Physician Consortium for Performance Improvement® (PCPI®)

Preventive Care and Screening

Performance Measurement Set

PCPI Approved September, 2008 and May, 2013

Measures and Specifications Updated June, 2016

** Introductory content is listed as originally drafted in 2008 and 2013 and may not be up to date*

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Preventive Care and Screening

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*The composition and affiliations of the work group members are listed as originally convened in 2007 and are not up to date.

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Purpose of Measures

These clinical performance measures, developed by the Physician Consortium for Performance Improvement® (PCPI®), are designed for individual quality improvement. The measures may also be used in data registries, continuing medical education programs, and in board certification programs. Unless otherwise indicated, the measures are also appropriate for accountability if appropriate methodological, statistical, and implementation rules are achieved.

The measure titles listed below may be used for accountability:

Measure #1: Tobacco Use: Screening and Cessation Intervention
Measure #2: Unhealthy Alcohol Use: Screening
This measure will no longer be maintained by the PCPI® and, as a result, is currently inactive. It has been removed from this document.
Measure #3: Unhealthy Alcohol Use: Screening & Brief Counseling
Measure #4: Influenza Immunization
Measure #5: Screening Mammography Females aged 50 – 74 years
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Measure #10: Obesity Screening
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Intended Audience, Care Setting and Patient Population

These measures are designed for use by physicians and other health care professionals who provide preventive care and screening services to patients 18 and older. However, the influenza immunization measure applies to patients 6 months and older and the mammography measure applies to female patients aged 52 through 74 years. The colorectal cancer screening measure applies to patients aged 50 through 75 years. The lipid screening measure applies to male patients aged 35 through 80 years and female patients aged 45 through 80 years.

These measures are meant to be used to calculate performance and/or reporting at the individual clinician level.

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Importance of Topic

Incidence, Prevalence, & Cost

Tobacco Use

- In 2006, approximately 20.8% (45.3 million) U.S. adults were current smokers[1]. There has not been a significant change in this prevalence since 2004[2].
- During 1997-2001, approximately 438,000 premature deaths each year are attributed to smoking or exposure to second hand smoke[3].
- The 2006 National Survey on Drug Use and Health (NSDUH) found that approximately 72.9 million (29.6%) Americans age 12 years and older were current users of tobacco[4]. A breakdown by type of tobacco is as follows:
    - 61.6 million persons (25.0%) were current cigarette smokers
    - 13.7 million persons (5.6%) smoked cigars
    - 8.2 million persons (3.3%) use smokeless tobacco
    - 2.3 million (0.9%) smoked tobacco in a pipe
- Smoking attributable health care expenditures in 1998 were estimated to be $75.5 billion[5]. This, plus the estimated productivity losses of $92 billion from 1997-2001 combine for a total of over $167 billion per year.

Alcohol Use

- The 2006 National Survey on Drug Use and Health reports that:
    - Approximately half (50.9%; 125 million persons) of Americans age 12 years and older reported being current drinkers of alcohol
    - 23% (57 million) persons age 12 years and older participated in binge drinking
    - Heavy drinking was reported by 6.9% (17 million) persons age 12 years and older
- In 2001, excessive alcohol use was responsible for 75,000 preventable deaths and 2.3 million years if potential life lost[6].
- Economic costs associated with alcohol abuse are estimated to have been $184.6 billion in 1998. This represents a 25% increase over the previous estimate of $148 billion in 1992.

Influenza

- Complications from influenza resulted in approximately 36,000 deaths from 1990-1999[7] and in approximately 226,000 hospitalizations from 1979-2001.[8]
- Increased numbers of hospitalization from complications from influenza and higher mortality rates from complications of influenza[7] are found among the elderly population.
- Hospitalization due to complications related to influenza costs approximately $10,000 per hospitalization, not including intensive care costs.[9]
- There were 115 influenza–associated pediatric deaths reported to the CDC between September 1, 2010 and August 31, 2011. Almost half of the children who died had no known high-risk medical condition.[10]

Breast Cancer

- Breast cancer is the leading cancer among women.[11] An estimated 230,480 new cases of breast cancer will be diagnosed and 39,520 women will die from breast cancer in 2011.[11]
- The National Cancer Institute's (NCI) Surveillance Epidemiology and End Results (SEER) Cancer Statistics review reports that the age-adjusted incidence rate was 127.25 per 100,000 women in 2008.[12]

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- Medical care to treat breast cancer was estimated to cost $16.5 billion in 2010.[13]

Colorectal Cancer

- Colon cancer is the third most common cancer and the third leading cause of death in the United States. An estimated 141,210 men and women were diagnosed and 49,380 men and women died from cancer of the colon and rectum in 2011.[14]
- The United States Cancer Statistics latest data (2008) identifies the incidence rate of colorectal cancer for males at 51.6 and females 38.7 per 100,000 (age-adjusted).[15]
- Medical treatment for colorectal cancer was estimated to cost $14.14 billion in 2010.[13]

Cervical Cancer

- An estimated 11,070 women will be diagnosed with and 3,870 women will die from cervical cancer in 2008.[16]
- The National Cancer Institute's (NCI) Surveillance Epidemiology and End Results (SEER) Cancer Statistics review reports that the age-adjusted incidence rate was 8.4 per 100,000 women per year based on new cases diagnosed in 2001-2005.[16]

