.

Measure	#	Measure Definition	Ages ²	Target Goal
Dental Home Verification	1.11	<p>Percentage of patients seen for a Well Visit who were asked whether they have a dental home and were referred to a dental home if necessary during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit who were asked whether they have a dental home and were referred to a dental home if necessary during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 21 (BF)	
2.0 Patient Engagement				
Confidentiality Policy Reviewed with Patient (and Parent when appropriate)	2.1	<p>Percentage of patients seen for a Well Visit for whom the practice's confidentiality policy was reviewed with the patient (and his/her parent(s)) during the defined measurement period.⁷</p> <p>Numerator: Number of patients seen for a Well Visit for whom the practice's confidentiality policy was reviewed during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 21 ⁸	
Private Time with Patient During Visit	2.2	<p>Percentage of adolescent patients seen for a Well Visit who had private time with the provider during the defined measurement period.</p> <p>Numerator: Number of adolescent patients seen for a Well Visit who had private time during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 21 (BF)	
Pre-Visit Questionnaire to Assess Strengths	2.3	<p>Percentage of patients seen for a Well Visit for whom a strengths assessment* was performed during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom a strengths assessment was performed during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p> <p>*See Appendix II: Adolescent Pre-Visit Questionnaire/Interview Elements: Strengths.</p>	11 to 21 (BF)	

⁷ Confidentiality should be considered for all adolescents and young adults covered by insurance that sends an Explanation of Benefits (EOB) to the policyholder of the insurance plan.

⁸ Age range is contingent on the confidentiality policy of the state in which the practice is located; policies differ from state to state.

Measure	#	Measure Definition	Ages ²	Target Goal
Patient (Parent) Strengths Discussed	2.4	<p>Percentage of patients seen for a Well Visit for whom patient (and/or parent) strengths were discussed during the defined measurement period.⁹</p> <p>Numerator: Number of patients seen for a Well Visit for whom patient (and/or parent) strengths were discussed during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 21 (BF)	
Patient (Parent) Concerns Actively Elicited	2.5	<p>Percentage of patients seen for a Well Visit for whom patient (and/or parent) concerns were elicited during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom patient (and/or parent) concerns were actively elicited during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	
Patient (Parent) Concerns Addressed	2.6	<p>Percentage of patients for a Well Visit for whom patient (and/or parent) concerns were addressed during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit for whom patient (and/or parent) concerns were addressed during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit for whom patient (and/or parent) concerns were identified during the defined measurement period.</p>	11 to 26 (BF)	

⁹ For more information on strengths-based preventive care, see the American Academy of Pediatrics EQIPP list of modules, <http://eqipp.aap.org/>.

Measure	#	Measure Definition	Ages ²	Target Goal
3.0 Nutrition, Physical Activity, and Cardiovascular Risks¹⁰				
Counseling for Nutrition	3.1	<p>Percentage of patients seen for a Well Visit who received counseling for nutrition, including one of the following:</p> <ul style="list-style-type: none"> • Discussion of current nutrition behaviors (e.g., eating habits, dieting behaviors) • Checklist indicating nutrition was addressed • Counseling or referral for nutrition education • Adolescent received educational materials on nutrition • Anticipatory guidance for nutrition <p>Numerator: Number of patients seen for a Well Visit who received counseling for nutrition during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF, HEDIS; composite with weight classification and counseling for physical activity)	
Counseling for Physical Activity	3.2	<p>Percentage of patients seen for a Well Visit who received counseling for physical activity, including one of the following:</p> <ul style="list-style-type: none"> • Discussion of current physical activity behaviors (e.g., exercise routine, participation in sports or other physical activities.) • Checklist indicating physical activity was addressed • Counseling or referral for physical activity • Person received educational materials on physical activity • Anticipatory guidance on physical activity <p>Numerator: Number of patients seen for a Well Visit who had counseling for physical activity documentation in the medical record during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF, HEDIS; composite with weight classification and counseling for nutrition)	
Universal Lipid Screening	3.3	<p>Percentage of patients aged 9 to 11 and 17 to 21 seen for a Well Visit who had appropriate Lipid Screening (non-HDL cholesterol or fasting lipid profile) measured at least once during the defined measurement period.</p> <p>Numerator: Number of patients aged 9 to 11 and 17 to 21 seen for a Well Visit who had appropriate Lipid Screening measured at least once during the defined measurement period.</p> <p>Denominator: Number of patients aged 9 to 11 and 17 to 21 seen for a Well Visit during the defined measurement period.</p>	9 to 11; 17 to 21 (BF)	

¹⁰ For more information, see NIPN Healthy Weight Measures; <https://www.uvm.edu/medicine/nipn/documents/NIPNHealthyWeightMeasures.pdf>.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Fasting Lipid Profile (9-11)</i>	3.3 R	<p><u>Risk factor:</u> BMI greater than or equal to 95th percentile¹¹</p> <p>Percentage of patients aged 9 to 11 seen for a Well Visit with identified risk for whom a Fasting Lipid Profile¹² was obtained during the defined measurement period.¹³</p> <p>Numerator: Number of patients aged 9 to 11 seen for a Well Visit with identified risk for whom a fasting lipid profile was obtained during the defined measurement period.</p> <p>Denominator: Number of patients aged 9 to 11 seen for a Well Visit with identified risk during the defined measurement period.</p>	9 to 11 (BF)	
<i>Fasting Lipid Profile (12-21)</i>	3.3 R	<p><u>Risk factor:</u> BMI greater than or equal to 85th percentile</p> <p>Percentage of patients aged 12 to 21 seen for a Well Visit with identified risk for whom a Fasting Lipid Profile was obtained during the defined measurement period.</p> <p>Numerator: Number of patients aged 12 to 21 seen for a Well Visit with identified risk for whom a fasting lipid profile was obtained during the defined measurement period.</p> <p>Denominator: Number of patients aged 12 to 21 seen for a Well Visit with identified risk during the defined measurement period.</p>	12 to 21 (BF)	
<i>Lipid Disorder Screening (20-26)</i>	3.3 R	<p><u>Risk Factors:</u> Diabetes.</p> <p>Previous personal history of CHD or non-coronary atherosclerosis (e.g., abdominal aortic aneurysm, peripheral artery disease, carotid artery stenosis).</p> <p>A family history of cardiovascular disease before age 50 in male relatives or age 60 in female relatives.</p> <p>Tobacco use.</p> <p>Hypertension.</p> <p>Obesity (BMI ≥30).¹⁴</p> <p>Percentage of patients seen for a Well Visit with identified risk(s) who received a lipid disorder screening during the defined measurement period.</p>	20 to 26 (BF, USPSTF)	

¹¹ Note that there are risk factors other than elevated BMI that would prompt obtaining a Fasting Lipid Profile, such as Other Health Condition (diabetes, hypertension) OR Family History (FH of MI, angina, CABG/stent/angioplasty at < 55 years in a male first degree relative and <65 years in a female first degree relative, OR parent with TC > 240 or parent with dyslipidemia). Other tests may be obtained as indicated for individual patients, e.g., testing for diabetes and/or polycystic ovary syndrome.

¹² Note that current recommendations are Fasting Lipid Profile, but obtaining a non-fasting lipid profile and repeating a fasting study if abnormal may be appropriate for some populations.

¹³ There is currently no recommendation for when to repeat the test, if the results are abnormal. It is recommended that there be documentation of a plan about how to follow up the abnormal result for that individual patient.

¹⁴ See U.S. Preventative Services Task Force. Final recommendation statement: *Lipid disorders in adults (cholesterol, dyslipidemia): Screening, June 2008*: Clinical considerations. <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening#consider>.

