Proposed New Measure for HEDIS^{®1} MY 2026: Tobacco Use Screening and Cessation Intervention (TSC-E)

NCQA seeks comments on the proposed new HEDIS measure for MY 2026, *Tobacco Use Screening and Cessation Intervention (TSC-E)*. If the proposed new measure is approved, the existing HEDIS measure *Medical Assistance with Smoking and Tobacco Use Cessation* (MSC) would be retired for MY 2026. Public comment on MSC measure retirement took place in 2023.

The United States Preventive Services Task Force recommends that clinicians screen all adults and school-aged children for commercial tobacco use and offer appropriate behavioral counseling and pharmacotherapy for cessation.

The proposed measure reports two rates:

- 1. The rate of persons 12 years of age and older who are screened for tobacco use.
- 2. The rate of persons who screen positive for tobacco use who receive tobacco cessation intervention, either through behavioral counseling or dispensed pharmacotherapy for those 18 and older.

After review of performance testing data, our expert panels support the proposed measure as feasible and informative about rates of tobacco use screening and tobacco cessation intervention.

NCQA seeks feedback on the following questions:

- 1. Do the measure specifications, codes and value sets adequately capture tobacco use screening and cessation intervention?
- 2. Do you support including age stratification rates for persons 12–17, 18–64 and 65 years of age and older as part of the measure?

Supporting documents include draft measure specifications and the evidence workup.

NCQA acknowledges the contributions of the Geriatric, Technical and Respiratory Measurement Advisory Panels and the Lung Cancer and Tobacco Use Technical Expert Panel.

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Measure title	Tobacco Use Screening and Cessation Intervention	Measure ID	TSC-E	
Description	The percentage of persons 12 years of age and older who were screened for tobacco use once or more during the measurement period and who received tobacco cessation intervention during the measurement period or the 180 days prior to the measurement period if identified as a tobacco user.			
	Two rates are reported:			
	1. <i>Tobacco Use Screening.</i> The percentage of persons 12 years of age and older who were screened for tobacco use once or more during the measurement period.			
	2. Cessation Intervention. The percentage of persons 12 years of age and older who were identified as a tobacco user during the measurement period and who received tobacco cessation intervention during the measurement period or the 180 days prior to the measurement period.			
Measurement period	January 1–December 31.			
Copyright and disclaimer notice	Refer to the complete copyright and disclaimer information at the front of this publication. NCQA website: www.ncqa.org Submit policy clarification support questions via My NCQA (https://my.ncqa.org).			
Clinical recommendation statement	The U.S. Preventive Services Task Force (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 nonpregnant adults who use tobacco (Grade A Recommendation) (U.S. Preventive Services Task Force, 2021). The USPSTF recommends that clinicians ask all pregnant persons about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant persons who use tobacco (Grade A			
	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 (Grade I Statement) (U.S. Preventive Services Task Force, 2021).			
	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of electronic cigarettes (e-cigarettes) for tobacco cessation in adults, including pregnant persons. The USPSTF recommends that clinicians direct patients who use tobacco to other tobacco cessation interventions with proven effectiveness and established safety (Grade I Statement) (U.S. Preventive Services Task Force, 2021).			

	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 (Grade B Statement) (U.S. Preventive Services Task Force, 2020).
	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary carefeasible interventions for the cessation of tobacco use among school-aged children and adolescents (Grade I Statement) (U.S. Preventive Services Task Force, 2020).
	All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increase rates of clinician intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).
	All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).
	Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).
	The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008).
	For adolescents 11 to 17, the American Academy of Pediatrics recommends the ACT method to assess tobacco product use. Ask: Screen for tobacco use with all youth, during every clinical encounter. Counsel: Advise all youth who use tobacco to quit and have them set a quit date within two weeks. Treat: Link youth to behavioral treatment extenders and prescribe pharmacologic support when indicated. After the visit, follow-up to assess progress and offer support. (American Academy of Pediatrics, 2022).
Citations	US Preventive Services Task Force. 2021. "Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons." US Preventive Services Task Force Recommendation Statement. <i>JAMA</i> 325(3), 265–279. doi:10.1001/jama.2020.25019
	US Preventive Services Task Force. 2020. "Primary Care Interventions for Prevention and Cessation of Tobacco Use in Children and Adolescents." US Preventive Services Task Force Recommendation Statement. <i>JAMA</i> 2020;323(16):1590–1598. doi:10.1001/jama.2020.4679
	Agency for Healthcare Research and Quality. 2008. <i>Treating Tobacco Use and Dependence: 2008 Update.</i> https://www.ahrq.gov/prevention/guidelines/tobacco/index.html