High Blood Cholesterol

- High total cholesterol and low high-density lipoprotein (HDL) cholesterol are major risk factors for coronary heart disease (CHD).[17]
- During 2009 – 2010, approximately 13.4% adults (12.2% men and 14.3% women) aged 20 years and older had total blood cholesterol levels of 240 mg/dL and higher.[18]
- During 2009 – 2010, 21.3% adults (31.4% men and 11.9% women) aged 20 years and older had low HDL cholesterol levels (less than 40 mg/dL).[19]
- The CDC estimates that a 10% decrease (population-wide) in total cholesterol levels may result in a 30% decrease in CHD.[19]
- The estimated direct costs for CHD in 2010 were $35.7 billion and the indirect costs were $73.2 billion.[20]

Pneumococcal Disease

- An estimated 40,000 cases and more than 4,400 deaths due to invasive pneumococcal disease occurred in 2005[21]. More than half of these cases occurred in those who were candidates for pneumococcal immunization[22].
- Incidence rates for invasive pneumococcal disease vary greatly by age group. In 1998, incidence rates were highest among children less than 2 years of age, followed by those 65 years of age and older.[22]

Obesity

- Since 1980, the number of persons considered to be overweight or obese has risen steadily.[22]
- In 2003-2004 67% of adults aged 20-74 were overweight (includes the category of obese) and 34% were obese.
- The percent of adults considered overweight but not obese has remained about the same since 1960-1962 at about 32%-34%.

Opportunity for Improvement / Gap or Variation in Care

It has been reported that overall, adults receive approximately half of all recommended medical care.[23,24]

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Tobacco Use
From 1998-2000[25]:

- 3% of patients had smoking status documented at least once
- 61% of patients that were documented smokers had their smoking status indicated on more than 50% of office visits
- 12% of patients identified as smokers had documentation that advice to quit smoking was given at least once during the year
- 45% of patients were screened for problem drinking
- 54.4% of women had the date and result of their last Pap smear documented in their medical record and 86.9% of women who had not had a Pap smear in the last three years had one performed
- 63.8% of patients aged 65 and older had documentation in their medical record of being offered the pneumococcal vaccine at least once
- 40.8% of patients' medical records contained documentation of height and 66.4% of patients' medical records contained documentation of weight at least once.

Additionally:

- Data from the National Center for Health Statistics show that in 2005[26]:
    - 17.1% of adults aged 50-64 and 56.2% of adults aged 65 years and older reported ever receiving pneumococcal immunization.

Influenza Immunization

- Data from the National Center for Immunization and Respiratory Diseases at the CDC obtained from the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire reported 41.2% of those over the age of 6 months received the seasonal influenza immunization during the 2009-10 influenza season, even if combined with H1N1 immunization, the percentage was 47.8.[27]

Mammography Screening

- Data from the 2010 BRFSS show that for women aged 50 years and over the mammography rate is 77.8%.[28]

Colorectal Cancer Screening

- Data from the 2010 BRFSS show that 64.5% of adults aged 50 to 75 years were up-to-date with their colorectal cancer screening.[29]

Lipid Screening

- Data from the 2009 – 2010 National Health and Nutrition Examination Survey reported that approximately 68.0% of adults aged 20 and older had their cholesterol checked within the preceding 5 years.[19]

Health Care Disparities

The data below shows the influenza immunization, screening mammography, colorectal cancer screening and lipid screening rates for the US white, black and Hispanic populations. The influenza rates are from the CDC National Flu Survey taken in March 2011 based on the 2010 - 2011 influenza season.[30] The mammography rates are based on the 2008 BRFSS.[31] The colorectal cancer screening rates are

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based on 2010 BRFSS data.[30] The lipid screening rates are from the CDC National Health and Nutrition Examination Survey.[19]

Preventive Service	White	Hispanic	Black only, non-Hispanic
Influenza Immunization *6 months and older* *(2010 - 2011 season)*	45.5	37.7	35.5
Mammography Screening *females aged 50 -74* *(2008)*	81.4	81.4	82.1
Colorectal Cancer Screening *(2010)*	66.3	51.6	65.0
Lipid Screening *(2009 - 2010)*	70.5	56.0	66.1

The Partnership for Prevention/National Commission on Prevention Priorities published a report in August 2007 that outlines the disparities regarding use of preventive services. The data below is taken from this report[32]. Disparities were calculated using non-Hispanic whites as the reference group. The higher the value, the greater the disparity. For example, a value of .55 means that group was 55% less likely to receive the service than non-Hispanic whites. A value of zero means that there is no disparity, while a negative value means that racial/ethnic group was more likely to receive the service than non-Hispanic whites.

Preventive Service	Hispanic	Black only, non-Hispanic	Asian only, non-Hispanic	American Indian/Alaska Native	Multiple Race, non-Hispanic
Smokers Advised to Quit *adult smokers 18+*	.48	.02	.40	.03	.03
Smokers Offered Assistance to Quit *adult smokers 18+*	.55	.00	N/A	-.02	.11
Cervical Cancer Screening *women 18-64*	.11	.02	.25	N/A	N/A
Pneumococcal Immunization *adults 65+*	.55	.34	.45	N/A	N/A

As reported by the Partnership for Prevention/National Commission on Prevention Priorities, there is currently no data being collected across the national population regarding screening and brief intervention for unhealthy alcohol use[33].