Measure	#	Measure Definition	Ages ²	Target Goal
		<p>Numerator: Number of patients seen with identified risk(s) who received a lipid disorder screening during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>		
<i>Readiness to Change</i>	3.4	<p><u>Risk factor:</u> BMI greater than or equal to 85th percentile and/or weight classification overweight or obese</p> <p>Percentage of patients seen for a Well Visit with identified risk for whom readiness to change was documented during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk for whom readiness to change was documented during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
<i>Self-management Goal</i>	3.5	<p><u>Risk factor:</u> BMI greater than or equal to 85th percentile and/or weight classification overweight or obese</p> <p>Percentage of patients seen for a Well Visit with identified risk for which a self-management goal was documented.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk for which a self-management goal was documented during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	

Measure	#	Measure Definition	Ages ²	Target Goal
4.0 Safety and Violence				
Safety and behavioral risks	4.0	<p>Percentage of patients seen for a Well Visit who were asked about risk behaviors¹⁵ during the defined measurement period. Everyone should be screened for the below risks; screening for additional risks appropriate to your practice may also be advisable.</p> <p><u>Risk Behaviors:</u></p> <ul style="list-style-type: none"> 4.1 Family/Partner Violence 4.2 Fighting 4.3 Helmets 4.4 Seat Belts 4.5 Alcohol while Driving 4.6 Gun Access 4.7 Bullying <p>Numerator: Number of patients seen for a Well Visit who were asked about risk(s) behaviors during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	
5.0 Sexual Health				
Sexual Activity Screening	5.1	<p>Percentage of patients aged 11-26 seen for a Well Visit who had sexual activity screening during the defined measurement period. This screen could include: initiation of sexual activity, type of sexual activity (oral, genital, anal), number of partners, and sex of partners.</p> <p>Numerator: Number of patients aged 11- 26 seen for a Well Visit who had sexual activity screening during the defined measurement period.</p> <p>Denominator: Number of patients aged 11-26 seen for a Well Visit during the defined measurement period.</p>	11 to 26	
Universal HIV Screening	5.2	<p>Percentage of patients aged 16-18 seen for a Well Visit who had routine HIV screening during the documentation period.</p> <p>Numerator: Number of patients aged 16-18 seen for a Well Visit who had routine HIV screening during the defined measurement period.</p> <p>Denominator: Number of patients aged 16-18 seen for a Well Visit during the defined measurement period.</p>	16 to 18 (BF)	

¹⁵ Practices may choose to measure each risk behavior independently or as a group.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>HIV Screening following identified risk(s)</i>	5.2 R	<p>Risk Factors: Men who have sex with men Active injection drug users Other persons at high risk include those who have acquired or request testing for other STIs</p> <p>Behavioral risk factors include:</p> <ul style="list-style-type: none"> • Having unprotected vaginal or anal intercourse • Having sexual partners who are HIV-infected, bisexual, or injection drug users • Exchanging sex for drugs or money¹⁶ <p>Percentage of patients seen for a Well Visit with identified risk(s) that were screened for HIV during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk(s) that were screened for HIV during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 26 (BF)	

¹⁶ See U.S. Preventative Services Task Force. Final recommendation statement: *Human Immunodeficiency Virus (HIV) Infection: Screening, April 2013*: Clinical considerations: Assessment of risk. <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/human-immunodeficiency-virus-hiv-infection-screening#clinical-considerations>.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Chlamydia Screening</i>	5.3	<p><u>Risk factors:</u> Sexually active patients</p> <p>All sexually experienced adolescent and young adult females ≤ 24 should be tested annually, even if no symptoms are present or barrier contraception is reported.</p> <p>Sexually experienced adolescent and young adult men who have sex with men (MSM) should be screened routinely for rectal and urethral chlamydia annually, if they engaged in receptive or insertive anal intercourse, respectively. MSM should be screened every 3 to 6 months if at high risk because of multiple or anonymous sex partners, sex in conjunction with illicit drug use, or sex with partners who participate in these activities. Annual screening may be considered for sexually active males who have sex with females in settings with high prevalence rates (such as jails, juvenile corrections facilities, and national job training programs), STI clinics, high school clinics and adolescent clinics for patients who have a history of multiple partners.¹⁷¹⁸</p> <p>Percentage of sexually active females or males seen for a Well Visit with identified risk(s) that were screened for chlamydia during the defined measurement period.</p> <p>Females Numerator: Number of female patients seen for a Well Visit with identified risk(s) that were screened for chlamydia during the defined measurement period. Denominator: Number of female patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p> <p>Males Numerator: Number of male patients seen for a Well Visit with identified risk(s) that were screened for chlamydia during the defined measurement period. Denominator: Number of male patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 24 (BF, USPSTF)	

¹⁷ American Academy of Pediatrics. Red Book: 2015 Report of the committee on infectious diseases, 30th Ed,. Chlamydia trachomatis, Routine Screening Tests, p. 293.

¹⁸ American Academy of Pediatrics, Committee on Adolescence; Society for Adolescent Health and Medicine. Screening for nonviral sexually transmitted infections in adolescents and young adults. *Pediatrics*. 2014;134(1):e302-11.

Measure	#	Measure Definition	Ages ²	Target Goal
Gonorrhea Screening	5.4	<p><u>Risk factors:</u> Sexually active patients. Gonorrhea cases tend to cluster regionally, so check with your local department of health.</p> <p>All sexually experienced adolescent and young adult females ≤ 24 should be tested annually, even if no symptoms are present or barrier contraception is reported.</p> <p>Sexually experienced adolescent and young adult men who have sex with men (MSM) should be screened routinely for rectal and urethral chlamydia annually, if they engaged in receptive or insertive anal intercourse, respectively. MSM should be screened every 3 to 6 months if at high risk because of multiple or anonymous sex partners, sex in conjunction with illicit drug use, or sex with partners who participate in these activities. Annual screening may be considered for sexually active males who have sex with females in settings with high prevalence rates (such as jails, juvenile corrections facilities, national job training programs), STI clinics, high school clinics, and adolescent clinics for patients who have a history of multiple partners.^{19,20}</p> <p>Percentage of sexually active females or males with identified risk(s) seen for a Well Visit who were screened for gonorrhea during the defined measurement period.</p> <p>Females</p> <p>Numerator: Number of female patients seen for a Well Visit with identified risk(s) that were screened for gonorrhea during the defined measurement period.</p> <p>Denominator: Number of female patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p> <p>Males</p> <p>Numerator: Number of male patients seen for a Well Visit with identified risk(s) that were screened for gonorrhea during the defined measurement period.</p> <p>Denominator: Number of male patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 26 (BF, USPSTF)	

¹⁹ American Academy of Pediatrics. *Red Book: 2015 Report of the committee on infectious diseases*. 30th ed., Chlamydia trachomatis, Routine Screening Tests, p. 293.

²⁰ American Academy of Pediatrics. Committee on Adolescence and Society for Adolescent Health and Medicine. Screening for nonviral sexually transmitted infections in adolescents and young adults. *Pediatrics*. 2014;134(1):e302-11. doi:10.1542/peds.2014-1024.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Syphilis Screening</i>	5.5	<p><u>Risk Factors:</u> Sexually active patients All pregnant women Men who have sex with men HIV-positive patients.²¹</p> <p>Percentage of patients seen for a Well Visit with identified risk(s) that were screened for syphilis during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk(s) that were screened for syphilis during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk(s) during the defined measurement period.</p>	11 to 26 (BF, USPSTF)	
<i>STI Counseling</i>	5.6	<p><u>Risk factor:</u> All sexually-active adolescents and young adults at increased risk.</p> <p>Percentage of patients seen for a Well Visit with identified risk who received STI counseling during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk who received STI counseling during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF, USPSTF)	
<i>Pregnancy Test</i>	5.7	<p><u>Risk Factor:</u> Adolescent and young adult female patients, who are pubertal, sexually active with or without protection, and/or have missed menses, or think they might be pregnant²²</p> <p>Percentage of female patients seen for any visit with identified risk for which a Pregnancy test was given during the defined measurement period.</p> <p>Numerator: Number of female patients seen for any visit with identified risk for which a Pregnancy test was given during the defined measurement period.</p> <p>Denominator: Number of female patients seen for any visit with identified risk during the defined measurement period.</p>	11 to 26 (Females) (BF)	

²¹ American Academy of Pediatrics. *Red Book: 2015 Report of the committee on infectious diseases*. 30th ed., Syphilis, p. 755.