	American Academy of Pediatrics. 2022. "Youth Tobacco Use: Considerations for Clinicians." <i>JAMA</i> https://downloads.aap.org/AAP/PDF/AAP_Youth_Tobacco_Cessation_Conside rations_for_Clinicians.pdf		
Characteristics			
Scoring	Proportion.		
Туре	Process.		
Product lines	Commercial.		
	Medicaid.		
	Medicare.		
Stratifications	 Age as of the start of the measurement period. 12–17 years (commercial and Medicaid only). 18–64 years. 65+ years. 		
Risk adjustment	None.		
Improvement notation	Increased score indicates improvement.		
Guidance	Collection Methods for additional information.		
	Date specificity: Dates must be specific enough to determine that the event occurred in the period being measured.		
	Which services count? When using claims, include all paid, suspended, pending and denied claims.		
Definitions			
Positive Tobacco User	Persons who were screened for tobacco use and had a documented positive result. Any of the following meet criteria:		
	 <u>Tobacco Assessment Value Set</u> with LOINC code LA33-6. 		
	 LOINC code 72166-2 with Positive Tobacco Use Status Value Set. 		
	 <u>Tobacco Use Screening Value Set</u> with <u>Tobacco User Value Set</u>. 		
Negative Tobacco User	 Persons who were screened for tobacco use and had a documented negative result. Any of the following meet criteria: <u>Tobacco Assessment Value Set</u> <i>with</i> LOINC code LA32-8. 		

	 LOINC code 72166-2 <i>with</i> <u>Negative Tobacco Use Status Value Set</u>. <u>Tobacco Use Screening Value Set</u> <i>with</i> <u>Tobacco Non User Value Set</u>.
Initial population	 Measure item count: Person. Attribution: Enrollment. Benefit: Medical. Continuous enrollment: 180 days prior to the measurement period through December 31 of the measurement period. Allowable gap: No more than one gap of ≤45 days during the continuous enrollment period. The person must be enrolled on the last day of the measurement period. Ages: 12 years and older at the start of the measurement period. Event: None.
Exclusions	 Persons with a date of death. Death in the measurement period, identified using data sources determined by the organization. Method and data sources are subject to review during the HEDIS audit. Persons in hospice or using hospice services. Persons who use hospice services (<u>Hospice Encounter Value Set</u>; <u>Hospice Intervention Value Set</u>) or elect to use a hospice benefit any time during the measurement period. Organizations that use the Monthly Membership Detail Data File to identify these persons must use only the run date of the file.
Denominator	Denominator 1: The initial population minus denominator exclusions. Denominator 2: Persons from numerator 1 who were identified as a positive tobacco user between January 1 and December 1 of the measurement period.
Numerator	 Numerator 1: Tobacco Use Screening Persons who were screened for tobacco use and identified as either a positive or negative tobacco user (refer to the Definitions) during the measurement period. Numerator 2: Cessation Intervention Persons who received tobacco cessation intervention during the measurement period or 180 days prior to the measurement period. The following meet criteria: Persons 12–17 years of age who received tobacco cessation counseling (Tobacco Use Cessation Counseling Value Set) during the measurement period. Persons 18 years of age and older who received tobacco cessation counseling (Tobacco Use Cessation Counseling Value Set) or dispensed pharmacotherapy intervention (Tobacco Use Cessation Pharmacotherapy Medication List) during the measurement period or 180 days prior to the measurement period or 180 days prior to the measurement period.