Clinical Evidence Base

Evidenced-based clinical practice guidelines and consensus standards are available for preventive care and screening services. This measurement set is based on clinical guidelines from the following:

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- Centers for Disease Control/Advisory Committee on Immunization Practices
- United States Preventive Services Task Force

The performance measures found in this document have been developed with these guidelines, enabling the clinician to track his or her performance in individual patient care across patient populations. ***Please note that the provision of preventive care and screening services must be based on individual patient needs and professional judgment.*** Performance measures are not to be used as a substitute for clinical guidelines and individual clinician clinical judgment. There may be instances where an individual patient falls outside the age range for the performance measure(s), however this does **not** mean that they should not receive the service. Whether or not a patient should undergo a specific screening service is a decision that needs to be made between the patient and the clinician while weighing the risks and benefits of the service, along with individual patient preference.

Evidenced-based clinical practice guidelines and consensus standards are available for preventive care and screening services. This measurement set is based on clinical guidelines from the following:

- United States Preventive Services Task Force
- Department of Health and Human Services/Public Health Service
- National Quality Forum
- Centers for Disease Control

The performance measures found in this document have been developed with these guidelines, enabling the physician to track his or her performance in individual patient care across patient populations. ***Please note that the provision of preventive care and screening services must be based on individual patient needs and professional judgment.*** Performance measures are not to be used as a substitute for clinical guidelines and individual physician clinical judgment. There may be instances where an individual patient falls outside the age range for the performance measure(s), however this does **not** mean that they should not receive the service. Whether or not a patient should undergo a specific screening service is a decision that needs to be made between the patient and the physician while weighing the risks and benefits of the service, along with individual patient preference

Measure Harmonization

When hospital or plan-level measures are available for the same measurement topics, the PCPI attempts to harmonize the measures to the extent feasible. The measures in the Preventive Care & Screening measurement set were aligned with the National Committee for Quality Assurance's Health Effectiveness Data Set (HEDIS) as much as possible, as well as other existing measures for preventive care and screening services. This may differ by measure. Please see individual measure documentation for specifics regarding harmonization.

Measure Testing & Implementation

Tobacco Use, Testing of the Measurement Set

The AMA-convened PCPI collaborated on a testing project in 2011 to ensure the Tobacco Use: Screening and Cessation Intervention measure was reliable and evaluated for accuracy of the measure numerator, denominator and exceptions case identification. The testing project was conducted utilizing electronic health record data. Signal-to-noise reliability was tested. Multiple sites participated in the parallel forms

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testing of the measure and comprised of a network of community health centers across the United States. Members in the network largely consisted of safety net organizations serving primarily low income and uninsured patients.

Measures Tested

- Tobacco Use: Screening and Cessation Intervention

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from electronic health records were used to perform signal-to-noise reliability for the measures.

Reliability Testing Results

Tobacco Use: Screening and Cessation Intervention

Signal-to-Noise Reliability Testing
Electronic Health Record

For this measure, the reliability at the minimum level of quality reporting events (10) was 0.46. The average number of quality reporting events for physicians included is 76.1. The reliability at the average number of quality reporting events was 0.86

This measure has stable reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Unhealthy Alcohol Use: Screening & Brief Counseling, Testing of the Measurement Set

The AMA-convened PCPI collaborated on a testing project in 2012 to ensure the Unhealthy Alcohol Use: Screening & Brief Counseling measure is reliable and evaluated for accuracy of the measure denominator, numerator and exceptions case identification. The testing projects were conducted utilizing electronic health record data. Three sites participated in the parallel forms reliability testing of the measure. Site A was comprised of a network of community health centers across the United States serving more than 2.5 million patients annually. Site B was a large independent multi-specialty group the Midwest comprised of over 315 physicians. Site C was a single physician owned adult primary care private practice in Chicago.

Measures Tested

- Unhealthy Alcohol Use: Screening & Brief Counseling

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from electronic health records were used to calculate parallel forms reliability for the measure.

Reliability Testing Results

Unhealthy Alcohol Use: Screening & Brief Counseling

Parallel Forms Reliability Testing
Site A, Site B, and Site C

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There were 120 observations from Site A, Site B and Site C used for the denominator analysis. The kappa statistic value of 0.31 demonstrates fair agreement between the automated report and manual reviewer.

The kappa statistic value of 0.31 demonstrates fair agreement. This is due to the high observed agreement rate and the concentration of observations in the YES, YES cell (81% of all observations (97/120)). This is an example of the limitation of the Kappa statistic. While agreement can be high, if one classification category dominates, kappa can be significantly reduced. (Warrens MJ, A Formal Proof of a Paradox Associated with Cohen's Kappa. Journal of Classification. 27:322-332, 2010; Feinstein AR, Cicchetti DV. High Agreement but Low Kappa: I. The Problems of Two Paradoxes. Journal of Clinical Epidemiology. 43:543–549, 1990)

Of the 120 observations that were initially selected, 97 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.82 demonstrates almost perfect agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)
Denominator: 120, 85.0%, 0.31 (0.10 – 0.52)
Numerator: 97, 91%, 0.82 (0.70 – 0.93)

Testing of the Measurement Set
The measures in the set are being made available without any prior testing. The PCPI recognizes the importance of testing all of its measures and encourages testing of the Influenza measurement set for feasibility and reliability by organizations or individuals positioned to do so. The Measure Testing Protocol for PCPI Measures was approved by the PCPI in 2007 and is available on the PCPI web site (see Position Papers at www.physicianconsortium.org); interested parties are encouraged to review this document and to contact PCPI staff. The PCPI will welcome the opportunity to promote the initial testing of these measures and to ensure that any results available from testing are used to refine the measures before implementation.