²² HEDIS additionally recommends that the patient be referred to an obstetrician in the first trimester of pregnancy. See National Committee for Quality Assurance: Prenatal and Postpartum Care (PPC). <http://www.ncqa.org/portals/0/Prenatal%20Postpartum%20Care.pdf>.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Birth Control Methods Counseling</i>	5.8	<p><u>Risk Factor:</u> Females who are (or intend to become) sexually-active and do not want to become pregnant.</p> <p>Percentage of female patients seen for any visit with identified risk who received counseling on birth control methods during the defined measurement period.</p> <p>Numerator: Number of female patients seen for any visit with identified risk who received counseling on birth control methods.</p> <p>Denominator: Number of female patients seen for any visit with identified risk during the defined measurement period.</p>	(Females)	
<i>Cervical Cancer Screening</i>	5.9	<p><u>Risk Factor:</u> Sexually-active patients with a cervix</p> <p>Percentage of female patients seen for a Well Visit with identified risk that was screened for cervical cancer during the defined measurement period.</p> <p>Numerator: Number of female patients seen for a Well Visit with identified risk that was screened for cervical cancer during the defined measurement period.</p> <p>Denominator: Number of female patients seen for a Well Visit with identified risk during the defined measurement period.</p>	21 to 26 (Females; USPSTF)	

Measure	#	Measure Definition	Ages ²	Target Goal
6.0 Substance Use				
Tobacco Use and Exposure Screening	6.1	<p>Percentage of patients seen for a Well Visit who received screening for tobacco use (including traditional cigarettes, e-cigarettes²³, and all other tobacco products) and/or exposure to secondhand smoke.</p> <p>Numerator: Number of patients seen for a Well Visit who received screening for tobacco use and/or exposure to secondhand smoke during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	
Medical Assistance with Smoking and Tobacco Use Cessation	6.2	<p><u>Risk Factor:</u> Any identified use of a tobacco product</p> <p>Percentage of patients seen for a Well Visit who engage in any use of tobacco, who:</p> <ul style="list-style-type: none"> • Received advice to quit, or • Discussed recommended cessation medications, or • Discussed recommended cessation strategies. <p>Numerator: Number of patients seen for a Well Visit with identified risk for which any form of medical assistance with smoking and tobacco use cessation was documented during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
Alcohol Use Screening ²⁴	6.3	<p>Percentage of patients seen for a Well Visit who received screening for alcohol use during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit who received screening for alcohol use during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	

²³ Justification for screening for e-cigarette use comes from national data illustrating the rise in prevalence of e-cigarette use among adolescents. Dutra LM, Glantz SA. Electronic cigarettes and conventional cigarette use among U.S. adolescents: A cross-sectional study. *JAMA Pediatr.* 2014;168(7):610-7. doi: 10.1001/jamapediatrics.2013.5488. pmid:24604023).

²⁴ Use a validated screening tool to identify alcohol or drug use. For patients up to 21 years of age, *Bright Futures, 3rd Ed.*, recommends the CRAFFT screening tool. For patients over 21, use CAGE (for alcohol use) or CAGE-AID (for alcohol and drug use). For more information, consult the National Institute on Drug Abuse *Chart of Evidence-Based Screening Tools for Adults and Adolescents*,” See: <http://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/screening-assessment-drug-testing-resources/chart-evidence-based-screening-tools-adults>.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Counseling for Alcohol Use/Misuse</i>	6.4	<p><u>Risk Factor:</u> Any identified use/misuse of alcohol or other drugs</p> <p>Percentage of patients seen for a Well Visit with identified risk who received brief counseling interventions to reduce alcohol misuse.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk who received counseling for alcohol use/misuse during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF, USPSTF)	
Marijuana/Illicit Drug Use Screening	6.5	<p>Percentage of patients seen for a Well Visit who received screening for marijuana/illicit drug use during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit who received screening for marijuana/illicit drug use during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	
<i>Counseling For Marijuana/Illicit Drug Use</i>	6.6	<p><u>Risk factor:</u> Any identified use of marijuana/illicit drugs</p> <p>Percentage of patients seen for a Well Visit with identified risk who received counseling for other illicit drug use during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk who received counseling for other illicit drug use during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
7.0 Mental Health				
Screening for Clinical Depression	7.1	<p>Percentage of patients seen for a Well Visit who received screening for clinical depression during the defined measurement period.</p> <p>Validated screening tools include:</p> <ul style="list-style-type: none"> • PHQ-A, PHQ-2, PHQ-9 modified for adolescents • Beck Depression Inventory • Reynolds Adolescent Depression Screen • Mood and Feelings Questionnaire • PHQ-2 or PHQ-9 for young adults. <p>Numerator: Number of patients seen for a Well Visit who received screening for clinical depression during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit during the defined measurement period.</p>	11 to 26 (BF)	

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Intervention or Follow-Up for Clinical Depression</i>	7.2	<p>Percentage of patients seen for a Well Visit who screen positive for depression and for whom a follow-up or intervention plan was documented during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk for which a follow-up or intervention plan was documented during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
<i>Suicide Screening</i>	7.3	<p><u>Risk Factor:</u> Any identified depressive symptoms or mental health risk.</p> <p>Percentage of patients seen for a Well Visit who received suicide screening during the defined measurement period.</p> <p>Numerator: Number of patients seen for a Well Visit with identified risk who received suicide screening during the defined measurement period.</p> <p>Denominator: Number of patients seen for a Well Visit with identified risk during the defined measurement period.</p>	11 to 26 (BF)	
8.0 Immunizations				
Tetanus, Diphtheria, Pertussis (Tdap/TD) ²⁵	8.1	<p>Percentage of eligible patients seen for any visit who received 1 dose of Tdap/TD vaccine during the defined measurement period.</p> <p>Numerator: Number of eligible patients seen for any visit that received 1 dose of Tdap/TD vaccine during the defined measurement period or were already up-to-date for Tdap/TD vaccine.</p> <p>Denominator: Number of eligible patients aged 11 to 12 seen for any visit during the defined measurement period.</p>	11 to 12 (ACIP)	
Meningococcal	8.2	<p>Percentage of eligible patients seen for any visit who received 1 dose of meningococcal vaccine during the defined measurement period.</p> <p>Numerator: Number of eligible patients seen for any visit who received 1 dose of meningococcal vaccine during the defined measurement period or were already up-to-date for meningococcal vaccine.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	11 to 12, booster at 16 (ACIP)	

²⁵ Note that for Adolescent Immunizations measures, numerators and denominators specify adolescents “seen for any visit,” not “seen for a Well Visit,” as immunization administration does not need to be limited to the Well Visit only. The *Bright Futures/American Academy of Pediatrics Recommendations for Preventive Pediatric Health Care Periodicity Schedule*, “Every visit should be an opportunity to update and complete a child’s immunizations.” See: https://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Serogroup B Meningococcal (Men B)</i>	8.3	<p>Percentage of patients seen for any visit at increased risk for serogroup b meningococcal disease who received 2 or 3 doses²⁶ of serogroup B meningococcal vaccine during the defined measurement period. The vaccine should be given according to CDC/ACIP guidelines.²⁷</p> <p>Numerator: Number of patients seen for any visit at increased risk for serogroup b meningococcal disease who received 2 or 3 doses of meningococcal vaccine during the defined measurement period or were already up-to-date for meningococcal vaccine.</p> <p>Denominator: Number of eligible patients seen for any visit at increased risk for serogroup b meningococcal disease during the defined measurement period.</p>	10-25 (ACIP)	
Human Papillomavirus (HPV)	8.4	<p>Percentage of eligible patients seen for any visit who received the appropriate dose of the 3-dose series of HPV vaccine during the defined measurement period.</p> <p>Numerator: Number of eligible patients seen for any visit who received the three-dose series of HPV vaccine during the defined measurement period or were already up-to-date for HPV vaccine.</p> <p>Denominator: Number of eligible patients 11 to 12 seen for any visit during the defined measurement period.</p>	11 to 12 (ACIP)	
Influenza	8.5	<p>Percentage of eligible patients seen for any visit who received 1 dose of influenza vaccine during the defined measurement period.</p> <p>Numerator: Number of eligible patients seen for any visit who received 1 dose of influenza vaccine during the defined measurement period or were already up-to-date for influenza vaccine.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	9 to 21 (ACIP); 18 to 64 (HEDIS)	
<i>Pneumococcal (conjugate)</i>	8.6	<p>Percentage of eligible patients seen for any visit who received 1 dose of pneumococcal conjugate vaccine during the defined measurement period. The vaccine should be given according to CDC/ACIP guidelines.²⁸</p> <p>Numerator: Number of eligible patients seen for any visit who received 1 dose of pneumococcal conjugate vaccine during the defined measurement period.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	19 to 25 (ACIP)	

²⁶ The Food and Drug Administration has approved two serogroup B meningococcal vaccines for use in people 10-25 years old: Trumenba® as a 3-dose series and Bexsero® as a 2-dose series. See: <http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening-serogroup.html>.

²⁷ See: Foraranmi T, Rubin L, Martin SW et al. Use of Serogroup B Meningococcal Vaccines in Persons Aged ≥10 Years at Increased Risk for Serogroup B Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices, 2015. *Morbidity and Mortality Weekly Report (MMWR)*. June 12, 2015.64(22);608-12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6422a3.htm>.

²⁸ See: PCV13 (Pneumococcal Conjugate) vaccine: Recommendations, scenarios & q&as for healthcare professionals about PCV13 for adults. Centers for Disease Control and Prevention Web Site. <http://www.cdc.gov/vaccines/vpd-vac/pneumo/vac-PCV13-adults.htm>. Updated September 3, 2015.