Summary of changes	• This is a first-year measure.			
Data Elements	Organizations that submit data to NCQA must provide the following data elements in a specified file.			
	Table TSC-E-1/2: Data Elements for Tobacco Use Screening and Cessation Intervention			
	Metric Age Data Element Reporting Instructions		Reporting Instructions	
	TobaccoUse	12-17	Benefit	Metadata
	Cessation	18-64	InitialPopulation	For each Metric and Stratification
	-	65+	Exclusions	For each Metric and Stratification
		Total	Denominator	For each Metric and Stratification
			Numerator	For each Metric and Stratification
			Rate	(Percent)

Tobacco Screening and Follow-Up for Adolescents and Adults (TSC-E) Measure Workup

Topic Overview

Importance and Prevalence

Commercial tobacco use is the leading cause of preventable disease, disability and death in the United States. Smoking causes cancer, heart diseases, stroke, lung disease, type 2 diabetes and other chronic conditions.

In 2020, an estimated 12.5% (30.8 million) of U.S. adults smoked cigarettes (defined as smoking ≥100 cigarettes during a lifetime and now smoking cigarettes either every day or some days) (CDC 2024). Nearly 70% of adult smokers in the United States said they wanted to quit, according to a 2017 study (Babb 2017). Quitting tobacco products can be exceedingly difficult due to their addictive nature. 55% of adult smokers had made a quit attempt in the past year, but only about 8% were successful in quitting for 6–12 months (Creamer 2019).

Nearly all tobacco use begins during youth and young adulthood, so it is imperative to address children and adolescent initiation of tobacco products (CDC 2012). As of 2022, about 4 of every 100 middle school students (4.5%) and about 1 of every 6 high school students (16.5%) reported current use of tobacco products. Electronic cigarettes (e-cigarettes) are the most used tobacco product among youth, with 14.1% of high school students reporting that they have used an e-cigarette in the past 30 days (Park-Lee 2022). In comparison, only 2% of high school students report using cigarettes (Park-Lee 2022).

Tobacco use harms nearly every organ of the body and can lead to disease and disability (Lushniak 2014). While nicotine itself does not cause cancer, 69 chemicals in tobacco smoke are carcinogenic. Nicotine's addictive nature contributes to people who smoke inhaling those carcinogens.

E-cigarettes also produce a number of dangerous chemicals that are potentially toxic to cells and can cause lung disease, heart disease, COPD, asthma and cancer (Sassano 2018).

More than 16 million Americans live with a smoking-related disease. Cigarette smoking accounts for at least 30% of all cancer deaths, and overall rates of death from cancer are twice as high among smokers as nonsmokers (Islami 2022). Smoking also causes lung disease, such as chronic bronchitis and emphysema, and increases the risk of heart disease.

There have been links between e-cigarette use and hospitalizations due to respiratory issues including shortness of breath, cough and chest pain (Krishnasamy 2020).

Smoking cessation can reduce the risk of negative health effects, regardless of age or how long someone has been smoking (Lushniak 2014). According to a 2020 Surgeon General's report, quitting smoking can add as much as 10 years to life expectancy (General 2020).

Health care
disparities14.1% of men and 11% of women in the United States are current smokers
(Cornelius 2022). Men have higher rates of tobacco use than women. A 2015
survey found that 16.7% percent of men use cigarettes, compared to 13.6% of
women (Jamal 2016).

Tobacco use and exposure are also more likely to occur in marginalized groups (Cornelius 2022). Smoking is highest among racial and ethnic minorities. A 2020 survey found that the highest rates of commercial tobacco use occurred in American Indian/Alaska Native adults (27.1%), while rates for

other race groups include non-Hispanic White adults (13.3%), non-Hispanic Black adults (14.4%), Hispanic adults (8%) and non-Hispanic Asian adults (8%) (Cornelius 2022).

This increased likelihood of tobacco use can lead to high rates of tobaccorelated health issues in communities. For example, non-Hispanic Black adults are more likely to die from smoking-related diseases, despite starting smoking later in life and smoking fewer cigarettes than non-Hispanic White adults (General 2020).