Technical Specifications: Introduction

There are several data sources available for collecting performance measures; generally different data sources require different sets of measure specifications, due to the structure of the systems storing the data.

Quality measure technical specifications for administrative data sources are developed with administrative code sets – ICD-9-CM, ICD-10-CM, CPT, for example. A measure intended for administrative data source use or reporting may have significant differences in the specifications due to the nature of the various data sources. In administrative data sources, administrative or billing codes are typically used to identify eligible populations and reported immediately following the provision of care.

Quality measure technical specifications for electronic data sources are developed in alignment with national standards for clinical quality measures. Based on a measure's intended data sources, coding terminology recommendations and tools are used to create specifications to allow for clinical quality measure reporting. In electronic clinical data sources, data can be aggregated over a specific time period

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and also allow for greater ability to express certain types of data through use of the recommended terminologies for electronic sources.

The Centers for Medicare and Medicaid Services (CMS) developed *A Blueprint for the Measures Management System*, which provides guidance related to the development, implementation, and maintenance of clinical quality measures. Specific to eCQMs, this resource includes the recommended vocabularies used to develop the value sets used in the measures. The Blueprint can be found at the following webpage: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/MeasuresManagementSystemBlueprint.html

When expressing clinical concepts found within a measure, specifically for those electronically specified, the Value Set Authority Center (VSAC) is used as a repository for the value sets. The VSAC serves as a repository for value sets in various stages of development, from draft to published, and allows for maintenance of value sets as updates are made to terminologies. It also allows measure developers to search for value sets currently in the VSAC and stewarded by another organization which could potentially be reused in a measure, as an effort towards harmonization with existing value sets so as not to duplicate value sets already in use with the same or similar clinical concepts. The VSAC can be accessed at the following webpage: https://vsac.nlm.nih.gov/

The Quality Data Model (QDM) is a framework used to categorize clinical concepts used in quality measures, as well as the relationships among them for electronic specification. The QDM allows for an Health Quality Measures Format (HQMF) rendering of logic using the Measure Authoring Tool (MAT) to express complex measure logic, and subsequently export measures in several formats, currently including a human-readable document, which can be viewed in a web browser, and the XML.
Links to these tools are found below:
QDM: https://ecqi.healthit.gov/qdm
MAT: https://www.emeasuretool.cms.gov/

CMS and the Office of the National Coordinator for Health IT (ONC) host a website, the Electronic Clinical Quality Information Resource Center (eCQI Resource Center), which is designed to serve as a one-stop shop for all resources related to eCQM development.

The eCQI Resource Center can be accessed at: https://ecqi.healthit.gov/ecqm

Measure Exceptions

Measure Exclusions

The PCPI distinguishes between measure exceptions and measure exclusions. Exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (ie, the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision.

Measure Exceptions

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are

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not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences.

For ***process measures***, the PCPI provides three categories of exception reasons for which a patient may be removed from the denominator of an individual measure.

- **Medical reasons**
  Includes:
    - not indicated (absence of organ/limb, already received/performed, other)
    - contraindicated (patient allergic history, potential adverse drug interaction, other)
- **Patient reasons**
  Includes:
    - patient declined
    - social or religious reasons
    - other patient reasons
- **System reasons**
  Includes:
    - resources to perform the services not available
    - insurance coverage/payer-related limitations
    - other reasons attributable to health care delivery system

These measure exception categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. For some measures, examples have been provided in the measure exception language of instances that would constitute an exception. Examples are intended to guide clinicians and are not all-inclusive lists of all possible reasons why a patient could be excluded from a measure. There are different approaches for reporting measure exceptions, depending on whether the measure is being reported from an electronic clinical data source or an administrative data source.

Electronic Clinical Data Sources:
Value sets are included in the electronic clinical data source specifications for Medical Reason, Patient Reason and System Reason. These have been specified in SNOMED-CT and include a broad list of reasons that pertain to each type of exception and cover various situations. The contents of these value sets are broad, and facilitate re-use of the Medical, Patient, and System Reason value sets across measurement sets.

Administrative Data Sources
Exceptions reported from administrative data sources can be reported using a Quality Data Code (QDC), which may be a CPT Category II code or a G-code.

Where CPT Category II codes are used, the exception of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P
- **System reasons**: modifier 3P

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Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the *specific* reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception.

Please refer to documentation for each individual measure for information on the acceptable exception categories and the codes and modifiers to be used for reporting.

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Measure #1: Tobacco Use: Screening and Cessation Intervention

Preventive Care and Screening

This measure may be used as an Accountability measure.