Measure	#	Measure Definition	Ages ²	Target Goal
<i>Pneumococcal (polysaccharide)</i>	8.7	<p>Percentage of eligible patients seen for any visit who received 1 or 2 doses of pneumococcal polysaccharide vaccine during the defined measurement period. The vaccine should be given according to CDC/ACIP guidelines.²⁹</p> <p>Numerator: Number of eligible patients seen for any visit who received 1 or 2 doses of pneumococcal polysaccharide vaccine during the defined measurement period.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	19 to 25 (ACIP)	
Childhood Immunizations: Catch-Up	8.8	<p>Percentage of eligible patients seen for any visit who were not up-to-date on one or more recommended childhood vaccines listed below during the defined measurement period:</p> <ul style="list-style-type: none"> • MMR: 2 doses. • Varicella: 2 doses. • Hepatitis A: 2 doses. • Hepatitis B: 3 doses. <p>Numerator: Number of eligible patients seen for any visit who were documented as not up-to-date on one or more recommended childhood vaccines, or had no documentation of prior disease exposure or immunity.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	9 to 21 (ACIP, BF)	
Adolescent Immunizations: Catch-Up	8.9	<p>Percentage of eligible patients seen for any visit who were not up-to-date on one or more recommended adolescent vaccines listed below, or had no documentation of prior disease exposure or immunity during the defined measurement period:</p> <ul style="list-style-type: none"> • Tdap/TD: 1 dose. • Meningococcal: 2 doses³⁰. • HPV: 3 doses³¹. <p>Numerator: Number of eligible patients seen for any visit who were documented as not up-to-date on one or more recommended adolescent vaccines.</p> <p>Denominator: Number of eligible patients seen for any visit.</p>	9 to 21 (ACIP, BF)	

²⁹ Ibid.

³⁰ Note that the recommendation for meningococcal vaccine is dependent on the age at which the first dose of meningococcal vaccine was administered: “Two doses of MCV4 are recommended for adolescents 11 through 18 years of age: the first dose at 11 or 12 years of age, with a booster dose at age 16. If the first dose (or series) is given between 13 and 15 years of age, the booster should be given between 16 and 18. If the first dose (or series) is given after the 16th birthday, a booster is not needed.” See CDC Vaccine Information Statement for Meningococcal Vaccines: <http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening.pdf>.

³¹ Vaccination is also recommended for females aged 13 through 26 years and for males aged 13 through 21 years who have not been vaccinated previously or who have not completed the 3-dose series. Males aged 22 through 26 years may be vaccinated. See CDC Use of 9-Valent Human Papillomavirus (HPV) Vaccine: Updated HPV Vaccination Recommendations of the Advisory Committee on Immunization Practices: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6411a3.htm>.

Measure	#	Measure Definition	Ages ²	Target Goal
Immunizations: Documented Refusal	8.10	<p>Percentage of eligible patients seen for any visit who were documented as having refused one or more recommended vaccines³² during the defined measurement period.</p> <p>Numerator: Number of eligible patients seen for any visit who were documented as having refused one or more recommended vaccines during the defined measurement period.</p> <p>Denominator: Number of eligible patients seen for any visit during the defined measurement period.</p>	9 to 21 (ACIP)	

References

American Academy of Pediatrics. *Recommendations for preventive pediatric health care*. https://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf. Published September 2015.

Centers for Medicare and Medicaid Services. *Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set)*. <http://www.medicare.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>. Published March 2015.

Centers for Medicare and Medicaid Services. *Accountable care organizations quality measures and performance standards*. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/ACO-Shared-Savings-Program-Quality-Measures.pdf>. Published March 2015.

Hagan JF, Shaw JS, Duncan PM, eds. *Bright futures: Guidelines for health supervision of infants, children and adolescents*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008.

National Committee for Quality Assurance. *National Healthcare Effectiveness Data and Information Set (HEDIS)*. <http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures/HEDIS2016.aspx>. Published 2016.

United States Preventive Services Task Force. *Published recommendations*. <http://www.uspreventiveservicestaskforce.org/BrowseRec/Index>. Published November 2015.

³² Refusal can come from either the patient or parent(s).

Appendix I: Adolescent Pre-Visit Questionnaire Elements

Domain	Topic	Key points	Action if risk identified
Preventive Services	Vision	Trouble seeing	Snellen test
	Hearing	Trouble hearing	Audiometry
	Tuberculosis	Travel history, family member or contact, incarcerated, HIV+	Tuberculin skin test
	Anemia	Diet low in iron Females: menses > 5 days, excessive menstrual bleeding	Hematocrit or hemoglobin
	Oral Health	Dental home, visit in past year	Refer to dental home
Patient Engagement	Assess Strengths (*See Appendix II)		
	Connectedness with family, peers, community		
	Interpersonal relationships		
	School performance		
	Coping		
	Mood regulation		
	Elicit Concerns	Any other questions?	
	Physical health	Any questions about growth or pubertal development	
Nutrition, Physical Activity and Cardiovascular Risks	Body image	Ask about restricting, bingeing, purging	
	Healthy Eating	5210, portion size, fast food, Calcium, iron	Initiate Change Plan
	Physical Activity	60 minutes a day, screen time, TV in bedroom	Initiate Change Plan
	Dyslipidemia	FHx, Cigarette smoker, high risk medical condition, (BMI≥85%)	Lipid screen, other labs
Safety/Violence	Safety belt & Helmet use		
	Substance abuse and riding in a vehicle	Ask about riding in a car with impaired driver, even if no personal alcohol or drug use is reported	
	Guns	Access, storage	Recommend removal if patient is actively suicidal
	Interpersonal violence (fighting)	Feel safe at home, school, with intimate partner, in community	
	Bullying	School, internet	
Sexual Health	Sexuality	Sexual orientation, sexual activity	Counsel in birth control, STIs
	STIs	Sexually-active, number and gender of partners, and type of sexual activity (oral, genital, anal)	Test for chlamydia, gonorrhea, syphilis, HIV, others (depending on risk)
	Pregnancy	Sexually active without protection, missed menses	UPT, if positive refer to OB in first trimester Counsel on birth control
Substance Use	Tobacco	Ask about all tobacco products	Offer quit smoking advice or resources
	Alcohol	Ask about any alcohol use	Screen with CRAFFT, offer services or refer
	Other drugs	Ask about any marijuana use, prescription medication abuse, or other illicit drug use	Screen with CRAFFT, offer services or refer
Mental Health	Mental Health	Screen for depression, (including suicide)	Initiate counseling or refer (crisis services if indicated)

Appendix II: Adolescent Pre-Visit Questionnaire/Interview Elements: Strengths

Domain	Topic	Key Questions	Action if Strength is Lacking
Contribution (Generosity)	Positive engagement in the community, helping out, giving back	What do you do to help others (at home, at school, in the community)? Do you feel you “matter” at school? In your community?	Suggest a volunteering commitment that takes advantage of adolescent’s interest and skill-set.
Confidence	Self-esteem, self-efficacy, hopefulness	What are you most proud of? How confident are you that you could make a needed change in your life? Where do you see yourself in X years?	Discuss ways to set a simple goal and work towards it.
Competence (Mastery)	Physical, cognitive, emotional, social, and moral competencies; knows how to get things done, can control behavior, cope with stress	What are you good at? What do you do to stay healthy? How do you stay calm when you are angry or stressed?	Suggest ways to build skills. Discuss practicing deep breathing as a way to stay calm.
Connection (Belonging)	Caring and supportive relationships with family, peers, school, community, faith-based organization; at least on adult to turn to for help; capacity for healthy intimate relationship	How do you get along with household members? How do you feel you “fit in” at school? In your community? Who do you go to when you have a problem?	Suggest getting involved in a mentoring program, suggest other adults who can be helpful.

For additional information on using a strength-based approach with adolescents:

1. Duncan PM, Garcia AC, Frankowski BL et al. Inspiring healthy adolescent choices: A rationale for and guide to strength promotion in primary care. *J Adol Health*. 2007;41(6):525-35.
2. Frankowski BL, Leader IC, Duncan PM. Strength-based interviewing. *Adolesc Med State Art Rev*. 2009;20(1):22-40, vii-viii.
3. Ginsburg KR. Engaging adolescents and building on their strengths. *Adolesc Health Update*. 2007;19(2):1-8.
4. Klein DA, Goldenring JM, Adelman WP. Probing for scars: How to ask the essential questions. *Contemp Pediatr*. 2014;31(1):16-20,22-8.