High-risk groups include incarcerated people, LGBTQ people, people with low socioeconomic status, people with mental illness and people with substance use disorder (Marbin 2021).

Population	Disparity
Incarcerated people	Smoking prevalence is approximately 4 times higher in criminal justice populations than in the general population.
LGBTQ+ people	20.5% of the LGBTQ population smokes cigarettes, compared to 15.3% of straight adults.30.7% of transgender people smoke.
People of low socioeconomic status	Adults below the poverty level are approximately twice as likely to use tobacco products than those who are above the poverty level.
People with mental illness and substance use disorders	Approximately 25% of U.S. adults have some form of mental illness or a substance abuse disorder. These adults smoke 40% of all cigarettes smoked by adults.

Table 1. Tobacco Related Disparities

There are also marked disparities in tobacco product use by race and ethnicity among teens.

Tobacco use was also higher among certain vulnerable populations of students identifying as lesbian, gay or bisexual (16.0%), students identifying as transgender (16.6%) and students reporting severe psychological distress (18.3%) (Park-Lee 2022).

Financial importance and cost effectiveness

Tobacco has an effect on health care costs and lost productivity. A 2022 study found that the cumulative economic loss from cigarette smoking was \$891B in 2020 (Nargis 2022). A 2018 study showed that cigarette smoking costs more than \$240B in health care spending, nearly \$185B in lost productivity from smoking-related illness and health conditions and \$180B in lost productivity from smoking-related deaths (Shrestha 2022).

Tobacco Screening Guidelines

Numerous studies have demonstrated the effectiveness of screening and treatment for tobacco use. The following section includes information on the evidence for tobacco screening, treatment models, gaps in care and disparities.

Screening Methods and Supporting Evidence

Tobacco users who can stop smoking lower their risk for heart disease, lung disease and stroke. There is evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) are successful in helping tobacco users quit.

The U.S. Preventive Service Task Force (USPSTF) gave a grade A recommendation for clinicians to ask all adults about tobacco use, advise them to stop using tobacco and provide behavioral interventions; the U.S. Food and Drug Administration (FDA) approved pharmacotherapy for cessation to nonpregnant adults who use tobacco. All patients should be asked about their tobacco use and whether risk factors for use are present and encouraged to stop using tobacco (Krist 2021).

Studies have shown the effectiveness of screening and counseling on increasing smoking cessation. A 2012 *Morbidity and Mortality Weekly Report (MMWR)* article summarized data from the 2005–2008 National Ambulatory Medical Care Survey (NAMCS) and the National Health Interview Survey (NHIS) to determine progress toward Healthy People 2020 objectives calling for increased screening, cessation counseling and cessation success, and reported the following key findings:

- 1. During the study period, adults 18 years and older made an estimated annual average of approximately 771 million outpatient visits (an estimated total of 3.08 billion visits during 2005–2008 combined) to office-based physicians.
- 2. Tobacco use screening occurred during the majority of adult visits to outpatient physician offices (62.7%)
- 3. Of the visits that included tobacco use screening, 17.6% (340 million visits) were made by current tobacco users.
- 4. Among patients who were identified as current tobacco users, only 20.9% received tobacco cessation counseling and 7.6% received tobacco cessation medication
- 5. Patients who visited their primary care physician were more likely to receive tobacco screening (66.6% of visits) than patients who visited a physician who was not their primary care physician (61.6% of visits). Screening also varied by physician specialty. Patients visiting general or family practitioners (66.4%) and OB/GYNs (69.6%) were more likely to receive screening than patients who visited physicians in other specialties (58.2%), excluding internal medicine, cardiovascular disease and psychiatry (Jamal 2012).

Given that hospital outpatient visits account for approximately 1 in 10 outpatient visits, Jamal and colleagues sought to assess the rates of tobacco use screening and cessation assistance offered to U.S. adults during hospital outpatient clinic visits, analyzing data from the 2005–2010 NAMCS.