Measure Description

Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user

Measure Components

Numerator Statement	Patients who were screened for tobacco* use at least once within 24 months AND who received tobacco cessation intervention** if identified as a tobacco user *Definitions:* **Tobacco Use - Includes any type of tobacco* ***Tobacco Cessation Intervention - Includes brief counseling (3 minutes or less), and/or pharmacotherapy*
Denominator Statement	All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period
Denominator Exceptions	Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons)
Supporting Guideline	The following evidence statements are quoted verbatim from the referenced clinical guidelines. 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. (Grade A Recommendation) (U.S. Preventive Services Task Force, 2015[44]) 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. (Grade A Recommendation) (U.S. Preventive Services Task Force, 2015[44]) The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems 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). (Grade I Statement) (U.S. Preventive Services Task Force, 2015[44])

Measure Importance

Relationship to This measure is intended to promote adult tobacco screening and tobacco

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desired outcome	cessation interventions for those who use tobacco products. There is good evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) is successful in helping tobacco users quit. Tobacco users who are able to stop smoking lower their risk for heart disease, lung disease, and stroke.
Opportunity for Improvement	From 1998-2000, • 43% of patients had smoking status documented at least once[34] • 61% of patients that were documented smokers had their smoking status indicated on more than 50% of office visits[34] • 12% of patients identified as smokers had documentation that advice to quit smoking was given at least once during the year[34]
Exception Justification	The measure development Work Group determined that the provision of preventive care and screening services—such as patients with terminal illness—is not appropriate in all cases. Therefore, a medical exception is included in this measure so that those patients may be excluded from the denominator.
Harmonization with Existing Measures	This measure was harmonized to the extent feasible with the National Committee for Quality Assurance Health Effectiveness Data Information Set (HEDIS) measure titled, Medical Assistance with Smoking and Tobacco Use Cessation.

Measure Designation

Measure Purpose	• Quality Improvement • Accountability
Type of Measure	• Process
Care Setting	• Ambulatory Care
Data Source	• Administrative data • Medical record • Electronic health record system • Prospective data collection flowsheet

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Measure #2: Unhealthy Alcohol Use: Screening
Preventive Care and Screening

This measure, Unhealthy Alcohol Use: Screening, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

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Measure #3: Unhealthy Alcohol Use: Screening & Brief Counseling

Preventive Care and Screening

This measure may be used as an Accountability measure.

Measure Description

Percentage of patients aged 18 years and older who were screened for unhealthy alcohol use using a systematic screening method at least once within the last 24 months AND who received brief counseling if identified as an unhealthy alcohol user

Measure Components

Numerator Statement	Patients who were screened for unhealthy alcohol use using a systematic screening method* at least once within the last 24 months AND who received brief counseling** if identified as an unhealthy alcohol user *Definitions:* **Systematic screening method - For purposes of this measure, one of the following systematic methods to assess unhealthy alcohol use must be utilized. Systematic screening methods and thresholds for defining unhealthy alcohol use include:* *AUDIT Screening Instrument (score >= 8)* *AUDIT-C Screening Instrument (score >=4 for men; score >=3 for women)* *Single Question Screening - How many times in the past year have you had 5 (for men) or 4 (for women and all adults older than 65 years) or more drinks in a day? (response >=2)* ***Brief counseling - Brief counseling for unhealthy alcohol use refers to one or more counseling sessions, a minimum of 5-15 minutes, which may include: feedback on alcohol use and harms; identification of high risk situations for drinking and coping strategies; increased motivation and the development of a personal plan to reduce drinking.*
Denominator Statement	All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period
Denominator Exceptions	Documentation of medical reason(s) for not screening for unhealthy alcohol use (eg, limited life expectancy, other medical reasons)
Supporting Guideline	The following evidence statements are quoted verbatim from the referenced clinical guidelines. 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. (Grade B recommendation) (USPSTF, 2014[50])

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Measure Importance

Relationship to desired outcome	This measure is intended to promote unhealthy alcohol use screening and brief counseling which have been shown to be effective in reducing alcohol consumption. About 30% of the U.S. population misuse alcohol, with most engaging in what is considered risky drinking. (SAMHSA, 2012[46]) A recent analysis of data from the National Alcohol Survey shows that approximately one-third of at-risk drinkers (32.4%) and persons with a current alcohol use disorder (31.5%) in the United States had at least 1 primary care visit during the prior year, demonstrating the potential reach of screening and brief counseling for unhealthy alcohol use in the primary care setting. (Mulia et al., 2011[47]) A number of studies, including patient and provider surveys, have documented low rates of alcohol misuse screening and counseling in primary care settings. In the national Healthcare for Communities Survey, only 8.7% of problem drinkers reported having been asked and counseled about their alcohol use in the last 12 months. (D'Amico et al., 2005[48]) A nationally representative sample of 648 primary care physicians were surveyed to determine how such physicians identify--or fail to identify--substance abuse in their patients, what efforts they make to help these patientsand what are the barriers to effective diagnosis and treatment. Of physicians who conducted annual health histories, less than half ask about the quantity and frequency of alcohol use (45.3 percent). Only 31.8 percent say they ever administer standard alcohol or drug use screening instruments to patients. (CASA, 2000[49])
Opportunity for Improvement	From 1998-2000, 45% of patients were screened for problem drinking[34].
Exception Justification	The measure development Work Group determined that the provision of preventive care and screening services—such as for patients with terminal illness—is not appropriate in all cases. Therefore, a medical exception is included in this measure so that those patients may be excluded from the denominator.
Harmonization with Existing Measures	This measure was harmonized to the extent feasible with the National Committee for Quality Assurance Health Effectiveness Data Information Set (HEDIS) measure titled, Initiation and Engagement of Alcohol & Other Drug Dependence Treatment.