Adolescent and Young Adult Measures Reference Table

Measure	Guidelines			Evidence Review/Recommendations				Measure Stewards			Federal Mandates		Other/Supportive Information
	Bright Futures (11-21)	ACOG		USPSTF		NHLBI	ACIP	HEDIS	CHIPRA	MCHB	EPSDT	Meaningful Use, Stage 1	
		13-21	19-39	<18	≥18								
Preventive Services													
1.1: Annual Well Visit	X							12-21 ¹ ; 20-26+ ²	11-19 ³	NPM 1 ⁴ ; NPM 10 ⁵	X		
1.2: Pre-Visit Questionnaire to Assess Risks	X												
1.3: Physical Exam	X	X									X		
1.4: Weight Assessment/Body Mass Index (BMI) Percentile or BMI	X	X	X	X ⁶	X ⁷	X ⁸		3-17 ⁹ ; 18-26+ ¹⁰			X	Obj. 8 ¹¹	CMS ¹²
1.5: Weight Classification	X					X ¹³							
1.6: Blood Pressure and/or Blood Pressure Percentile	X	X	X		X ¹⁴			18-26+ ¹⁵			X	Obj. 8 ¹⁶	CMS ¹⁷
1.7: Vision Testing (Snellen Test)	X		X								X		
1.8: Hearing Testing (Audiometry)	X										X		
1.9: Anemia Test	X										X		
1.10: Tuberculosis Test	X		X										USPSTF ¹⁸
1.11: Dental Home Verification	X							9-21 ¹⁹	9-20 ²⁰	NPM 13 ²¹	X		AADP ²² AAPD ²³ ADA ²⁴

Measure	Guidelines			Evidence Review/Recommendations				Measure Stewards			Federal Mandates		Other/Supportive Information
	Bright Futures (11-21)	ACOG		USPSTF		NHLBI	ACIP	HEDIS	CHIPRA	MCHB	EPSDT	Meaningful Use, Stage 1	
		13-21	19-39	<18	≥18								
Patient Engagement													
2.1: Confidentiality Policy Reviewed with Patient and Parent	X												Bright Futures ²⁵
2.2: Private Time with Patient During Visit	X												Bright Futures ²⁶ Klein et al ²⁷
2.3: Pre-Visit Questionnaire to Assess Strengths	X												Duncan et al ²⁸
2.4: Patient (Parent) Strengths Discussed	X												
2.5: Patient (Parent) Concerns Actively Elicited	X												
2.6: Patient (Parent) Concerns Addressed	X												
Nutrition, Physical Activity and Cardiovascular Risks													
3.1: Counseling for Nutrition	X					X ²⁹		3-17 ³⁰					
3.2: Counseling for Physical Activity	X		X			X ³¹		3-17 ³²		NPM 8 ³³			
3.3: Universal Lipid Screening	X	X	X		X ³⁴	X ^{35,36}							Pediatrics ³⁷
3.3 R: Lipid Disorder Screening	X				X ³⁸	X ^{39,40}							
3.3 R: Lipid Disorder Screening	X				X ⁴¹								
3.3 R: Lipid Disorder Screening					X ⁴²	X ^{43,44}							
3.4: Readiness to Change	X												
3.5: Self-management Goal	X											X	

Measure	Guidelines			Evidence Review/Recommendations				Measure Stewards			Federal Mandates		Other/Supportive Information
	Bright Futures (11-21)	ACOG		USPSTF		NHLBI	ACIP	HEDIS	CHIPRA	MCHB	EPSDT	Meaningful Use, Stage 1	
		13-21	19-39	<18	≥18								
Safety and Violence													
4.1: Family/Partner Violence	X												
4.2: Fighting	X												
4.3: Helmets	X												
4.4: Seat Belts	X												
4.5: Alcohol While Driving	X												
4.6: Gun Access	X												
4.7: Bullying	X									NPM 9 ⁴⁵			
Sexual Health													
5.1: Sexual Activity Screening	X	X	X										
5.2: Universal HIV Screening	X	X	X	X ⁴⁶	X ⁴⁷								CDC ⁴⁸
5.3: Chlamydia Screening	X	X ⁴⁹	X ⁵⁰	X ⁵¹	X ⁵²			16-24 ⁵³					
5.4: Gonorrhea Screening	**	X	X	X ⁵⁴	X ⁵⁵								
5.5: Syphilis Screening	**	X	X	X ⁵⁶	X ⁵⁷								
5.6: STI Counseling				X ⁵⁸	X ⁵⁹								
5.7: Pregnancy Test	***												One Key Question, Oregon Foundation for Reproductive Health ⁶⁰

Measure	Guidelines			Evidence Review/Recommendations				Measure Stewards			Federal Mandates		Other/Supportive Information
	Bright Futures (11-21)	ACOG		USPSTF		NHLBI	ACIP	HEDIS	CHIPRA	MCHB	EPSDT	Meaningful Use, Stage 1	
		13-21	19-39	<18	≥18								
5.8: Birth Control Methods Counseling		X											
5.9: Cervical Cancer Screening	*	≥21	≥21	X ⁶¹	X ⁶²								
Substance Use													
6.1: Tobacco Use and Exposure Screening	X			X ⁶³	X ⁶⁴	X ⁶⁵				NPM 14 ⁶⁶		X ⁶⁷	
6.2: Medical Assistance with Smoking and Tobacco Use Cessation				X ⁶⁸	X ⁶⁹	X ⁷⁰		18+ ⁷¹			X		CMS ⁷²
6.3: Alcohol Use Screening	X	X	X		X ⁷³								
6.4: Counseling for Alcohol Use/Misuse	X	X	X		X ⁷⁴			13+ ⁷⁵					
6.5: Marijuana/Illicit Drug Use Screening	X	X	X										
6.6: Counseling For Marijuana/Illicit Drug Use	X	X	X										
Mental Health													
7.1: Screening for Clinical Depression	*			X ⁷⁶	X ⁷⁷								CMS ⁷⁸ AACAP ⁷⁹
7.2: Intervention or Follow-Up for Clinical Depression													AACAP ⁸⁰ GLAD-PC II ⁸¹
7.3: Suicide Screening	X	X	X	X ⁸²	X ⁸³								AACAP ⁸⁴

Measure	Guidelines			Evidence Review/Recommendations				Measure Stewards			Federal Mandates		Other/Supportive Information
	Bright Futures (11-21)	ACOG		USPSTF		NHLBI	ACIP	HEDIS	CHIPRA	MCHB	EPSDT	Meaningful Use, Stage 1	
		13-21	19-39	<18	≥18								
Immunizations													
8.1: Tetanus, Diphtheria, Pertussis (Tdap/TD)	X			X	X		X	13 ⁸⁵	13 ⁸⁶				CDC ⁸⁷ Immunization Action Coalition ⁸⁸
8.2: Meningococcal	X			X	X		X	13 ⁸⁹	13 ⁹⁰				CDC ⁹¹ Immunization Action Coalition ⁹²
8.3: Serogroup B Meningococcal (Men B)				X	X		X						CDC ⁹³
8.4: Human Papillomavirus (HPV)	X			X	X		X	F, 13 ⁹⁴	F, 13 ⁹⁵				CDC ⁹⁶ Immunization Action Coalition ⁹⁷
8.5: Influenza	X			X	X		X	18-26+ ⁹⁸					CDC ⁹⁹ CMS ¹⁰⁰
8.6: Pneumococcal (conjugate)	X			X	X		X						CDC ¹⁰¹
8.7: Pneumococcal (polysaccharide)	X			X	X		X						CDC ¹⁰²
8.8: Childhood Immunizations: Catch-Up	X			X	X		X						CDC ¹⁰³
8.9: Adolescent Immunizations: Catch-Up	X			X	X		X						CDC ¹⁰⁴
8.10: Immunizations: Documented Refusal													AAP ^{105,106}

* Included in forthcoming *Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition* and in 2014 periodicity schedule

** If sexually active

***Sexually active females without contraception, late menses, or amenorrhea

¹ Measure AWC-CH: Adolescent Well-Care Visit. See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>

² HEDIS: Adult Access to Preventive/Ambulatory Care. See: <http://www.qualitymeasures.ahrq.gov/content.aspx?id=48680>

³ Children's Health Insurance Program Reauthorization Act (CHIPRA) Core Set. Child and Adolescent Access to Primary Care Practitioners. See: <http://www.ncqa.org/portals/0/Children%20and%20Adolescents%20Access%20to%20Primary%20Care%20Practitioners.pdf>