- During the study period, adults 18 or older made, on average, 71.8 million hospital outpatient visits annually to hospital outpatient physicians, or an estimated 431 million visits from 2005–2010 combined.
- On average, 45.2 million (63.0%) hospital outpatient visits included tobacco use screening each year.
- Of the visits that included tobacco use screening, 25.7% (11.6 million annual average visits) were made by current tobacco users.

- Among patients who screened positive for current tobacco use, 24.5% (or an estimated 17.1 million visits) received any cessation assistance, including tobacco counseling, a prescription or order for a cessation medication at the visit, or both.
- Patients who visited general medicine clinics (67.1%) were more likely to receive tobacco use screening than those who visited surgical clinics (55.7%) or clinics with other specialties (45.2%), excluding obstetrics/gynecology (62.8%) and substance abuse clinics (68.3%) (Jamal 2015).

The USPSTF gave a grade I recommendation for school-aged children and adolescents who use tobacco, concluding that the current evidence is insufficient to assess the balance of benefits and harms of primary care—feasible interventions for cessation of tobacco use among school-aged children and adolescents (Krist 2021).

To fill in the gaps from the USPSTF recommendation, other organizations have created resources on how to address youth smoking and cessation. The American Academy of Pediatrics introduced the A.C.T. method for patients over the ages of 11, which has three steps:

- 1. Ask: Screen for tobacco use with all youth during every clinical encounter.
- 2. Counsel: Advise all youth who use tobacco to quit and have them set a quit date within 2 weeks.
- 3. *Treat:* Link youth to behavioral treatment extenders and prescribe pharmacologic support when indicated. After the visit, follow up to assess progress and offer support (Jensen 2023).

The American Academy of Pediatrics also suggests the use of pharmacological cessation support for people who are severely dependent on nicotine (Jensen 2023). The research is limited on the impact of pharmacotherapy on adolescents with tobacco dependence but given the severe harms of tobacco dependence and the effectiveness of pharmacotherapy in adults, a tobacco-dependent adolescent may be prescribed pharmacotherapy based on the severity of dependence and the readiness to change behavior (Groner 2015).

	Population	Recommendation	Strength of Recommendation
United States Preventive Task Force	Non-pregnant adult	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-approved pharmacotherapy for cessation to nonpregnant adults who use tobacco.	A
	School-aged children and adolescents who have not started to use tobacco	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.	В
	School-aged children and adolescents who use tobacco	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary care—feasible interventions for the cessation of tobacco use among school-aged children and adolescents.	Ι

Table 2.	Tobacco	Screening	Guidelines
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Data Standards and Use

"Data standards" refers to a common set of agreed-on data elements and definitions that can be implemented in a standardized, structured and interoperable way. Data standards can support quality measurement by providing a common understanding of how data are defined, represented and shared. Measures of tobacco screening and cessation intervention will require standardized data concepts and terms with which to identify people who screen eligible consistently across providers, health systems and plans.

Data standards currently support documentation and exchange of patient smoking status (currently smoke, formerly smoked, never smoked). Standards do not yet support documentation of additional smoking-related data that may be relevant to patient care, such as quit date and pack-years.

FHIR® U.S. Core IG FHIR is a data standard maintained by Health Level 7 (HL7[®]) and comprises a set of data elements that facilitate interoperable exchange of electronic health care data.

The FHIR US Core Implementation Guide includes a Smoking Status Observation Profile.¹ It requires that smoking status be documented using a specific observation code, with a corresponding list of allowed response values. Table 3 lists the required codes for documenting smoking status. Smoking status does not specify tobacco product type—the codes may be used to document non-cigarette (e.g. cigar, pipe) smoking status.

FHIR US Core Profile	Observation Code (LOINC)	Response Values (SNOMED)
Smoking Status Observation	Tobacco smoking status	Never smoked tobacco (266919005)
	(72100-2)	Tobacco smoking consumption unknown (266927001)
		Occasional tobacco smoker (428041000124106)
		Light tobacco smoker (428061000124105)
		Heavy tobacco smoker (428071000124103)
		Smokes tobacco daily (449868002)
		Smoker (77176002)

Table 3: HL7 FHIR Data Standards

United States Core Data for Interoperability Interoperability The United States Core Data for Interoperability (USCDI) outlines a standardized set of data elements for certified health IT systems to support. As of December 31, 2022, the Cures Act requires that certified health IT systems support USCDI version 1 (ONC 2020). Version 1 includes smoking status as a required data element; certified health IT systems must be capable of documenting and exchanging smoking status using SNOMED terminology.