Measure Designation

Measure Purpose	• Quality Improvement • Accountability
Type of Measure	• Process
Care Setting	• Ambulatory Care
Data Source	• Administrative Data combined with medical record review • Medical record • Electronic health record system

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Measure #4: Influenza Immunization

Preventive Care and Screening

Measure Description

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

Measure Components

Numerator Statement	Patients who received an influenza immunization OR who reported previous receipt* of an influenza immunization *Definition:* ** Previous Receipt - receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st)*
Denominator Statement	All patients aged 6 months and older seen for a visit between October 1 and March 31
Denominator Exceptions	Documentation of medical reason(s) for not receiving influenza immunization (eg, patient allergy, other medical reasons) Documentation of patient reason(s) for not receiving influenza immunization (eg, patient declined, other patient reasons) Documentation of system reason(s) for not receiving influenza immunization (eg, vaccine not available, other system reasons)
Supporting Guideline	The following evidence statements are quoted <u>verbatim</u> from the referenced clinical guidelines. Routine annual influenza vaccination is recommended for all persons aged >= 6 months who do not have contraindications. Optimally, vaccination should occur before onset of influenza activity in the community. Health care providers should offer vaccination by October, if possible. Vaccination should continue to be offered as long as influenza viruses are circulating. (CDC/ACIP, 2015[45])

Measure Importance

Relationship to desired outcome	Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged ≥6 months who do not have contraindications to vaccination.
Opportunity for Improvement	Data from the National Center for Immunization and Respiratory Diseases at the CDC obtained from the Behavioral Risk Factor Surveillance System (BRFSS)

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	questionnaire reported 41.2 of those over the age of 6 months received the seasonal influenza immunization during the 2009-10 influenza season. Even if combined with H1N1 immunization, the percentage was 47.8.[35]
Exception Justification	Due to the fact that this measure involves administration of a vaccination, the Work Group determined that justifiable medical (eg, patient allergy), patient (eg, patient declined), and system (eg, vaccine not available) reasons for exception apply to this measure. Reasons for exception are included as part of the performance information that is reported back to providers through use of the measure. Calculating the rates of exception for a measure can assist a provider in identifying possible areas for improvement.
Harmonization with Existing Measures	This measure was harmonized to the extent feasible with other PCPI immunization measures, as well as the National Committee for Quality Assurance Health Effectiveness Data Information Set (HEDIS). The Standard Specification for Immunization Measures from the National Quality Forum (NQF) was also reviewed during development, and this measure was harmonized to the extent feasible with these standard specifications. However, the NQF Standard Specifications for Immunization measures do not support the use of a system reason exception to account for the lack of vaccine availability. This approach does not allow clinicians a mechanism to accurately report attention to the measure when the vaccine is not available and in addition, measurement of the lack of availability of the vaccine could assist providers in identifying their vaccine needs for subsequent years. Although vaccine distribution has improved, the work group determined that clinicians must have a method to account for vaccine unavailability.

Measure Designation

Measure Purpose	Quality Improvement Accountability
Type of Measure	Process
Care Setting	Ambulatory Care Long-Term Care Home Care
Data Source	Administrative data Electronic health record system

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Measure #5: Screening Mammography Females aged 50 – 74 years

Preventive Care and Screening

This measure, Screening Mammography Females aged 50 – 74 years, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

Measure #6: Colorectal Cancer Screening

Preventive Care and Screening

This measure, Colorectal Cancer Screening, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

Measure #7: Cervical Cancer Screening

Preventive Care and Screening

This measure, Cervical Cancer Screening, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

Measure #8: Lipid Screening

Preventive Care and Screening

This measure, Lipid Screening, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

Measure #9: Pneumococcal Immunization

Preventive Care and Screening

This measure, Pneumococcal Immunization, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org.

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Measure #10: Obesity Screening

Preventive Care and Screening

This measure, Obesity Screening, has been removed from this document as it will no longer be maintained by the PCPI® and is currently inactive. If you have questions about this measure, please contact the PCPI at cpe@ama-assn.org

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Guideline Evidence Classification and Rating Schemes

U. S. Preventive Services Task Force (USPSTF) Grades of Recommendation [36,37,38,39,40,41,42]

- Grade A – The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.
- Grade B – – The USPSTF recommends that clinicians provide [the service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.
- Grade C – The USPSTF makes no recommendation for or against the routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.
- Grade D – The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.
- Grade I – The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

U.S Department of Health and Human Services/Public Health Service Strength of Evidence Ratings[43]

- A – Multiple well-designed randomized clinical trials, directly relevant to the recommendation, yielded a consistent pattern of findings.
- B – Some evidence from randomized clinical trials supported the recommendation, but the scientific support was not optimal. For instance, few randomized trials existed, the trials that did exist were somewhat inconsistent, or the trials were not directly relevant to the recommendation.
- C – Reserved for important clinical situations where the panel achieved consensus on the recommendation in the absence of relevant randomized controlled trials.