⁴ Health Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 1: Percent of women with a past year preventive medical visit. See: <http://mchb.hrsa.gov/programs/titlevgrants/blockgrantguidanceappendix.pdf>

⁵ Health Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 10: Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year. See: <http://mchb.hrsa.gov/programs/titlevgrants/blockgrantguidanceappendix.pdf>

⁶ Obesity in Children and Adolescents: Screening. Children and Adolescents, Age 6-18 years old. Grade B. The USPSTF recommends that clinicians screen children aged 6 years and older for obesity and offer them or refer them to comprehensive, intensive behavioral intervention to promote improvement in weight status. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/ClinicalSummaryFinal/obesity-in-children-and-adolescents-screening>

⁷ Obesity in Adults: Screening and Management. All Adults. Grade B. The USPSTF recommends screening all adults for obesity. Clinicians should offer or refer patients with a body mass index (BMI) of 30 kg/m² or higher to intensive, multicomponent behavioral interventions. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/obesity-in-adults-screening-and-management#Pod2>

⁸ "Children >3 years old who are seen in a medical setting should have their BP measured" p. 5. U.S. Department of Health and Human Services. *The Fourth Report on the Diagnosis, Evaluation and Treatment of High Blood Pressure in Children and Adolescents*. Bethesda, MD: National Heart, Lung, and Blood Institute; Revised May 2005. NIH Publication No. 05-5267; See: https://www.nhlbi.nih.gov/files/docs/resources/heart/hbp_ped.pdf

⁹ HEDIS: Weight assessment and counseling for nutrition and physical activity for children and adolescents. See: <http://www.ncqa.org/Portals/0/Weight%20Assessment%20and%20Counseling.pdf>

¹⁰ HEDIS: Adult BMI Assessment. See: <http://www.qualitymeasures.ahrq.gov/content.aspx?id=48583>

¹¹ CMS. Electronic Health Records (EHR) Incentive Programs. Eligible Professional Meaningful Use Core Measures: Measure 8 of 13: Record Vital Signs. See: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/8_Record_Vital_Signs.pdf

¹² "Percentage of patients aged 18 years and older with a documented BMI during the current encounter or during the previous six months AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the encounter" p. 198. Measure #128 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan- National Quality Strategy Domain: Community/Population Health. In Centers for Medicare and Medicaid Services. *2015 Physician Quality Reporting System (PQRS) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures*. Baltimore, MD. 2014:198-202.

¹³ "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

¹⁴ Hypertension in Adults: Screening and Home Monitoring. Adults. Grade A. The USPSTF recommends screening for high blood pressure in adults 18 and over. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/high-blood-pressure-in-adults-screening>

¹⁵ HEDIS: Controlling High Blood Pressure. "...percentage of members 18 to 85 years of age who had a diagnosis of hypertension (HTN) and whose BP was adequately controlled during the measurement year, based on age/condition-specific criteria." See: <http://www.qualitymeasures.ahrq.gov/content.aspx?id=48620>

¹⁶ CMS. Electronic Health Records (EHR) Incentive Programs. Eligible Professional Meaningful Use Core Measures: Measure 8 of 13: Record Vital Signs. See: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/8_Record_Vital_Signs.pdf

- ¹⁷ “Percentage of patients 18 through 85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement period” p. 356. Measure #236 (NQF 0018): Controlling High Blood Pressure – National Quality Strategy Domain: Effective Clinical Care. In Centers for Medicare and Medicaid Services. *2015 Physician Quality Reporting System (PQRS) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures*. Baltimore, MD. 2014:356-358.
- ¹⁸ Tuberculosis Infection: Screening. USPSTF Final Research Plan. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/final-research-plan105/tuberculosis-infection-screening>
- ¹⁹ HEDIS: Annual Dental Visits. “...percentage of members 2 to 21 years of age who had at least one dental visit during the measurement year.” See: <http://www.qualitymeasures.ahrq.gov/content.aspx?id=48682>
- ²⁰ “The percentage of individuals ages 1 to 20 who are enrolled in Medicaid or CHIP Medicaid Expansion programs for at least 90 continuous days, are eligible for Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services, and who received at least one preventive dental service during the reporting period” p. 86. Centers for Medicare and Medicaid Services. Core Set of Children’s Health Care Quality Measures for Medicaid and CHIP (Child Core Set). Published March 2015. <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>
- ²¹ Health Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 13: A) Percent of women with a dental visit during pregnancy and B) Percent of children, ages 1 through 17, who had a preventive dental visit in the past year. See: <http://mchb.hrsa.gov/programs/titlevgrants/blockgrantguidanceappendix.pdf>
- ²² “Children who have a dental home are more likely to receive appropriate preventive and routine oral health care. Referral by the primary care physician or health provider has been recommended, based on risk assessment, as early as six months of age, six months after the first tooth erupts, and no later than 12 months of age.7-9 Furthermore, subsequent periodicity of reappointment is based upon risk assessment. This provides time-critical opportunities to implement preventive health practices and reduce the child’s risk of preventable dental/oral disease” p. 24. *Policy on the Dental Home*. American Academy of Pediatric Dentistry Reference Manual. 2010. See: http://www.aapd.org/media/Policies_Guidelines/P_DentalHome.pdf
- ²³ “The American Academy of Pediatric Dentistry (AAPD) supports the concept of a dental home for all infants, children, adolescents, and persons with special health care needs.” p. 24. *Policy on the Dental Home*. American Academy of Pediatric Dentistry Reference Manual. 2010. See: http://www.aapd.org/media/Policies_Guidelines/P_DentalHome.pdf
- ²⁴ American Dental Association, Dental Quality Alliance. *DQA measure specification sheet: Utilization of services, dental services*. “Description: Percentage of all enrolled children under age 21 who received at least one dental service within the reporting year.” February 3, 2014. http://www.ada.org/~media/ADA/Science%20and%20Research/Files/NQF_Dental_DQA_Util_of_Services.ashx
- ²⁵ “The legal age of majority varies from state to state as do the circumstances in which minors can consent to their own health care [...] Patient-provider confidentiality related to such care is a delicate issue, especially when supporting parental involvement. If an adolescent patient is entitled to confidential care (either because he is legally at the age of majority or he has been deemed an emancipated or a mature minor), a health care professional generally needs the adolescent’s permission to discuss his case with his parents. Health care professionals should be aware of their local laws and public regulations. Health care professionals should inform adolescent patients and their parents of the practice’s terms of confidentiality, as well as any exceptions, such as patient safety. Ultimately, clinical judgment, ethical principles, and moral certitude guide decisions about individual cases” p. 540. Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008.
- ²⁶ “Beginning with the Early Adolescence Visits [11 to 14 years], many health care professionals conduct the first part of the medical interview with the parent in the examination room, and then spend time with the adolescent alone. This approach helps early adolescents build a unique relationship with their health care professional, promotes confidence and full disclosure of health information, and enhances self-management” p. 519. Ibid.
- ²⁷ Klein JD, Allan MJ, Elster AB et al. Improving adolescent preventive care in community health centers. *Pediatrics*. 2001 Feb;107(2):318-27.
- ²⁸ Duncan PM, Garcia AC, Frankowski BL et al. Inspiring healthy adolescent choices: A rationale for and guide to strength promotion in primary care. *J Adol Health*. 2007;41(6):525-35.