> Smoking Status in USCDI does not specify tobacco product type—it may refer also to non-cigarette (e.g. cigar, pipe) smoking status. Additional versions of the USCDI have been released but are not yet standard for certified health IT systems. Nonetheless, the Smoking Status requirements remain the same in newer versions of the USCDI.

¹ The Observation resource in FHIR includes data elements which are "used to support diagnosis, monitor progress, determine baselines and patterns and even capture demographic characteristics."

Table 4: USCDI Version 1 Standards

Data Element	Definition	Required Vocabulary
Smoking Status	Representing a patient's smoking behaviors.	SNOMED

References

- Babb, S. "Quitting Smoking Among Adults—United States, 2000–2015." 2017. *MMWR. Morbidity and Mortality Weekly Report* 65. <u>https://doi.org/10.15585/mmwr.mm6552a1</u>
- CDC Tobacco Free. October 8, 2024. "Burden of Tobacco Use in the U.S." Centers for Disease Control and Prevention. <u>https://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-</u> united-states.html
- Creamer, M.R. 2019. "Tobacco Product Use and Cessation Indicators Among Adults—United States, 2018." 2019. *MMWR* 68. <u>https://doi.org/10.15585/mmwr.mm6845a2</u>
- Cornelius, M.E. 2022. "Tobacco Product Use Among Adults—United States, 2020." *MMWR* 71. <u>https://doi.org/10.15585/mmwr.mm7111a1</u>
- Dai, H., A.K. Ramos, B. Faseru, J.L. Hill, and S.Y. Sussman. November 2021. "Racial Disparities of E-Cigarette Use Among US Youths: 2014–2019." *American Journal of Public Health* 111, no. 11, 2050–8. <u>https://doi.org/10.2105/AJPH.2021.306448</u>
- Prevention and Health Promotion (US) Office on Smoking and. 2012. *Preventing Tobacco Use Among Youth and Young Adults*. Centers for Disease Control and Prevention (US). https://www.ncbi.nlm.nih.gov/books/NBK99237/
- Farber, H.J., S. Walley, J. Groner, and K. Nelson. November 2015. "Clinical Practice Policy to Protect Children From Tobacco, Nicotine, and Tobacco Smoke." *Pediatrics* 136, no. 5. https://doi.org/10.1542/peds.2015-3108
- Farhad, I. et al., December 15, 2022. "Person-Years of Life Lost and Lost Earnings from Cigarette Smoking-attributable Cancer Deaths, United States, 2019." *International Journal of Cancer* 151, no. 12, 2095–106, https://doi.org/10.1002/ijc.34217
- General Office of the Surgeon. "Smoking Cessation: A Report of the Surgeon General Key Findings." Page, January 21, 2020. <u>https://www.hhs.gov/surgeongeneral/reports-and-</u> publications/tobacco/2020-cessation-sgr-factsheet-key-findings/index.html.
- Groner, J.A., K.E. Nelson, R.A. Etzel, K.M. Wilson, H.J. Farber, S.J. Balk, J.A. Groner, and J.E. Moore. 2015. "Clinical Practice Policy to Protect Children From Tobacco, Nicotine, and Tobacco Smoke." *Pediatrics* 136 (5): 1008–17. <u>https://doi.org/10.1542/peds.2015-3108</u>.
- Jamal, A. "Current Cigarette Smoking Among Adults—United States, 2005–2015." 2016. MMWR 65. https://doi.org/10.15585/mmwr.mm6544a2
- Jamal, A. June 12, 2012. "Tobacco Use Screening and Counseling During Physician Office Visits Among Adults—National Ambulatory Medical Care Survey and National Health Interview Survey, United States, 2005–2009." https://www.cdc.gov/mmwr/preview/mmwrhtml/su6102a7.htm
- Jamal, A., S.R. Dube, and B.A. King. 2015. "Tobacco Use Screening and Counseling During Hospital Outpatient Visits Among US Adults, 2005–2010." *Preventing Chronic Disease* 12 (August):140529. <u>https://doi.org/10.5888/pcd12.140529</u>
- Jenssen, B.P., S.C. Walley, R. Boykan, A.L. Caldwell, D. Camenga, Section on Nicotine and Tobacco Prevention and Treatment, and Committee on Substance Use and Prevention. 2023. "Protecting Children and Adolescents From Tobacco and Nicotine." *Pediatrics* 151 (5): e2023061804. https://doi.org/10.1542/peds.2023-061804
- Krishnasamy, V.P. "Update: Characteristics of a Nationwide Outbreak of E-Cigarette, or Vaping, Product Use–Associated Lung Injury—United States, August 2019–January 2020." *MMWR* 69 (2020). <u>https://doi.org/10.15585/mmwr.mm6903e2</u>
- Krist, A., K.W. Davidson, C.M. Mangione, M.J. Barry, M. Cabana, A.B. Caughey, et al. January 19, 2021. "Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons: US Preventive Services Task Force Recommendation Statement." *JAMA* 325, no. 3, 265. https://doi.org/10.1001/jama.2020.25019