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APPENDIX A

Preventive Care and Screening Performance Measurement Specifications

Coding Reviewed and Updated: June, 2016

Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®). These Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

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Preventive Care and Screening

Measure #1: Tobacco Use: Screening and Cessation Intervention

A. Specifications for Administrative Data Sources

Denominator (Eligible Population)	All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period CPT code: Two visits during the measurement period • 90791, 90792 (Psych Visit – Diagnostic Evaluation) • 96150 (Health and Behavioral Assessment – Initial) • 96151 (Health and Behavioral Assessment, Reassessment) • 96152 (Health & Behavioral Assessment – Individual) • 97003, 97004 (Occupational Therapy Evaluation) • 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 (Office Visit) • 90832, 90834, 90837 (Psych Visit – Psychotherapy) • 90845 (Psychoanalysis) • 92002, 92004, 92012, 92014 (Ophthalmological Services) • 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 (Home Healthcare Services) OR CPT Code: One preventive visit during the measurement period • 99411, 99412 (Preventive Care Services – Group Counseling) • 99420, 99429 (Preventive Care Services – Other) • 99385, 99386, 99387 (Preventive Care Services – Initial Office Visit, 18 and Up) • 99395, 99396, 99397 (Preventive Care Services – Established Office Visit, 18 and Up) • 99401, 99402, 99403, 99404 (Preventive Care Services – Individual Counseling) • G0438, G0439 (Annual Wellness Visit) • 92521, 92522, 92523, 92524, 92540, 92557, 92625 (Speech and Hearing Evaluation)
Denominator Exclusions	None

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Numerator	Patients who were screened for tobacco* use at least once within 24 months AND who received tobacco cessation intervention** if identified as a tobacco user *Definitions:* **Tobacco Use - Includes any type of tobacco* ***Tobacco Cessation Intervention - Includes brief counseling (3 minutes or less), and/or pharmacotherapy* *Numerator Note:* As noted above in a recommendation statement from the USPSTF, the current evidence is insufficient to recommend electronic nicotine delivery systems (ENDS) including electronic cigarettes for tobacco cessation. Additionally, ENDS are not currently classified as tobacco in the recent evidence review to support the update of the USPSTF recommendation given that the devices do not burn or use tobacco leaves. In light of the current lack of evidence, the measure does not currently capture e-cigarette usage as either tobacco use or a cessation aid. CPT Category II code: 4004F: Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user OR 1036F: Current tobacco non-user OR CPT Category I code-Smoking and tobacco-use cessation counseling **The following codes are applicable if the patient screened positive for smoking/tobacco use and counseling was provided.* • 99406: Smoking/tobacco counseling 3-10 minutes • 99407: Smoking/tobacco counseling greater than 10 minutes
Denominator Exceptions	Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) • Append modifier to CPT Category II code: 4004F-1P

B. Specifications for Electronic Clinical Data Sources

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eCQM Library and view the most recent publishing:
http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

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Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/

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Preventive Care and Screening

Measure #3: Unhealthy Alcohol Use: Screening & Brief Counseling

A. Specifications for Administrative Data Sources

Denominator (Eligible Population)	All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period CPT code: Two visits during the measurement period • 96150 (Health and Behavioral Assessment- Initial) • 96151 (Health and Behavior Assessment- Re-Assessment) • 96152 (Health & Behavioral Assessment- Individual) • 97003, 97004 (Occupational Therapy Evaluation) • 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 (Office Visit) • 90791, 90792 (Psych Visit- Diagnostic Evaluation) • 90832, 90834, 90837 (Psych Visit – Psychotherapy) • 90845 (Psychoanalysis) • 97802, 97803, 97804, G0270, G0271 (Medical Nutrition Therapy) OR CPT Code: One preventive visit during the measurement period • G0438, G0439 (Annual Wellness Visit) • 99411, 99412 (Preventive Care Services- Group Counseling) • 99420, 99429 (Preventive Care Services- Other) • 99385, 99386, 99387 (Preventive Care Services- Initial Office Visit, 18 and Up) • 99395, 99396, 99397 (Preventive Care Services- Established Office Visit, 18 and Up) • 99401, 99402, 99403, 99404 (Preventive Care Services- Individual Counseling)
Denominator Exclusions	None

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Numerator	Patients who were screened for unhealthy alcohol use using a systematic screening method at least once within the last 24 months AND who received brief counseling if identified as an unhealthy alcohol user Patient not identified as an unhealthy alcohol user when screened for unhealthy alcohol use using a systematic screening method • Report quality data code: G9622 OR Patient identified as an unhealthy alcohol user when screened for unhealthy alcohol use using a systematic screening method and received brief counseling • Report quality data code: G9621 OR CPT Category I code-Screening and Brief Intervention • 99408, 99409 (Alcohol structured screening and brief intervention) **The following codes are applicable if the patient screened positive for unhealthy alcohol use and brief interventional services were provided for at least 15 minutes. Services of less than 15 minutes may not be reported using the following codes.*
Denominator Exceptions	Documentation of medical reason(s) for not screening for unhealthy alcohol use (eg, limited life expectancy, other medical reasons) Report quality data code: G9623

B. Specifications for Electronic Clinical Data Sources

PCPI has developed a health quality measures format (HQMF) electronic clinical quality measure (eCQM). As of the date of the posting of this document, this measure is not included in a national program utilizing electronic clinical data sources or electronic health record data sources. If you are interested in receiving the HQMF eCQM, please contact cpe@ama-assn.org for more information.