²⁹ "Ongoing nutrition counseling has been effective in assisting children and families to adopt and sustain recommended diets for both nutrient adequacy and reducing cardiovascular risk (grade A)" p. S220. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

³⁰ HEDIS: Weight assessment and counseling for nutrition and physical activity for children and adolescents. See:

<http://www.ncqa.org/Portals/0/Weight%20Assessment%20and%20Counseling.pdf>

³¹ "There is strong evidence that increases in moderate-to-vigorous physical activity are associated with lower systolic and diastolic BP, decreased measures of body fat, decreased BMI, improved fitness measures, lower TC level, lower LDL cholesterol level, lower triglyceride level, higher HDL cholesterol level, and decreased insulin resistance in childhood and adolescence (grade A)" p. S222. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

³² HEDIS: Weight assessment and counseling for nutrition and physical activity for children and adolescents. See:

<http://www.ncqa.org/Portals/0/Weight%20Assessment%20and%20Counseling.pdf>

³³ Health Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 8: Percent of children ages 6 through 11 and adolescents ages 12 through 17 who are physically active at least 60 minutes per day. See:

<http://mchb.hrsa.gov/programs/titlevgrants/blockgrantguidanceappendix.pdf>

³⁴ Lipid Disorders in Adults (Cholesterol, Dyslipidemia): Screening. Men 20-35 at Increased Risk for CHD. Grade B. The USPSTF recommends screening men aged 20-35 for lipid disorders if they are at increased risk for coronary heart disease. Women 20-45 at Increased Risk for CHD. Grade B. The USPSTF recommends screening women aged 20-45 for lipid disorders if they are at increased risk for coronary heart disease. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening>

³⁵ American Academy of Pediatrics: Physicians Recommend all Children, Ages 9-11, Be Screened for Cholesterol. See: <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Physicians-Recommend-all-Children,-Ages-9-11,-Be-Screened-for-Cholesterol.aspx#sthash.iZvUOAvl.dpuf>

³⁶ NHLBI Grade B: 9 to 11 y (Strongly recommend); NHLBI Grade B: 17 to 21 y (Recommend). See Table 9-5, p. S239. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

³⁷ "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

³⁸ Lipid Disorders in Adults (Cholesterol, Dyslipidemia): Screening. Men 20-35 at Increased Risk for CHD. Grade B. The USPSTF recommends screening men aged 20-35 for lipid disorders if they are at increased risk for coronary heart disease. Women 20-45 at Increased Risk for CHD. Grade B. The USPSTF recommends screening women aged 20-45 for lipid disorders if they are at increased risk for coronary heart disease. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening>

³⁹ "Obesity is commonly associated with a combined dyslipidemia pattern with mild elevation in TC and LDL cholesterol levels, moderate-to-severe elevation in triglyceride level, and a low HDL cholesterol level. This is the most common dyslipidemic pattern seen in childhood, and lipid assessment in overweight and obese children identifies an important proportion of those with significant lipid abnormalities (grade B)" p. S230-31. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁴⁰ NHLBI: Evidence-Based Recommendations for Lipid Assessment. 17-21 years. Universal Screening. Grade B: Recommend. See Table 9-5, p. S239. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁴¹ Lipid Disorders in Adults (Cholesterol, Dyslipidemia): Screening. Men 20-35 at Increased Risk for CHD. Grade B. The USPSTF recommends screening men aged 20-35 for lipid disorders if they are at increased risk for coronary heart disease. Women 20-45 at Increased Risk for CHD. Grade B. The USPSTF recommends screening women aged 20-45 for lipid disorders if they are at increased risk for coronary heart disease. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening>

⁴² Lipid Disorders in Adults (Cholesterol, Dyslipidemia): Screening. Men 20-35 at Increased Risk for CHD. Grade B. The USPSTF recommends screening men aged 20-35 for lipid disorders if they are at increased risk for coronary heart disease. Women 20-45 at Increased Risk for CHD. Grade B. The USPSTF recommends screening women aged 20-45 for lipid disorders if they are at increased risk for coronary heart disease. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening>

⁴³ "Obesity is commonly associated with a combined dyslipidemia pattern with mild elevation in TC and LDL cholesterol levels, moderate-to-severe elevation in triglyceride level, and a low HDL cholesterol level. This is the most common dyslipidemic pattern seen in childhood, and lipid assessment in overweight and obese children identifies an important proportion of those with significant lipid abnormalities (grade B)" p. S230-31. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁴⁴ NHLBI: Evidence-Based Recommendations for Lipid Assessment. 17-21 years. Universal Screening. Grade B: Recommend. See Table 9-5, p. S239. "Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report." Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁴⁵ Heath Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 9: Percent of adolescents, ages 12 through 17, who are bullied or bully others. See: <http://mchb.hrsa.gov/programs/titlevgrants/blockgrantguidanceappendix.pdf>

⁴⁶ Human Immunodeficiency Virus (HIV) Infection: Screening. Adolescents and Adults 15-65 Years Old. Grade A. The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk should also be screened. Pregnant Women. Grade A. The USPSTF recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/human-immunodeficiency-virus-hiv-infection-screening>

⁴⁷ Ibid.

⁴⁸ Branson BM, Handsfield HH, Lampe MA et al. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. *Morbidity and Mortality Weekly Report (MMWR)*. September 22, 2006. 55(RR14);1-17. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>.

⁴⁹ Chlamydia and Gonorrhea: Screening. Sexually Active Women. Grade B. The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection. Sexually Active Men. Grade I. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydia and gonorrhea in men. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening>

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Ibid.

⁵³ HEDIS: Chlamydia Screening in Women (CHL). The percentage of women 16-24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. See: <http://www.ncqa.org/portals/0/Chlamydia%20Screening%20in%20Women.pdf>

⁵⁴ Chlamydia and Gonorrhea: Screening. Sexually Active Women. Grade B. The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening>

⁵⁵ Ibid.

⁵⁶ Syphilis Infection: Screening. Persons at Increased Risk. Grade A. The USPSTF strongly recommends that clinicians screen persons at increased risk for syphilis infection. Note: Current recommendation is from 2004 and is currently undergoing review. Pregnant Women. Grade A. The USPSTF strongly recommends that clinicians screen all pregnant women for syphilis infection. Asymptomatic Persons, Not at Increased Risk. Grade D. The USPSTF recommends against routine screening of asymptomatic persons who are not at increased risk for syphilis infection. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/syphilis-infection-screening>

⁵⁷ Ibid.

⁵⁸ Sexually Transmitted Infections: Behavioral Counseling. Sexually Active Adolescents and Adults. Grade B. The USPSTF recommends intensive behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections (STIs). See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/sexually-transmitted-infections-behavioral-counseling1>

⁵⁹ Ibid.

⁶⁰ See: <http://www.onekeyquestion.org/>

⁶¹ Cervical Cancer: Screening. Women younger than 30 years, HPV testing. Grade D. The USPSTF recommends against screening for cervical cancer in women younger than age 21 years. Women younger than 21. Grade D. The USPSTF recommends against screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening>

⁶² Cervical Cancer: Screening. Grade A. The USPSTF recommends screening for cervical cancer in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years. Women younger than 30 years, HPV testing. Grade D. The USPSTF recommends against screening for cervical cancer in women younger than age 21 years. Women younger than 21. Grade D. The USPSTF recommends against screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/cervical-cancer-screening#consider>

⁶³ Tobacco Use in Children and Adolescents: Primary Care Interventions. School-Aged Children and Adolescents. Grade B. The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use among school-aged children and adolescents. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-children-and-adolescents-primary-care-interventions>

⁶⁴ Tobacco Smoking Cessation in Adults, including Pregnant Women: Behavioral and Pharmacotherapy Interventions. Adults who are not pregnant. Grade A. The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration (FDA)–approved pharmacotherapy for cessation to adults who use tobacco. Pregnant Women. Grade A. The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco. Pregnant Women. Grade I. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women. All Adults, including pregnant women. Grade I. The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems (ENDS) for tobacco cessation in adults, including pregnant women. The USPSTF recommends that clinicians direct patients who smoke tobacco to other cessation interventions with established effectiveness and safety (previously stated).

See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1>

⁶⁵ “Good-quality interventions in pediatric care settings to decrease children’s environmental smoke exposure have had mixed results (grade B)” p. S226. “Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report.” Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁶⁶ Heath Resources and Services Administration. Title V Maternal and Child Health Services Block Grant National Performance Measure No. 14: A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes. See:

<http://mchb.hrsa.gov/programs/titlegrants/blockgrantguidanceappendix.pdf>

⁶⁷ CMS. Electronic Health Records (EHR) Incentive Programs. Eligible Professional Meaningful Use Core Measures: Measure 9 of 13: Record Smoking Status. Record smoking status for patients 13 years and older. See: https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/9_Record_Smoking_Status.pdf

⁶⁸ Tobacco Use in Children and Adolescents: Primary Care Interventions. School-Aged Children and Adolescents. Grade B. The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use among school-aged children and adolescents. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-children-and-adolescents-primary-care-interventions>

⁶⁹ Tobacco Smoking Cessation in Adults, including Pregnant Women: Behavioral and Pharmacotherapy Interventions. Adults who are not pregnant. Grade A. The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration (FDA)–approved pharmacotherapy for cessation to adults who use tobacco. Pregnant Women. Grade A. The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco. Pregnant Women. Grade I. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women. All Adults, including pregnant women. Grade I. The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems (ENDS) for tobacco cessation in adults, including pregnant women. The USPSTF recommends that clinicians direct patients who smoke tobacco to other cessation interventions with established effectiveness and safety (previously stated). See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1>

⁷⁰ “Practice-based interventions to achieve smoking cessation in adolescents have had moderate success with limited long-term follow-up (grade B)” p. S226. “Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report.” Expert Panel on Integrated Guideline for Cardiovascular Health and Risk Reduction in Children and Adolescents. *Pediatrics*. 2011;128:S213-56. doi:10.1542/peds.2009-2107C.