- Lushniak, B.D., J.M. Samet, T.F. Pechacek, L.A. Norman, and P.A. Taylor. "The Health Consequences of Smoking—50 Years of Progress : A Report of the Surgeon General." Accessed January 14, 2025. https://stacks.cdc.gov/view/cdc/21569
- Marbin, J., et al. January 1, 2021. "Health Disparities in Tobacco Use and Exposure: A Structural Competency Approach." *Pediatrics* 147, no. 1: e2020040253, <u>https://doi.org/10.1542/peds.2020-040253</u>
- Nargis, N., A.K.M. Ghulam Hussain, S. Asare, Z. Xue, A. Majmundar, P. Bandi, F. Islami, K.R. Yabroff, and A. Jemal. October 2022. "Economic Loss Attributable to Cigarette Smoking in the USA: An Economic Modelling Study." *The Lancet Public Health* 7, no. 10, e834–43. <u>https://doi.org/10.1016/S2468-2667(22)00202-X</u>
- Office of the National Coordinator for Health IT. March 2020. Cures Act Final Rule: United States Core Data for Interoperability. <u>https://www.healthit.gov/sites/default/files/page2/2020-03/USCDI.pdf</u>
- Office of the National Coordinator for Health IT. November 2020. *Cures Act Final Rule—Cert Notes:* 2015 Edition Cures Update Reference.

<u>https://www.healthit.gov/sites/default/files/page/202011/Cures_Update_Quick_Reference_2020.pdf</u> Office of the National Coordinator for Health IT. March 3, 2022. *An Upcoming Milestone in Our*

Interoperability Journey. <u>https://www.healthit.gov/buzz-blog/healthit-certification/an-upcoming-</u> milestone-in-our-interoperability-journey

- Park-Lee, E. 2022. "Tobacco Product Use Among Middle and High School Students—United States, 2022." *MMWR* 71. <u>https://doi.org/10.15585/mmwr.mm7145a1</u>
- Sassano, M.F., et al. March 27, 2018. "Evaluation of E-Liquid Toxicity Using an Open-Source High-Throughput Screening Assay," ed. Chaitan Khosla. *PLOS Biology* 16, no. 3, e2003904. <u>https://doi.org/10.1371/journal.pbio.2003904</u>
- Shrestha, S.S., R. Ghimire, X. Wang, K.F. Trivers, D.M. Homa, and B.S. Armour. 2022. "Cost of Cigarette Smoking–Attributable Productivity Losses, U.S., 2018." American Journal of Preventive Medicine 63 (4): 478–85. <u>https://doi.org/10.1016/j.amepre.2022.04.032</u>