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Preventive Care and Screening

Measure #4: Influenza Immunization

A. Specifications for Administrative Data Sources

Denominator (Eligible Population)	All patients aged 6 months and older seen for a visit between October 1 and March 31 Age ≥ 6 months AND CPT Code: Two visits during the measurement period • 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 (Office Visit) • 99241, 99242, 99243, 99244, 99245 (Outpatient Consultation) • 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 (Care Services in Long-Term Residential Facility) • 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350 (Home Healthcare Services) OR One preventive visit during the measurement period • 99381, 99382, 99383, 99384 (Preventive Care- Initial Office Visit, 0 to 17) • 99385, 99386, 99387 (Preventive Care Services- Initial Office Visit, 18 and Up) • 99401, 99402, 99403, 99404 (Preventive Care Services- Individual Counseling) • 99411, 99412 (Preventive Care Services- Group Counseling) • 99420, 99429 (Preventive Care Services- Other) • 99315, 99316 (Discharge Services- Nursing Facility) • 99304, 99305, 99306, 99307, 99308, 99309, 99310 (Nursing Facility Visit) • G0438, G0439 (Annual Wellness Visit) • 90945, 90947, 90951, 90952, 90953, 90954, 90955, 90956, 90957, 90958, 90959, 90960, 90961, 90962, 90963, 90964, 90965, 90966, 90967, 90968, 90969, 90970, 99512 (Dialysis) • 99391, 99392, 99393, 99394 (Preventive Care- Established Office Visit, 0 to 17) • 99395, 99396, 99397 (Preventive Care Services- Established Office Visit, 18 and Up)
Denominator Exclusions	None

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Numerator	Patients who received an influenza immunization OR who reported previous receipt* of an influenza immunization *Definition:* ** Previous Receipt - receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st)* CPT Code for Influenza Immunization: • 90630, 90653, 90654, 90655, 90656, 90657, 90658, 90660, 90661, 90662, 90664, 90666, 90667, 90668, 90672, 90673, 90685, 90686, 90687, 90688 OR • G8482: Influenza immunization administered or previously received
Denominator Exceptions	Documentation of medical reason(s) for not receiving influenza immunization (eg, patient allergy, other medical reasons) • Append modifier to CPT Category II code: 4274F-1P Documentation of patient reason(s) for not receiving influenza immunization (eg, patient declined, other patient reasons) • Append modifier to CPT Category II code: 4274F-2P Documentation of system reason(s) for not receiving influenza immunization (eg, vaccine not available, other system reasons) • Append modifier to CPT Category II code: 4274F-3P

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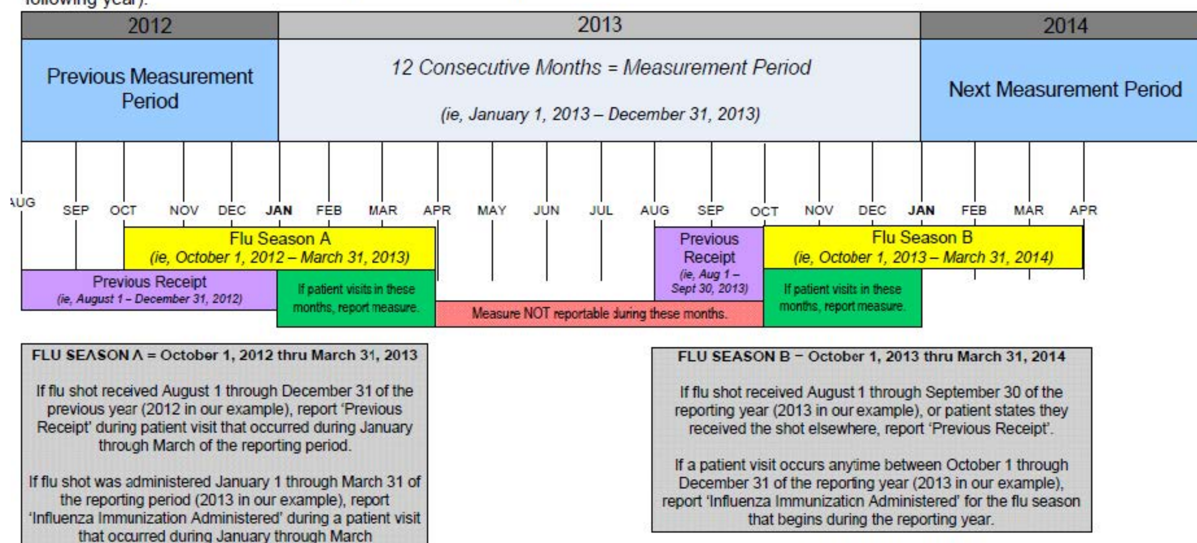
Administrative Claims Reporting – Example for 2013 Calendar Year

In a prospective claims reporting environment, patient information is reported at the time of the patient visit. Where the measurement period is a calendar year—January through December, an individual patient could be included in the denominator twice during a 12-month consecutive period to account for both flu seasons. This would occur if during a single calendar year one or more visits took place between January 1 and March 31 and one or more visits occurred between October 1 and December 31.

The diagram below depicts when the measurement period is a calendar year (the example provided uses calendar year 2013). Flu Season A starts before the start of the measurement period (October 1st of the previous year) and ends on March 31st during the measurement period. Flu Season B starts on October 1st during the measurement period and ends after the end of the measurement period (March 31st of the following year).



B. Specifications for Electronic Clinical Data Sources

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