⁷¹ HEDIS: Medical Assistance with Smoking and Tobacco Use Cessation. Advising Smokers and Tobacco Users to Quit; Discussing Cessation Medications; Discussing Cessation Strategies. See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-Adult-Core-Set-Manual.pdf>

⁷² “Percentage of patients aged 18 years and older who were screened for tobacco use at least once during the two-year measurement period AND who received cessation counseling intervention if identified as a tobacco user” p. 353. Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention – National Quality Strategy Domain: Community/Population Health. In Centers for Medicare and Medicaid Services. *2015 Physician Quality Reporting System (PQRS) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures*. Baltimore, MD. 2014:353-55.

⁷³ Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care. Adults aged 18 and older. Grade B. The USPSTF recommends that clinicians screen adults aged 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care>

⁷⁴ Ibid.

⁷⁵ HEDIS: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment. (*Note: this is beyond the scope of a regular health supervision visit.). See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-Adult-Core-Set-Manual.pdf>

⁷⁶ Depression in Children and Adolescents: Screening. Adolescents, 12-18 years of age, in Clinical Practices with Systems of Care. Grade B. The USPSTF recommends screening of adolescents (12-18 years of age) for major depressive disorder (MDD) when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-children-and-adolescents-screening>

⁷⁷ Depression in Adults: Screening. Adults age 18 and over -- When staff-assisted depression care supports are in place. Grade B. The USPSTF recommends screening adults for depression when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and follow-up. Adults age 18 and over -- When staff-assisted depression care supports are not in place. Grade C. The USPTF recommends against routinely screening adults for depression when staff-assisted depression care supports are not in place. There may be considerations that support screening for depression in an individual patient. See: <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening>

⁷⁸ "Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen" p. 212. Measure #134 (NQF 0418): Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan – National Quality Strategy Domain: Community/Population Health. In Centers for Medicare and Medicaid Services. *2015 Physician Quality Reporting System (PQRS) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures*. Baltimore, MD. 2014:212-15.

⁷⁹ "Clinicians should screen all children and adolescents for key depressive symptoms including depressive or sad mood, irritability, and anhedonia" p. 1507. Birmaher B, Brent D, AACAP Work Group on Quality Issues et al. Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. *J Am Acad Child Adolesc Psychiatry*. 2007 Nov;46(11):1503-26.

⁸⁰ See p. 1509. Birmaher B, Brent D, AACAP Work Group on Quality Issues et al. Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. *J Am Acad Child Adolesc Psychiatry*. 2007 Nov;46(11):1503-26.

⁸¹ GLAD-PC: Initial Management of Depression, p. e1306.

"Recommendation 1: Clinicians should educate and counsel families and patients about depression and options for the management of the disorder (grade of evidence: C; strength of recommendation: very strong). Clinicians should also discuss limits of confidentiality with the adolescent and family (grade of evidence: D; strength of recommendation: very strong)."

"Recommendation 2: Clinicians should develop a treatment plan with patients and families (grade of evidence: C; strength of recommendation: very strong) and set specific treatment goals in key areas of functioning, including home, peer, and school settings (grade of evidence: D; strength of recommendation: very strong)."

"Recommendation 3: The PC clinician should establish relevant links/collaboration with mental health resources in the community (grade of evidence: B; strength of recommendation: very strong), which may include patients and families who have dealt with adolescent depression and are willing to serve as resources to other affected adolescents and their family members (grade of evidence: D; strength of recommendation: very strong)."

"Recommendation 4: All management must include the establishment of a safety plan, which includes restricting lethal means, engaging a concerned third party, and developing an emergency communication mechanism should the patient deteriorate, become actively suicidal or dangerous to others, or experience an acute crisis associated with psychosocial stressors, especially during the period of initial treatment when safety concerns are highest (grade of evidence: C; strength of recommendation: very strong)." Zuckerbrot RA, Cheung AH, Jensen PS et al. Guidelines for adolescent depression in primary care (GLAD-PC): I. Identification, Assessment, and Initial Management. *Pediatrics*. 2007;120(5):e1306-12. DOI: 10.1542/peds.2007-1144.

⁸² Suicide Risk in Adolescents, Adults and Older Adults: Screening. Grade I: The USPSTF concludes that current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in adolescents, adults, and older adults in primary care. See:

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/suicide-risk-in-adolescents-adults-and-older-adults-screening>

⁸³ Ibid.

⁸⁴ See "Recommendation 4," p. 1508. Birmaher B, Brent D, AACAP Work Group on Quality Issues et al. Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. *J Am Acad Child Adolesc Psychiatry*. 2007 Nov;46(11):1503-26.

⁸⁵ HEDIS: Immunizations for Adolescents (IMA). See: <http://www.ncqa.org/portals/0/Immunizations%20for%20Adolescents.pdf>

⁸⁶ CMS. Core Set of Children's Health Care Quality Measures for Medicaid

and CHIP. Immunizations for Adolescents. See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>

⁸⁷ CDC. Recommended Immunization Schedules for Persons 0 through 18 years. United States, 2015. See:

<http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

⁸⁸ Tdap vaccine receipt is mandatory for secondary school entrance in all states with the exception of DE, HI, ME and SD; Td vaccine is required in MT. State Information: Tdap booster requirements for secondary schools. Updated January 15, 2015. Immunization Action Coalition Web Site.

<http://www.immunize.org/laws/#dtap>.

⁸⁹ CMS. Core Set of Children's Health Care Quality Measures for Medicaid and CHIP. Immunizations for Adolescents. See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>

⁹⁰ Ibid.

⁹¹ CDC. Recommended Immunization Schedules for Persons 0 through 18 years. United States, 2015. See:

<http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

⁹² Meningococcal vaccine receipt is mandatory for secondary school entrance in 25 states. State Information: State mandates on immunization and vaccine-preventable diseases. State Information: Meningococcal State Mandates for Elementary and Secondary Schools. Updated January 15, 2015. Immunization Action Coalition Web Site. <http://www.immunize.org/laws/#menin>.

⁹³ Guidelines for serogroup b meningococcal vaccine are evolving. See: Foraranmi T, Rubin L, Martin SW et al. Use of Serogroup B Meningococcal Vaccines in Persons Aged ≥10 Years at Increased Risk for Serogroup B Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices, 2015. *Morbidity and Mortality Weekly Report (MMWR)*. June 12, 2015.64(22);608-12. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6422a3.htm>.

⁹⁴ CMS. Core Set of Children's Health Care Quality Measures for Medicaid and CHIP: Human Papillomavirus (HPV) Vaccine for Female Adolescents. : <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-and-CHIP-Child-Core-Set-Manual.pdf>

⁹⁵ Ibid.

⁹⁶ CDC. Recommended Immunization Schedules for Persons 0 through 18 years. United States, 2015. See:

<http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

⁹⁷ HPV vaccine receipt is mandatory for secondary school entrance in the District of Columbia, Rhode Island, and Virginia. State Information: State Information: HPV Mandates for Children in Secondary Schools. Updated February 2, 2015. Immunization Action Coalition Web Site. <http://www.immunize.org/laws/hpv.asp>.

⁹⁸ HEDIS: Flu Vaccinations for Adults Ages 18-64. See: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicaid-Adult-Core-Set-Manual.pdf>

⁹⁹ CDC. Recommended Immunization Schedules for Persons 0 through 18 years. United States, 2015. See:

<http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

¹⁰⁰ "Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization" p. 166. Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization – National Quality Strategy Domain: Community/Population Health. In Centers for Medicare and Medicaid Services. *2015 Physician Quality Reporting System (PQRS) Measure Specifications Manual for Claims and Registry Reporting of Individual Measures*. Baltimore, MD. 2014:166-67.

¹⁰¹ CDC. Recommended Immunization Schedules for Persons 0 through 18 years. United States, 2015. See:

<http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ Tan T, Rothstein E. Documenting Parental Refusal To Have Their Children Vaccinated [Letter]. *American Academy of Pediatrics*. 2013.

<http://www2.aap.org/immunization/pediatricians/pdf/refusaltovaccinate.pdf>

¹⁰⁶ “The use of this or a similar form in concert with direct and non-condescending discussion can demonstrate the importance you place on appropriate immunizations, focuses parents’ attention on the unnecessary risk for which they are accepting responsibility, and may in some instances induce a wavering parent to accept your recommendations” no page. Ibid.